IUCN ACADEMY OF ENVIRONMENTAL LAW
E JOURNAL
ISSUE 6: 2015

A Word from the Editors

This issue of the eJournal sees some further changes to the team responsible for its production. We welcomed Professor Louis Kotzé (North-West University, South Africa) to the Editorial Board, and Clarissa Ferriera (University of Cape Town, South Africa) to our group of Assistant Editors. Both Louis and Clarissa are fantastic additions to the eJournal team, and we trust their expertise and assistance will continue to broaden and strengthen the content of the eJournal.

In this issue, we present a range of insightful contributions from around the globe on a wide array of environmental law matters.

This issue begins with two articles that highlight similar issues with strategic planning in the USA and EU looking at climate change adaptation and renewable energy regulation.

In the first article, Pérez de las Heras discusses EU actions to promote adaptation to climate change. As Pérez de las Heras indicates, although the EU does not appear to have taken terribly effective steps in relation to multi-level governance of adaptation, there is hope for more positive action in this direction. The EU has taken adaptation measures in other areas of competence and some individual cities within the EU have been more pro-active in taking measures. In addition, the EU has supported adaptation measures in developing States. These activities point to the possibility of effective EU legislation on adaptation in the future. Powers' article on renewable energy production in the USA highlights similar tensions between action and inaction. While on the one hand the *ad hoc* regulatory approach to renewables has up until this point created sufficient space for a significant growth in the production of renewable energy it may, if it continues, hinder future growth. In her detailed analysis, Powers illustrates both the ways in which individual regulatory tools operate and the gaps that are left when regulation lacks strategic planning. Having begun her article by demonstrating the potential for renewable generation in the USA, Powers concludes by presenting suggestions for a more strategic regulatory approach to harnessing this power.

In the third article, "Re-Imagining Mining: The *Earth Charter* as a Guide for Ecological Mining Reform", Sbert conducts a thought experiment as to how we might regulate the mining of minerals. In this she tackles the difficult questions of how we make choices about where, when and how much to mine. Sbert then explores the possibilities of moving from treating minerals as commodities to leasing minerals as a potential solution to the challenge of how we minimise the impact of mining on the earth.

The substantive articles are followed by three insights papers beginning with the thought-provoking piece by Richardson and Butterly on how we treat, or rather fail to treat (or take account of) time in environmental regulation. As Richardson and Butterly argue, the focus of environmental law has tended to be on the present or 'future present' with little account taken of, for example, the historical condition of an area, or the damage to an area caused prior to regulation. Their arguments are illustrated by reference to Australian marine planning.

Butti's piece on contaminated land takes us back to Europe and examines the interplay between requirements under the Industrial Emissions Directive and the Contaminated Land Regimes of member States. This is followed by Dominte's paper on the use of protected designations of origin as environmental protection tools. As Dominte argues, these designations, applying to products such as Bordeaux wine and Jaffa oranges are associated with environmental management practices, which, in giving rise to the particular characteristics of the growing environment, necessarily imply protection of particular environmental characteristics. There is, therefore, a possibility that these designations could be more consciously used as tools to protect the environment than they currently are.

These contributions are followed by 38 Country Reports from some 33 countries – the largest number of Country Reports included in the eJournal to date. This includes first time reports from Japan, Costa Rica, Ivory Coast, Poland, and Taiwan. From these reports, a number of broad issues are common to several jurisdictions. Briefly, we summarise these below.

As with the previous issue of this eJournal, issues concerning energy generation remain firmly on the environmental law agenda for many countries. This includes in some cases the management of conflict over land use. The reports from Costa Rica, the Democratic Republic of Congo, France, Japan, Kenya, Poland, Ukraine and the United States each highlight ongoing challenges with respect to the governance of energy development,

particularly new sources of energy (such as unconventional gas extraction), and alternative energy. Several of these reports point to the tensions between economic and environmental interests in energy development.

Some Country Reports document the passage of regressive environmental laws in certain jurisdictions. In Australia, Riley reports of a continued 'winding back' of environmental legislation, especially regarding climate change. In India, recent elections saw discussions regarding the relaxation of environmental regulations to promote economic growth, though ultimately this did not materialise. Cloutier de Repentigny reports on the implementation of a new environmental assessment regime in Canada which has witnessed a number of regressive changes. As he notes, it is incumbent upon us to be aware of how quickly progress in environmental law can be displaced by the changing whims of government, particularly in times of economic downturn. This recalls Michel Prieur's important work on non-regression in environmental law, where he ponders whether we have entered an 'era of law that refuses established rights in the name of sovereignty of laws and Parliaments — "what a law can do can be undone by another law"?'[1]

The need to improve access to public participation is also covered in several other reports, including Armenia, Columbia, Costa Rica, Czech Republic, the Democratic Republic of Congo, Ivory Coast, Papua New Guinea, and Thailand. Countries continue to grapple with the incorporation of meaningful public participation in environmental decision making. The report from the Bahamas discusses two cases which concerned a lack of public participation in EIA procedures, highlighting the need to improved consultation at a minimum. Cliquet and Schoukens' report on Belgium considers the gap between the law and practice of public participation through a discussion of a current case study, finding that there was indeed disparity between legislative aspiration and reality.

As in the substantive articles, so too in the country reports, the news is not all dire. Elsewhere, contributors report on new regulatory protections for the environment. In France,

---

[1] Michel Prieur, 'Non-regression in environmental law', *S.A.P.I.EN.S* [Online], 5.2 | 2012, Online since 12 August 2012, accessed 2 April 2015. URL : http://sapiens.revues.org/1405. See also Michel Prieur, 'De L'urgente Nécessité De Reconnaître Le Principe De "Non Régression" En Droit De L'Environnement' ('Urgently Acknowledging the Principle of "Non-Regression" in Environmental Rights [summary in English]), 2011 (1) IUCN Academy of Environmental Law eJournal, online at: http://www.iucnael.org/en/e-journal/previous-issues/86-journal/issue/157-issue-20111#sthash.d0cHaRO1.dpuf.

for example, innovative new legislation was tabled concerning biodiversity protection, whilst in Kenya and Malta more serious attention turned to developing law and policy approaches to climate change. In Singapore, an ambitious regulatory regime to combat transboundary haze pollution was also implemented. Case law developments and the issue of new sentencing guidelines in the United Kingdom have seen environmental crime treated more seriously, particularly in cases involving corporate offenders. Finally, three separate contributions report on various aspects of China's new Environmental Protection Law, including the broader scope for citizen participation and public interest environmental litigation. Whilst the various authors of these reports acknowledge that challenges remain, the new legislation offers hope for improved access to environmental justice in these jurisdictions.

Proposals for new environmental regulatory regimes were also released in Scotland and the Netherlands. As Hendry notes in the Scotland report, these are "challenging times for environmental regulation in many countries, with multiple pressures to reduce the 'red tape' burden, cut costs and achieve multiple policy outcomes, not all consistent". The end-result for these regimes remains to be seen, and we look forward to updates in future Country Reports.

Finally this issue concludes with a series of book reviews, ranging from Paloniitty's review of the Academy's own "Global Environmental Law at a Crossroads", to Brown Weiss's review of "Common Heritage of Mankind: A Bibliography of Legal Writing" and Kibugi's review of "The Canadian Law of Toxic Torts".

Overall, we trust that you find the contributions in this issue as thought-provoking as we did, and we look forward to your contributions to the next issue.

Amanda Kennedy and Elizabeth Kirk

ADAPTATION TO CLIMATE CHANGE IN THE EUROPEAN UNION: Between Supranational Action and State Reluctance

Beatriz Pérez de las Heras*

Abstract: Within the European Union, the issue of climate change adaptation, as opposed to mitigation, has been addressed too little too late. A number of member states have been reluctant to adopt national adaptation plans; some are even opposed to the EU's adopting of binding legal instruments. The EU has sought to counter these political and legal limitations by integrating adaptation measures in other policies within its competence. Greater receptivity among local authorities to the EU's supranational initiatives has also helped compensate for inertia at national level. In contrast to this scenario at an internal level, the EU has become the chief promoter of national adaptation plans in third countries through its policy on development aid. This international cooperation constitutes a potentially very valuable instrument, generating multilateral effects that could facilitate the adoption of a global post-2020 climate order.

Introduction

Adaptation to climate change has become one of the primary concerns at global, European, state, regional and local level. Repeated occurrences of extreme meteorological phenomena – such as hurricanes, floods, droughts and other climate-related natural catastrophes – are now constantly leading to major losses in all the world's regions. There is clear continuity and a direct relationship between the climate changes observed and those projected into the future.[1] As a result, not only is mitigation required to reduce emissions of greenhouse gases (GHGs); adaptation is also needed to anticipate future changes, reduce the risk and cost of

* Professor of European Law at the University of Deusto (Bilbao, España), Jean Monnet Chair Holder on European Integration and Principal Researcher of the *European Integration* Research Team. beatriz.perez@deusto.es

[1] Intergovernmental Panel on Climate Change (IPCC), Impacts, Adaptation and Vulnerability. Working Group II Contribution to the Fifth Assessment Report of the Intergovernmental Panel on Climate Change (Cambridge University Press 2014) 4-11.

losses arising from adverse natural phenomena and explore potential benefits linked to climate change.[2]

Within the international framework, the need for additional adaptation to the impacts of climate change is expressly set out in *the United Nations Framework Convention on Climate Change (UNFCCC)*.[3] Multilateral initiatives, such as the UNFCCC, are important to push national adaptation agendas forward, but not enough on their own. Successful adaptation policy requires a multi-level governance dialogue and strategy, given the unpredictable and cross-sectoral impact of climate change. Indeed, in any country or place, effective implementation of adaptation policies requires coherent coordination between the different levels of political responsibility and integration of appropriate measures in the sectors affected.[4] Yet such coordination does not always occur.

In Europe, scientific and political attention to adaptation has been late in coming, largely because in recent decades efforts to combat climate change have focused on limiting GHG emissions. The advantages of developing an EU-wide policy of adaptation – as opposed to mitigation – were not clearly understood in the 1990s. Indeed, apart from some isolated responses to serious natural disasters in 2002 and 2003, adaptation – as a visible and articulated strategy – did not first appear on the European agenda until 2007.[5] More than

---

[2] See European Environment Agency, Adaptation in Europe. Addressing Risks and Opportunities from Climate Change in the Context of Socio-Economic Developments (Publications Office of the European Union 2013) 115-122.

[3] Article 4 (1, e-f) of United Nations Framework Convention on Climate Change, 1771 UNTS 107. More specifically, adaptation is covered in the Bali Action Plan (2007) and in the Cancun Adaptation Framework (2010). Texts available at: <http://unfccc.int/adaptation/items/5852.php>accessed 8 January 2015.

[4] H. Corina Keskitalo (ed.), Developing Adaptation Policy and Practice in Europe: Multi-Level Governance of Climate Change (Springer 2010) 4-7; Lasse Peltonen et al., Governance of Climate Change Adaptation: Policy Review (BaltCICA 2010) 4.

[5] Before that year, there was no coordination at EU level. The UK and Dutch EU Presidencies of 2004 contributed to accelerating a more concerted adaptation policy. In its conclusions of December 2004, the Council referred to the European Environment Agency 2004 report, which warned about the visible impact of climate change across Europe. In 2005, the European Commission also mentioned the need for adaptation in its Communication 'Winning the Battle against Global Climate Change', while encouraging member states to take adaptation policies. The debate on a European policy evolved then within a specific working group in the Second European Programme on Climate Change. See Tim Rayner and Andrew Jordan, 'Adapting to a Changing Climate. An Emerging

seven years later, the EU has still proven incapable of developing coordinated action with its member states, some of which are reluctant to adopt a national adaptation strategy.[6]

In light of these premises, this paper poses the following question: to what extent has the EU been able to implement comprehensive adaptation measures?

To answer this question, the first section of this article analyses the current distribution of political power between the EU and the member states in the environmental area. It highlights how the lack of a specific EU competence in the area of adaptation and the cross-sectoral dimension of adaptation policy explain largely the reluctance of some EU member states to adopt binding measures, beyond those covered by the EU's traditional coordination and guiding role. The second section maintains that these limitations are, to some extent, offset by the integration of measures of adaptation through other European policies and by the greater receptivity of sub-state authorities to the EU's initiatives. Finally, the last section evaluates the EU's external action in the area of adaptation, highlighting how in contrast to its poor development in the internal area, the EU has become the main donor of aid and promoter of national adaptation strategies in developing countries. This international cooperation generates multilateral effects that may favour dialogue on a new post-2020 global climate order.

From the Green Paper to the Adaptation Strategy: A Soft Law Approach

The treaties currently governing the EU's political and legal framework do not provide specific legal grounds for the EU to adopt binding legislation on adaptation, other than those related to its environment policy.[7] Indeed, the only explicit legal basis for EU action in matters of climate change is Article 191 of *the Treaty on the Functioning of the European*

European Union Policy?' in Andrew Jordan *et al.*(eds)*, Climate Change Policy in the European Union* (Cambridge University Press 2010) 148-149.

[6] Andrew Jordan *et al.*,'Understanding the Paradoxes of Multi-Level Governing: Climate Change Policy in the European Union' (2012) 12 Global Environmental Politics 51; European Environment Agency (n 2) 1, 68.

[7] Adaptation is predominantly discussed in terms of environmental policy, though other recent framings of adaptation take into account the economic impacts of climate change and the need to include actors engaged in economic activities into planning adaptation. Lasse Peltonen *et al.* (n 4) 4-5.

Union (TFEU), under Title XX 'Environment'.[8] Paragraph 1 states that one of the objectives of EU policies on the environment shall be 'promoting measures at international level to deal with regional or worldwide environmental problems, and in particular combating climate change'.

However, the environment is an area of shared responsibility between the EU and its member states, as classified in Article 4.2 (c) of TFEU and this may provide the route to EU action. With regard to its international dimension, Article 191.4 of TFEU stresses the shared character of this area, when providing that the EU and the member states each intervene 'within their respective spheres of competence'. Accordingly, by virtue of Articles 2.2 of TFEU and 5 of *the Treaty on the European Union (TEU)*,[9] the EU has the power to adopt legally binding acts in the environmental area under the principle of subsidiarity. Introduced for the first time in the field of environmental policy by *the Single European Act*[10] and extended to all areas of shared competence by the Maastricht Treaty establishing the EU in 1993, this principle ensures that the EU does not take action unless it justifies that it will be more effective than action taken at national, regional or local level. This requirement means that when the European Commission submits a legislative proposal, it has to demonstrate that the act will have the added value of European legislation.[11]

Given the transboundary effects of environmental challenges, there is no doubt that the EU action may be more appropriate and effective than that undertaken individually by member states. However, subsidiarity does not preclude the EU from addressing environmental issues which do not have a cross-frontier nature, such as urban noise or household waste. In this case, given the different extent and level of stringency among member states' environmental policies, EU harmonisation has to ensure a high level of environmental

---

[8] As a result of the Treaty of Lisbon, in force since 1st December 2009, the Treaty establishing the European Community became the Treaty on the Functioning of the European Union. [2007] OJ C306/1. The consolidated version of the TFEU is published in [2012] OJ C326/47.

[9] [1992] OJ C191/01. The consolidated version of the TEU is published in [2012] OJ C326/13.

[10] [1987] OJ L169/1.

[11] Subsidiarity is closely bound up with the principle of proportionality, which requires that EU action does not exceed what it is necessary to achieve the objectives of the European dimension. See, among the abundant literature, Antonio Estella de Noriega, *The EU Principle of Subsidiarity and its critique* (Oxford University Press 2002); Philip Kiiver, 'The Conduct of Subsidiarity Checks of EU Legislative Proposals by National Parliaments: Analysis, Observation and Practical Recommendations' (2012) 12 ERA Forum 4, 535-547.

protection, as provided by Article 191.2 of TFEU. Yet, pursuant to Article 193 of TFEU, member states always retain the power to introduce measures more stringent than those adopted by the EU. Therefore, minimum harmonisation can be said to be the *modus operandi* of the EU environmental policy.[12] Consequently, European legislation on climate change issues is adopted on this basis as well.

With regard to this specific issue, EU action has been developed in a slower and more gradual way, in comparison with other environmental issues, such as water or biodiversity.[13] Indeed, it was after 2005 when the EU started to develop internal policies aiming to comply with *the Kyoto Protocol*.[14] Nevertheless, the extent and approach of the EU's action has been different, depending on whether mitigation or adaptation is involved. Thus, in the case of mitigation, over the last 10 years the EU has been adopting relevant legislation and legal instruments, such as the emissions trading scheme and the climate-energy package.[15] In contrast, not only has action on adaptation come later; it has been addressed from a soft law approach. That is, it has been addressed through non-legally binding measures such as the adoption of a White Paper. A soft law approach is used largely due to opposition from some member states to the development of a supranational adaptation policy that could intrude into policy areas which remain under state power (e.g. spatial planning and infrastructure development), given the cross-sectoral dimension of adaptation measures. Consequently, instead of trying to act in a hierarchical and regulatory way, the European Commission has opted for a looser form of governance, closer to the 'policy coordination method'. More specifically, the so called 'Open Method of Coordination', defined as an instrument by the *Lisbon Strategy (2000)*, provides a framework for cooperation among member states in order to direct their national policies towards certain common objectives. In practice, it is an intergovernmental method under which member states are mutually evaluated, the European Commission being limited to surveillance, while the European Parliament and the

---

[12] Nicolas de Sadeleer, 'Principle of Subsidiarity and the EU Environmental Policy' (2012) 9.I Journal for European Environmental Planning Law 63-70.

[13] Andrew Jordan *et al.* (n 6) 50; Frans Berkhout *et al.,* 'How Do Climate Policies Work? Confronting Governance Dilemmas in the European Union' in Mike Hulme and Henry Neufeldt, *Making Climate Change Work for Us* (Cambridge University Press 2012) 143-150.

[14] 2302 UNTS 162.

[15] See, for example, Marjan Peeters and Kurt Deketelaere, *EU Climate Change Policy. The Challenges of New Regulatory Initiatives* (Edwar Elgar Publishing 2007); Don Bredin and Cal Muckley, 'An Emerging Equilibrium in the EU Emissions Trading Scheme' (2011) 33 Energy Economics 353-362; Patrick Criqui and Silvana Mima, 'European Climate –Energy Security Nexus: a Model-Based Scenario Analysis' (2012) 41 Energy Policy 827-842.

Court of Justice have no role in the process. Relying largely on this method, the European Commission has limited itself to adopting guidelines or strategic documents on adaptation.[16]

In this line, the 2007 Green Paper marked the first step of any importance on adaptation in Europe.[17] No member state initially opposed the EU's becoming involved in adaptation initiatives. At that time, however, broad sectors of civil society and representatives of sub-state authorities were already clamouring for a more proactive role by the EU. An example of this movement was the platform set up by local authorities participating in the Eurocities network to press for a directive on adaptation. The proposal met with strong opposition from some member states, including the UK and the Netherlands.[18]

Nonetheless, the Green Paper and the intense debate it sparked among different interest groups led to the White Paper on adapting to climate change.[19] In this document, the European Commission justified why EU adaptation action is necessary. Among the main reasons, the White Paper pointed out the cross-border dimensions of climate change impacts and adaptation measures, the effects of these impacts on certain sectors which are integrated at EU level through the single market and common policies (e.g. agriculture, fisheries, energy, etc), the need to set up solidarity mechanisms to ensure that the most disadvantaged regions will be able to adopt the necessary adaptation measures, and the relevance of the support to member states' resources for adaptation.[20] The Commission's document also proposed to integrate adaptation actions in key areas, a process known as 'mainstreaming', rather than adopting a directive or other specific legal instrument on adaptation. Specifically, the proposal included 33 actions, most of which have already been put into action, such as the establishment of the European Biodiversity Clearing House Mechanism (EB-CHM),[21] the publication of numerous documents offering guidance on

---

[16] Rayner and Jordan (n 5) 156. About the open method of coordination, see information available at: <http://ec.europa.eu/invest-in-research/coordination/coordination01_en.htm#> accessed 8 January 2015.

[17] European Commission, 'Green Paper of 29 June 2007 on Adapting to Climate Change in Europe-Options for EU Action' COM (2007) 354 final.

[18] Rayner and Jordan (n 5) 149.

[19] European Commission,'White Paper. Adapting to Climate Change: Towards a European Framework for Action' COM (2009) 147 final.

[20] Ibid 6.

[21] In reality, EB-CHM constitutes an information network promoting technical co-operation and technology transfer between Europe and the rest of the world. Managed by the European Environment Agency, the mechanism forms part of the Biodiversity Information System for Europe

incorporating adaptation measures in different sectoral directives and the European Climate Adaptation Platform (Climate-Adapt), set up in March 2012.[22]

The White Paper paved the way and set the bases for the adoption of *the EU's Strategy on Adaptation to Climate Change* on 16 April, 2013.[23] In line with *the European Strategy 2020*, the Adaptation Strategy is intended to act as a comprehensive framework that will help the EU make the transition to a low-carbon, climate-resilient economy. It stresses the need to improve the capacity to respond to the impacts of climate change at all levels of political power (EU, national, regional and local) through a coherent and coordinated approach.[24]

One of the priority objectives established for 2020 is to increase climate resilience amongst the most vulnerable sectors. In operating terms, it is planned to consistently extend the integration of adaptation measures in key EU policies, prioritising projects and actions that address key cross-sectoral, trans-regional and/or cross-border issues and which promote, among others aims, green infrastructures and innovative adaptation technologies.[25] Planned actions to achieve these aims range from soft measures (orientations, impact studies, support frameworks, etc.) to legislation and direct intervention.[26]

Despite the significance of the Adaptation Strategy as a more comprehensive and more ambitious framework, the most important challenge facing the EU is undoubtedly to encourage member states to adopt a national adaptation strategy in consonance with the European one. The instrument generally recommended by *the UNFCCC* is a national adaptation plan (NAP). Unlike mitigation, however, adaptation lacks diplomatic discipline, assessment and deadlines imposed by binding, international treaties along the lines of the Kyoto Protocol. When *the European Adaptation Strategy* was adopted, only 15 of the then

---

(BISE). Extensive information on its activities can be found at: <http://biodiversity.europa.eu/chm-network> accessed 13 March 2015.

[22] This platform offers extensive information on guideline documents in different sectors and actions at all tiers of government <http://climate-adapt.eea.europa.eu/> accessed 8 January 2015.

[23] European Commission, 'An EU Strategy on Adaptation to Climate Change' (Communication) COM (2013) 216 final.

[24] Ibid 5.

[25] Ibid 9.

[26] See Commission Staff Working Group, 'Summary of the Impact Assessment' SWD (2013) 131 final, 4-7.

27 EU member states had an NAP. To date, 16 member states have adopted an NAP.[27] Uncertainty surrounding trends in GHGs and the unpredictable nature of climate change impacts also nourish state inertia. In addition, private agents are also undertaking their own adaptation measures in most countries, making it difficult to see to what extent this area should be the responsibility of national government.[28] Likewise, as noted above, member states are reluctant to accept adaptation action being taken by the EU, since they consider it may interfere in areas they deem to fall under their jurisdiction, such as land use, infrastructure and planning in general. These reasons explain why some member states oppose the adoption of any binding EU legal instrument that would require them to adopt a national adaptation strategy.[29] Nonetheless, the Commission,[30] contradicting its White Paper, plans to propose precisely such legislation in 2017, if no progress has been made by member states in adopting NAPs by that time.[31]

Because of these limitations, the EU is currently concentrating its efforts on integrating adaptation measures in the sectoral policies over which it has powers by 2020. Likewise, the greater receptivity of local bodies to its supranational initiatives can serve not only to compensate for state inertia, but also to stimulate, from the bottom up, action among national governments, thus contributing to the Europeanization of this multi-level policy.

Horizontal Integration and Bottom-Up Initiatives: Towards the Europeanization of the Adaptation Policy

As mentioned above, mainstreaming is a key pillar of the current *EU Adaptation Strategy*, in line with the White Paper and consistently with Article 3.3 of TEU, which sets out sustainable development as an overarching and long-term goal of the EU. This objective was first introduced by *the Treaty of Amsterdam (1997)* [32] and, since then, mainstreaming

---

[27] Action at national level is formulated in different ways, ranging from states with broad strategies and individual legislation for different policy areas to countries with specific adaptation legislation. For an overall overview, see European Environment Agency (n 2) 69.

[28] Climate Action Network (CAN). Europe, Climate Change Adaptation and the Role of the Private Sector' (CAN 2013) 8-14.

[29] Commission Staff Working Group (n 26) 6.

[30] The Commission, though consisting of individuals from member states, is designed to act independently of the EU Members, and is instead to act in the interests of the EU as an institution.

[31] Commission (n 23) 6.

[32] [1997] OJ C340/01.

environmental considerations has become a requirement for all EU areas. Specifically, Article 11 of TFEU sets out the integration principle of environmental protection in all EU policies.[33] In other words, environmental protection must be considered as a relevant factor in the definition and implementation of all EU legal initiatives and activities. It is also a policy goal of the EU's external action, as provided by Article 21.2 (d) of TEU. Consequently, one may assert that adaptation mainstreaming is not a mere choice for the EU, but a political and legal requirement imposed by member states themselves through the treaties.

In line with this requirement, the EU has been introducing climate change impact resilience measures in different domains under its competence over the last few years, although their scope varies from sector to sector. For example, adaptation is already included in legislation on the marine environment,[34] transport,[35] forestry,[36] energy,[37] environment,[38] management and prevention of hazards and disasters,[39] integrated coastal management and maritime spatial planning,[40] and invasive species.[41] Adaptation actions are also planned in the areas

[33] The Sustainable Development Strategy (2001) provides the policy framework to address this legal commitment. After its review in 2009, it continues to be the long-term vision for EU policies until 2050. The implementation of this objective has led to the setting up of multiple impact assessment processes, such as the Commission-wide Impact Assessment for all EU legislation with internal impacts and the Sustainability Impact Assessment for DG Trade, as concerns other countries and international organizations. See <http://europa.eu/legislation_summaries/environment/sustainable_development/l28117_en.htm>accessed 8 January 2015.

[34] European Parliament and Council Directive 2008/56/EC of 17 June 2008 establishing a framework for community action in the field of marine environmental policy [2008] OJ L164/19.

[35] European Parliament and Council Regulation (EU) 1315/2013 of 11 December 2013 on Union guidelines for the development of the trans-European transport network and repealing Decision 661/2010/EU [2013] OJ L348/1.

[36] European Parliament and Council Regulation (EU) 2152/2003 of 17 November 2003 concerning monitoring of forests and environmental interactions in the Community [2003] OJ L324/1.

[37] European Parliament and Council Regulation (EU) 1316/2013 of 11 December 2013 establishing the Connecting Europe Facility [2013] OJ L348/129.

[38] European Parliament and Council Directive 2014/52/EU of 16 April 2014 amending Directive 2011/92/EU on the assessment of the effects of certain public and private projects on the environment [2014] OJ L124/1.

[39] European Parliament and Council Decision 1313/2013/EU of 17 December 2013 on a Union Protection Mechanism [2013] OJ L347/924.

[40] European Parliament and Council Directive 2014/89/EU of 23 July 2014 establishing a framework for maritime spatial planning [2014] OJ L 257/135.

of farming and forestry,[42] public health,[43] green infrastructures[44] and the new forestry strategy.[45] Infrastructures are covered by the Eurocode harmonisation standards established by the European Committee for Standardization to which all projects must conform.[46]

Mainstreaming is also a relevant element of the new *2014-2020 Multiannual Financial Framework (MFF)*, which includes a share of climate-related expenditure of 20% of the EU budget.[47] Finally, the recent inclusion of a conditionality clause making access to European

---

[41] European Parliament and Council Regulation (EU) 1143/2014 of 22 October 2014 on the prevention and management of the introduction and spread of invasive alien species [2014] OJ L 317/35.

[42] The list of specific recommendations can be consulted at: <http://ec.europa.eu/agriculture/cap-post-2013/legal-proposals/index_en.htm> accessed 13 March 2015.

[43] For example, in 2013 the European Commission adopted a roadmap to prevent the introduction and spread of new pests and diseases on plants, to protect forests and to ensure food security. Available at: <http://ec.europa.eu/smart-regulation/impact/planned_ia/docs/2013_sanco_002_eu_plant_health_law_en.pdf> accessed 13 March 2015. See also <http://www.climate-adapt.eea.europa.eu/web/guest/health> accessed 8 January 2014.

[44] European Commission, 'Green Infrastructure (GI). Enhancing Europe's Natural Capital' (Communication) COM (2013) 249 final.

[45] European Commission, 'A new EU Forest Strategy: for forests and the forest-based sector' (Communication) COM (2013) 659 final.

[46] European Parliament and Council Regulation (EU) 305/2011 of 9 March 2011 laying down harmonised conditions for the marketing of construction products and repealing Council Directive 89/106/EEC [2011] OJ L88/5. Extensive information on the Eurocodes is available at: <http://eurocodes.jrc.ec.europa.eu/showpage.php?id=1> accessed 8 January 2015.

[47] About 190 billion euro. This financial framework sets the maximum amount of commitment appropriations in the EU annual budget for broad policy areas ('Headings'). It sets an overall ceiling on payment and commitment appropriations. Council Regulation lies down the multiannual financial framework for the years 2014-2020 [2013] OJ L347/884. Specifically, adaptation actions will be implemented through the programmes financed by different funds: the Cohesion Fund, the European Regional Development Fund, the European Social Fund, the European Agricultural Fund for Rural Development and the European Maritime and Fisheries Fund. The LIFE programme and the new Horizon research programme also include adaptation as a priority area for intervention. See European Commission, *Multiannual Financial Framework 2014-2020 and EU Budget 2014. The Figures* (Publications Office of the European Union 2013) 7-13, 19; <http://ec.europa.eu/budget/mff/index_en.cfm> accessed 8 January 2015.

funds conditional on the implementation of adaptation measures may become a useful tool to encourage countries that have not yet adopted a national adaptation strategy.[48]

For the moment, in contrast to the foot-dragging at national level, some local authorities have proven much more receptive and driven in preparing their own strategies and drawing on the institutional and financial opportunities offered by the EU's supranational action. In this context, and because the EU legislation uses the term local authorities to refer to cities and towns, rather than to national regions,[49] the discussion focuses upon the responses of cities to climate change. It is worth noting then that, alongside population aging, migratory pressure and growing dependency on communication technologies, European cities view climate change as one of the most important threats they currently face. The effects of global warming are already visible in numerous urban nuclei, with retreating coastlines, coastal erosion, flooding, overflowing rivers, heat waves and water shortages. Europe's future therefore depends to a great extent on the adoption of proactive climate change resistance measures at local level.[50]

Aware of these risks, many European cities have begun developing adaptation strategies or action plans, of varying scope. Generally speaking, however, very few cities have the capacity to implement comprehensive adaptation strategies at this time, – Copenhagen and Rotterdam are examples – although there is also a small core of cities with the capacity to achieve this position in two years. If this is confirmed, they could become a potential instrument for disseminating capacity-building within and among the various cities.[51]

---

[48] This condition is expressly set out in Article 8 of the European Parliament and Council Regulation (EU) 1303/2013 of 17 December 2013 laying down common provisions on the European Regional Development Fund, the European Social Fund, the Cohesion Fund, the European Agricultural Fund for Rural Development and the European Maritime and Fisheries Fund and laying down general provisions on the European Regional Development Fund, the European Social Fund, the Cohesion Fund and the European Maritime and Fisheries Fund and repealing Council Regulation (EC) 1083/2006 [2013] OJ L347/320; European Environmental Agency (n 2) 65-66.

[49] Although cities are the main center of power and action for adaptation, the term ‘local authorities’ used by the EU documents refers to the body responsible for the government either of a city or town.

[50] Ecologic Institute et al., Adaptation to Climate Change: Policy Instruments for Adaptation to Climate Change in Big European Cities and Metropolitan Areas (Committee of the Regions 2011) 5-8.

[51] Ricardo-AEA, Adaptation Strategies for European Cities. Summary Report (European Commission 2013) 9.

For the moment, many of the adaptation measures implemented in cities such as Stuttgart, Ghent, London and Vienna can be seen to have arisen out of research studies and projects. This demonstrates that knowledge and learning are relevant factors that enable political leaders to see the importance of climate change adaptation to the city's socio-economic development, to understand better the cost and benefits, and to encourage the implementation of city level adaptation strategies Clearly then, the scientific community is contributing to generating leadership among policy makers and economic and social agents.[52]

In all events, intervention by regional and national authorities is essential to justify the resources required to develop cities' adaptation strategies. Indeed, regional governments have a key role to play, especially when the necessary adaptation measures transcend the boundaries of any one municipal authority. However, the scope of regional action will vary depending on the respective political structures of each state. In federal countries such as Germany or Austria, for example, the regional governments enjoy broad political decision-making powers. The German programme KLIMZUG is an example of effective coordination in the field of adaptation between research centres, administrative authorities and interested sectors at a regional level. Its implementation has been of key importance in developing specific strategies for cities such as Dresden, Hamburg and Bremen. The programme was co-financed by the authorities in the seven participating regions, together with a number of private companies, although the majority of funding has come from the federal government.[53] In countries with a more unitary structure, decision-making and legislative capacities are normally in the hands of the central government, although in some cases (e.g. Sweden) regional and local authorities also have extensive powers. Nonetheless, adaptation is not always developed as a priority strategy in the most vulnerable cities, even those that have the administrative capacity to put it into action. Other factors, such as political leadership and the specific economic circumstances, can also act as a catalyst.[54]

---

[52] Birgit Georgi *et al.* 'Knowledge and Information for Resilient Cities' in Konrad Otto-Zimmermann (ed.), *Resilient Cities 2: Cities and Adaptation to Climate Change Proceedings of the Global Forum 2011* (Springer 2012) 251-260.

[53] See Ecologic Institute (n 50) 28.

[54] See H. Corina Keskitalo, 'Connecting Multi-Levels of Governance for Adaptation to Climate Change in Advanced Industrial States' in Jurian Edelenbos, Nancy Bressers and Peter Scholten (eds.) *Water Governance as Connective Capacity* (Ashgate 2013) 71, 87.

From a perspective of multi-level governance, the national level provides the ideal direct link with the EU's supranational action. It is therefore essential to set out a comprehensive national strategy, specifying rules on adaptation in different sectors that are consistent with and supportive of local initiatives. The promotion of adaptation measures at the local level also offers the national authorities a chance for political learning;[55] the cities' experience with direct implementation can provide useful lessons and best practice that can help improve national strategies and procedures.[56]

In general terms, however, we can see that adaptation strategies are not adopted by cities in response to prior mandatory national requirements, albeit the majority appear to be linked to an existing NAP (Denmark, Spain, France, Hungary, Germany) or one in preparation (Czech Republic, Italy, Latvia, Portugal, Sweden). Moreover, some NAPs impose additional requirements on local authorities that are not backed by the necessary financial coverage. In other cases, the NAPs focus exclusively on aspects of a national dimension, without sufficiently taking into account local needs. As a result it is often not clear how the NAPs are coordinated with local and regional strategies and in general a lack of consistency between the different levels can be observed.[57] At the same time, in states which have yet to adopt an NAP, the local authorities operate within a legal vacuum. This often results in a lack of coordination between different cities and a deficient adaptation response. As a result of these inadequacies at the national level, some cities and towns are bypassing the national perspective and taking the EU as the direct reference point for their actions.[58]

---

[55] See European Environment Agency, Urban Adaptation to Climate Change in Europe. Challenges and Opportunities for Cities together with Supportive National and European Policies (Publications Office of the European Union 2012) 98-99.

[56] In France, for example, since 1982 building insurance has covered damage resulting from natural disasters. Insurance and reinsurance firms are required to set aside 12% of premiums for such contingencies. In the event of bankruptcy of the principal reinsurer, the state meets 100% of the coverage. The consequence of this state-backed guarantee has been that people have continued to settle in areas with potential risk of flooding. The experience observed at a local level led the national government to change the regulatory framework in 1995. Since then, natural risk prevention plans limit urban growth in areas of risk in order to minimise the possible damage. See Celine Grislain-Letremy and Cédric Peinturier, *Le Régime d'Assurance des Catastrophes Naturelles en France Métropolitaine entre 1995 et 2006* (Commisariat Général au Development Durable 2010) 19.

[57] European Environment Agency (n 55) 101.

[58] Ricardo-AEA (n 51) 13.

A number of initiatives (including the Sustainable Cities and Towns Campaign), networks and associations (e.g. the Council of European Municipalities and Regions and Eurocities) offer direct interaction between cities and the European Commission. Many municipalities are also participating in transnational environmental networks, such as the Global Cities Network (ICLEI) and the Climate Alliance. These networks partner cities taking pioneering steps on climate issues. They also form a focus of knowledge generation and political innovation. At the same time, they enable the European Commission and national governments to interact with a broad spectrum of local authorities.[59]

These channels through which local authorities can gain direct access to EU levels reflect the growing Europeanization of the politics of climate change. They are also an example of the relevant role cities can play in the drawing up of European policies. The European Commission, in particular, views cities not only as the place where adaptation takes place; as agents actively participating in climate governance, they also offer feedback on the effectiveness of European proposals and thus assume a key role in assessment and compliance-monitoring. *The European Adaptation Strategy* has confirmed the important contribution local authorities can make in the supranational context of the Union. Within this framework, the strategic target is that by 2020 all cities with a population of over 100,000 will have their own adaptation strategy.[60]

Others forms of horizontal interaction in the European context amongst the territorial authorities themselves include interregional strategies, such as the Baltic Sea[61] and Danube

---

[59] Kristine Kern and Harriet Bulkeley, 'Cities, Europeanization and Multi-Level Governance: Governing Climate Change through Transnational Municipal Networks' (2009) 47 Journal of Common Market Studies 324.

[60] Commission (n 23) 3. 41% of the EU population lives and works currently in cities, while only 23% in rural areas and 35% live in intermediate regions. Urban spaces are a major source of GHG. The process of urbanisation is expected to increase in the forthcoming years, so it is at city level where climatic threats will have the most severe effects, hence adaptation efforts are mainly focused on cities. See Committee of the Regions, *Climate Change Adaptation: Empowerment of Local and Regional Authorities, with a Focus on their Involvement in Monitoring and Policy Design* (European Union 2013) 9.

[61] European Commission, 'European Union Strategy for the Baltic Sea Region' (COM) 2009 248 final. More information available at: <http://www.interreg-baltic.eu> accessed 9 February 2015.

strategies.[62] These initiatives promote direct cooperation between local and regional governments and have EU funding for developing adaptation measures.[63]

The inclusion of adaptation in numerous EU policies also has a direct impact on sectors of key importance for regional and local authorities. Perhaps the most important for these tiers of government is the cohesion policy, to which an important share of the EU budget is devoted. The cohesion policy encompasses programmes such as INTERREG and URBACT, which co-finance regional and local adaptation projects. For example, initiatives financed by the Regional Development Fund, such as BaltCICA in Helsinki and ASTRA in Riga, are of major importance for promoting the first initiatives and developing local capacities.[64] Likewise, in the area of environmental policy, following its recent amendment, the Environmental Impact Assessment (EIA) Directive could become an important instrument for promoting adaptation. Compulsory national implementation of this institutional legislation could prove relevant for local authorities.[65] The same is true of the Floods Directive[66] and the Water Scarcity and Droughts Strategy,[67] currently under review by the European Commission. All this EU legislation can directly promote and support the activities

[62] European Commission, 'European Union Strategy for Danube Region' COM (2010) 715 final. More information available at: <http://www.danube-region.eu/> accessed 9 February 2015.

[63] European Commission, 'Report from the Commission to the European Parliament, the Council, the Social and Economic Council and the Committee of the Regions concerning the governance of macro-regional strategies' COM (2014) 284 final.

[64] Ecologic Institute (n 50) 28.

[65] For example, Article 6.1 of the EIA Directive, as amended by Directive 2014/52/EU (n 37) provides that member states shall have to consult the local and regional authorities in order to give them the opportunity to express their opinion on the information supplied by the developer of a project. The newly amended EIA Directive 2014/52/EU came into force on 15 May 2014, but member states have three years for its transposition (until 15 May 2017). The new provisions bind member states to simplify their environmental assessment procedures of the potential effects of projects on the environment. It also aims to improve the level of environment protection, by trying to make business decisions on public and private investments more predictable and sustainable in the long term. Areas, such as climate change and disaster prevention are now better reflected in the assessment process. For a general overview, see European Commission, 'Review of the Environmental Impact Assessment (EIA) Directive' (2014) <http://ec.europa.eu/environment/eia/review.htm> accessed 8 January 2015.

[66] European Parliament and Council Directive 2007/60/EC of 23 October 2007 on the assessment and management of floods risks [2007] OJ L288/1.

[67] European Commission, 'Report on the Review of the European Water Scarcity and Droughts Policy' COM (2012) 672 final.

of the regional and local authorities. *The Floods Directive*, for example, has already provided numerous cities with the basis for drafting plans for adapting to flooding risks.[68]

Another recent initiative, launched by the Commission in March 2014 to develop adequate adaptation capacity among local authorities, is the 'Mayors Adapt'. Cities choosing to sign up to this voluntary initiative undertake to draw up their adaptation plans in consonance with *the European Adaptation Strategy* and to review it every two years. In exchange, participating authorities receive technical advice, guideline documents and information on best practice and networking activities. Mayor Adapt complements the mitigation work being carried out by European cities under the auspices of the Covenant of Mayors, one of the most significant of all European climate governance initiatives. The Covenant directly involves local and regional authorities in meeting emission reduction and sustainable energy targets.[69]

We may therefore conclude that, unlike some member states, regional and local authorities, in particular, are determined to contribute to meeting the EU's climate change and energy targets. This determination clearly indicates that there is greater potential for implementing the EU's supranational actions at sub-state level.

Paralleling its actions in the internal area, the EU has rolled out a whole series of initiatives to help developing countries to address the effects of global warming. These actions help reinforce the important international outreach of European action on climate change.

Climate Resilience in EU External Action: Promoting National Adaptation Plans in Developing Countries

One of the most important challenges faced by the EU and the international community at large is to identify the best way of financing the costs of climate adaptation in developing

[68] European Environment Agency (n 55) 102, 104.

[69] More than 3000 cities and municipalities in the 28 member states and a further 19 third countries have now signed up to the Covenant of Mayors. Within this framework, some regions are playing an important role as territorial coordinators and catalysts of the necessary funds for the investments required. Extensive information is available at: <http://mayors-adapt.eu/> accessed 13 March 2015.

countries. Recent estimates suggest that around 380 billion dollars are required per year to properly attend to adaptation shortfalls in Third World countries.[70]

The primary international sources of financing for adaptation projects in these countries are currently the UN and the EU.[71] Indeed, despite the economic recession still gripping the eurozone, the EU continues to be the primary source of funding for climate-related actions in poorer countries. EU aid is channelled through a number of external policies, including its *Trade and Neighbourhood policies*, but *the Development Co-operation policy* is particularly significant in this regard. The ultimate aim is to promote sustainable economic growth in poorer countries, in keeping with the multilateral legal framework currently provided by *the UNFCCC* and the future post-Kyoto climate order currently being negotiated. From this perspective, the EU can be said to be helping bring these countries into the international climate governance regime.

The strategic document used by the EU as the basis for launching this initiative 10 years ago was *the Climate Change Action Plan*, in the context of Development Co-operation 2004-2008.[72] *The Action Plan* was in consonance with the Millennium Development Goals and the results of the World Summit on Sustainable Development (Johannesburg 2002).[73] Its strategic aims were to give greater political importance to climate change in development co-operation, to support adaptation and mitigation initiatives in poorer countries and to develop their capacities for climate resilience. Within this framework, the most important measure was undoubtedly the assistance provided for assessing vulnerability and in the consequent preparation of NAPs. In financial terms, the EU has contributed to preparing and implementing NAPs from its own funds and those provided by member states.

Indeed, the EU and its member states share powers not only in environmental matters, but also in development co-operation. Together they constitute the world's largest provider of

---

[70] Manuel Montes, 'Climate Change Financing Requirements of Developing Countries' (2013) 1 Climate Policy Brief 4.

[71] Alice Caravani, Sam Barnard, Smita Nakhooda and Liane Schalatek, 'Climate Finance Thematic Briefing: Adaptation Finance' (2014) 3 Climate Finance Fundamentals 1.

[72] European Commission, 'Climate change in the Context of Development Co-operation' (Communication) COM (2003) 85 final.

[73] United Nations, 'World Summit on Sustainable Development. Declaration on Sustainable Development' A/Conf. 199/20 (2002) <http://www.un-documents.net/jburgdec.htm> accessed 13 March 2015.

development aid, accounting for over 50% of global aid.[74] During COP15 in Copenhagen, the EU and its member states committed to contributing 7.2 billion euro of an estimated 20 billion euro provided for fast-start financing in the period 2010-2012. They eventually exceeded that initial commitment, contributing a total 7.34 billion euro, despite the serious economic recession faced by the eurozone from 2010. They are currently preparing to meet the commitment assumed by developed countries to devote 100 billion dollars per year until 2020 to help underdeveloped countries identify vulnerabilities, priorities and strategies for action.[75]

As well as bilateral funding, another outlet for adaptation financing by the EU and its member states are the multilateral instruments specifically established for this purpose. These include the Adaptation Fund, the Special Climate Change Fund and the Least Developed Fund.[76] At present, most of the bilateral and multilateral funds allocated prioritise adaptation measures, since mitigation is less relevant in poorer economies.[77]

Following the conclusion of *the Action Plan* in 2008, the principal instrument through which the EU and the member states now channel their aid to developing countries is the Global Climate Change Alliance (GCCA).[78] The GCCA is an EU initiative specifically designed to reinforce dialogue and cooperation with the countries that are most vulnerable to climate change, particularly least-developed countries and small island developing states. It was set

---

[74] Following two years of declining figures, aid from the EU and its 28 member states jointly came to 56.5 billion euro in 2013, up from 55.3 billion in 2012. See Organization for Economic Cooperation and Development, 'Aid to Developing Countries Rebonds in 2013 to Reach an All Time High' (2014) <http://www.oecd.org/newsroom/aid-to-developing-countries-rebounds-in-2013-to-reach-an-all-time-high.htm> accessed 8 January 2015.

[75] European Commission, 'European Union Climate Funding for Developing Countries in 2014' (2014) 3 <http://ec.europa.eu/clima/publications/docs/funding_developing_countries_2014_en.pdf> accessed 8 January 2015.

[76] The creation of these funds was decided during the COP 7 in Marrakech (2001). Currently, there are more than 10 multilateral funds devoted to financing climate-related policies in developing countries. Dessai Svraje and Emma Lisa, 'The Marrakech Accords to the Kyoto Protocol: Analysis and Future Prospects' (2007) 26 Global Environmental Change 149-153; Climate Funds Update, 'The Funds' (2014) <http://www.climatefundsupdate.org/the-funds> accessed 8 January 2015.

[77] According to this trend, the multilateral funding for adaptation increased in a 57% during the period 2013-2014. Caravani *et al.* (n 71) 1.

[78] Extensive information is available at <http://www.gcca.eu> accessed 8 January 2015.

up in 2008 with four countries. In 2015, 35 States and 8 regions and sub-regions are participating in this multilateral initiative, in which over 45 national and regional programmes are being implemented, with a combined budget of close to 300 million euro.[79]

Through the GCCA, the EU and its member states provide technical and financial support in five priority areas: mainstreaming climate change into poverty reduction and development efforts, adaptation, reduction of emissions from deforestation and forest degradation (REDD+), improvement in the clean development mechanism (CDM) and disaster risk reduction. Based on the number of interventions, the priority area at this time can perhaps be identified as being adaptation.[80] Projects are being carried out in sectors that are especially vulnerable to the impact of climate change, such as agriculture and fishing, land management, water and waste, forests and natural resources. Most of the programmes and projects are being implemented in countries in Africa, the Caribbean and the Pacific.[81] To be eligible for European aid, the beneficiary countries must adopt national climate change resistance strategies. Through this element of conditionality, the EU is trying to generate sufficient capacity in these countries to enable them to receive and in the long term, effectively manage funding for combatting the effects of global warming. At the same time, this approach serves the EU itself as a catalyst for mainstreaming the climate factor in its development aid, thus producing a multiplier effect.[82]

As well as the GCCA, the European Investment Bank (EIB) – which is financed by EU member states – is one of the international financial institutions that is providing most financing for climate actions, inside and outside Europe, especially in developing and emerging countries. In 2013, the EIB spent 19 billion euro on climate change projects worldwide. Of this amount 2.2 billion was invested in developing countries.[83] Finally, the fight against climate change is extensively covered in the current multiannual financial framework 2014-2020. As mentioned above, during that period it is planned to devote 20% of the EU's annual budget to climate-related projects and actions, representing a total amount of 190

---

[79] Commission (n 75) 7.

[80]<http://www.climatefundsupdate.org/listing/global-climate-change-allianc#TOC-Graphs-and-statistics> accessed 8 January 2015.

[81] Detailed information about projects, sectors and regions is available at <http://www.gcca.eu/technical-and-financial-support> accessed 8 January 2015.

[82] See European Commission, Paving the Way for Climate Compatible Development: Experiences from the Global Climate Change Alliance (European Commission, GCCA 2012) 29-40.

[83] Commission (n 75) 8.

billion euro. This ambitious financing target includes cooperation policies, with 1.7 billion euro allocated to climate measures in this area in the period 2014-2015 alone.[84] In this context and period, climate relevant activities in developing countries and economies in transition will be funded through different instruments, such as the Development Cooperation Instrument, which will support environmental sustainability and climate change-related projects within the thematic programme 'Global Public Goods and Challenges'. Countries included in the Organisation for Economic Cooperation (OECD) Development Assistance Committee (DAC) list of Official Development Assistance (ODA) may be recipient of this funding.[85] The European Neighbourhood Instrument will also provide funding for climate-related projects in the 16 target countries,[86] while the new Partnership Instrument will support environmental sustainability efforts in EU traditional partners and emerging global actors, such as US, China, Brazil, South Africa and India.[87]

Despite the well-known problems of coordination between the EU and its member states in the field of development assistance and notwithstanding the inconsistencies sometimes observed between European development co-operation and climate change policies,[88] there can be no doubt that all these collective efforts are valuable in terms of generating mutual relationships of trust and collaboration between the EU and developing countries. Joint experience in turn fosters a common understanding and a shared strategic vision in the search for global solutions to climate change. This interaction extends beyond the current international framework and could contribute to facilitating the adoption of a new post-2020 global climate order.

---

[84] Within the current multiannual framework, development cooperation is part of Heading 4. Global Europe. This EU policy has a budget of 66.2 billion euro, which represents a 6.12% of the overall budget for 2014-2020. See European Commission (n 47) 21-22.

[85] The current DAC list is available at:<http://www.oecd.org/dac/stats/daclist.htm> accessed 13 March 2015.

[86] Algerie, Armenia, Azerbaijan, Belarus, Egypt, Georgia, Israel, Jordan Lebanon, Libya, Moldova, Morocco, occupied Palestinian Territory, Syria, Tunisia and Ukraine. <http://ec.europa.eu/eurostat/web/european-neighbourhood-policy/overview> accessed 8 January 2015.

[87] See Alisa Herrero and Hanne Knaepen, 'Run-up to 2015: A Moment of Truth for EU External Climate Action? (2014) 67 ECDPM Briefing Note 9-12.

[88] One example is the EU policy on biofuels and their harmful effects for developing countries. European Parliament, 'Report on the EU 2013 Report on Policy Coherence for Development' (2014) 6-7 <http://www.europarl.europa.eu/sides/getDoc.do?pubRef=-//EP//NONSGML+REPORT+A7-2014-0161+0+DOC+PDF+V0//EN>accessed 13 March 2015.

Conclusion

The future effects of global warming will be felt differently and with varying intensity in the different regions of Europe. However, the cross-sectoral dimension and the transnational implications of adaptation measures require the EU to take a supranational coordinating role. As this study has shown, there is at this time no organised multi-level governance in the area of adaptation, in particular, between the state framework and the supranational EU framework, since numerous member states have not even adopted an NAP and some oppose the adoption of binding EU legislation. As a result, the EU will only be able to respond effectively to the challenges of climate change if all those involved in the different tiers of government in Europe learn to work together and recognise that adaptation must be supported as part of the EU's political agenda.

By contrast, and in some way compensating for the above limitations, the gradual integration of adaptation measures in other sectors of European competence and the important drive for sustainability from the local level as factors demonstrated in this paper can promote a more holistic and effective multi-level adaptation framework over the coming years. However, despite this potential, in the short term the EU must face the challenge of establishing synergies between its mitigation and adaptation actions, and therefore the adoption of binding legislation will in all events be necessary in order to respond in a coherent fashion to the global challenges of climate change.

Where the EU has had more success is in supporting adaptation measures in developing States. Adaptation to climate change is an inescapable priority in developing countries; financing that adaptation is one of the greatest challenges facing the international community. Through the GCCA, the EU contributes one of the main sources of financing for adaptation projects in developing countries. The conditions laid on eligibility for these funds are acting as a catalyst for adoption of NAPs in these countries. At a global level, the experience of the GCCA offers useful lessons and case studies that can serve to channel international negotiations, particularly with regard to developing countries' potential to participate actively in the future climate post-Kyoto framework. Such joint dialogue can therefore go beyond bilateral relations in facilitating a shared strategic vision that will help drive forward the transition towards a more sustainable global climate order.

FACILITATING THE US RENEWABLE TRANSITION: From *Ad Hoc* Integration to Comprehensive Reform

Melissa Powers*

Introduction

The United States of America is blessed with an abundance of renewable electricity resources. The country could satisfy its electricity needs perhaps sixteen times over through onshore wind power alone,[1] and it could potentially produce more than one hundred times the power it needs from solar energy.[2] Each individual state, moreover, could likely meet all of its energy demand solely from instate renewable resources,[3] and many states would have surplus power to export.[4] The United States also has an advanced and innovative technology sector that has designed key technologies that have made and will continue to make renewable electricity cheaper, more available, and more reliable.[5] Government studies

---

* Associate Professor of Law, Lewis & Clark Law School, Portland, OR USA, and Director of the Green Energy Institute at Lewis & Clark Law School. The author thanks Elizabeth Kirk for her help with the article.

[1] Xi Lu, Michael B. McElroya, and Juha Kiviluomac, 'Global Potential for Wind-Generated Electricity' (2009) 106 PNAS 10,933, 10,938.

[2] Anthony Lopez, Billy Roberts, Donna Heimiller, Nate Blair, and Gian Porro, 'US Renewable Energy Technical Potentials: A GIS-Based Analysis' (NREL 2014) 20.

[3] Mark Z. Jacobson, Guillaume Bazouin, Zack A.F. Bauer, Christa C. Heavey, Emma C. Fisher, Emma C. Hutchinson, Sean B. Morris, Diniana J.Y. Piekutowski, Taylor A. Vencill, Tim W. Yeskoo, '100% Wind, Water, Sunlight (WWS) All-Sector Energy Plans for the 50 United States' (2014).

[4] Several states already produce renewable electricity for export to other states. The physical interconnection of the US transmission system enables these exports, although intermittent resources face difficulties obtaining affordable access to the transmission system. *See infra* n. 75-83 and accompanying text. Renewable energy exports face other challenges in today's energy market, including slack demand and competition from lower cost natural gas. *See* Judy W. Chang, J. Michael Hagerty, Johannes P. Pfeifenberger, and Ann Murray, 'Nebraska Renewable Energy Exports: Challenges and Opportunities (LB 1115 Study)' (The Brattle Group, 12 Dec 2014). Despite these obstacles, the fact remains that most US states have sufficient wind and solar power capacity to produce a surplus of renewable power.

[5] Jacobson, et al. (n. 3). Wind capacity maps produced by the National Renewable Energy Laboratory (NREL) illustrate how technological improvements can expand renewable power availability. In late

have calculated that the United States could obtain 80% of its electricity from renewable sources by 2050,[6] and private studies have argued that a 100%-by-2050 goal is realistic.[7] A transformation of the electricity system (this paper will call it a "renewable transition") is technically feasible. Indeed, the United States added an unprecedented amount of new electricity capacity from renewable sources in the past several years.[8] Yet, as of 2014, renewables accounted for only 13% of the country's electricity production,[9] and non-hydroelectric renewable resources built since the 1970s accounted for less than half of this production.[10] Solar and wind, the resources with the highest growth rates and arguably the greatest potential to supply future US power (and the focus of this article),[11] together provided only about 5% of US power generation by early 2015.[12] In comparison, in 2014 renewable resources provided 24% of electricity supply in Germany[13] and 40% in Denmark, nearly all of which has come online since the 1990s.[14]

2014, NREL released wind capacity maps demonstrating that nearly every state in the country could produce substantial wind power using 140-meter onshore wind turbines, which have only recently become commercially available. In comparison, 110-meter turbines in use today reduce wind capacity in many states, particularly in the southeast. See US Dept. of Energy, WINDExchange, 'Wind Potential Capacity' (last updated 10 Dec 2014), http://apps2.eere.energy.gov/wind/windexchange/windmaps/resource_potential.asp [hereinafter Wind Potential Capacity].

[6] Nat'l Renewable Energy Lab., 'Renewable Electricity Futures Study' (2012) xviii.

[7] Jacobson, et al. (n. 3).

[8] Jeff St. John, 'U.S. Solar Generation Doubled in 2014, Renewable Output Grew 11%' *The Energy Collective* (12 Mar 2015), http://theenergycollective.com/jeffstjohn/2202001/us-solar-generation-doubled-2014-renewable-output-grew-11.

[9] Energy Info. Admin., 'Energy in Brief, How Much U.S. Electricity is Generated from Renewable Energy?' (14 Apr 2014), http://www.eia.gov/energy_in_brief/article/renewable_electricity.cfm.

[10] Ibid.

[11] St. John (n. 8); Jacobson, et al. (n. 3) (focusing on wind and solar power for future renewable supplies).

[12] In 2014, wind power provided about 4.4% of U.S. power generation, and solar provided about 0.5%. US Dept. of Energy, Energy Info. Admin., 'Electric Power Monthly' (4 Mar 2015).

[13] Stefan Nicola, 'Renewables Take Top Share of German Power Supply in First' *Bloomberg* (New York, 1 Oct 2014) http://www.bloomberg.com/news/2014-10-01/german-renewables-output-tops-lignite-for-first-time-agora-says.html.

[14] Justin Gillis, 'A Tricky Transition from Fossil Fuel, Denmark Aims for 100 Percent Fossil Fuel Energy' *NY Times* (New York, 10 Nov 2014) http://www.nytimes.com/2014/11/11/science/earth/denmark-aims-for-100-percent-renewable-energy.html.

The low penetration of renewable energy in the United States is somewhat surprising, at least when one considers that renewable energy laws have been on the books since the late 1970s.[15] The primary federal and state renewable policies *(Renewable Portfolio Standards (RPSs)*, net metering laws, tax credits, and *the Public Utility Regulatory Policies Act (PURPA))* [16] have played essential roles in supporting renewable energy development, but have also promoted erratic and unreliable growth.[17] As a result of this fitful growth, renewables have provided and likely will continue to provide a much smaller proportion of power than they could.[18] For example, despite lower costs, improved technologies, and increased federal efforts to support renewable power, the Department of Energy released a report in March 2015 that aims for wind to produce only 20% of the nation's power by 2030 and 35% by 2050.[19] While these figures are ambitious compared to the penetration of wind power at the end of 2014, they pale in comparison to US wind power potential[20] (not to mention penetration rates achieved by other countries, such as Denmark).[21] Similarly, a proposed federal regulation*, the Clean Power Plan*,[22] would set renewable targets that are nearly half of what they could be based on current state policies and development levels.[23] At the very least, the United States suffers from a lack of ambition when it comes to

---

[15] *See* Public Utility Regulatory Policies Act of 1978, Pub. L. 95-617, 92 Stat. 3117, codified in part at 16 U.S.C. § 824a-3 (2012).

[16] Discussed more fully below. *See* also Database of St. Incentives for Renewables & Efficiency, Financial Incentives for Renewable Energy, http://www.dsireusa.org/summarytables/finre.cfm(accessed 15 Dec 2014); Database of St. Incentives for Renewables & Efficiency*,* Rules, Regulations, & Policies for Renewable Energy, http://www.dsireusa.org/summarytables/rrpre.cfm(accessed 15 Dec 2014).

[17] *See* Melissa Powers, 'Sustainable Energy Subsidies' (2013) 43 Envtl L 211; Melissa Powers, 'Small is (Still) Beautiful: Designing U.S. Energy Policies to Increase Localized Renewable Energy Generation' (2012) 30 Wisc Intl Envtl LJ 595.

[18] Union of Concerned Scientists, 'Strengthening the EPA's Clean Power Plan' (2014), http://www.ucsusa.org/sites/default/files/attach/2014/10/Strengthening-the-EPA-Clean-Power-Plan.pdf.

[19] US Dept. of Energy, 'Wind Vision: A New Era for Wind Power in the United States' (2015) xvi.

[20] *See* Lu, McElroya, & Kiviluomac (n. 1); Lopez et al. (n. 2); Wind Potential Capacity (n. 5).

[21] *See* Gillis (n. 14).

[22] Carbon Pollution Emission Guidelines for Existing Stationary Sources: Electric Utility Generating Units (18 June 2014) 79 Fed. Reg. 34,830 [hereinafter Clean Power Plan].

[23] Union of Concerned Scientists (n. 18) 3 fig. 1.

renewable power. For the country to achieve a renewable transition, it will need to aim much higher.

Lack of ambition, however, is not the only problem with US renewable energy policies. Uncertainty has become the norm in the renewable energy industry, and this uncertainty presents hurdles for both independent renewable developers and utilities that must secure adequate power supplies. Persistent political disputes about renewable energy development and policies have infected the industry with instability. Tax policies have become the poster children for this dynamic. Inconsistent federal tax policy has subjected the wind energy industry to a boom-and-bust development cycle that constrains the investment, growth, and stability necessary to support reliable and low-cost wind energy development.[24] The solar energy industry may soon face similar instability when other federal tax credits expire.[25] At a minimum, unpredictable tax policy raises the transaction costs associated with renewable power acquisition;[26] but in many cases, expiring tax credits have caused a collapse in renewable energy development.[27] Other policies may be heading in a similar direction. Although experts credit RPSs with promoting substantial growth in the renewable energy

---

[24] Powers, 'Sustainable Energy Subsidies' (n. 17); Erin Dewey, 'Sundown and You Better Take Care: Why Sunset Provisions Harm the Renewable Energy Industry and Violate Tax Principles' (2011) 52 BC L Rev 1105, 1119 & n.112 (note); Alexandra Klass & Lesley McAllister, 'Subsidizing in Spurts: Our Production Tax Credit Policy, or Lack Thereof' (*CPR Blog* 12 Feb 2013), http://www.progressivereform.org/CPRBlog.cfm?idBlog=CEA8C992-BD12-B999-EF92A40AE2F89CD6(last visited 7 Apr 2013).

[25] Thomas Jensen, 'The Solar Industry's Tax Credit Conundrum' *GreenTechSolar* (Washington 21 July 2014), http://www.greentechmedia.com/articles/read/the-solar-industrys-tax-credit-conundrum; *see also* Camilo Patrignani, 'The Solar Industry Needs to Let Its Federal Tax Credit Die, Says This CEO' *GreenTechSolar* (Washington 13 Jan 2015), http://www.greentechmedia.com/articles/read/the-solar-industry-needs-to-let-its-federal-tax-credit-die-says-this-ceo (arguing that the instability experienced by the wind industry would be worse for the solar industry than loss of the tax credit).

[26] Powers, 'Sustainable Energy Subsidies' (n. 17) 225-26; Merrill Jones Barradale, 'Impact of Policy Uncertainty on Renewable Energy Investment: Wind Power and the PTC' (Working Paper rev. ed. Aug 2009) 5, 6 fig.1, available at http://ssrn.com/abstract=1085063.

[27] Am. Wind Energy Ass'n, Federal Production Tax Credit for Wind Energy: The American Wind Industry Urges Congress to Take Immediate Action to Pass an Extension of the PTC, available at http://www.awea.org/issues/federal_policy/upload/PTC-Fact-Sheet.pdf. A similar drop-off in wind power development occurred when Denmark suspended its own subsidies without providing alternative policy support. Meyer, N. I. and A. L. Koefoed, 'Danish energy reform: Policy implications for renewables' (2003) 31 Energy Pol'y 597.

industry,[28] their impact is diminishing as utilities come closer to meeting RPS targets.[29] Unless policy makers adopt new RPSs with more aggressive goals for the future, demand for renewable power could drop. Without RPSs to drive demand, with federal tax credits facing expiration,[30] and with increasing uncertainty surrounding net metering laws and PURPA,[31] a sustained transition to renewable power becomes more unlikely.[32]

Unfortunately, US renewable energy policies themselves engender uncertainty by promoting *ad hoc*[33] renewable power development and integration rather than a comprehensive plan for the renewable transition. These policies provide greater autonomy to independent renewable power developers, but the piecemeal development they allow has significant downsides. First, piecemeal renewable power development is inefficient and expensive,[34] and although equipment costs have declined, other "soft costs" remain high.[35] As a result, renewable power cannot compete effectively in the current electricity market without policy assistance.[36] Second, piecemeal development and siting of renewable power facilities complicates transmission and distribution gird planning and management, which, in turn, stifles renewable power growth.[37] While distributed power sources could actually improve

---

[28] Galen Barbose, 'Renewables Portfolio Standards in the United States: An Update' (Lawrence Berkeley Nat'l Lab Dec 2014) 3.

[29] Ibid. 9.

[30] The tax credit that primarily supports wind power development has already expired, although facilities that began construction before January 1, 2015 and are placed into service by December 31, 2016 remain eligible for the credit. Tax Increase Prevention Act of 2014, H.R. 5771 (2d. Sess. 2013); IRS Notice 2015-25 (11 Mar 2015). The tax credits that support commercial and residential solar development will drop or expire at the end of 2016. I.R.C. § 45(a), (b) (2012); I.R.C. § 48 (2012).

[31] *See infra* section III.

[32] Energy Info. Admin., 'Annual Energy Outlook with Projections to 2040' (Apr 2014) IF42-IF43 [hereinafter Annual Energy Outlook]. Most renewable power development has occurred in states that offer a mix of policy supports that include RPSs and tax credits.

[33] "*Ad hoc*" means "for the particular end or case at hand without consideration of wider application." Merriam-Webster, http://www.merriam-webster.com/dictionary/ad%20hoc.

[34] *See* Nick Lawton, 'Shrinking Solar Soft Costs: Policy Solutions to Make Solar Power Economically Competitive' (Green Energy Institute Apr 2014), 8-17.

[35] Ibid. 2-6. Importantly, although hardware costs for solar have declined, the "soft costs" associated with solar development generally have not.

[36] Annual Energy Outlook (n. 32) IF42-IF43

[37] *See infra* notes 220-240 and accompanying text. With relatively low levels of renewable deployment in most places, integration has not yet presented significant challenges to grid reliability. However, individual facilities have struggled to obtain access to transmission lines in various places, and power

grid reliability,[38] unplanned expansion of distributed generation could have the opposite effect.[39] Third, while all renewable energy policies face some opposition, programs that promote piecemeal development face increasingly intense (and often unfounded) political opposition for being elitist and unfair.[40] These contentious political debates draw attention away from much more fundamental questions about how the electricity system and utility business models must change to achieve the renewable transition.[41]

Grid managers and regulators have sought to address the uncertainty in the electricity sector primarily through transmission planning strategies. Since the 1990s, the Federal Energy Regulatory Commission (FERC) has developed a series of regulations and orders designed to ensure that wholesale power producers have open, non-discriminatory access to the transmission system.[42] As more renewable power has entered the mix, FERC has

---

planners anticipate that increased integration without better planning could present both economic and reliability problems. *See* Krysti Shallenberger, 'Mont. Project Will Send Wind Across Border to Wyo.' *EnergyWire* (20 Mar 2015), http://www.eenews.net/energywire/2015/03/20/stories/1060015412; California ISO, 'Fast Facts: What the Duck Curve Tells Us About Managing a Green Grid' (2013), http://www.caiso.com/Documents/FlexibleResourcesHelpRenewables_FastFacts.pdf. Not everybody agrees that the "duck curve" is as significant, however. Jeff St. John, 'Retired CPUC Commissioner Takes Aim at Duck Curve' *GreentechGrid* (24 Mar 2014), http://www.greentechmedia.com/articles/read/retired-cpuc-commissioner-takes-aim-at-caisos-duck-curve.

[38] U.S. Dep't of Energy, 'The Potential Benefits of Distributed Generation and Rate-Related Issues that May Impede Their Expansion: A Study Pursuant to Section 1817 of the Energy Policy Act of 2005' (2007) 2-17.

[39] Herman K. Trabish, 'How California is Incentivizing Solar to Solve the Duck Curve' *Utility Dive* (13 Oct 2014), http://www.utilitydive.com/news/how-california-is-incentivizing-solar-to-solve-the-duck-curve/317437/.

[40] *See* Steven Weissman & Nathaniel Johnson, 'The Statewide Benefits of Net-Metering in California & the Consequences of Changes to the Program' (2012) (responding to these claims); Evan Halper, 'Minority Groups Back Energy Companies in Fight Against Solar Power' *LA Times* (9 Feb 2015), http://www.latimes.com/nation/la-na-solar-race-20150209-story.html; Jon Wellinghoff & James Tong, 'Wellinghoff and Tong: A Common Confusion over Net Metering is Undermining Utilities and the Grid: "Cost-shifting" and "Not Paying Your Fair Share" Are Not the Same Thing' *Utility Dive* (22 Jan 2015), http://www.utilitydive.com/news/wellinghoff-and-tong-a-common-confusion-over-net-metering-is-undermining-u/355388/.

[41] Wellinghoff & Tong (n. 40).

[42] Promoting Wholesale Competition Through Open Access Nondiscriminatory Transmission Services by Public Utilities; Recovery of Stranded Costs by Public Utilities and Transmitting Utilities, Order No.

established requirements to facilitate integration of large wind generators, variable energy producers, and small renewable power producers.[43] In addition, FERC has directed transmission operators to develop regional plans for integrating renewable power sources.[44] Other entities have likewise sought to plan for increased renewable energy integration. For example, eastern regional transmission operators have begun to plan for increased renewable power integration,[45] and transmission operators in the West have initiated efforts to create an energy imbalance market that would facilitate integration of variable renewable resources across the western states.[46] Even with these efforts, grid managers and energy policy makers acknowledge they have much more to do.[47] For example, distribution-level

---

888, FERC Stats. & Regs. ¶ 31,036, 61 Fed.Reg. 21,540 (1996), clarified, 76 FERC ¶ 61,009 and 76 FERC ¶ 61,347 (1996) ("Order 888"), on reh'g, Order No. 888–A, FERC Stats. and Regs. ¶ 31,048, 62 Fed.Reg. 12,274, clarified, 79 FERC ¶ 61,182 (1997), on reh'g, Order No. 888–B, 81 FERC ¶ 61,248, 62 Fed.Reg. 64,688 (1997), on reh'g, Order No. 888–C, 82 FERC ¶ 61,046 (1998) [hereinafter Order 888]; Open Access Same–Time Information System and Standards of Conduct, Order No. 889, FERC Stats. & Regs. ¶ 31,035, 61 Fed.Reg. 21,737 (1996) ("Order 889"), *on reh'g,* Order No. 889–A, FERC Stats. & Regs. ¶ 31,049, 62 Fed.Reg. 12,484 (1997), *on reh'g,* Order No. 889–B, 81 FERC ¶ 61,253 (1997); and Regional Transmission Organizations, Order No. 2000, 65 Fed.Reg. 810 (2000).

[43] Interconnection for Wind Energy, Order 661, FERC Stats & Regs., ¶ 61,353 (2005); Integration of Variable Energy Resources, Order 764, FERC Stats & Regs., ¶ 61,246 (2012); and Small Generator Interconnection Agreements and Procedures, Order 792, FERC Stats & Regs., ¶ 61,159 (2013).

[44] FERC, Facts, Order No. 1000: Final Rule on Transmission Planning and Cost Allocation by Transmission Owning and Operating Public Utilities (Jul. 21, 2011), *available at* http://www.ferc.gov/media/news-releases/2011/2011-3/07-21-11-E-6-factsheet.pdf.

[45] *See* GE Energy Consulting, 'PJM Renewable Integration Study, Executive Summary Report Revision 03' (Mar 2014) 3-5 [hereinafter PJM Renewable Integration Study]. The study assumed, for example, that onshore wind farms would be located in designated "best sites," that offshore wind would provide a significant amount of power, and that solar power would come from centralized plants widely dispersed across PJM's service territory and smaller distributed solar facilities located in major cities. Ibid; GE Energy Mangement, 'PJM Renewable Integration Study (PRIS), Final Project Review 07, Stakeholder Meeting of March 3, 2014' (Mar 2014) 37-40. PJM is regional transmission operator responsible for coordinating electricity transmission in thirteen states in the eastern and Midwestern parts of the United States. *See* PJM, 'About PJM' https://www.pjm.com/about-pjm.aspx (last visited Mar. 15, 2015).

[46] National Renewable Energy Lab, 'Transmission Grid Integration, Energy Imbalance Markets,' http://www.nrel.gov/electricity/transmission/energy_imbalance.html (updated 19 Sep 2014).

[47] *See* California ISO (n. 37); Jim Lazar, 'Teaching the Duck to Fly' (RAP Jan 2014).

management remains an area in need of much greater attention.[48] Nonetheless, regulators understand the challenges presented by the potential renewable transition and are working to overcome them.

This article proposes that policies to promote renewable power development should change as well. Specifically, renewable energy policies should create long-term goals and strategic plans for increasing renewable energy development and facilitating grid integration and reliability. State-level renewable energy mandates[49] would also allow regulators to design policies that either accommodate the existing utility structure or enable a redesign of the utility model. Expanded RPSs would establish predictable goals that would create investment certainty for renewable energy producers and likely enable increased renewable power integration at lower costs. While other policies, including net metering, PURPA, and tax credits, could continue to support renewable power development, they would work within a larger comprehensive plan. Finally, comprehensive energy plans that map out locations for renewable facility siting would facilitate electricity grid management and help avoid transmission line conflicts and potential reliability concerns that increased integration of renewable power could present. While creating a comprehensive plan would be complicated and contentious, the final plan would facilitate the renewable transition better than piecemeal development.

Part II of this article provides a quick snapshot of renewable energy's place in the current US electricity sector. Next, Part III explains how PURPA, net metering, tax credits, and RPSs have promoted renewable power and yet exposed the renewable power industry to increased uncertainty. Part IV argues that much of this uncertainty results from the policies' promotion of piecemeal development and integration of renewable electricity sources. Rather than continue this piecemeal approach, Part V briefly advocates for the creation of long-term renewable energy goals, optimally with comprehensive siting plans, to pave the way for increased stability and investment in the renewable energy sector. Thus, the article concludes that policies that promote planning and certainty offer the best chance for a sustained expansion of the US renewable electricity system.

---

[48] National Renewable Energy Lab, 'Transmission Grid Integration, Energy Management Systems,' http://www.nrel.gov/electricity/transmission/energy_management.html (updated 19 Sep 2014).

[49] Federal renewable energy mandates are unlikely in the current and foreseeable political climate.

Renewable Energy's Place in the Current US Electricity System

Renewable electricity has expanded at remarkable rates in the United States in the past decade. From 2000 through to 2014, wind power development grew 25-fold.[50] Solar power deployment alone doubled in 2014.[51] Indeed, in 2014, new renewable power installations exceeded all other sources of new electricity supply.[52] These deployment rates followed several previous years of growth that have allowed solar and wind power to secure a foothold of sorts in the US power system.

This foothold, however, is by no means secure in the current electricity market and regulatory structure. Despite the growth rates witnessed by wind and solar power, forecasts for future expansion are relatively weak on a national level. Based on current policies, national wind power deployment will likely drop by the end of 2016, when federal tax credits fully expire.[53] Forecasts for solar power are a little stronger due to policy support in some states, but policymakers and solar industry representatives have expressed concerns that the impending expiration of a federal tax credit for solar facilities will stifle growth after 2016.[54] These concerns and projections highlight the fact that renewable power cannot compete in the US electricity system without policies that expressly support renewable energy growth and deployment. Indeed, the market and regulatory structure of the US electricity system is still stacked against renewables in a number of ways.[55]

---

[50] Wind Power in the United States, *Wikipedia*, http://en.wikipedia.org/wiki/Wind_power_in_the_United_States (last updated 6 Apr 2015) fig (citing verified statistics from the US Department of Energy, Office of Energy Efficiency and Renewable Energy, and the American Wind Energy Association).

[51] St. John (n. 8).

[52] Peter Danko, 'Renewables, Led by Wind and Solar, Provided Half of 2014 US Energy Capacity Additions' *Breaking Energy* (30 Jan 2015), http://breakingenergy.com/2015/01/30/renewables-led-by-wind-and-solar-provided-half-of-2014-us-energy-capacity-additions/ (noting that wind and solar

[53] *See* Annual Energy Outlook (n. 32) IF42-IF43.

[54] Jensen (n. 25).

[55] The US electricity system is owned and operated by a combination of private and public entities. Since the creation of the US electric industry, private vertically integrated monopolies have provided the majority of retail electricity sales in the country. US Energy Info Admin, DOE/EIA-0562(00), 'The Changing Structure Of The Electric Power Industry 2000: An Update' (2000) 5, http://www.eia.gov/cneaf/electricity/chg_stru_update/update2000.pdf. Today, private investor-owned utilities serve about 68.5% percent of US electricity customers, and public utilities and rural electric cooperatives are responsible for about 27.2%. Power production is more competitive, with

In states where vertically integrated monopolies continue to operate, market-driven competition at the generation level is weak,[56] although independent power producers may provide wholesale power to utilities in certain situations, such as to supply energy during peak periods or to supply energy necessary for compliance with renewable mandates.[57] Moreover, utilities have incentives to limit the wholesale market to protect their monopolies. Independent renewable energy producers, like other independent power producers, are directly competing with these monopolies and thus pose a threat to the utilities' business models and profits.[58] Under most state utility regulation laws, utilities are entitled to earn a profit on capital expenses but not on their operating costs.[59] Power purchases from renewable facilities owned by third parties count as operating expenses for which utilities will not earn a direct profit.[60] Utilities therefore resist buying third parties' power. While all third-party power producers face similar challenges in vertically integrated markets, renewable power producers are often at a further disadvantage due to the intermittent nature of many types of renewable power, particularly wind and solar power.[61] Consequently, without policies directing utilities to purchase renewable electricity, vertically integrated utilities would not purchase renewable power from third parties.[62]

Utilities could produce their own renewable power in regulated markets, which would eliminate some of the concerns described above. However, this is not a common practice, despite the economic and management benefits these investments offer.[63] A few reasons

---

independent power producers generating about 41% of the nation's power, vertically integrated investor-owned utilities producing about 38%, and public power facility owners producing about 17%. American Public Power Ass'n, '2014-15 Annual Directory and Statistics' (2014) 26, 28, http://www.publicpower.org/files/PDFs/USElectricUtilityIndustryStatistics.pdf.

[56] Severin Borenstein and James Bushnell, 'The U.S. Electricity Industry after 20 Years of Restructuring' Energy Institute at Haas Working Papers Series (Sep 2014) 9 fig. 2 (independent power producers provide less than 10% of the power in many states).

[57] Ibid.

[58] Powers, Small is Beautiful (n. 17) 601-02.

[59] Ibid.

[60] Ibid.

[61] Ibid.

[62] *See* Amelia Schlusser, 'A Safe Bet: How Least-Risk Resource Planning Policies Promote Renewable Energy' (Green Energy Institute 2015).

[63] James Montgomery, 'More Insights into Solar and Utilities: Large-Scale Integration, Self-Ownership, and Net Metering' *RenewableEnergyWorld.com* (5 June 2013),

may explain this dynamic. First, the inherently conservative culture of utilities may make them slow to adopt new technology. Second, some states allow utilities to build their own facilities only when they can do it at a lower cost than competitive bidders.[64] Until utilities acquire more expertise with renewable facility development, their costs will likely be higher than existing renewable power developers. Finally, traditional utility regulation, which usually requires utilities to invest in "least cost" resources, has favored fossil fuels over renewable power.[65] While a shift to "least risk" planning could promote utility investment in renewables, few states have adopted least risk rules.[66] As a result, utilities have built very little of the existing renewable power capacity. While lower costs for renewables have begun to promote a bit more utility investment, utilities are unlikely to turn to renewable power without policies that expressly require more renewable power integration.[67]

In restructured markets, renewable power facilities face their own competitive hurdles. Without RPSs driving demand, renewable energy must compete with other wholesale power providers, including incumbent fossil fuel-fired power plants. These decades-old power plants often have low capital expenses and low fuel prices,[68] thanks in part to direct and indirect subsidies that make coal-based and natural gas-based power much cheaper than it would be in a truly competitive market.[69] Although the cost of renewable power has declined and may be cost-competitive with fossil fuel plants in certain cases,[70] renewables are still at

---

http://www.renewableenergyworld.com/rea/news/article/2013/06/more-insights-into-solar-and-utilities-large-scale-integration-self-ownership-and-net-metering (reporting the utilities owned 12% of utility-scale solar and 7% of all solar); Powers, Small is Beautiful (n. 17) 601-02 (explaining the economic benefits of utility ownership and investment).

[64] *See* In the Matter of PacifiCorp, dba, Pacific Power & Light Co, Order No. 07-018, Draft 2012 Request for Proposals (OR PUC 2007) (discussing the bidding process).

[65] Schlusser (n. 62) 9-11.

[66] Ibid. 20

[67] Schlusser (n. 62) 25-26; Zachary Shahan, 'Why Utilities Don't Invest More in Solar' *CleanTechnica* (2 Oct 2014), http://cleantechnica.com/2014/10/02/utilities-dont-invest-solar-video/ (arguing utilities are holding out until they can get better returns on their investments); Michael Mendelsohn, 'Where is All the Utility Investment? Are Utilities Missing an Opportunity to Finance Solar and Storage?' *NREL* (14 Oct 2013), https://financere.nrel.gov/finance/content/where-all-utility-investment-are-utilities-missing-opportunity-finance-solar-and-storage.

[68] Borenstein & Bushnell (n. 56) 20-21, 26,

[69] *See* Jeff Johnson 'Long History of U.S. Energy Subsidies,' *Chem. & Eng'g News* (19 Dec 2011), http://cen.acs.org/articles/89/i51/Long-History-US-Energy-Subsidies.html.

[70] Jacobson, et al. (n. 3).

a disadvantage and depend substantially on other policies, such as tax credits, for their growth.[71] Indeed, even though energy forecasts predict that renewable power generation will grow, forecasts also indicate that natural gas will provide the majority of new power capacity through to at least 2040.[72] Thus, a competitive market does not necessarily favour renewable power—certainly not enough to reach an 80%- or 100%-by-2050 goal. What is more, state policymakers interested in supporting renewable power cannot direct utilities to pay renewable energy facilities incentive rates without potentially running afoul of exclusive federal authority over wholesale rates.[73] Although states have attempted to avoid these "price preemption" dynamics, these efforts have not produced incentives rates that many experts think are necessary to make renewable power competitive in the United States.[74]

Finally, access to the transmission system often presents barriers to independent renewable energy producers. Although federal laws exist to facilitate equitable and non-discriminatory transmission access,[75] congestion, costs, and occasional discrimination still serve as impediments to renewable producers. First, interconnection costs charged to renewable producers, particularly wind farms, are significant.[76] Even smaller, distributed power

---

[71] Energy Info. Admin., 'Renewable Electricity Generation Projections Sensitive to Cost, Price, Policy Assumptions' *Today in Energy* (29 Apr 2014), http://www.eia.gov/todayinenergy/detail.cfm?id=16051.

[72] Annual Energy Outlook (n. 32) MT16-MT17. Under the "reference case," which assumed that tax credits for renewables will expire, natural gas would provide 70% of new capacity. Ibid.

[73] As a general rule, FERC has exclusive authority over wholesale electricity rates. Federal Power Commission v. Southern California Edison Company, 376 US 205 (1964). While PURPA gives states the ability to set rates for QFs (which are a category of wholesale power producers), these rates cannot exceed utilities' avoided costs. *See infra* n. 90-107 and accompanying text.

[74] *See* Jim Rossi, 'Clean Energy and the Price Preemption Ceiling' (2012) 3 San Diego J. Climate & Energy Law 243.

[75] *See*, *e.g.*, supra n. 42-44 and accompanying text.

[76] *See* Stephen M. Fisher, 'Reforming Interconnection Queue Management under FERC Order No. 2003' (2009) 26 Yale J. on Reg. 117 (explaining the interconnection process and fees, which can exceed $100,00 for required interconnection studies). Texas has also proposed charging wind power producers extra to pay for backup power supplies, even though the American Wind Energy Association has produced reports documenting that fossil fuel power plants have more unpredicted outages and place a greater strain on grid reliability than renewable resources do. *See* Michael Goggin, 'Fact Check: Wind's Integration Costs are Lower than Other Energy Sources' *AWEABlog* (25 Jul 2014), http://aweablog.org/blog/post/fact-check-winds-integration-costs-are-lower-than-those-for-other-energy-sources.

producers can face high interconnection fees.[77] Second, because renewable power producers must site their facilities where wind or solar resources are optimal, and not necessarily where transmission lines already exist, they often have to build costly spur lines to the existing transmission system.[78] Third, grid management protocols often require wholesale producers to purchase firm transmission rights that intermittent renewable resources often cannot use.[79] Until recently, many transmission operators also required renewable producers to purchase firm transmission rights in hourly increments, even though renewable producers frequently could not use the complete increment (and might in fact be penalized for scheduling transmission services they would not fully use).[80] Although FERC passed regulations requiring transmission operators to sell transmission rights in smaller, 15-minute increments,[81] legal disputes regarding firm transmission rights have persisted.[82] Finally, despite a number of laws designed to prevent discrimination, wind producers have successfully challenged transmission operators' actions for discriminating against wind power,[83] demonstrating that discrimination remains an impediment for renewable producers.

Thus, even though renewable power has grown substantially in the past decade or so, renewable resources remain at a competitive disadvantage. Recognizing these competitive disadvantages, policymakers have employed a number of policies to support renewable electricity development. However, as Sections III and IV explain in greater detail, these policies have not adequately stabilized the renewable electricity sector.

The Effective, Yet Unstable, US Renewable Energy Policies

To offset the competitive and regulatory disadvantages renewable energy faces, policymakers in the United States have used PURPA, net metering, tax credits, and RPSs to

---

[77] Robert E. Burns & Kenneth Rose, PURPA Title II Compliance Manual (2014) 50.

[78] Powers, 'Small is Beautiful' (n. 17) 617-19.

[79] *See* Ken Dragoon, Small Resource Transmission Scheduling: Special Challenges Facing Smaller Generators 6-7 (2014) (explaining problems QFs face when transmission rules require them to secure firm transmission rights in hourly increments).

[80] Ibid.

[81] Integration of Variable Energy Resources, Order 764, FERC Stats & Regs., ¶ 61,246 (2012).

[82] *See* PáTu Wind Farm, LL.C v. Portland General Electric Co., Order Granting in Part and Dismissing in Part Complaint, 150 FERC ¶ 61,032 (2015).

[83] *See* Iberdrola Renewables Inc. v. Bonneville Power Administration, 137 FERC ¶ 61,185 (2011); PáTu Wind Farm, LL.C, 150 FERC ¶ 61,032.

promote renewable power development. Collectively, these policies primarily aim to create a more favourable investment environment for renewable power producers through direct and indirect price supports and by creating demand for renewable electricity. On a number of levels, these policies have succeeded in promoting renewable power production and integration. However, this success has come at a price, as the policies have faced increased opposition. This section will explain how the policies operate and identify the major critiques parties have raised against each policy.

The Public Utility Regulatory Policies Act

Since the 1970s, PURPA has supported renewable energy development from small renewable energy producers. Although federal regulations establish the overarching mandates of PURPA, states have broad discretion over PURPA's implementation.[84] As a result of this state discretion and sustained opposition to the purchase mandate, PURPA has served as an uneven and occasionally unreliable tool for promoting renewable energy development in the United States.[85] Nonetheless, PURPA still plays an important role in promoting small scale and distributed generation in many states.

The Mechanics of PURPA

PURPA directs utilities to 1) purchase electricity from "qualifying facilities" (QFs), 2) connect the QFs to the power grid, and 3) pay the QFs specified "avoided cost" rates.[86] PURPA

[84] Fed. Energy Regulatory Comm'n v. Mississippi, 456 US 742, 746–47 (1982).

[85] As a general rule, PURPA works well to promote renewable power where state laws support PURPA implementation. In other states, PURPA has had very little effect. *See* Carolyn Elefant, 'Reviving PURPA's Purpose: The Limits of Existing State Avoided Cost Ratemaking Methodologies In Supporting Alternative Energy Development and A Proposed Path for Reform' (2011) 3, http://www.recycled-energy.com/images/uploads/Reviving-PURPA.pdf. Moreover, even where a state appears eager to support renewable power through PURPA, some renewable resources may fare worse than others. *See* Jessica Wentz, 'Balancing Economic and Environmental Goals in Distributed Generation Procurement: A Critical Analysis of California's Renewable Auction Mechanism (RAM)' (2014) 5 J. Energy & Envtl. L. 30 (discussing ways in which wind power has performed poorly under California's auction program to implement PURPA).

[86] 16 U.S.C. § 824a-3(a), (b) & (d); 18 C.F.R. § 292.101(6) (defining avoided cost rates); 18 C.F.R. § 292.303(c)(1) (requiring interconnection). FERC defines "avoided costs" as "the incremental costs to an electric utility of electric energy or capacity or both which, but for the purchase from the QF or QFs, such utility would generate itself or purchase from another source." 18 C.F.R. § 292.101(6) (2012);

establishes two types of QFs.[87] The first type of QF includes any combined heat and power facility.[88] The second type of QF—and the focus of this article—encompasses "small power producers" from power plants with capacities of 80 megawatts (MW) or smaller that produce electricity from renewable energy sources.[89] Thus, PURPA directs utilities to buy electricity at specified rates from smaller renewable power facilities and to connect these facilities to the grid.

a. Avoided Cost Rates

Electricity rates under PURPA are based on the utilities' avoided costs, or the rates the utilities would otherwise pay to produce their own power or get power from somewhere else.[90] Federal regulations spell out the factors that states should consider when calculating the rates,[91] but states generally have ample discretion to set rates so long as they do not exceed the utilities' avoided costs.[92] While a state may include in its rate calculation the costs the utility would otherwise pay for transmission line losses or mandatory pollution credits, a state may not include externalities or other costs the utility itself would not incur.[93] States have employed a number of methodologies to calculate avoided costs.[94] Some states use a "proxy unit" method to calculate the costs a utility would incur if it needed to build its own power plant.[95] Some states base avoided costs on avoided marginal costs associated with procuring or producing peak power, and some states link their avoided cost calculations

---

see also Am. Paper Inst. Inc. v. Am. Elec. Power Serv. Corp., 461 US 402, 413 (1983) (upholding this definition).

[87] 16 U.S.C. § 824a-3(a) (2012).

[88] Ibid.

[89] 16 U.S.C. § 796(17)(A) (2006). FERC's regulations further refine the definitions of QFs. *See* 18 C.F.R. § 292.204.

[90] 18 C.F.R. § 292.101(6); 18 C.F.R. §292.304.

[91] The factors include utility estimates of avoided costs, utilities' future energy and capacity needs, the QFs' ability to produce peak power and to displace fossil fuel use, and savings associated with reduced transmission line losses. 18 C.F.R. § 292.304(e).

[92] Cal. Pub. Util. Com'n, 132 FERC ¶ 61,047 (2010) [hereinafter *CPUC I*]. PURPA rates are different than rates provided through feed-in tariffs. While PURPA rates are capped at the amounts the utilities would otherwise pay and may or may not incentivize QF investment, feed-in tariffs rates are designed specifically to incentivize renewable power investment.

[93] Cal. Pub. Util. Comm'n, 133 FERC ¶ 61,059, 61,267-68 (2010) [hereinafter *CPUC II*].

[94] Elefant (n. 85) 3.

[95] Ibid. 17-18.

to prevailing market rates the utilities would otherwise pay for power.[96] In times of high electricity prices, whether driven by high fuel costs, high demand, low supply, or other factors, avoided cost rates can be substantial.[97] Conversely, when demand drops and supply is abundant, avoided cost rates are often quite low.[98] PURPA's effectiveness in incentivizing renewable power thus depends substantially on the state of the electricity market as a whole.

Recently, states have begun to calculate resource-specific avoided cost rates to prevent low-cost fossil fuels from driving down overall avoided cost rates.[99] If a state can show that utilities have an obligation to obtain power from a specific resource, such as residential photovoltaic, avoided cost calculations could focus solely on the costs of that resource.[100] To justify these resource-specific valuations, states likely must also have resource-specific purchase mandates, or RPS carve-outs.[101] And, to ensure that avoided cost rates remain high enough to incentivize investment, the RPS carve-outs should set aggressive mandates. Otherwise, a weak market will cause avoided cost rates to fall.[102]

QFs have three potential procedural avenues to calculate avoided cost rates. First, QFs may ask state regulators to conduct the rate calculations.[103] Second, QFs may instead negotiate bilateral contracts directly with utilities to avoid the hassle associated with administrative cost

---

[96] Ibid. 18-20.

[97] *See* Frank Graves, Philip Hanser, and Greg Basheda, 'PURPA: Making the Sequel Better than the Original' (The Brattle Group 2006) 11-12 (discussing utility dissatisfaction with avoided costs guaranteed in long-term contracts negotiated based on the presumption that oil and gas prices would remain high, when prices in fact fell).

[98] Ibid. 13. Recognizing that market conditions can change and affect the prices QFs will receive, federal regulations allow QFs to select the time at which the avoided cost calculation is made. Specifically, QFs may opt to receive avoided cost rates based on the time the utility incurred a "legally enforceable obligation" to buy the power or at the time of delivery of the power. 18 C.F.R. § 292.304(d)(1) & (2)(i-ii).

[99] *See CPUC I* 132 FERC ¶ 61,047 (2010); *CPUC II*, 133 FERC ¶ 61,059 (2010); Cal. Pub. Util. Comm'n, 134 FERC ¶ 61,044 (2011); *see also* Powers, 'Small is Beautiful' (n. 17) 643-46 (explaining how states may increase avoided cost rates for specific renewable energy resources, but questioning whether these approaches would produce incentive rates provided under feed-in tariffs).

[100] Powers, 'Small is Beautiful' (n. 17) 643-46.

[101] Ibid. For more about RPS carve-outs, *see infra* n. 172-174 and accompanying text.

[102] *See* Barbose (n. 28) 11 (discussing similar dynamic with RPS credits).

[103] 18 C.F.R. § 292.304(e).

calculations.[104] QFs may agree to accept prices that are below actual avoided costs in exchange for the certainty provided by long-term contracts.[105] Utilities, in turn, benefit from contracts that establish lower-than-avoided-cost rates and allow utilities to plan for the integration of QFs' power. Third, in recognition that case-by-case cost assessments or contract negotiations may serve as insurmountable barriers for many small QFs, FERC regulations require states to establish one-size, fits-all "standard offer" contracts for any QF with a capacity of 100 kilowatts or smaller.[106] States may also, at their discretion, set standard offer terms that apply to larger facilities.[107] Whether negotiated on a case-by-case basis or secured through the standard offer requirements, contracts under PURPA provide a degree of certainty to QFs and utilities alike.

b. Interconnection Requirements

The interconnection requirements are another important mechanism of PURPA. FERC's regulations obligate utilities to make any interconnection costs that are necessary to provide QFs access to the grid.[108] These regulatory requirements are not very specific, however, and FERC often relies on its general transmission access and integration rules to ensure that QFs have access to the grid.[109] Even with these rules, interconnection can present challenges for QFs. First, PURPA regulations make clear that QFs may be required to pay interconnection and other fees.[110] While the fees must be non-discriminatory and may only include the costs the utility would not otherwise pay for transmission of its own or a non-QF's power, the incremental costs may nonetheless be significant for some QFs.[111] Second, despite efforts by FERC to remove transmission barriers for small power producers, individual facilities continue to report problems.[112] Although QFs may compel compliance

---

[104] Elefant (n. 85) 3; *see also* 18 C.F.R. § 292.301(b) (noting that QFs and utilities may negotiate contracts to set rates and other terms).

[105] Ibid.

[106] Power Production and Cogeneration Facilities; Regulations Implementing Section 210 of PURPA, 45 Fed. Reg. 12214, 12223 (Feb. 25, 1980); 18 C.F.R. § 292.304(c)(1).

[107] 18 C.F.R. § 292.304(c)(2).

[108] 18 C.F.R. § 292.303(c)(1).

[109] For example, FERC has established procedures and a *pro forma* integration agreement that utilities must use for small generators with capacities below 20 MW. *See* FERC Order 792, Small Generator Interconnection Agreements and Procedures, 145 FERC ¶ 61,159 (2013).

[110] 18 C.F.R. § 292.306. States may waive these fees, however.

[111] Burns & Rose (n. 77) 50.

[112] *See* Dragoon (n. 79) 6-7.

with FERC regulations through administrative and judicial enforcement,[113] the transaction costs associated with remedying transmission impediments are high, particularly for smaller entities.

PURPA Controversies

With the availability of contracts to implement PURPA and with avoided cost rates set at the amounts utilities would already be paying for power, one might think that PURPA would be relatively uncontroversial. Utilities have nonetheless vigorously opposed PURPA's purchase mandate. In the 1990s, for example, utilities argued that PURPA forced them to enter into long-term contracts during the 1980s that locked in high-cost power purchases despite falling power prices.[114] While very few utilities outside of California had actually felt much impact from PURPA at the time,[115] persistent utility complaints ultimately yielded changes to PURPA. In 2005, Congress agreed to a limited repeal of PURPA, which allows FERC to waive PURPA's purchase mandate in competitive electricity markets.[116] Acting pursuant to this authority, FERC has waived the purchase mandate for QFs larger than 20 MW in several regions of the United States.[117]

In other markets that lack robust competition, PURPA putatively remains in force for all eligible QFs, but efforts to enforce it have often resulted in litigation and controversy that have eroded PURPA's mandate that utilities buy QFs' power at avoided cost rates. Most significantly, Texas utilities have successfully argued before the U.S. Court of Appeals for

---

[113] *See* PáTu Wind Farm, LL.C v. Portland General Electric Co., Order Granting in Part and Dismissing in Part Complaint, 150 FERC ¶ 61,032 (2015).

[114] Bob Vandewater 'State Utility Joins Protest of U.S. Policy' *NewsOK.com* (25 May 1995) http://newsok.com/state-utility-joins-protest-of-u.s.-policy/article/2503596.

[115] *See* Deirdre O'Callaghan & Steve Greenwald, 'PURPA From Coast to Coast: America's Great Electricity Experiment' (1996) 10 WTR Nat Resources & Env't 17, 20–21.

[116] Energy Policy Act of 2005, Pub. L. No. 109-58, 119 Stat. 594, codified at 16 U.S.C. § 824a-3(m)(1)(A)-(C); *see also* FERC regulations implementing PURPA changes, 18 C.F.R. §§ 292.309-.314, and Michael D. Hornstein & J.S. Gebhart Stoermer, 'The Energy Policy Act of 2005: PURPA Reform, the Amendments, and Their Implications' (2006) 27 Energy LJ 25.

[117] Pacific Gas & Electric, Order Granting Application to Terminate Purchase Obligation, 135 FERC ¶ 61,234 (2011); Duke Energy Shared Services, Inc., Order Granting Application to Terminate Purchase Obligation and Denying Late Intervention, 119 FERC ¶ 61,146 (2007); Public Service Co. of New Hampshire, 131 FERC ¶ 61,027 (2010).

the Fifth Circuit that PURPA's purchase mandate does not apply to intermittent power.[118] If this decision stands, utilities will be able to avoid purchasing electricity from wind and solar facilities, because their power production is often intermittent. Some utilities and states have also resisted QFs' efforts to enforce standard offer rates. For example, even though Idaho had established rules making standard offer rates available to facilities with capacities up to 10 MW, the state then refused to allow wind farms to use these rates. The dispute led to several rounds of administrative and judicial litigation[119] and ultimately a settlement between FERC and the state of Idaho.[120] However, Idaho also altered its standard offer rates to apply in the future only to the smallest solar and wind facilities.[121] As a result, all solar and wind facilities larger than 100 kilowatts will have to engage in expensive and contentious negotiations to establish the applicable avoided cost rates.

Despite these challenges, and despite being controversial PURPA remains an important law for renewable energy development. Many states have used PURPA to support renewable power production, and PURPA has been particularly important for small, distributed power sources. In states without renewable power policies, PURPA provides renewable producers a mechanism for obtaining access to the electricity system.

Net Metering

Net metering laws emerged about five years after PURPA to provide state-level incentives for the installation of renewable electricity facilities.[122] The term "net metering" refers to the process by which utilities bill customers for their net electricity consumption.[123] Net metering allows consumers to discount the amount of energy they deliver to the grid from their total electricity consumption and to pay only for their net consumption. Without net metering,

---

[118] Exelon Wind. LL.C. v. Nelson, 766 F.3d 380 (5th Cir. 2014).

[119] *See* J.D. Wind I, 129 FERC ¶ 61,148, p. 25 (2009); Grouse Creek Wind Park, LLC, 142 FERC ¶ 61,187 (2013); Idaho Power Co. v. Idaho Public Utilities Com'n, 555 Idaho 780 (Idaho 2013).

[120] Memorandum of Agreement between the Federal Energy Regulatory Commission and the Idaho Public Utilities Commission, *available at* http://www.ferc.gov/legal/mou/mou-idaho-12-2013.pdf.

[121] In the Matter of the Joint Petition of Idaho Power Company, Avista Corporation, and Pacificorp dba Rocky Mountain Power to Address Avoided Cost Issues and to Adjust the Published Avoided Cost Rate Eligibility Cap, Order No. 32176, Case No. GNR-E-I0-04, Idaho PUC (Feb. 7, 2011).

[122] *See* Steven Ferrey, 'Nothing but Net: Renewable Energy and the Environment, MidAmerican Legal Fictions, and Supremacy Doctrine' (2003) 14 Duke Envtl L & Pol'y F 1.

[123] Powers, 'Small is Beautiful' (n. 17) 635.

customers would pay retail rates for the power they receive from the utility and earn wholesale rates (which are about one-third the value of retail rates) for the power they deliver to the utility.[124] With net metering, only the net purchase or sale counts.[125] Net metering programs thus allow ratepayers to effectively receive some of their retail electricity services for free.[126] At a minimum, net metering lowers these ratepayers' overall electricity bills and, in some states, it even allows utility customers to earn a profit.[127]

Net metering programs are common state policies,[128] but states often limit their scope in various ways. States will typically cap the total amount of electricity that is eligible for net metering,[129] and many states restrict participation in net metering programs.[130] The success of net metering, moreover, typically depends on the availability of other programs and subsidies to support renewable power.[131] In states with high retail rates and generous subsidies to offset the upfront costs of renewable facilities, net metering has contributed meaningfully to renewable energy development.[132] In other places, net metering provides only limited support for renewable energy development; indeed, one scholar calculated it could take decades for net metering alone to repay renewable energy producers for their investment.[133] Declining equipment and "soft costs" associated with permitting, customer acquisition, grid integration, and other phases of renewable power development may reduce this recovery period, but to date, the upfront costs of renewable generation facilities are out of reach for most homeowners and many businesses.[134]

Recognizing this, some companies have created third-party leasing programs to facilitate the process. Through these third-party arrangements, private companies install solar panels on

---

[124] Ferrey (n. 122) 78–79.

[125] Powers, 'Small is Beautiful' (n. 17) 637.

[126] Ibid.

[127] Ferrey (n. 122) at 16.

[128] Database of St. Incentives for Renewables & Efficiency, Net Metering (Sept. 2012), http://www.dsireusa.org/documents/summarymaps/net_metering_map.pdf (indicating that as of September 2012, 43 states had some type of net metering policy in place).

[129] Ferrey (n. 122) at 55–65.

[130] Ibid.

[131] Powers, 'Small is Beautiful' (n. 17) 639.

[132] Ibid.

[133] Joel B. Eisen, 'Residential Renewable Energy: By Whom?' (2011) 31 Utah Envtl L Rev 339, 354–61.

[134] For a discussion of solar "soft costs" and strategies to reduce them, *see* Lawton (n. 34).

private (and sometimes public) property and handle the transactions necessary to get the solar facilities sited and connected to the grid.[135] Property owners use net metering to reduce their electricity bills, and the third-party installers earn revenue through the lease fees paid by the property owners, the sale of renewable energy credits under the state RPSs, and tax credits.[136] The arrangement helps facilitate renewable energy development and may lower associated soft costs.[137] While some states have prohibited third-party leasing entirely and other states have made it economically infeasible,[138] third-party leasing arrangements demonstrate how a combination of policies can promote increased renewable energy development.

However, as third-party arrangements have grown, so has utility opposition to net metering. Utilities argue, with some credence, that net metering allows utility customers to receive expensive utility services—including distribution, grid management, and transmission—for free.[139] These arguments first gained traction in California, which has one of the more expansive net metering policies in the United States and a great deal of solar power potential.[140] Under California's net metering law, commercial ratepayers with solar facilities as large as 1 MW may participate in net metering programs.[141] Larger commercial customers typically pay higher electricity rates than residential customers, particularly during

---

[135] Todd Woody, 'The Next Big Innovation in Renewable Energy Won't Be Technological' *The Atlantic* (11 Nov 2013), available at http://www.theatlantic.com/ technology/archive/2013/11/the-next-big-innovation-in-renewable-energy-wont-be-technological/ 281345/.

[136] Kristen Ardani, Dan Seif, Robert Margolis, Jesse Morris, Carolyn Davis, Sarah Truitt, and Roy Torbert, 'Non-Hardware ("Soft") Cost Reduction Roadmap For Residential And Small Commercial Solar Photovoltaics, 2013–2020' (National Renewable Energy Laboratory 2013) 27, available at http://www.nrel.gov/docs/fy13osti/59155.pdf; Lawton (n. 34) 13.

[137] Lawton (n. 34) 13-17.

[138] Evan Halper, 'Rules Prevent Solar Panels in Many States with Abundant Sunlight' *LA Times* (9 Aug 2014), http://www.latimes.com/nation/la-na-no-solar-20140810-story.html - page=1.

[139] *See* Felicity Carus, 'Net Metering Battle Heats Up as Utilities Fear "Silent Subsidy"' *PTECH* (Apr. 10,2012), http://www.pvtech.org/editors_blog/net_metering_battle_heats_up_as_utilities_fear_silent_subsidy.

[140] Ibid.

[141] Cal. Pub. Util. Com'n, Net Energy Metering, http://www.cpuc.ca.gov/PUC/energy/DistGen/netmetering.htm (accessed 14 Dec 2014).

peak electricity periods.[142] When commercial customers began producing solar power during peak electricity periods, thereby depriving utilities of high-priced sales to their larger customers, utilities cried foul.[143] Utilities argued that net metering could threaten their economic viability if they were forced to provide retail services for free.[144] Similar arguments against net metering have been raised in other states, and some states have begun to charge even residential customers for participating in net metering programs.[145] These charges could eliminate the economic incentives net metering would otherwise provide.[146] If more state policy makers follow suit, net metering's beneficial impact on renewable energy development will further erode.

Federal Tax Credits

Since the 1990s, two federal tax credits, *the Production Tax Credit (PTC)* and *the Investment Tax Credit (ITC)*, have played critical roles in assisting renewable energy development in the United States.[147] Despite the importance of federal tax credits, however, they have injected uncertainty into the renewable energy market.[148] This uncertainty drives up the overall cost of renewable power, requires ongoing lobbying efforts to sustain the

---

[142] Joseph P. Tomain & Richard D. Cudahy, *Energy Law in a Nutshell* (2d ed. 2011) 177–182; Peter Navarro & Michael Shames, 'Electricity Deregulation: Lessons Learned from California' (2003) 24 Energy LJ 33, 44–45.

[143] *See* Herman K. Trabish, 'Solar's Net Metering Under Attack' *Greentech* (Washington DC, 3 May 2012), http://www.greentechmedia.com/articles/read/solars-net-metering-under-attack/. *See also* Naïm Darghouth, Galen Barbose, and Ryan Wiser, Dept. of Energy, 'The Impact of Rate Design and Net Metering on the Bill Savings from Distributed PV for Residential Customers in California' (2010) vii, xi, 25 *see also* Thomas J. Starrs & Howard J. Wenger, 'Policies to Support a Distributed Energy System' (1999), http://www.repp.org/repp_pubs/pdf/pv3.pdf.

[144] Trabish (n. 143). For more on these disputes, *see infra* Section IV.C.

[145] *See, e.g.*, Julia Pyper, 'Wisconsin Regulators Vote to Raise Fixed Charges, Add Solar Fees' *GreenTechSolar* (Washington, 18 Nov 2014), http://www.greentechmedia.com/articles/read/wisconsin-regulators-vote-to-raise-fixed-charges-and-add-solar-fees.

[146] Ibid.

[147] *See* I.R.C. § 45(a), (b) (2012); I.R.C. § 48 (2012).

[148] Powers, 'Sustainable Energy Subsidies' (n. 17).

policies, and undermines the underlying purposes of the tax credits, which are to help build a self-reliant and sustainable renewable energy sector.[149]

Of the two tax credits, the PTC faces the most frequent criticism and political uncertainty. The PTC provides a specified tax credit—worth $.023 at the end of 2014—for each kilowatt-hour of electricity production.[150] The PTC applies to a number of renewable energy sources, but it has been most important to the wind energy industry.[151] The tax credit applies during the first ten years of a facility's operation, and it is available only to facilities that complete construction within specified timeframes.[152] Since the late 1990s, Congress has established short eligibility periods for facilities to qualify for the PTC.[153] The pending expiration dates of the PTC typically spur a frenzy of lobbying efforts in which the wind energy industry and its supporters urge renewal of the PTC, while opponents insist that Congress allow the PTC to expire permanently.[154] Over the years, as the debates regarding the PTC have intensified, Congress has delayed extending it until, and sometimes after, the last possible moment.[155] These extensions often last for only a couple of years and thus set the stage for subsequent rounds of debates and lobbying efforts.[156]

The ITC, which is most important to the solar industry, includes similar eligibility deadlines. The ITC gives renewable energy developers a tax credit based on the amount of money they spend building a facility.[157] To qualify for the ITC, developers must place their facilities

---

[149] Ibid, 223-27.

[150] I.R.C. § 45(a), (b) (2012) (setting the PTC at an initial 1.5¢/kWh in 1993 dollars, and allowing for inflation adjustments).

[151] Ibid.

[152] I.R.C. § 45(a)(2)(A)(ii) (2012); *see also* American Taxpayer Relief Act of 2012, Pub. L. No. 112-240, § 407(a)(1), 126 Stat. 2340 (2013) (to be codified at I.R.C. § 45) (requiring eligible facilities to begin construction before January 1, 2014).

[153] Am. Wind Energy Ass'n, 'Federal Production Tax Credit For Wind Energy: The American Wind Industry Urges Congress To Take Immediate Action To Pass An Extension Of The PTC' http://www.awea.org/issues/federal_policy/upload/PTC-Fact-Sheet.pdf; see also Dewey (n. 24) 1119 & n.112 (listing the various extensions of the PTC since its inception).

[154] Powers, 'Sustainable Energy Subsidies' (n. 17) 222-23.

[155] Am. Wind Energy Ass'n (n. 153).

[156] Ibid.

[157] *See* Roberta F. Mann & E. Margaret Rowe, 'Taxation' in Michael B. Gerrard (ed.) *The Law of Clean Energy: Efficiency and Renewables* (ABA 2011) 145, 149.

in service by specified deadlines.[158] The current ITC allows solar developers to receive a tax credit equal to 30 percent of their investment in commercial solar facilities built by December 31, 2016.[159] In 2017, the tax credit will drop to 10 percent.[160] The tax credit for residential solar installations will expire completely at the end of 2016.[161] Energy forecasters expect that solar development will suffer if the tax credit drops as scheduled.[162] Lobbying regarding an extension of the ITC is already underway; however, if experience with the PTC is any guide, one should expect Congress to delay action on the ITC until the last possible moment (if not later).

Neither tax credit program establishes concrete goals regarding the amount of renewable energy development Congress hopes to promote nor links the tax credits to the economic viability of the renewable energy producers. Instead, the tax credits come and go based on the calendar, rather than market maturity or competitiveness.[163] As explored below, this lack of clear policy objectives contributes to the political and economic vulnerability of the renewable energy sector. Not only do the limited eligibility periods force the renewable energy industry to repeatedly appear before Congress hat-in-hand, they also inject uncertainty into utility planning practices. Without clearer targets for renewable power development and use, the boom-bust cycle driven by the federal tax credits will likely increase.

Renewable Portfolio Standards

RPSs are relatively popular programs in the United States. Twenty-eight states have enacted RPS mandates, and another eight states have voluntary RPS goals.[164] RPSs

[158] I.R.C. §§ 48(a).

[159] Ibid.

[160] I.R.C. § 48(a)(2) (2012).

[161] I.R.C. § 25D(g).

[162] Jensen (n. 25); Christopher Martin, 'Solar Consolidation Expected as Tax Credit Drives Deals' *Bloomberg* (New York, 20 Oct 2014), http://www.bloomberg.com/news/2014-10-21/solar-consolidation-expected-as-tax-credit-drives-deals.html.

[163] Powers, 'Sustainable Energy Subsidies' (n. 17) 222-23.

[164] Database of State Incentives for Renewables & Efficiency, Renewable Portfolio Standard Policies (Sept 2012), http://www.dsireusa.org/documents/summarymaps/RPS_map.pdf. West Virginia repealed its alternative energy mandate in 2015, dropping the number of states with mandatory purchase requirements from twenty-nine to twenty-eight. Naveena Sadasivam, 'In W.Va., New GOP Majority Defangs Renewable Energy Law That Never Had a Bite' *InsideClimateNews* (5 Feb 2015),

require electric utilities to obtain a specified percentage of electricity from renewable sources by specified deadlines.[165] To demonstrate compliance with their RPS mandates, utilities must typically acquire Renewable Electricity Credits (RECs), which are certificates representing the "renewable" component of electricity.[166] Each REC typically represents a megawatt-hour of renewable power.[167] Some states allow utilities to buy and sell RECs, while other states limit REC trading.[168] Most states give their utilities flexibility either to produce renewable power and the associated RECs themselves or to purchase RECs from third-party renewable power producers or marketers.[169] This flexibility, combined with the clear mandates of RPSs, allows utilities to plan for increased renewable power integration.[170] Indeed, most renewable power integration and transmission reliability studies rely on RPS mandates to calculate the total amount of power the transmission system will need to integrate.[171]

RPSs also often include design elements to encourage production of certain types or sizes of renewable power sources. For example, some states include "carve-outs" that require a certain percentage of renewable power to come from solar, wind, or distributed

---

http://insideclimatenews.org/news/20150205/wva-new-gop-majority-defangs-renewable-energy-law-never-had-bite.

[165] Felix Mormann, 'Enhancing the Investor Appeal of Renewable Energy' (2012) 42 Envtl L 681, 691. Database of State Incentives for Renewables & Efficiency, Incentives/Policies for Renewable Energy, Rules, Regulations, and Policies*,* http://www.dsireusa.org/incentives/allsummaries.cfm?SearchType=RPS&&re=1&ee=0 (accessed 7 Dec 2012) (e.g., Arizona's standard establishes annual requirements, and California establishes interim requirements for 2013 and 2016 before requiring utilities to meet a 33% by 2020 final RPS).

[166] *See* Edward A. Holt & Ryan H. Wiser, 'The Treatment Of Renewable Energy Certificates, Emissions Allowances, And Green Power Programs In State Renewables Portfolio Standards' (Lawrence Berkeley Nat'l Lab 2007) (noting that tradable renewable energy certificates "widen[] the geographic scope of eligible renewable energy projects"); Edward Holt, Jenny Summner & Lori Bird., 'The Role Of Renewable Energy Certificates In Developing New Renewable Energy Projects' (Nat'l Renewable Energy Lab 2011) 11.

[167] Jon Hamrin, 'REC Definitions and Tracking Mechanisms Used by State RPS Programs' (Clean Energy States Alliance 2014) 2.

[168] Powers, 'Small is Beautiful' (n. 17) 611-13.

[169] Ibid.

[170] Holt & Wiser (n. 166).

[171] *See* PJM Renewable Integration Study (n. 45).

generation.[172] Well-crafted carve-outs can mitigate concerns that RPSs primarily incentivize construction of large, remote renewable facilities that may exacerbate transmission congestion.[173] Carve-outs can also create separate markets for specific REC categories, and thereby increase the economic viability of more expensive renewable resources, including residential solar.[174] Thus, RPSs can offer regulators and renewable energy advocates strategies to promote certain types of renewable energy development, including small-scale development, while also providing predictability that enables better planning.

Despite these benefits, RPSs have their own limitations. First, without specific design elements aimed at promoting distributed and solar power, they primarily incentivize large wind power development.[175] While this is a benefit in many respects, a balance between wind and solar power, spread out over larger geographical areas, may improve reliability and lower costs as more renewable energy is integrated into the power system.[176] Second, although interstate REC trading is a purported benefit of RPSs, the lack of uniformity between states policies has at times complicated the REC trading process.[177] To rectify these problems, some scholars have called for a national RPS,[178] although the political climate in Washington D.C. makes any such program unlikely. Third, several states have

---

[172] Nev. Rev. Stat. § 704.7821 2.(a)(1) (2009) (creating carve-outs for solar); Me. Rev. Stat. Ann. §3402(2)(C), as enacted by PL 2007, c. 661, Pt. A, §4 (creating carve-outs for wind power generally, as well as coastal and offshore wind).

[173] Powers, 'Small is Beautiful' (n. 17) 611-13.

[174] Ibid. 662-63; *CPUC II*, 133 FERC ¶ 61,059 (2010).

[175] *See* Ryan Wiser & Galen Barbose, 'Renewables Portfolio Standards in the United States: A Status Report With data Through 2007' (Lawrence Berkeley Nat'l Lab 2008) 13, *available at* http://eetd.lbl.gov/ea/ems/reports/lbnl-154e.pdf (explaining that 93% of new renewable energy development in states with RPSs came from wind power); Miguel Mendonça, Stephen Lacey, and Frede Hvelplund, 'Stability, Participation and Transparency in Renewable Energy Policy: Lessons from Denmark and the United States' (2009) 27 POL'Y & SOC'Y 379, 381, *available at* http://www.sciencedirect.com/science/article/pii/S144940350900006X.

[176] *See* PJM Renewable Integration Study (n. 43) 12; Amory B. Lovins, E. Kyle Datta, Thomas Feiler, Karl R. Rábago, Joel N. Swisher, André Lehmann, and Ken Wicker, Small is Profitable: The Hidden Economic Benefits of Making Electrical Resources the Right Size (2002) 220-23; U.S. Dep't of Energy, 'The Potential Benefits of Distributed Generation and Rate-Related Issues that May Impede Their Expansion: A Study Pursuant to Section 1817 of the Energy Policy Act of 2005' (2007) 2-17.

[177] Hamrin (n. 167) 1-4 (summarizing similarities and differences between state programs).

[178] See, e.g., Lincoln L. Davies, 'Power Forward: The Argument for a National RPS' (2010) 42 Conn. L. Rev. 1339, 1339.

designed RPSs in ways that violate the "dormant Commerce Clause," a doctrine that prohibits states from discriminating against interstate commerce or engaging in economic protectionism.[179] For example, some states have unlawfully limited RPS eligibility only to instate renewable resources,[180] and others have rewarded instate resources with additional RECs that out-of-state facilities cannot receive.[181] By and large, these discriminatory laws have been changed due to threatened or filed lawsuits.[182] However, some more aggressive lawsuits challenging RPSs remain active.[183] While most legal observers believe the RPSs will withstand the legal challenges, an element of uncertainty hangs over these policies.[184]

Surprisingly, however, political opposition to RPSs is less of a threat. By and large, RPSs have proven quite resilient, and attempted repeals of RPSs have had limited success.[185] In 2014, Ohio decided to freeze its renewable energy mandates for two years.[186] More recently, West Virginia repealed its alternative energy mandate, although some commentators have argued this repeal means little, since the state's "alternative energy" sources included fossil fuels and dirty fuel sources such as tires.[187] Despite these setbacks, observers believe that

---

[179] *See* C & A Carbone, Inc. v. Town of Clarkstown, 511 U.S. 383, 390 (1994); City of Phila. v. New Jersey, 437 U.S. 617, 628–29 (1978). States are also prohibited from imposing an "undue burden" on interstate commerce. Pike v. Bruce Church, Inc., 397 U.S. 137, 142 (1970).

[180] *See* Ill. Commerce Com'n v. FERC, 721 F.3d 764, 776 (7th Cir. 2013) ("Michigan's first argument—that its law forbids it to credit wind power from out of state against the state's required use of renewable energy by its utilities—trips over an insurmountable constitutional objection. Michigan cannot, without violating the commerce clause of Article I of the Constitution, discriminate against out-of-state renewable energy."); Kate Konschnik & Ari Peskoe, 'Minimizing Constitutional Risk: Crafting State Energy Policies that Can Withstand Constitutional Scrutiny' (Nov 2014) 2-4.

[181] *See* Ariz. Admin. Code § R14–2–1806(D)–(E); *see also* William Griffin 'Renewable Portfolio Standards and the Dormant Commerce Clause: The Case for In-Region Location Requirements' (2014) 41 B.C. Envtl. Affairs L. Rev. 133 (discussing other in-state renewable incentives).

[182] Konschnik & Peskoe (n. 179) 2-4.

[183] *See* Energy and Environmental Legal Institute v. Epel ___F.Supp.3d___, 2014 U.S. Dist. LEXIS 64285 (D. Colo., May 9, 2014), *appeal filed* 14-1216 (10th Cir., June 3, 2014).

[184] *See generally*, Konschnik & Peskoe (n. 179) 2-11.

[185] Maria Gallucci, 'Renewable Energy Standards Target of Multi-Prong Attack' *InsideClimateNews* (19 Mar 2013), http://insideclimatenews.org/print/24712.

[186] Gallucci, 'Ohio Gov. Kadish to Sign "Freeze" on State Clean Energy Mandate by Saturday' *Int'l Bus Times* (11 Jun 2014), http://www.ibtimes.com/ohio-gov-kasich-sign-freeze-state-clean-energy-mandate-saturday-1598602.

[187] Sadasivam (n. 164); W. Va. Code § 24-2F-3(3) (electricity produced by advanced coal technology, natural gas, coalbed methane, waste coal, and burning tires qualified for the standard).

strong public support for renewable energy will make efforts to repeal RPSs difficult in most places, partly because RPSs have created markets for new constituencies, including farmers who receive royalties from wind power producers and workers at wind turbine manufacturing facilities.[188] Indeed, Ohio's freeze has received criticism from within and outside of the state, in part because of the economic losses it has caused.[189] Finally, unlike the federal tax credits with built-in expiration dates, RPS repeals require lawmakers to act affirmatively. The inertia that protects existing laws helps to insulate them from rollback efforts.[190] However, ALEC has made energy policy a priority for 2015,[191] and additional RPS repeal efforts may follow. Nonetheless, if past repeal efforts are a signal, it seems unlikely that opponents of renewable electricity will succeed in repealing most RPS mandates.

The greatest threat to RPS programs may actually lie in their own relative lack of ambition. In many states, RPS mandates are relatively weak, requiring utilities to obtain as little as 10% of their electricity from renewable sources by 2015.[192] Based on the amount of renewable capacity added to the US power supply since 1990, almost all RPS quotas can be satisfied with existing supplies.[193] Thus, without more ambitious RPS mandates, demand

---

[188] Brad Plumer, 'State Renewable-Energy Laws Turn Out to Be Incredibly Hard to Repeal' *Washington Post* (Washington 8 Aug 2013), http://www.washingtonpost.com/blogs/wonkblog/wp/2013/08/08/state-renewable-energy-laws-turn-out-to-be-really-hard-to-repeal/.

[189] Gwynne Taraska & Alison Cassady, 'The Economic Fallout of the Freeze on Ohio's Clean Energy Sector' (Center for American Progress 2015), https://www.americanprogress.org/issues/green/report/2015/03/10/108251/the-economic-fallout-of-the-freeze-on-ohios-clean-energy-sector/. It may be easier to calculate these losses with an RPS than with other programs that lack clear renewable targets.

[190] Dewey (n. 24) 1122.

[191] Tom Hamburger, 'Fossil-Fuel Lobbyists, Bolstered by GOP Wins, Work to Curb Environmental Rules' *Washington Post* (7 Dec 2014), http://www.washingtonpost.com/politics/fossil-fuel-lobbyists-bolstered-by-gop-wins-work-to-curb-environmental-rules/2014/12/07/3ef05bc0-79b9-11e4-9a27-6fdbc612bff8_story.html.

[192] *See* Warren Leon, 'The State of State Renewable Portfolio Standards' (2013) 4 fig.1.

[193] Ibid. (noting that compliance with existing RPSs would require an additional 3.5 gigawatts of electricity supply annually between 2013-2020). In comparison, new renewable electricity additions ranged from 6-13 gigawatts per year between 2008-2013. *See* Galen Barbose, 'Renewables Portfolio Standards in the United States: A Status Update,' a presentation to the National Conference of State Legislatures (2 May 2013), http://www.cleanenergystates.org/assets/2013-Files/RPS/BarboseRPS-Presentation-NCSL-Spring-2013.pdf**.**

for new renewable power facilities may weaken. Some states have in fact initiated efforts to increase their RPS requirements.[194] Part V of this article argues that US renewable energy advocates should follow this lead and focus on strengthening RPSs. Without stronger RPSs and strategic plans to develop and integrate more renewable power into the grid, renewable energy development will proceed in a much slower, costlier, and messier fashion, as the following section describes.

The Benefits and Limitations of *Ad Hoc* Renewable Power Development

With expiring tax credits looming and RPS targets nearly met, the US renewable energy industry has reached a critical point. Energy forecasts predict that investment in renewable power will drop, perhaps precipitously, without an effective policy response.[195] Indeed, in California, where utilities have already met most of their RPS requirements, renewable energy developers report they are already facing financing challenges for larger projects due to a lack of demand.[196] Separately, an Oregon utility proposed obtaining no new renewable resources until after 2020, because it had satisfied its RPS goals and did not forecast that the state would adopt new ones.[197] Based on projections from Lawrence Berkeley National Laboratory, it appears that many utilities could follow a similar course.[198] The renewable energy boom of the past several years could, without the correct policy response, become a bust.

To address this looming crisis, renewable energy advocates could work to extend or expand the existing suite of renewable electricity policies. In so doing, however, these advocates will be promoting a continuation of piecemeal, *ad hoc* siting, development, and integration of renewable power. Although this approach has to date yielded substantial growth of renewable power, this section argues that continued piecemeal growth will make the renewable transition more expensive, inefficient, technically challenging, and politically contentious than it otherwise could be. This section will begin with an explanation of how the current US policies tend to promote *ad hoc* renewable development. It will then explain the

---

[194] Julie Cart, Gov. 'Brown's Renewable Energy Plan Could Boost Solar, Wind Industries' *LA Times* (7 Jan 2015), http://www.latimes.com/local/california/la-me-renewable-goals-20150108-story.html.

[195] Annual Energy Outlook (n. 32) IF42-IF43.

[196] Cart (n. 194).

[197] Schlusser (n. 62) 25-26 (discussing the proposed resource plan for Pacific Power).

[198] Barbose (n. 28) 9 (showing that renewable power currently under development will meet or exceed RPS demand in three US regions and nearly meet demand in another two).

benefits and downsides of a piecemeal approach to renewable power development. Ultimately, the section concludes that, while *ad hoc* development offers some benefits, it will delay the necessary transition to a renewable electricity system.

The Ad Hoc Nature of US Renewable Electricity Policies

The policies discussed above all support *ad hoc* renewable energy development, in that they promote piecemeal, site-by-site development of renewable energy facilities. Moreover, aside from RPSs, US renewable power policies typically do not set quantitative targets for renewable power acquisition. In terms of renewable power siting, all four policies tend to promote developer-driven, piecemeal decision-making. PURPA, for example, allows QFs to choose where they will build and then to force utilities to buy their power. Indeed, under PURPA, a utility may be forced to purchase power from QFs located outside of its service territory.[199] Net metering rules, by definition, apply within each utility's service territory, but they rarely include more specific siting requirements. RPSs sometimes include location requirements linked to transmission access,[200] but states must be careful to not use location specifications that would run afoul of the dormant Commerce Clause.[201]Federal tax credits apply regardless of location. Collectively, although some general geographic restrictions may exist under net metering and RPSs, developers have broad discretion to select where they will build their facilities.

With the discretion most policies afford, commercial developers wisely make their investment and siting decisions based on resource availability (i.e., the amount of wind or sun), existing transmission capacity, and the market signals they receive. Most wind development, for example, has occurred in places with strong wind resources, available capacity on the transmission system, and access to RPS markets that require utilities to buy wind power or RECs.[202] The timing and amount of wind development follows the market

---

[199] Turner Falls Ltd. P'ship, 55 FERC ¶ 61487 (1991); Connecticut Valley Elec. Co., Inc. v. FERC, 208 F.3d 1037 (D.C. Cir. 2000).

[200] *See* California Public Utility Commission, 33% RPS Procurement Rules, http://www.cpuc.ca.gov/PUC/energy/Renewables/hot/33RPSProcurementRules.htm (last modified 17 Jun 2013).

[201] *See* Konschnik & Peskoe (n. 179) 2-4.

[202] Ryan Wiser & Mark Bolinger, '2011 Wind Technologies Market Report' (U.S. Dep't Of Energy 2012) 3.

signals sent by tax credits and RPSs. Likewise, most residential solar power development has occurred in locations that have net metering laws, tax credits that offset upfront costs, and third-party leasing operations. With the right market signals, developers can usually figure out where and when they should build to get the best return for each project.

To date, this developer-driven process has largely succeeded in bringing new resources online with relatively few hiccups. However, this *ad hoc* system carries risks as well as benefits. Parts B and C of this section explore some of these benefits and downsides of the US piecemeal development approach.

The Benefits of Ad Hoc Development

As explained above, *ad hoc* development has led to unprecedented growth of renewable power in the United States, lower costs, improving technology, lower pollutant emissions, and overall increased public support for renewable electricity. The current approach has facilitated the creation of a robust renewable energy industry that includes a number of new actors and new business models that are leading to utility reforms that would likely not have emerged otherwise. Likewise, increased renewable power production has prompted long-overdue changes in the transmission system that could lead to better development and management strategies. These developments make a 100% renewable power target more viable than it has ever seemed.

It is doubtful that many of these changes would have developed without the mix of policies discussed in this paper. PURPA enabled the initial creation of QFs and signaled to regulators that renewable power could supply some US power. Without the results achieved under PURPA, it is unclear whether politicians would have taken further steps to promote renewable power. Yet as they did, and as these policies began to operate together, they revealed how a mix of policies can promote much more renewable growth. The combination of tax credits and RPSs, for example, was necessary to incentivize a meaningful buildup of wind power.[203] Third-party leasing models for distributed solar would not work without some combination of tax credits, RECs, and net metering. Had these policies not promoted successful independent renewable power production, moreover, it is highly unlikely that either the deregulated market or regulated utilities would have independently invested in renewable energy.

---

[203] Wiser & Bolinger (n. 202).

These policies have also initiated reforms in the utility sector that could fundamentally change the electricity grid and, in some places, the utility business model. Increased development of renewable power systems has led to several FERC orders requiring transmission operators to accommodate renewable power integration.[204] Of these, FERC's order requiring regional transmission planning may become the most important if it results in more strategic transmission system design and operation.[205] At the distribution side, growth in distributed generation sources has prompted efforts to develop a "smart" grid that can accommodate increasing numbers of distributed sources and fluctuating loads.[206] Storage technology has also advanced to provide backup supplies for renewable sources.[207] Finally, some states have begun to reconsider the fundamental responsibilities of electric utilities and have initiated efforts to transform the utilities into "wires" companies that would bear primary responsibility for managing the renewable transition.[208] Without independent renewable power production, few, if any, of these changes would have occurred.

Thus, it is clear that US policies to support renewable power have had profound impacts on the electricity system. Even though non-hydro renewable resources account for less than 5% of US power, renewable power capacity has increased at an unprecedented rate.[209] To be sure, the piecemeal approach to renewable development has succeeded on many levels.

---

[204] *See* Alexandra B. Klass & Elizabeth J. Wilson, 'Interstate Transmission Challenges for Renewable Energy: A Federalism Mismatch' (2012) 65 Vand L Rev 1801, 1813-25.

[205] Transmission Planning and Cost Allocation by Transmission Owning and Operating Public Utilities, 136 FERC P 61,051 (July 21, 2011); Klass & Wilson (n. 204) 1823-25.

[206] *See* Joel B. Eisen, 'Smart Regulation and Federalism for the Smart Grid' (2013) 37 Harv Envtl L Rev 1.

[207] *See* Andrew H. Meyer, 'Federal Regulatory Barriers To Grid-Deployed Energy Storage' (2014) 39 Colum. J. Envtl. L. 479.

[208] *See* Nate Larsen, 'New York's REV: Regulatory Reforms' *Charged Debate* (26 Feb 2015), http://greenenergyinstitute.blogspot.com.es/2015/02/new-yorks-rev-regulatory-reforms.html; Nate Larsen, 'GEI Submits Comments to Hawaii PUC Regarding HECO Company Plans' *Charged Debate* (17 Oct 2014), http://greenenergyinstitute.blogspot.com.es/2014/10/gei-submits-comments-to-hawaii-puc.html.

[209] Electric Power Monthly (n. 9).

The Downsides of Ad Hoc Development

Despite these important successes, the *ad hoc* approach will not produce the renewable transition this paper envisions. First, piecemeal development is expensive and inefficient. Second, even with the transmission planning efforts of FERC, *ad hoc* development complicates grid integration. Finally, piecemeal development can incite intense political opposition. To date, most of these challenges have been manageable. However, for the renewable transition to occur, policy makers will have to overcome or avoid many of the problems presented by *ad hoc* renewable power production.

Expense and Inefficiency

Piecemeal renewable power development is often inefficient and expensive.[210] Studies have documented how incremental development raises the costs of nearly every phase of a solar project, including equipment procurement, site selection, customer acquisition, permitting, installation, inspection, and interconnection.[211] When solar developers concentrate on facility installation within a single neighborhood, or when communities or developers engage in bulk equipment purchases, their costs typically decline.[212] A similar dynamic applies to wind development, with the costs of distributed wind power about double that of commercial wind farms.[213]

While the major US policies aim to make renewable energy development more affordable, they do not necessarily aim to lower costs. Rather, they provide financial support to offset the higher costs of renewable power. In so doing, they may actually drive up the costs of renewable energy development. Intermittent subsidies under the PTC illustrate this dynamic most clearly, as short eligibility periods create a boom-bust cycle of development that drives up the costs of wind power facility development.[214] During the booms, equipment costs, labor costs, rents and royalties become more expensive.[215] While some individuals and companies are likely engaging in arbitrage during the development booms, many in the wind

---

[210] *See* Lawton (n. 34) 8-17 (discussing costs of solar development).

[211] Ibid.; Ardani (n. 136).

[212] Lawton (n. 34) 31-35.

[213] ICF International, 'The Cost and Performance of Distributed Wind Turbines, 2010-25, Final Report' (2010) 1-2, http://www.eia.gov/analysis/studies/distribgen/system/pdf/appendix-b.pdf.

[214] Powers, 'Sustainable Energy Subsidies' (n. 17) 223-25.

[215] Ibid.

energy industry are trying to use the boom periods as hedges against the development busts that follow when the eligibility periods expire. The intermittent PTC thus promotes sub-optimal, but understandable, development decisions. These dynamics, however, have made it difficult for the wind energy industry to attract stable investment and to secure cheap capital.[216] The lack of access to capital, in turn, has made the wind energy industry even more reliant upon the unpredictable PTC. [217]

Piecemeal renewable power development may further drive up costs by creating unnecessary stranded assets. [218] Common wisdom holds that intermittent renewable resources require backup fossil fuel resources (most commonly, natural gas plants) to ensure reliability. However, wind farm aggregation and proper solar array alignment can mitigate many reliability concerns and displace the need for backup gas plants.[219] *Ad hoc* renewable power development increases the likelihood that new natural gas plants will come online to provide backup power. If those gas plants ultimately become obsolete as strategic renewable development occurs, customers may end up paying for the plants regardless.

This economic uncertainty does not have to be an inherent element of the renewable transition. Although transitioning the electricity sector will require investment for new generation resources and transmission and distribution infrastructure, the transition could reduce customers' exposure to fluctuating fuel prices, carbon prices, and other costs associated with burning fossil fuels. But for these benefits to be realized, the US needs to go beyond its *ad hoc* approach to renewable energy development.

Grid Integration

Piecemeal development and siting of renewable power facilities also complicate transmission and distribution planning and management, which, in turn, stifles renewable power growth.[220] Although FERC has attempted to mitigate some of these problems, grid

---

[216] Mormann (n. 165) 687.

[217] Annual Energy Outlook (n. 32) IF42-IF43 (predicting low growth in the wind power sector if Congress does not extend the PTC).

[218] Schlusser (n. 62) 14.

[219] PJM Renewable Integration Study (n. 43).

[220] *See* supra notes 91-97 and accompanying text. *See* also Krysti Shallenberger, 'Mont. Project Will Send Wind Across Border to Wyo.' *EnergyWire* (20 Mar 2015), http://www.eenews.net/energywire/2015/03/20/stories/1060015412; California ISO, 'Fast Facts: What

integration remains a challenge that *ad hoc* development exacerbates. Difficulties arise, moreover, with both large, remote renewable facilities and distributed power facilities.

A lack of transmission capacity has stifled or delayed wind power growth in the West and Midwest,[221] and piecemeal development may exacerbate this problem. Many of the best wind resources in the West and Midwest are in rural areas with small populations that historically had little need for transmission capacity, and despite the economic advantages of building wind farms in those areas, limited transmission has prevented wind power development.[222] One obvious solution to this is to develop more transmission lines,[223] but uncertainty associated with piecemeal development creates a chicken-or-egg dilemma for transmission line developers: they cannot reasonably invest in new, expensive transmission lines if they cannot guarantee that new wind producers will use the lines. Wind producers, in turn, cannot build wind farms in locations without adequate transmission infrastructure. Existing renewable policies do not address these limitations. In fact, even if new transmission lines are sited quickly, tax credits will have already expired and RPS mandates may already be fulfilled. This timing mismatch highlights one significant limitation of *ad hoc* renewable policies.

Even where transmission capacity is normally adequate, congestion can interfere with wind generators' operations and revenues. In Oregon, a high-profile dispute illustrates the potential vulnerability wind producers face when transmission policies are unclear.[224] For a period of time, Oregon was an optimal place for new wind farms. Federal and state tax credits made development economically viable, the transmission system operated by the Bonneville Power Administration had plenty of available space, and Oregon wind producers could easily deliver their power to California to qualify for that state's lucrative RPS.[225]

---

the Duck Curve Tells Us About Managing a Green Grid' (2013), http://www.caiso.com/Documents/FlexibleResourcesHelpRenewables_FastFacts.pdf. Cf Jeff St. John, 'Retired CPUC Commissioner Takes Aim at Duck Curve' *GreentechGrid* (24 Mar 2014), http://www.greentechmedia.com/articles/read/retired-cpuc-commissioner-takes-aim-at-caisos-duck-curve.

[221] Klass & Wilson (n. 204) 1811-12; Shallenberger (n. 220).

[222] Ibid.

[223] Ibid.

[224] *See* Timothy P. Duane & Kiran H. Griffith, 'Legal, Technical, and Economic Challenges in Integrating Renewable Power Generation into the Electricity Grid' (2012-2013) 4 *San Diego J Climate & Energy L* 1.

[225] Ibid. 4-5, 17-20.

Several new wind farms came on line and signed contracts with Bonneville securing their firm transmission rights.[226] In 2011, however, Bonneville curtailed generation at many wind farms to accommodate increased transmission needs of the region's hydropower system during an especially rainy and snowy year.[227] As a result, wind farms were unable to earn tax credits from the PTC or to sell RECs, at estimated costs of at least $2.15 million.[228] Since then, wind producers, Bonneville, and other stakeholders have been involved in litigation regarding the right curtailment policies and who should pay when curtailment happens.[229] If the renewable policies had taken the possibility of transmission congestion into account, it is possible that the dispute would have cost much less money and been resolved much sooner.[230]

Distributed power sources—which could actually improve grid reliability[231]—are not immune to the potential consequences of poor planning.[232] In California, which has by far the most distributed solar, *ad hoc* development has produced challenges associated with the "duck curve."[233] In essence, California faces operational and economic challenges due to an overabundance of solar resources during the middle of the day when power consumption is relatively low and a dearth of solar power as power consumption rapidly increases later in the day, when temperatures rise and home air conditioners come on.[234] This overabundance/under-abundance problem could have significant economic and environmental consequences, if high-cost, polluting natural gas plants are paid to stay in standby mode during the middle of the day and then to ramp up operations as solar

---

[226] Iberdrola Renewables Inc. v. Bonneville Power Administration, 137 FERC ¶ 61,185 (2011).

[227] Duane & Griffith (n. 224) 25-26 (explaining Bonneville's rationale).

[228] Ibid. 33.

[229] Ibid.

[230] Most economic losses were from the facilities' inability to meet eligibility requirements under the PTC and California's RPS. Essentially, both programs require power to actually be delivered to the transmission system before a facility can earn tax credits or RECs. Ibid. 33. If the policies themselves included an exception to this eligibility requirement that would allow properly sited, functional facilities to earn credits for power they could have produced but for a curtailment order, they would have mitigated some of the concerns at issue in the *Iberdrola* dispute.

[231] U.S. Dep't of Energy, 'The Potential Benefits of Distributed Generation and Rate-Related Issues that May Impede Their Expansion: A Study Pursuant to Section 1817 of the Energy Policy Act of 2005' (2007) 2-17.

[232] Trabish (n. 39).

[233] Ibid.

[234] Lazar (n. 47) 2.

production drops off.[235] Yet, energy experts believe that the duck curve dilemma has some relatively easy and cheap solutions that smarter planning could provide. For example, if more solar panels were oriented to the southwest and west, solar energy production would continue later into the day and offset the need to ramp up as many fossil fuel plants.[236] Had California electricity planners embedded this solution into their renewable energy policies at the outset, they could have ensured proper orientation of the solar panels. Instead, they are now offering incentive rates for better oriented facilities.[237]

Finally, grid reliability and planning can be undermined by policies that concentrate renewable power development in specific, limited locations. [238] Plans for integrating renewable energy into the transmission system highlight the benefits of geographical diversity of renewable facilities.[239] Geographical diversity allows renewable power sources to back each other up and thus displace the need for backup fossil fuel plants.[240] Geographic diversity also reduces potential transmission congestion.[241] To date, however, US renewable power policies have not taken these advantages into account. This makes transmission planning and integration more complicated than they should be.

Political Instability

While all renewable energy policies face some opposition, programs that promote piecemeal development have faced increasingly intense political opposition that often inaccurately presents renewable energy as elitist and unfair.[242] Piecemeal development allows opponents to target specific facilities supported by specific policies to create inaccurate portrayals of renewable policies. Finally, policies that incrementally threaten utilities increase uncertainty and utility opposition to renewable power, without directly addressing questions about the future role of utilities in the renewable transition.

---

[235] Trabish (n. 39).

[236] Lazar (n. 47) 7-8.

[237] Trabish (n. 39).

[238] *See* Duane & Griffith (n. 224) 4-5, 17-20 (discussing risks of concentrating wind power in one location).

[239] PJM Renewable Integration Study (n. 45).

[240] Ibid.

[241] Ibid.

[242] *See* Weissman & Johnson (n. 40); Halper (n. 40); Wellinghoff & Tong (n. 40).

The net metering disputes illustrate how political opposition can paint a distorted picture of renewable energy. As described above, utilities fear that net metering will lower utilities' revenues. But in the media and before regulators, they have attacked net metering for shifting the costs of renewable power development onto the poor. They argue that if wealthier utility customers can lower their own electricity bills by installing renewable energy systems, the costs of managing the electricity system will shift to customers who cannot afford to install their own renewable facilities.[243] In effect, they suggest that poor (and often non-white) customers will be forced to subsidize wealthy, white ones.[244] Although empirical studies have refuted these arguments,[245] the contention that net metering produces a "reverse Robin Hood" effect in which the poor subsidize the rich,[246] has had profound political impact. Moreover, when images of solar arrays on expensive houses are presented along with inflammatory rhetoric, the political messaging can be difficult to overcome, even if it is incomplete or inaccurate.

A similar dynamic has played out with tax credits. Opponents of federal tax credits have frequently criticized them for "picking winners and losers,"[247] violating free market principles,[248] and simply for costing too much and thus wasting taxpayers' money.[249]

---

[243] Wellinghoff & Tong (n. 40). This cost shift is not a necessary result of declining utility revenues. Regulators could instead decide to award utilities and their shareholders less revenue, rather than to shift costs to ratepayers to keep utilities' profits at their existing levels.

[244] Ibid.

[245] A study of Nevada's net metering program revealed that it had actually returned a $36 million benefit to customers who did not participate in net metering. Energy & Environmental Economics, 'Nevada Net Energy Metering Impacts Evaluation' (Nevada PUC Jul 2014) 8 tbl 2, http://puc.nv.gov/uploadedFiles/pucnvgov/Content/About/Media_Outreach/Announcements/Announcements/E3%20PUCN%20NEM%20Report%202014.pdf?pdf=Net-Metering-Study. A California study found that customers who use net metering still pay on average 103% of their costs and thus, by definition, are not being subsidized by other ratepayers. The study also noted that these net metering customers had previously paid on average 133% of their full cost of service and had been subsidizing others. Energy & Environmental Economics, 'California Net Energy Metering Ratepayer Impacts Evaluation' (CPUC Oct 2013) 10 tbl 5, http://www.cpuc.ca.gov/NR/rdonlyres/75573B69-D5C8-45D3-BE22-3074EAB16D87/0/NEMReport.pdf [hereinafter California NEM Ratepayer Evaluation].

[246] Wellinghoff & Tong (n. 40).

[247] Nicolas Loris, 'Wind PTC: There's No Free Lunch' *The Foundry: Conservative Policy News Blog* (21 June 2012), http://blog.heritage.org/2012/06/21/wind-ptc-theres-no-freelunch.

[248] Ibid.

[249] Jason Stverak, Op-Ed., 'The Truth About Wind Energy Subsidies: They Blow,' *Forbes* (19 Dec

Although there are a number of viable critiques against these facile arguments, defending the PTC has proven to be politically challenging.[250] In part, this is because opponents of the subsidy have been able to isolate data regarding the program's direct costs[251] and discount the disparate data about the program's direct and indirect benefits.[252] It is also easy for opponents to cherry-pick examples of failed projects to suggest they represent programmatic flaws, even when the programs themselves succeed.[253] The anecdotes are almost always more exciting and memorable than the data, and policies that promote piecemeal development are particularly vulnerable to these types of anecdotal attacks.

Finally, policies that promote piecemeal renewable power integration increase uncertainty in the electricity sector and make it more likely that utilities will fight each piecemeal change, to the detriment of renewable power development. Utility opposition to PURPA and net metering illustrates this dynamic. Both policies require utilities to purchase third parties' power and may potentially displace utilities' own power production.[254] These policies thus threaten existing monopolies and revenues.[255] While renewable power advocates may view these changes positively, unplanned economic losses could undermine the transition to renewable energy, because utilities may have fewer resources to invest in transmission lines, distribution infrastructure, and other resources necessary to accommodate renewable

---

2012), http://www.forbes.com/sites/realspin/2012/12/19/the-truth-about-windenergy-subsidies-they-blow.

[250] *See generally* Powers, 'Sustainable Energy Subsidies' (n. 17).

[251] See, e.g., Robert L. Bradley Jr., Op-Ed., 'Where Federal Energy Subsidies Really Go' *Forbes* (15 Aug 2011), http://www.forbes.com/sites/realspin/2011/08/15/where-federal-energysubsidies-really-go.

[252] Powers, 'Sustainable Energy Subsidies' (n. 17) 215-19.

[253] *See* Jeff Brady, 'After Solyndra Loss, US Energy Loan Program Turning a Profit' *NPR* (13 Nov 2014), http://www.npr.org/2014/11/13/363572151/after-solyndra-loss-u-s-energy-loan-program-turning-a-profit. Solyndra was a solar panel company that defaulted on a $535 million loan guaranteed by the Department of Energy under a federal loan program. President Obama had visited the Solyndra facility before it defaulted to tout the loan program, so when Solyndra went belly-up, the President's political opponents pounced, attacking the President, the company, and the program as a whole. Three years later, when the program began to yield profits, media coverage was tepid. Indeed, Solyndra is still considered a scandal by many. Denise Robbins, 'Will the Right-Wing Media Ever Stop Obsessing Over Solyndra?' *Media Matters* (23 Feb 2015), http://mediamatters.org/blog/2015/02/23/will-the-right-wing-media-ever-stop-obsessing-o/202635.

[254] Powers, 'Small is Beautiful' (n. 17) 654-55, 656-58; Borenstein & Bushnell (n. 56) 33-34.

[255] Powers, 'Small is Beautiful' (n. 17) 654-55, 656-58

power.[256] In order to maintain profit margins, utilities could choose to operate dirtier coal-fired power plants with lower marginal costs rather than cleaner, more expensive plants. Alternatively, utilities could successfully lobby for recovery of their stranded costs associated with the power displacement and thus drive up the indirect costs of renewable power. In short, the incremental displacement of existing power resources by renewable resources could drive up both the political and economic costs of renewable power, and thereby undermine the renewable transition.

This is not to say that *ad hoc* development has failed. To the contrary, both solar and wind power have become more affordable, and some market forecasts for renewable power development are quite bullish.[257] However, most investors continue to assign a risk premium to renewable energy,[258] and this risk premium is likely to remain in place until the renewable power industry can grow steadily. The contentious political debates regarding individual policies or individual projects draw attention away from much more fundamental questions about how the electricity system and utility business models must change to accommodate new sources of power and achieve the renewable transition.[259] It is unlikely that the US renewable transition can happen without incumbent utilities playing a role, and economically viable utilities will facilitate increased renewable energy integration better than bankrupt ones.[260] Policies should therefore begin to spell out the role that utilities will play, rather than primarily promote piecemeal power development that provokes intense political fights that will undermine the renewable transition.[261]

Expanding and Stabilizing Renewable Power Growth with RPSs and Strategic Plans

To avoid the problems associated with piecemeal renewable power development, policy advocates and policy makers should promote the creation of long-term, ambitious renewable power mandates, coupled with strategic plans for energy facility siting and grid integration.

---

[256] Borenstein & Bushnell (n. 56) 33-34.

[257] *See* Kenneth Bossong, 'Too Conservative? EIA Projects Renewables to be 16-27 Percent of U.S. Electricity Supply by 2040' *RenewableEnergyWorld* (29 Apr 2014), http://www.renewableenergyworld.com/rea/news/article/2014/04/too-conservative-eia-projects-renewables-to-be-16-27-percent-of-us-electricity-supply-by-2040.

[258] *See* Jensen (n. 101).

[259] Wellinghoff & Tong (n. 40).

[260] *See* Borenstein & Bushnell (n. 56) 31-33.

[261] Ibid. 33-34.

Policies should also define the roles of utilities in the future electricity system. Although the creation of these plans would undoubtedly be complicated and contentious, the plans would, once established, provide certainty necessary to facilitate the renewable transition. This section will briefly outline the elements of a comprehensive strategy.[262]

First, comprehensive planning should begin with long-term, ambitious targets for renewable power use. RPSs offer a policy solution that has enabled and could continue to promote sustained and predictable expansions of renewable electricity development. RPSs send clear messages to utilities and investors alike that reduce investment risks and allow utilities to plan for renewable power integration. Indeed, of the policies examined in this article, RPSs have likely promoted the greatest amount of renewable power investment, and they have the potential to achieve much more. Studies examining the impacts of different renewable energy policies concluded that RPSs, in combination with federal tax credits, have had the greatest success in promoting renewable electricity development and acquisition.[263] Costs associated with RPS compliance, moreover, appear to be relatively low.[264] By establishing demand for renewable power, RPSs send clear signals to renewable energy developers and financial institutions that a market will exist for their products. These market signals help to spur investment and to keep costs down.

RPSs also allow transmission operators to plan for renewable energy integration and thus add certainty to an otherwise potentially volatile transition.[265] In fact, when entities responsible for transmission system reliability estimate the impacts of renewable integration, they typically base their calculations on RPS mandates.[266] From a practical perspective, it is

---

[262] Due to space limitations, this article will not discuss comprehensive planning in detail. I plan to provide more detailed recommendations in a future article.

[263] Ryan Wiser & Galen Barbose, 'Renewables Portfolio Standards in the United States: A Status Report with Data through 2007' (Lawrence Berkeley Nat'l Lab 2008) 13 http://eetd.lbl.gov/ea/ems/reports/lbnl-154e.pdf (explaining that 93% of new renewable energy development in states with RPSs came from wind power).

[264] J. Heeter, G. Barbose, L. Bird, S. Weaver, F. Flores-Espino, K. Kuskova-Burns, and R. Wiser, 'A Survey of State-Level Cost and Benefit Estimates of Renewable Portfolio Standards' (NREL 2014) v-vi.

[265] *See* Starrs & Wenger (n. 82) 5B-5, 5A-6, 5B-9, 5A-26. *See* also Tomain & Cudahy (n. 88) 182–86 (explaining ratemaking formula), 191 (explaining rate of return),192 (explaining implications of ratemaking formula**).**

[266] PJM Renewable Integration Study (n. 45); North American Electric Reliability Corp., Potential Reliability Impacts of EPA's Proposed Clean Power Plan: Initial Reliability Review (2014), *available at*

hard to imagine what else they could use to calculate the potential degree of renewable integration, since other policies do not establish predictable quantities of renewable integration. From a policy perspective, moreover, having a common set of figures helps ensure that transmission studies are accurate and comparable.[267]

Second, renewable energy advocates and policy makers should go beyond establishing RPSs and start engaging in comprehensive energy planning to facilitate an even smoother and swifter transition to renewable energy development. For example, if a state were to adopt an 80%-by-2050 RPS, the state should then develop a strategy for achieving that target. That strategy should identify the optimal energy mix between distributed solar, utility-scale solar, wind power, and other renewable sources. The strategy should also identify optimal development sites for specific types of renewable power, as well as areas excluded from development for environmental, archaeological, social, or other reasons. Site selection for renewable facility development should be based on the quality of the renewable resource, actual and potential access to the grid, and ensuring balance in the electricity system. Last, the plan should incorporate the feedback of transmission operators and regulators to ensure that the transmission system expands as necessary to accommodate new renewable facilities, to enable better integration of electricity storage, to promote energy efficiency, and to maintain grid reliability as more flexible resources enter the system. In short, the comprehensive planning should address renewable facility siting, balance, and grid integration in a systematic and strategic manner.

Finally, regulators should determine the roles that utilities and independent power producers will play in the future electricity system and develop a regulatory structure in accordance with those established roles. Some states may decide that utilities should maintain their vertically

---

http://www.nerc.com/pa/RAPA/ra/Reliability Assessments DL/Potential_Reliability_Impacts_of_EPA_Proposed_CPP_Final.pdf [hereinafter "NERC Reliability Study]; Jürgen Weiss, Bruce Tsuchida, Michael Hagerty, and Will Gorman, 'EPA's Clean Power Plan and Reliability: Assessing NERC's Initial Reliability Review' (The Brattle Group 2015), http://www.brattle.com/system/news/pdfs/000/000/790/original/EPA%E2%80%99s_Clean_Power_Plan_and_Reliability_-_Assessing_NERC's_Initial_Reliability_Review.pdf?1424391397 [hereinafter Brattle Group Study].

[267] See, for example, Clean Power Plan (n. 22), NERC Reliability Study (n. 266); Brattle Group Study (n. 266).

integrated structures and produce most of their own renewable power.[268] In these locations, existing electricity regulations related to procurement and ratemaking would govern utilities' investments in renewables and transmission infrastructure.[269] Other states may decide that independent renewable power producers should produce electricity and utilities should have responsibility for the transmission and distribution systems.[270] These states would need to develop strategies both for restructuring their electricity systems and for supporting independent renewable power development. To support independent production, states might expand net metering, set resource-specific avoided cost rates under PURPA, increase state subsidies for renewable producers, and support an active REC market. States would also likely need to reform the utility regulatory model to ensure the utility remains economically viable and thus capable of performing its grid management functions. While these types of strategic planning would be a substantial undertaking, they would nonetheless establish much clearer objectives for all parties in the future.

Some readers may understandably balk at this proposal for centralized, strategic planning. To be sure, developing it will be challenging on multiple levels, particularly from a political perspective. In states that did not previously restructure their utilities, efforts to change the regulatory model would receive intense opposition. In states with substantial fossil fuel resources, centralized planning aimed at a renewable transition is unlikely to occur. However, a number of states have demonstrated their support for renewable power development and may have the political climate to support the type of strategic planning this section envisions. Even if states were to allow the role of utilities to remain up in the air, many states would have the capacity to set aggressive, long-term targets for renewable integration and to use existing land use planning laws to guide renewable siting. Progress in these two areas alone would ameliorate many of the problems associated with piecemeal renewable power development by creating long-term demand for renewable power and facilitating grid integration. These improvements would do much more than continued reliance upon piecemeal policies.

---

[268] States could and should not restrict all independent renewable power production, however. Federal laws that promote independent production, including PURPA and any remaining tax credits, would continue to apply. It would also likely be impractical for states to attempt to limit all renewable power development to regulated utilities.

[269] For an argument that utilities should not be allowed to build their own renewable resources, *see* Troy A. Rule, Essay, 'Unnatural Monopolies: Why Utilities Don't Belong in Rooftop Solar Markets' (forthcoming 2015) 52 Idaho L Rev.

[270] *See* Larsen (n. 208) (discussing ongoing reforms in New York and Hawaii).

Conclusion

The United States is quickly approaching an inflection point for renewable policy design, as tax credits near expiration, RPS targets near completion, and disputes regarding net metering and PURPA continue to arise. Although the current mix of policies has done a great deal to promote renewable power development and potentially alter the electricity system, a broader transition to renewable power requires much more certainty than US policies currently provide. US renewable power advocates should therefore begin to promote a comprehensive approach to renewable policymaking. This approach would set aggressive long-term targets for renewable energy use, strategically plan for renewable power facility siting and integration, and potentially revisit the role of utilities in an electricity system powered by renewables. While this level of planning is undoubtedly ambitious, it will likely accomplish more than the piecemeal approach the United States has used thus far.

RE-IMAGINING MINING:
The *Earth Charter* as a Guide for Ecological Mining Reform

Carla Sbert*

Introduction

Global society faces a deepening ecological crisis that will force profound changes,[1] including a transformation in the consumption and production of goods and services.[2] Current, and especially future, generations of human and other life will fare better if this transformation is actively pursued as soon as possible. At its core is a shift away from a growth-insistent economic model, especially in developed countries, to an economy that operates within the planet's biophysical limits, with much reduced material-energy

---

* This research was supported by the Sciences and Humanities Research Council of Canada and the University of Ottawa. I am grateful to Heather McLeod-Kilmurray, Nathalie Chalifour, Geoffrey Garver and Jean-François Dionne for reviewing and helping to improve this manuscript, as well as to Elizabeth Kirk for her editorial guidance, and to the anonymous reviewers for their useful comments.

[1] Johan Rockström, Will Steffen, Kevin Noone, Åsa Persson, F Stuart III Chapin, Eric Lambin, Timothy M Lenton, Marten Scheffer, Carl Folke, Hans Joachim Schellnhuber, Björn Nykvist, Cynthia A de Wit, Terry Hughes, Sander van der Leeuw, Henning Rodhe, Sverker Sörlin, Peter K Snyder, Robert Costanza, Uno Svedin, Malin Falkenmark, Louise Karlberg, Robert W Corell, Victoria J Fabry, James Hansen, Brian Walker, Diana Liverman, Katherine Richardson, Paul Crutzen, and Jonathan Foley, 'Planetary Boundaries: Exploring the Safe Operating Space for Humanity' (2009) 14:2 Ecol & Soc 3; Will Steffen, Asa Persson, Lisa Deutsch, Jan Zalasiewicz, Mark Williams, Katherine Richardson, Carole Crumley, Paul Crutzen, Carl Folke, Line Gordon, Mario Molina, Veerabhadran Ramanathan, Johan Rockström, Marten Scheffer, Hans Joachim Schellnhuber and Uno Svedin, 'The Anthropocene: From Global Change to Planetary Stewardship' (2011) 40 AMBIO 739; Will Steffen, Katherine Richardson, Johan Rockström, Sarah E Cornell, Ingo Fetzer, Elena M Bennett, R Biggs, Stephen R Carpenter, Wim de Vries, Cynthia A de Wit, Carl Folke, Dieter Gerten, Jens Heinke, Georgina M Mace, Linn M Persson, Veerabhadran Ramanathan, B Reyers and Sverker Sörlin, 'Planetary Boundaries: Guiding Human Development on a Changing Planet' (2015) January 15 Science 1; Will Steffen, Wendy Broadgate, Lisa Deutsch, Owen Gaffney and Cornelia Ludwig, 'The Trajectory of the Anthropocene: The Great Acceleration' (2015) The Anthropocene Review 1.

[2] Paul Hawken, Amory B Lovins and L Hunter Lovins, *Natural Capitalism: Creating the Next Industrial Revolution* (Little Brown1999).

throughputs and ecological footprints.[3] This will require fundamental changes in the political sphere and many other areas, including economics and law.[4]

In 1987, the Brundtland Commission recommended adopting a "new ethic" and a charter to set sustainability norms.[5] The *Earth Charter*[6] aims to inspire and guide this profound change in how humanity approaches development. If we are to translate ecological values into social change, we need to examine in specific contexts – such as the mining sector – what it would mean for principles such as those of the *Earth Charter* to be implemented, and we need to debate the implications of legal reform grounded in these kinds of principles.[7] Mining is one key component of the current growth-insistent economy,[8] and thus a key part of the transformation needed. This paper is a thought experiment that aims to advance this debate by exploring what guidance the *Earth Charter* provides for a potential transformation of the law of mining.

---

[3] William E Rees, 'Avoiding Collapse: An Agenda for Sustainable Degrowth and Relocalizing the Economy' (Canadian Centre for Policy Alternatives 2014). <www.policyalternatives.ca/publications/reports/avoiding-collapse> accessed 1 December 2014.

[4] Thomas Berry, *The Great Work: Our Way into the Future* (Bell Tower 1999); Herman E Daly and Joshua Farley, *Ecological Economics* (Island Press 2004).

[5] Brundtland Commission, 'Report of the World Commission on Environment and Development: Our Common Future' (Annex to UN Doc A/42/427 1987) <www.un-documents.net/wced-ocf.htm> accessed 1 December 2014.

[6] Earth Charter Commission, *The Earth Charter* (2000) <www.earthcharterinaction.org/content/pages/Read-the-Charter.html> accessed 24 April 2014 (*Earth Charter*).

[7] Nicholas A Robinson writes: "Environmental law professors, practicing lawyers and judges will need to more explicitly orient their proposals and advice in light of the Earth Charter. We must test the application of the law against these basic jurisprudential concepts. Where the proposed action or advice is at variance with the core values, they must be revisited and re-examined." Nicholas A Robinson, 'Reflecting on Rio: Environmental Law in the Coming Decades' Chapter 2 in Jamie Benidickson, Ben Boer, Antonio Herman Benjamin and Karen Morrow (eds), *Environmental Law and Sustainability after Rio* (The IUCN Academy of Environmental Law Series, Edward Elgar 2011) 23-24.

[8] Martin Creamer, 'Global Mining Drives 45%-plus of World GDP – Cutifani' *Mining Weekly* (4 July 2012) <www.miningweekly.com/article/global-mining-drives-45-plus-of-world-gdp-cutifani-2012-07-04> accessed 7 May 2014.

Beyond a Growth-Insistent Economy

Challenging the economic growth paradigm is increasingly common. Thinkers who question whether infinite economic growth is possible or desirable on a finite planet include John Stuart Mill,[9] the Club of Rome,[10] Herman Daly,[11] Peter Victor,[12] Tim Jackson,[13] and many more who are converging in the degrowth movement.[14] Brown and Garver propose "a whole earth economy" which "is not necessarily a no-growth economy [but] an economy with other priorities: providing rich and fulfilling lives for both individuals and communities, but without pushing towards extreme wealth and advantages that destroy social and ecological well-being".[15] Science and economics increasingly make clear the need for future development to occur within the limits of a "safe and just operating space".[16] Law is critical in this process. Samuel Alexander argues that "when an economy has grown so large that it exceeds the regenerative and absorptive capacities of Earth's ecosystems, then lawmakers ought to initiate a 'degrowth' process of planned economic contraction".[17]

The Effects of Mining

Mining is understood comprehensively here to include all activities carried out to remove solid material from the earth and seabed (including coal and bitumen) for diverse uses.[18] Materials originating in mining (herein "minerals" or "mined materials") are essential to

---

[9] John Stuart Mill, *Principles of Political Economy* (D Appleton and Company 1884).

[10] Donella H Meadows and Club of Rome, *Limits to Growth: A Report for the Club of Rome's Project* (Universe Books 1972).

[11] Herman E Daly, *Steady-State Economics* (Island Press 1991).

[12] Peter Victor, Managing without Growth: Slower by Design, Not Disaster (Edward Elgar c2008).

[13] Tim Jackson, Prosperity without Growth: Economics for a Finite Planet (Earthscan 2009).

[14] See Giacomo D'Alisa, Federico Demaria and Giorgos Kallis (eds), *Degrowth: A Vocabulary for a New Era* (Routledge 2015).

[15] Peter Brown and Geoffrey Garver, *Right Relationship: Building a Whole Earth Economy* (Berrett-Koehler Publishers 2009) 26.

[16] Steffen et al, 'Planetary Boundaries' (n 1); Kate Raworth, 'A Safe and Just Space for Humanity: Can We Live Within the Doughnut?' (Oxfam 2012).

[17] Samuel Alexander, 'Earth Jurisprudence and the Ecological Case for Degrowth' in Peter Burdon (ed), *Exploring Wild Law: The Philosophy of Earth Jurisprudence* (Wakefield Press 2011) 293.

[18] Encyclopædia Britannica Online, s. v. "mining," <www.britannica.com.proxy.bib.uottawa.ca/EBchecked/topic/384099/mining> accessed 30 April 2014.

virtually all other industries and have substantial economic and social impacts,[19] contributing to human well-being through goods, services and employment.[20] However, humanity is coming up against the physical limits of the planet in at least two ways that call for a serious questioning of extractive activities: 1) mining causes negative impacts that are ecologically unsustainable; 2) most mined materials are finite and nonrenewable. Extractive activities are compromising ecological integrity locally and regionally, undermining traditional livelihoods,[21] destroying habitats,[22] and leaving an expensive pollution legacy.[23] Mining contributes to the ever-increasing consumption of energy and materials, and the accumulation of wastes and toxic substances.[24] According to UNEP, during the twentieth century "the annual extraction of construction materials grew by a factor of 34, ores and minerals by a factor of 27, fossil fuels by a factor of 12, biomass by a factor of 3.6, and total material extraction by a factor of about eight, while GDP rose 23-fold".[25] As UNEP also notes: "This expansion of material consumption was not equitably distributed and it had profound environmental impacts."[26]

---

[19] International Council on Mining and Metals (ICMM), 'Mining's Contribution to Sustainable Development: The Series' <www.icmm.com/minings-contribution>, ch 1, 2; James Otto, 'Mining Royalties: A Global Study of Their Impact on Investors, Government, and Civil Society' (World Bank c2006).

[20] The Intergovernmental Forum on Mining, Minerals, Metals and Sustainable Development reckons 30 million people are employed in the mining industry globally. IGF, 'Mining and Sustainable Development: Managing One to Advance the Other' (IGF October 2013) 20.

[21] The Gaia Foundation, *UnderMining Agriculture: How the Extractive Industries Threaten Our Food System* (The Gaia Foundation 2014) <www.gaiafoundation.org/UnderMiningAgriculture> accessed 1 December 2014.

[22] Philippe Sibaud, *Opening Pandora's Box: The New Wave of Land Grabbing by the Extractive Industries and the Devastating Impact on Earth* (The Gaia Foundation 2012) <www.gaiafoundation.org/opening-pandoras-box> accessed 1 December 2014, 33-44.

[23] See for example, Jack Cladwell, 'Giant Mine to Cost Billions to Cleanup and Look After for Thousands of Years' (Mining.com 3 April 2013) <www.mining.com/giant-mine-to-cost-billions-to-cleanup-and-look-after-for-thousands-of-years-63654/> accessed 1 December 2014.

[24] Clive Ponting, A Green History of the World: The Environment and the Collapse of Great Civilizations (Penguin Books 1993) 325-329.

[25] International Resource Panel, 'Decoupling Natural Resource Use and Environmental Impacts from Economic Growth' (UNEP 2011) <www.unep.org/resourcepanel/Portals/24102/PDFs/DecouplingENGSummary.pdf> 7.

[26] Ibid.

Thus, mining contributes directly and indirectly to humanity's overshooting of the carrying capacity of ecosystems[27] and the potential transgression of planetary boundaries.[28]

Control over natural resources is a matter under exclusive state sovereignty. Thus, there is no international law regarding mining, aside from restrictions on mining the seabed,[29] Antarctica,[30] and the Moon.[31] However, international soft law – especially the concept of sustainable development – increasingly influences how mining is regulated,[32] while debates on human rights, development and environmental degradation shape expectations of the sector's behaviour.[33]

How states regulate mining varies considerably, with stricter standards often applied in countries with strong legal systems and active civil societies.[34] Countries generally

---

[27] WWF estimates "our demand for renewable ecological resources and the goods and services they provide is now equivalent to more than 1.5 earths" and that "since the 1990s we have reached overshoot by the ninth month every year". R McLellan, L Iyengar, B Jeffries and N Oerlemans (eds), *Living Planet Report 2014: Species and Spaces, People and Places* (WWF 2014) <wwf.panda.org/about_our_earth/all_publications/living_planet_report/> 32, 33 accessed 1 December 2014.

[28] While not explicitly addressed in the planetary boundaries framework, mining directly and indirectly impacts humanity's "operating space": it contributes to biodiversity loss through pollution, and direct and induced habitat destruction; to land use change through displacement of agricultural communities, and forest clearing; to climate change through coal and bitumen mining; to the production of fertilizers disrupting the Nitrogen and Phosphorous cycles. Rockström, et al (n 1).

[29] *United Nations Convention on the Law of the Sea* (adopted 10 December 1982, entered into force 16 November 1994) 31363 UNTS 1833, 1834, 1835 (*UNCLOS*) Part XI art 136.

[30] *Protocol on Environmental Protection to the Antarctic Treaty* (adopted 4 October 1991, entered into force 14 January 1998) 5778 UNTS (no v no.) art 7.

[31] Treaty on Principles Governing the Activities of States in the Exploration and Use of Outer Space, Including the Moon and Other Celestial Bodies (adopted 27 January 1967, entered into force 10 October 1967) 8843 UNTS 610 art 11.

[32] George Pring, James Otto and Koh Naito, 'Trends in International Environmental Law Affecting the Minerals Industry' (1999) 17 J. Energy & Nat. Resources L. 39 (part I) and (1999) 17 J. Energy & Nat. Resources L. 151 (part II); cf generally Alexander Gillespie, *The Illusion of Progress: Unsustainable Development in International Law* (Earthscan Publications 2001).

[33] See for example, Ramsey Hart and Catherine Coumans, 'Evolving Standards and Expectations for Responsible Mining: A Civil Society Perspective' (MiningWatch Canada 2013).

[34] See for example, Günter Tiess, Legal Basics of Mineral Policy in Europe: An Overview of 40 Countries (Springer c2011).

encourage mining, while imposing measures to limit its negative impacts on people and the environment.[35] Legal frameworks vary, but they often include these elements: arrangements for access to the resources and the land, usually linked to taxes and royalties; requirements for prospecting and exploration activities; provisions for compensation of affected landowners and communities; requirements of environmental impact assessment for large projects; worker health and safety rules; obligations regarding effluent and waste treatment, storage, and disposal; noise and air pollution standards; monitoring and reporting requirements; and mine closure provisions, which may include reclamation plans and financial warranties.[36]

Additionally, voluntary industry standards[37] and market-based instruments[38] are increasingly gaining traction, while a number of international initiatives have bearing on mineral extraction, for example, by requiring environmental and human rights assessments as conditions for financing.[39] These measures are aimed at ensuring projects respect human rights, communities, and the environment, but industry insiders admit that "despite good intentions at the strategy level and examples of good practice, the complexity of situations at the mine site means implementation across the sector is highly variable".[40] Critics posit that "sustainable mining" is the "emperor's new clothes" and that nothing has changed for communities affected by mining.[41]

---

[35] Marta Miranda, David Chambers and Catherine Coumans, 'Framework for Responsible Mining: A Guide to Evolving Standards' (Center for Science in Public Participation & WRI/WWF, 2005).

[36] Ibid 54.

[37] Hevina S Dashwood, 'Sustainable Development and Industry Self-Regulation: Developments in the Global Mining Sector' (2014) 53:4 Business & Society 551; ICMM, '10 Principles' <www.icmm.com/our-work/sustainable-development-framework/10-principles> accessed 6 February 2014.

[38] For example, Institute of the Environment, "Getting Biodiversity Offsets Right: A Research Agenda for Canada" (IE, 15 October 2014) <www.ie.uottawa.ca/article1010> accessed 6 December 2014.

[39] See list of ten major international mining initiatives in Abbi Buxton, 'MMSD+10: Reflecting on a Decade of Mining and Sustainable Development' (International Institute for Environment and Development 2012) 13.

[40] Ibid 2.

[41] Andy Whitmore, 'The Emperor's New Clothes: Sustainable Mining?' (2006) 14(3) Journal of Cleaner Production 309.

Ultimately, despite legal and voluntary frameworks, local environmental impacts are often substantial and sustainability, even "*sensu lato*," is not the norm.[42] For example, in Canadian tar sands surface mining, an "overburden" of approximately 75 meters is normally removed before mining the bitumen deposits (typically 40-60 meters thick) causing a loss of boreal forest intactness of approximately 90.6 percent in the mined area.[43] Additionally, these operations use a net volume of 2.4 barrels of freshwater (a total between 7.5 and 12 barrels including recycled water) to extract and upgrade one barrel of bitumen, and waste water is stored in tailings lagoons as it cannot be reincorporated into the water cycle due to its high toxicity.[44] Many affected Aboriginal communities are seeking judicial remedies and a halt to tar sands expansion.[45]

We need to transform mining to avoid further disrupting the Earth's ecosystems and deepening inequities with respect to poor and marginalized people, and to future generations of humans and other species. Because the *Earth Charter* sets out principles for a deep transformation of society centered on ecological integrity,[46] it is a good place to start in imagining what rules would govern mining in an ecologically sustainable world.

The Earth Charter as a Guide for Ecological Legal Reform

The *Earth Charter* is a call for a world of peace, equity, and sustainability based on new and long-held ideas from many different disciplines, including law, ecology, theology and ethics. Despite the recommendation of the Brundtland Commission to create a charter setting

---

[42] Jaime M Amezaga, Tobias S Rötting, Paul L Younger, Robert W Nairn, Anthony-Jo Noles, Ricardo Oyarzún, Jorge Quintanilla, 'A Rich Vein? Mining and the Pursuit of Sustainability' (2011) 45 Environmental Science & Technology 21.

[43] David Poulton, 'The Alberta Oilsands: Considerations for Offsetting' (14 February 2014) <www.ie.uottawa.ca/tiki-calendar_edit_item.php?viewcalitemId=54> 10, 12 (citing Thomas J Habib, Daniel R Farr, Richard R Schneider, Stan Boutin, 'Economic and Ecological Outcomes of Flexible Biodiversity Offset Systems' (2013) 27(6) Conservation Biology 1313, 1316).

[44] Pembina Institute, 'Oilsands: Water Impacts' <www.pembina.org/oil-sands/os101/water> accessed 26 February 2014.

[45] 'Alberta Oilsands Facing Aboriginal Legal Onslaught in 2014' (The Canadian Press January 2, 2014) <www.cbc.ca/news/politics/alberta-oilsands-facing-aboriginal-legal-onslaught-in-2014-1.2481825> accessed 10 February 2015.

[46] Klaus Bosselmann, 'The Rule of Law Grounded in the Earth: Ecological Integrity as a *Grundnorm*' in Laura Westra and Mirian Vilela (eds), *The Earth Charter, Ecological Integrity and Social Movements* (Routledge 2014) 9.

sustainability norms,[47] during the 1992 Rio Earth Summit states adopted the non-binding *Rio Declaration on Environment and Development* instead.[48] Civil society took on the task of producing this charter,[49] and after nearly a decade of international consultations to which over 5,000 people contributed, the *Earth Charter* was officially launched in 2000. It is a "soft law instrument that provides an ethical foundation for the ongoing development of environmental and sustainable development law",[50] not a binding international convention. It has not been adopted by states, but thousands of organizations including UNESCO and the IUCN have formally endorsed it.[51] In its fifteenth anniversary, it remains relevant because, as Klaus Bosselmann writes: "As a declaration of principles for a just, sustainable, and peaceful world, the [Earth] Charter reflects the fundamental importance of sustainability as an ethical and law-generating principle."[52] It may be an instrument whose time has come given the urgent need for new rules to avoid social-ecological collapse.[53] We may have entered a new geological era defined by our species' impact on the planet – the Anthropocene – which demands a governance transformation for planetary stewardship.[54] The *Earth Charter's* emphasis on shared global responsibility offers an anchor for this new global governance.[55]

There is a wide gap between what the Brundtland Report meant by "sustainable development" and how states have interpreted it.[56] Fundamentally, this gap derives from the failure to recognize ecological sustainability as a prerequisite for social and economic

---

[47] Brundtland Commission (n 5).

[48] *Rio Declaration on Environment and Development*, (UN Doc A/CONF 151/26 vol I 1992) <www.un-documents.net/rio-dec.htm> accessed 1 December 2014.

[49] Earth Charter Initiative, 'Background History of the Earth Charter Initiative' <www.earthcharterinaction.org/content/pages/History.html > accessed 23 April 2014.

[50] Earth Charter Initiative, 'How Can the Earth Charter Be Used?' <www.earthcharterinaction.org/content/pages/FAQ.html> accessed 23 April 2014; Klaus Bosselmann, 'In Search of Global Law: The Significance of the Earth Charter' (2004) 8(1) Worldviews: Global Religions, Culture, and Ecology 62.

[51] Earth Charter Initiative, "Endorse," <www.earthcharterinaction.org/content/pages/Endorse.html> accessed 24 April 2014.

[52] Klaus Bosselmann, The Principle of Sustainability: Transforming Law and Governance (Ashgate 2008) 74-75.

[53] Bosselmann, 'The Rule of Law Grounded in the Earth' (n 46) 10.

[54] Steffen et al, 'The Anthropocene' (n 1).

[55] Bosselmann, 'In Search of Global Law' (n 50).

[56] Jim MacNeill, 'Brundtland Revisited' (Canadian International Council, 4 February 2013) <http://opencanada.org/features/the-think-tank/essays/brundtland-revisited/> accessed 24 April 2014.

sustainability: not to be balanced with social and economic interests, but prioritized over them, because social and economic systems are embedded in and dependent on the Earth's systems.[57] The *Earth Charter* proposes "interdependent principles for a sustainable way of life as a common standard by which the conduct of all individuals, organizations, businesses, governments, and transnational institutions is to be guided and assessed".[58] These principles have been a guide for all kinds of organizations, businesses, and education initiatives.[59]

Similarly, the *Earth Charter* can provide guidance for legal reform.[60] As awareness grows of the need to transition to an economy that respects ecological limits, a parallel need for changes in legal and policy frameworks must also emerge.[61] The *Earth Charter* is a good starting point, not because it is the last word on what is required for a transition to sustainability – even some of its longstanding advocates underscore that it is meant to evolve.[62] It is a good lens for considering transformative legal reforms towards sustainability because it seeks to overcome some of the key flaws of environmental law.[63] It underscores the interconnectedness of life, rejecting the "core falsehood that we humans are separate from our environment and that we can flourish even as the health of Earth deteriorates".[64] Also, it prioritizes ecological limits, thus "challenging the dominant paradigm of endless economic growth based on ever-increasing consumption of energy and resources".[65] The preeminence of growth over ecological limits within current environmental law is why it has been critiqued as "treating the symptoms, not the causes, of the problems".[66] Environmental law before and since the *Earth Charter* has developed many principles (for example,

---

[57] Bosselmann, The Principle of Sustainability (n 52) 2.

[58] *Earth Charter* (n 6) Preamble.

[59] See some examples in Westra and Vilela (n 46).

[60] Robinson (n 7); Bosselmann, 'In Search of Global Law' (n 50) 9; Ronald Engel and Brendan Mackey, "The Earth Charter, Covenants, and Earth Jurisprudence" in Burdon (n 17) 313.

[61] Geoffrey Garver, 'The Rule of Ecological Law: The Legal Complement to Degrowth Economics' (2013) 5 Sustainability 316 <doi:10.3390/su5010316>.

[62] J Ronald Engel, 'Summons to a New Axial Age–The Promise, Limits and Future of the Earth Charter' in Westra and Vilela (n 46) xxv.

[63] See for example, David R Boyd, 'Sustainability Law: (R)Evolutionary Directions for the Future of Environmental Law' (2004) 14 J Env L & Prac 357.

[64] Cormac Cullinan, *Wild Law: A Manifesto for Earth Justice*, (2nd edn Chelsea Green Pub c2011) 44.

[65] David R Boyd, Unnatural Law: Rethinking Canadian Environmental Law and Policy (UBC Press c2003) 276.

[66] Ibid 277.

sustainable development, polluter-pays, public participation, etc.[67]) and rules protecting certain spaces and species (such as protected areas designations[68] and endangered species laws[69]) or prohibiting environmentally harmful practices (for example, hazardous waste trade restrictions,[70] air pollution[71] and toxic substances control measures,[72] etc.).[73] These are valuable tools to build upon. However, in contrast to environmental law, "the Earth Charter […] is in its entirety designed around the concept of ecological integrity".[74]

Yet how can the aspirations of the *Earth Charter* lead to concrete changes in the laws and activities of current societies? This requires expanding our thinking to include radical possibilities, such as imagining how activities like mining might be approached under the *Earth Charter*. This paper is just such a thought experiment.

Three *Earth Charter* Rules for Mining

What basic rules would govern mining if the *Earth Charter* guided law? While all of its principles offer guidance, this paper focuses primarily on its two explicit references to natural resources.

---

[67] Rio Declaration on Environment and Development (n 48) Principles 4, 10, 16.

[68] For example, the *Convention for the Protection of the World Cultural and Natural Heritage* (adopted 16 November 1972, entered into force 17 December 1975) 15511 UNTS 1037.

[69] For example, the *Convention on International Trade in Endangered Species of Wild Fauna and Flora* (adopted 3 March 1973, entered into force 1 July 1975) 14537 UNTS 993.

[70] For example, the Basel Convention on the Control of Transboundary Movements of Hazardous Wastes and their Disposal (adopted 22 March 1989, entered into force 5 May 1992) 28911 UNTS 1673.

[71]Trail Smelter Arbitration (United States v. Canada) Arbitral Trib., 3 U.N. Rep. Int'l Arb. Awards 1905 (1941) (Trail Smelter); Convention on Long-Range Transboundary Air Pollution (adopted 13 November 1979, entered into force 16 March 1983) 21623 UNTS 1302.

[72] For example, the Rotterdam Convention on the Prior Informed Consent Procedure for Certain Hazardous Chemicals and Pesticides in International Trade (adopted 10 September 1998, entered into force 24 February 2004) 39973 UNTS 2244; and the Stockholm Convention on Persistent Organic Pollutants (adopted 22 May 2001, entered into force 17 May 2004) 40214 UNTS 2256.

[73] See also Pring, Otto and Naito (n 32); Jeremy P Richards (ed), *Mining, Society, and a Sustainable World* (Springer 2009); 'The Future We Want' (UNGA Resolution A/RES/66/288, 11 Sep 2012, Annex) <www.uncsd2012.org>.

[74] Bosselmann, 'The Rule of Law Grounded in the Earth' (n 46) 9.

Under the theme of "Respect and Care for the Community of Life," Principle 2 provides that we should "[a]ccept that with the right to own, manage, and use *natural resources* comes the duty to prevent environmental harm and to protect the rights of people".[75] The other reference to mining occurs under the theme of "Ecological Integrity", where Principle 5 – *"Protect and restore the integrity of Earth's ecological systems, with special concern for biological diversity and the natural processes that sustain life"*[76] – specifically provides that we must *"[m]anage the extraction and use of non-renewable resources such as minerals and fossil fuels in ways that minimize depletion and cause no serious environmental damage".*[77]

Three key rules derive from these two *Earth Charter* principles:

1. *Prevent environmental harm* or *cause no serious environmental damage;*
2. *Minimize depletion*; and
3. *Protect the rights of people*.

As noted, these rules build upon existing principles and concepts of environmental and sustainable development law, policy and scholarship, which the *Earth Charter* aims to anchor to ecological integrity and justice.[78] Also, as overarching rules, their application to different types of mining, materials and contexts will have varying implications and may require different approaches. For example, applying these rules to minerals used (such as rare earths) or consumed (such as coal) in energy production requires considering their impacts on the environment and the climate change context.[79]

Rule 1: Prevent Environmental Harm or Cause No Serious Environmental Damage

The distinctions between preventing environmental harm and causing no serious environmental damage could be debated, but in this paper they are treated as equivalent.

---

[75] *Earth Charter* (n 6) Principle 2(a) (emphasis added).

[76] Ibid Principle 5.

[77] Ibid Principle 5(f) (emphasis added).

[78] See also Heinrich Böll Foundation (ed), 'Resource Politics for a Fair Future' (Heinrich Böll Foundation 2014) (deriving similar rules for resource governance) 34-35.

[79] Damien Giurco, Benjamin McLellan, Daniel M Franks, Keisuke Nansai and Timothy Prior, 'Responsible Mineral and Energy Futures: Views at the Nexus' (2014) 84 Journal of Cleaner Production 322.

While there is no single definition of environmental harm or damage in environmental law, it has been conceived predominantly as a function of harm to people or property.[80] In contrast, the meaning of "environmental harm" and "serious environmental damage" should be understood through the increasingly recognized concept of "ecological integrity", one of the core *Earth Charter* themes. The green movement has long advocated that ecology should be at the forefront of decision-making.[81] The concept offers an important tool for environmental management,[82] and it has been proposed as a rule to constrain the use of property[83] and a "*grundnorm*" for international environmental law.[84] The Global Ecological Integrity Group[85] suggests that a standard of ecological integrity requires functional, life-sustaining ecosystems, with whole reproductive and regenerative capacities.[86] The Panel on the Ecological Integrity of Canada's National Parks states that "[i]n plain language, ecosystems have integrity when they have their native components (plants, animals and other organisms) and processes (such as growth and reproduction) intact".[87] Thus, a

---

[80] *Trail Smelter* (n 71); see also for example, José Juan González, 'Towards a New Theory of Environmental Liability Without Proof of Damage' in Benidickson, Boer, Benjamin and Morrow (n 7) 179-195; Albert C Lin, 'The Unifying Role of Harm in Environmental Law' (2006) Wis L Rev 897, 977-983.

[81] Heinrich Böll Stiftung Foundation, 'Ecology' <www.boell.de/en/topics/ecology> accessed 20 January 2015.

[82] GA De Leo and S Levin, 'The Multifaceted Aspects of Ecosystem Integrity' (1997) 1(3) Conservation Ecology 1.

[83] Joseph H Guth, 'Law for the Ecological Age' (2007-2008) 9 Vt J Envtl L 431.

[84] Rakhyun E Kim and Klaus Bosselmann, 'International Environmental Law in the Anthropocene: Towards a Purposive System of Multilateral Environmental Agreements' (2013) 2 Transnational Environmental Law 285 doi:10.1017/S2047102513000149.

[85] Jack Manno, 'Why the Global Ecological Integrity Group? The Rise, Decline and Rediscovery of a Radical Concept' in Laura Westra and Agnès Prudence Michelot (eds), *Confronting Ecological and Economic Collapse: Ecological Integrity for Law, Policy and Human Rights* (Taylor and Francis 2013) 10-20.

[86] David Pimentel, Laura Westra and Reed F Noss (eds), *Ecological Integrity: Integrating Environment, Conservation, and Health* (Island Press 2000) 20-21, 99. See also Guth (n 83) (proposing a tort of "ecological degradation" where "'ecological degradation' is intended to mean the biotic impoverishment and decline in the self-sustaining and self-renewing capacity of the biosphere") 496; Geoffrey Garver, 'A Complex Adaptive Legal System for the Challenges of the Anthropocene' (forthcoming) 5-6.

[87] Parks Canada Agency, 'Unimpaired for Future Generations: Protecting Ecological Integrity with Canada's National Parks: A Call to Action' (2000) <http://publications.gc.ca/collections/Collection/R62-323-2000-1E.pdf> accessed 24 April 2014, 2.

significant loss of intactness of an ecosystem's native components and processes determines "serious environmental damage".

The *Earth Charter* emphasizes avoiding serious impacts, while existing legal requirements and voluntary commitments seek to *minimize* and *mitigate* environmental harm, but rarely to *prevent* it or to *refrain* from causing it.[88] Because of the nature of extractive activities, this difference is significant: it could mean that under the *Earth Charter* only a reduced number of projects may be considered viable. Currently, environmental damage is regularly allowed, if later mitigated or compensated. In contrast, *preventing* or *causing no serious environmental damage* imply that serious harm to the environment in the short term may not be justified by expectations that the damage may be corrected in the long term. Although minimization of harm may include some prevention, mitigation of effects and compensation are not the equivalent of prevention.[89]

Principle 6 of the *Earth Charter* further links protection, prevention and precaution: "*prevent* harm as the best method of environmental *protection* and, when knowledge is limited, apply a *precautionary* approach".[90] The *Earth Charter's* precautionary approach has four elements. The first builds on the precautionary principle,[91] requiring action "to avoid the possibility of serious or irreversible environmental harm even when scientific knowledge is incomplete or inconclusive".[92] The second relates to responsibility and calls for placing "the burden of proof on those who argue that a proposed activity will not cause significant harm, and [for making] the responsible parties liable for environmental harm".[93] The third element concerns the temporal and spatial scope of precaution, and requires "ensur[ing] that decision making addresses the cumulative, long-term, indirect, long distance, and global consequences of human activities".[94] Finally, the fourth element builds on the basic principle of prevention,[95]

---

[88] See for example, Mining Association of Canada (MAC), 'Toward Sustainable Mining Guiding Principles' <http://mining.ca/sites/default/files/documents/TSMGuidingPrinciples_0.pdf> accessed 9 December 2014.

[89] 'Prevent' means 'stop from happening or doing something; hinder; make impossible'. Della Thompson (ed), *The Concise Oxford Dictionary of Current English* (9th edn Clarendon Press 1995) *SV* 'prevent'.

[90] *Earth Charter* (n 6) Principle 6 (emphasis added)

[91] Philippe Sands, Jacqueline Peel, Adriana Fabra and Ruth MacKenzie, *Principles of International Environmental Law* (Cambridge University Press, 2012) 217.

[92] *Earth Charter* (n 6) Principle 6(a).

[93] Ibid Principle 6(b).

[94] Ibid Principle 6(c).

and calls for "prevent[ing] pollution of any part of the environment and allow[ing] no build-up of radioactive, toxic, or other hazardous substances".[96]

Thus, the *Earth Charter's* precautionary approach also incorporates avoidance, in contrast to that of the *Rio Declaration*, which only provides that "lack of full scientific certainty shall not be used as a reason for postponing cost-effective measures to prevent environmental degradation".[97] Also, the *Earth Charter* does not make cost-effectiveness a pre-condition of preventive action. Applying this to mining may require foregoing extraction of a particular mineral, for example, due to its toxicity; or in certain places, such as biodiversity hotspots. The mining proponent would have to prove the activity will cause no significant environmental harm, considering "cumulative, long-term, indirect, long distance, and global"[98] impacts, and would be liable if any such harm occurred. Currently, examples of environmental concerns preempting harmful economic activities appear to be few.[99] The norm is that activities are allowed to proceed under certain conditions, sometimes numerous and strict but often not properly implemented, effectively monitored or adequately enforced.[100]

Having defined the *cause no serious environmental damage* standard, to apply it to mining, one needs to consider what is mined, where, and how.

What to Mine?

Markets, technology and access to mineral deposits usually determine what materials are mined. Whether the material may cause serious environmental damage at the mining stage or in its life cycle is not a threshold consideration, but a technical issue. Applying this

---

[95] Sands, Peel, Fabra and MacKenzie (n 91) 200.

[96] *Earth Charter* (n 6) Principle 6(d).

[97] Rio Declaration on Environment and Development (n 48) Principle 15.

[98] Ibid Principle 6(c).

[99] Research for this paper did not include a comprehensive review of environmental assessment decisions. However, at the federal level in Canada, for example, among the mining projects listed as completed under the Canadian Environmental Assessment Agency (CEAA) registry since 2012, one project was denied approval on the basis of environmental concerns (twice), four were authorized, and one was authorized despite a determination that it may cause serious environmental harm. CEAA, 'Browse Projects, Environmental assessment completed' <http://www.ceaa-acee.gc.ca/050/navigation-eng.cfm?type=2&id=2> accessed 29 April 2014.

[100] Miranda, Chambers and Coumans (n 35) xi.

criterion alone would mean a major departure from current practice, which generally approaches risk through minimization and mitigation, rather than avoidance.[101]

Mining for extremely toxic or hazardous minerals (mostly metals and radioactive materials), and mining with highly damaging processes both carry very high risks of serious environmental damage. In order to *cause no serious environmental damage*, and "prevent pollution of any part of the environment and allow no build-up of radioactive, toxic, or other hazardous substances"[102] the use and extraction of these materials would have to be eliminated. Life-saving uses – such as certain radiation-based medical diagnostic procedures, cancer treatments, and sterilization of medical equipment[103] – may justify exceptional extraction until substitutes are found, and provided their recovery from other processes or wastes is not possible.

In the case of mined fossil fuels (coal and bitumen), given the increasing damage from climate change,[104] *causing no serious environmental damage* also requires halting their extraction beyond the amount that can be safely consumed without exceeding systems thresholds for catastrophic climate change, taking a precautionary approach. In fact, the International Panel on Climate Change and others have called for keeping about two-thirds of proven fossil fuel reserves underground.[105]

Eliminating the extraction and use of hazardous materials is not unprecedented. For example, the elimination of mercury – which is extremely toxic and persistent – is in progress. According to UNEP, primary mining of mercury is taking place in only a few of the

---

[101] MAC (n 88).

[102] *Earth Charter* (n 6) Principle 6(d).

[103] World Nuclear Association, 'Radioisotopes in Medicine' (July 2014) <www.world-nuclear.org/info/Non-Power-Nuclear-Applications/Radioisotopes/Radioisotopes-in-Medicine/> accessed 16 September 2014; Teach Nuclear, 'Medical Applications' <http://teachnuclear.ca/contents/cna_nuc_tech/med_app_intro/> accessed 16 September 2014.

[104] See for example, Jianchu Xu, R Edward Grumbine, Arun Shrestha, Mats Eriksson, Xuefei Yang, Yun Wang, Andreas Wilkes, 'The Melting Himalayas: Cascading Effects of Climate Change on Water, Biodiversity, and Livelihoods' (2009) 23(3) Conservation Biology 520.

[105] 'Synthesis Report of the Fifth Assessment Report of the Intergovernmental Panel on Climate Change (IPCC)' (adopted at the 40th Session of the IPCC, 1 November 2014, Copenhagen) 66-67; International Energy Agency, 'World Energy Outlook 2012' <http://www.iea.org/publications/freepublications/publication/English.pdf> accessed 29 April 2014, 3.

countries where mercury occurs.[106] An important milestone was the signing of the *Minamata Convention on Mercury*, which "includes a ban on new mercury mines, the phase-out of existing ones, control measures on air emissions, and the international regulation of the informal sector for artisanal and small-scale gold mining [which uses mercury]". [107] Implementation challenges are not negligible, however, especially in the context of artisanal small-scale mining.[108] Amalgamation with mercury is a simple and fast technology for gold recovery, while poor artisanal miners often cannot afford alternative methods and require assistance in adopting safe practices or transitioning to other more ecologically and economically sustainable livelihoods. [109]

Finally, while the *Earth Charter* is clear about avoiding radioactive materials, it does not explicitly oppose nuclear energy. The question is whether this should be treated as an exceptionally acceptable use of radioactive materials due to increasing climate change risks from carbon based energy sources. The toxicity of radioactive materials, their extraction through highly damaging processes, and the legacy issues involved point strongly against it. However, given the alarmingly increasing climate change risks, whether alternative renewable energy sources will permit avoiding this trade-off is hotly debated.[110] A planned timetable leading from reduction to elimination of both sources of energy in favour of more sustainable sources may be required. The *Earth Charter* would, however, clearly prevent the

---

[106] UNEP, 'Mercury – Time to Act' (2013), <htttp://www.unep.org/PDF/PressReleases/Mercury_TimeToAct_hires.pdf> accessed 29 April 2014, 15.

[107] *Minamata Convention on Mercury*, (adopted 10 October 2013, 128 signatories and 9 parties, as of 9 December 2014) <http://www.mercuryconvention.org/Convention/tabid/3426/Default.aspx> accessed 9 December 2014.

[108] See for example, Sue Blaine, 'Illegal Mining in Roodepoort Despite State's "Action"' (Business Day Live October 24 2012) <http://www.bdlive.co.za/national/science/2012/10/24/illegal-mining-in-roodepoort-despite-states-action> accessed 11 February 2015; Martin J Clifford, 'Future Strategies for Tackling Mercury Pollution in the Artisanal Gold Mining Sector: Making the Minamata Convention Work' (2014) 62 Futures 106.

[109] Alliance for Responsible Mining, 'Fairmined® Gold and Mercury Use by Artisanal Miners? ARM's Position: No Contradiction' <www.communitymining.org> accessed 23 February 2015.

[110] See for example, R M Harrison, R E Hester (eds), *Nuclear Power and the Environment* (Royal Society of Chemistry c2011) <DOI:10.1039/9781849732888> Preface; cf Kristin Shrader-Frechette, *What Will Work: Fighting Climate Change with Renewable Energy, Not Nuclear Power* (Oxford Scholarship Online 2012) <DOI:10.1093/acprof:oso/9780199794638.001.0001> ch 6, 7.

ongoing expansion of bitumen mining and would at least require that expansion of nuclear energy would be conditional on eliminating bitumen and coal extraction.

Where to Mine?

By definition, mining disturbs terrestrial and aquatic ecosystems.[111] Even a project with minimal land disturbance and a comprehensive restoration plan aimed at achieving a net benefit to biodiversity – the objective of some biodiversity offset mechanisms[112] – cannot guarantee that no serious short to medium term environmental harm will be caused, or that restoration efforts will not fail. This puts certain areas off limits under the *cause no serious environmental damage* norm. Building on international law and policy aimed at protecting special sites, WWF suggests off-limits areas include the following:

- *Highly protected areas (IUCN categories I-IV, marine category I-V protected areas, UNESCO World Heritage sites, core areas of UNESCO biosphere reserves, and Natura 2000 sites in European Union countries);*
- *Proposed protected areas within priority conservation areas selected through ecoregional planning exercises;*
- *Areas containing the last remaining examples of particular ecosystems or species even if these lie outside protected areas; or*
- *Places where mineral activities threaten the wellbeing of communities including, particularly, local communities and indigenous people.*[113]

Agricultural lands are also emerging as an alarming example of "places where mineral activities threaten the wellbeing of communities". Extraction of lower grade mineral reserves is increasingly taking place on, or adjacent to, agricultural lands, directly removing soil, consuming and polluting water needed for agriculture, and increasing air pollution that

---

[111] See for example, 'Mining: Adding Up the Costs of a Hole in the Ground' in *Soil Atlas: Facts and Figures about Earth, Land and Fields* (Heinrich Boll Foundation and Institute for Advanced Sustainability Studies, January 2015) 32-33.

[112] Business and Biodiversity Offsets Program, 'To No Net Loss and Beyond: An Overview of the Business and Biodiversity Offsets Program (BBOP)' (ForestTrends 2013) <http://www.forest-trends.org/documents/files/doc_3319.pdf> accessed 23 May 2014.

[113] Nigel Dudley and Sue Stolton, 'To Dig or Not to Dig?: Criteria for Determining the Suitability or Acceptability of Mineral Exploration, Extraction and Transport from Ecological and Social Perspectives' (WWF International and WWF-UK 2002) <http://www.wwf.org.uk/filelibrary/pdf/to_dig_or_not_to_dig1.pdf > accessed 23 May 2014, 3.

affects crops and animals.[114] A recent report advocates that "[a]gricultural and food producing areas, and the water systems they depend on" should be off-limits for mining in order to protect food security.[115]

Along with the parameters proposed by the WWF, *causing no serious environmental damage* requires that decisions about mine sites also consider larger scales: from the impact on the carrying capacity of the ecosystem, to the potential contribution of a mine to transgressing planetary boundaries, especially the boundary for biodiversity loss (given the global extinction crisis).[116] Building on best sustainability assessment practices[117] and broadening the scope of assessment when considering impacts are crucial to avoid causing serious environmental harm, as mining operations have effects beyond the immediate site, and contribute to cumulative, regional and global human impacts on the environment.[118]

How to Mine?

The bulk of existing laws, regulations and best practices relate to the different stages and many complex aspects of a wide variety of mining methods.[119] Standards normally focus on imposing measures to minimize and mitigate the environmental impacts of operations without compromising any specific project.[120] Maintaining ecological integrity – the focus of the *Earth Charter* – is not the priority. To *cause no serious environmental damage* in accordance with the principles of the *Earth Charter*, all the different stages of mining (of acceptable minerals, in appropriate places) must be executed under standards based on ecological integrity.

There is no shortage of constantly evolving knowledge in the mining sector regarding best practices to prevent environmental damage.[121] Under the *Earth Charter*, practices that are

---

[114] The Gaia Foundation (n 21) 10-14.

[115] Ibid 7.

[116] Rockström et al (n 1) 14-15.

[117] See for example, Alan Bond, Angus Morrison-Saunders and Richard Howitt (eds), *Sustainability Assessment: Pluralism, Practice and Progress* (Routledge c2013) 3-17.

[118] Steffen et al, 'Planetary Boundaries' (n 1) 2-3.

[119] Myer Kutz, Environmentally Conscious Materials and Chemicals Processing (John Wiley & Sons c2007) 1-32.

[120] Miranda, Chambers and Coumans (n 35).

[121] See for example, F G Bell and Laurance J Donnelly, *Mining and Its Impact on the Environment* (Taylor & Francis 2006).

consistent with the objective of ecological integrity would be strictly applied; those that do not would be upgraded to meet that objective. While the focus for determining how to mine is on specific operational practices, the benchmark should be the ecological integrity of the ecosystem. In addition to controlling the impacts on the site and its vicinity, cumulative impacts must be monitored as a key reference for making adjustments to operational constraints. The most appropriate practices will vary depending on the site and other factors, so local knowledge and flexibility (about means) are critical in determining what standards must be followed, but the clear objective of preserving ecological integrity must remain constant. Certain methods of mining – some increasingly prevalent like large-scale surface mining[122] and mountaintop removal[123] – are so destructive that they may no longer be permissible under ecological integrity standards. Notably, Costa Rica banned open pit metal mining in 2010, and other communities are following suit.[124]

Rule 2: Minimize Depletion

Taken seriously, this rule would be even more transformative of the law and justice of mining. *Minimizing depletion* should be understood in the context of ecological justice and, in particular, intergenerational equity.[125] The extraction of non-renewable resources would be based on the reasonable needs of living generations (equitably considered) without jeopardizing the ability of future generations to enjoy similar access to those resources. The *Earth Charter* states that "[f]undamental changes are needed in our values, institutions, and ways of living" and calls for the realization "that when *basic needs* have been met, human development is primarily about being more, not having more".[126] *Minimizing depletion* would thus require answering questions about *basic needs*, and about the use and distribution of non-renewable resources to ensure sustainability and equity.

---

[122] Ibid 290.

[123] James Wickham, Petra Bohall Wood, Matthew C Nicholson, William Jenkins, Daniel Druckenbrod, Glenn W Suter, Michael P Strager, Christine Mazzarella, Walter Galloway and John Amos, 'The Overlooked Terrestrial Impacts of Mountaintop Mining' (2013) 63(5) BioScience 335.

[124] Marcel Evans, 'Costa Rica Upholds Ban on Open-Pit Mining' (Costa Rica Star 8 February 2013) <http://news.co.cr/costa-rica-upholds-ban-on-open-pit-mining/21901/> accessed 23 April 2014; Sandra Cuffe, 'Territories Free of Mining on the Rise in Honduras' (5 January 2015) <http://www.beaconreader.com/sandra-cuffe/territories-free-of-mining-on-the-rise-in-honduras?ref=profile> accessed 16 February 2015.

[125] Klaus Bosselmann, 'Ecological Justice and Law' in Benjamin J Richardson and Stepan Wood (eds), *Environmental Law for Sustainability: A Reader* (Hart Pub 2006) 150.

[126] *Earth Charter* (n 6) Preamble (emphasis added).

Minimizing depletion would be a major societal undertaking, and would likely involve the following elements in some form (Figure 1). First, society would need to agree that *basic needs* should be the benchmark for establishing limits on mining. It would also need to agree on what constitutes *basic needs*. Many thinkers have explored and critiqued this question.[127] In the context of minimizing depletion of minerals, a concept such as Tim Jackson's "bounded capabilities" offers a helpful conceptual frame, as it qualifies Amartya Sen's notion of "capabilities for flourishing"[128] by noting that "capabilities are bounded on the one hand by the scale of the global population and on the other by the finite ecology of the planet".[129] Second, society would need to determine which uses of minerals (deemed acceptable under the *what to mine* rules) respond to basic needs (*needs-based demand* or *NbD*). A third element would be to identify *NbD* at local, regional, and global scales. Fourth, society would need to determine how to satisfy the *NbD* with already extracted minerals (extracted stocks, recovery, and recycling). Then, if there is a remaining *NbD*, the balance could be extracted only if the technology currently exists to later recover or recycle those minerals, and if the extraction and production processes meet ecological, human and community rights standards (under the *where* and *how to mine* rules). In the case of coal and bitumen *NbD* that cannot yet be met with renewable alternatives,[130] extraction would be limited by the "unburnable carbon" calculation[131] and decided based on considerations including energy return on energy invested.[132] Finally, demand that is not needs-based could be satisfied as follows: through recovery and recycling only; once *NbD* has been satisfied; and provided a

---

[127] See for example, Ivan Illich, 'Needs' in Wolfgang Sachs (ed), *The Development Dictionary: A Guide to Knowledge as Power* (2nd edn Zed Books, 2010) 95-110] (offering a critique and a brief history of the concept of 'needs' in the development discourse); also Amartya Sen, 'The Ends and Means of Sustainability' (2013) 14(1) Journal of Human Development and Capabilities 6.

[128] Jackson (n 13) 45-47; see also Breena Holland, 'Ecology and the Limits of Justice: Establishing Capability Ceilings in Nussbaum's Capability Approach' (2008) 9 Journal of Human Development 401.

[129] Jackson (n 13) 46.

[130] See text to n 110 regarding nuclear energy.

[131] "Unburnable Carbon refers to fossil fuel energy sources which cannot be burnt if the world is to adhere to a given carbon budget" set to avoid catastrophic climate change. Carbon Tracker, 'Unburnable Carbon' <http://www.carbontracker.org/resources/> accessed 12 December 2014. See also text to n 105.

[132] "Energy return on investment (EROI) is the ratio of the energy delivered by a process to the energy used directly and indirectly in that process."<http://www.eoearth.org/view/article/152557/> accessed 12 December 2014.

stock from already extracted minerals is set aside for future generations if the minerals in question are already or nearly depleted.

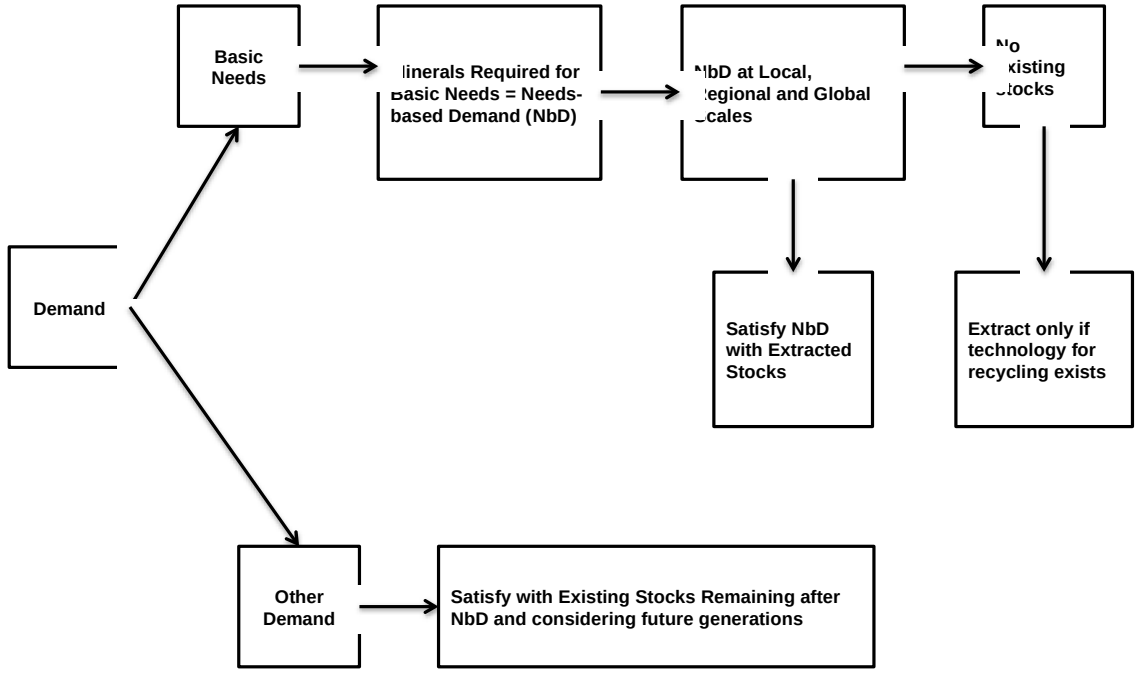


Figure 1 - A hypothetical path to minimizing depletion

Goodland and Daly offer a complementary model for minimizing depletion in the input-output rule they propose as the fundamental definition of environmental sustainability.[133] The input portion of the rule that refers to non-renewable resources states that "depletion rates of non-renewable-resource inputs should be equal to the rate at which renewable substitutes are developed by human invention and investment" and that part "of the proceeds from liquidating non-renewables should be allocated to research in pursuit of sustainable substitutes".[134]

How would a path to minimizing depletion along the lines suggested above be implemented in the mining sector? The *Earth Charter* states that "[w]e have the knowledge and

[133] Robert Goodland and Herman Daly, 'Environmental Sustainability: Universal and Non-Negotiable' (1996) 6(4) Ecological Applications 1002.

[134] Ibid 1008.

technology to provide for all and to reduce our impacts on the environment".[135] Some "argue that enough minerals and metals have been mined already" and that global basic needs can be met by "changing the way we design, make and sell products, closing the loop to ensure zero waste, [and] investing in a circular economy".[136] In their call for a "whole earth economy in right relationship with life's commonwealth", Brown and Garver propose a "Global Reserve" focused on "the analysis of the earth's life support budgets and their uses in accordance with right relationship with the commonwealth of life".[137]

The needed recovery and recycling capacity is not in place yet,[138] and much research and development will be required for a deep transformation of the mining industry along the lines sketched above. However, there are encouraging breakthroughs in technology and design, as well as consumer and retailer awareness. For example, increased demand for copper is driving its recovery-recycling and life cycle management;[139] design-for-disassembly and design-for-recycling have been available for at least two decades;[140] and consumers are beginning to demand products made with recycled gold and other metals.[141]

At the same time, major governance reforms would be required to implement a path to minimizing depletion. Left to the market forces and economic growth policies that dominate macro-decision-making about mining, the shift is unlikely to happen quickly or comprehensively enough to avoid resource depletion and further environmental damage. Yet society has the option to set different priorities and directions. Governments can refocus their education, research, and infrastructure investments on the development and

---

[135] *Earth Charter* (n 6) Preamble.

[136] The Gaia Foundation (n 21) 7.

[137] Brown and Garver (n 15) 113.

[138] Markus Reuter, Outotec Oyj, Christian Hudson, Antoinette van Schaik, Kari Heiskanen, Christina Meskers and Christian Hagelüken, 'Metal Recycling: Opportunities, Limits, Infrastructure (A Report of the Working Group on the Global Metal Flows to the International Resource Panel)' (UNEP 2013) <http://www.unep.org/resourcepanel/Portals/24102/PDFs/Metal_Recycling_Full_Report.pdf> accessed 23 February 2015.

[139] Five Winds International, 'Sustainable Development and the Global Copper Supply Chain: International Research Team Report' (IISD 2011).

[140] Paul Dvorak, 'Putting the Brakes on Throwaway Designs' (1993) Machine Design 46.

[141] Earthworks, 'The Gold Star List' <http://nodirtygold.earthworksaction.org/retailers/the_gold_star_list#.Uv6b-f2jRg1> accessed 15 February 2014; Responsible Jewellery Council, (2014) <http://www.responsiblejewellery.com/> accessed 11 February 2015.

deployment of mineral recovery and recycling technologies,[142] and away from discovery of new mineral deposits.[143] Brown and Garver also propose that a "Global Federation could wield its taxing authority to work toward eliminating or finding substitutes for metal compounds that are persistent and harmful in the biosphere".[144]

At the core of the issue of depletion is the treatment of minerals as commodities. While this requires more detailed analysis than is possible here, one could argue that in order to minimize depletion there should be a shift of focus in the management of these non-renewable resources – a shift from exchange value for wealth creation to use value for the satisfaction of needs. Scarce minerals should be managed so that they can be privately used, but not privately owned, and not treated as commodities. It is hard to imagine minerals, and metals like gold, not being treated as commodities – particularly given the current trend towards greater "commoditization" [145] and the "financialisation" of commodities.[146] Yet, some level of de-commodification may result from a practical or strategic response to scarcity. Already, frameworks for managing "mineral services" are emerging in anticipation of "peak metal" [147] – the point at which minable deposits become scarce.[148] It is also possible for de-commodification to result from a normative choice to treat

---

[142] While aimed at ensuring the stable supply of minerals for Europe, rather than at minimizing depletion and equitable access, the European Union Raw Materials Initiative exemplifies this type of government intervention. Commission Communication to the European Parliament and the Council, 'The Raw Materials Initiative-Meeting Our Critical Needs for Growth and Jobs in Europe' (COM 2008 699); Johanna Sydow, Lili Fuhr and Ute Straub, 'Analysis of the EU Raw Materials Initiative' (Heinrich Böll Foundation 3 February 2011) <http://www.boell.de/en/ecology/resource-governance-analysis-of-the-eu-raw-materials-initiative-11124.html> accessed 11 February 2015, 7.

[143] In Canada for example, '[e]xploration and deposit appraisal expenditures increased from $912 million in 1998 to $3.9 billion in 2012'. Government of Canada, 'Mining Sector Performance Report:1998-2012' (Energy and Mines Minister's Conference, August 2013) <http://publications.gc.ca/site/eng/450082/publication.html> accessed 10 February 2014, 10.

[144] Brown and Garver (n 15) 13.

[145] JP Manno, 'Commoditization: Consumption Efficiency and an Economy of Care and Connection' in T Princen, M Maniates and K Conca (eds), *Confronting Consumption* (MIT Press 2002).

[146] Sibaud (n 22) 42-43.

[147] Leah Mason, Timothy Prior, Gavin Mudd and Damien Giurco, 'Availability, Addiction and Alternatives: Three Criteria for Assessing the Impact of Peak Minerals on Society' (2011) 19 Journal of Cleaner Production 958.

[148] 'Beyond Mining' (2011) 4 Nature Geoscience 653 <doi: 10.1038/ngeo1291>; see also Mikhail Butusov and Arne Jernelöv, *Phosphorus: An Element That Could Have Been Called Lucifer* (Springer 2013) ch 9, 10.

minerals as commons[149] or manage them through public trusts in the interest of current and future generations.[150] Admittedly, this would be fraught with difficulties, starting with the challenge of gaining state support for commons or public trust regimes and ensuring such regimes are structured to avoid treating resources as commodities.[151] For example, the regime for mining the seabed area designated as "the common heritage of humankind" (CHM) remains controversial and treats the minerals found there as commodities.[152]

Other major difficulties derive from the role of resource extraction in economic growth strategies, especially given growing demand from both developed and developing countries. Countries with mineral reserves currently have no incentive to place even those most at risk of depletion under any form of global commons regime.[153] Given historical inequities in the distribution of benefits from resource extraction,[154] developing countries where most of these reserves are located have even less reason to share their scarce mineral reserves. However, the development benefits of resource extraction have long been questioned, especially in developing countries,[155] and mineral extraction is increasingly being criticized for failing to benefit the poor.[156] Moreover, the growth-centered economic model in which it is embedded is, as noted earlier, increasingly being challenged, especially in developed countries.[157] If, as some argue, a steady state or degrowth model would be more favourable

---

[149] See Burns H Weston and David Bollier, *Green Governance: Ecological Survival, Human Rights, and the Law of the Commons* (Cambridge University Press 2013) 203 (arguing commons governance enhances the role of nonmonetized value).

[150] Mary Christina Wood, *Nature's Trust: Environmental Law for a New Ecological Age* (Cambridge University Press 2013) 73-75; Prue Taylor, 'The Future of The Common Heritage of Mankind: Intersections with the Public Trust Doctrine' in Westra and Michelot (n 85) 43.

[151] Taylor (n 150) 43.

[152] *UNCLOS* (n 29) *Agreement Relating to the Implementation of Part XI*; Taylor (n 150) 42 (arguing the CHM "was intended as a non-property concept").

[153] In fact, the opposite appears to be the case, as governments rush to secure future access to scarce resources. See for example, Sydow, Fuhr and Straub (n 142).

[154] Sibaud (n 22) 39-42; Graham A Davis, 'Extractive Economies, Growth, and the Poor' in Richards (n 73) 94.

[155] See for example, Vandana Shiva, *Earth Democracy: Justice, Sustainability, and Peace* (South End Press c2005); Gustavo Esteva, 'Development' in Sachs (n 127).

[156] See for example, Davis (n 154) 37.

[157] See text to n 9-17 above, "Beyond a Growth-Insistent Economy".

for the development of commons regimes,[158] it is worth exploring the possibilities of minerals commons within these alternative economic models.

Rule 3: Protect the Rights of People

The core *Earth Charter* principle of "Respect and Care for the Community of Life" provides that society must "[a]ccept that with the right to own, manage, and use natural resources comes the duty to prevent environmental harm and to protect the rights of people".[159] Because mining can have gravely detrimental impacts on human well-being, *protecting the rights of people* requires protecting rights that range from safe labour conditions to free prior informed consent of indigenous peoples (FPIC); from the rights of individuals, to those of communities; and the rights of women, men, seniors, and children.

The *Earth Charter* principle speaks of a "duty to protect", demanding more vigilance and proactive engagement than the (often-unrealized)[160] current commitment of "respecting" people's rights. At a minimum, it requires ensuring meaningful participation of affected communities and indigenous peoples in decision making on what, where, and how to mine, and on minimizing depletion, as well as full access to effective redress mechanisms for those affected by mining activities.[161] The *Aarhus Convention*[162] sets a good example of participatory rights, although it fails to recognize the right of affected communities and indigenous people to withhold their consent, an element further discussed below.

Principle 12, under the theme of "Social and Economic Justice", provides that society should "[a]ffirm the right of indigenous peoples to their spirituality, knowledge, lands and resources

---

[158] See for example, Silke Helfrich and David Bollier, 'Commons' ch 14 in D'Alisa, Demaria and Kallis (n 14) 75-78.

[159] *Earth Charter* (n 6) Principle 2(a).

[160] See for example, Human Rights Watch, 'Gold's Costly Dividend: Human Rights Impacts of Papua New Guinea's Porgera Gold Mine' (Human Rights Watch 2011) <http://www.hrw.org/sites/default/files/reports/png0211webwcover.pdf> accessed 23 February 2014.

[161] Canadian Network on Corporate Accountability, 'Open for Justice' (2013) <http://cnca-rcrce.ca/wp-content/uploads/CNCA-Backgrounder-Open-for-justice-ENG.-FINAL1.pdf> accessed 23 February 2014, 3.

[162] Convention on Access to Information, Public Participation in Decision-Making and Access to Justice in Environmental Matters (concluded 25 June 1998, entered into force 30 October 2001) 37770 UNTS 2161.

and to their related practice of sustainable livelihoods".[163] Historically, indigenous peoples have been substantially impacted by mineral extraction, and it is estimated that almost half of new extraction will occur in their territories.[164]

Mining companies are beginning to recognize their role with respect to human rights.[165] However, the right of communities to bar mining is rarely recognized.[166] This is at the heart of many conflicts and much violence associated with mining across the world.[167] Despite this, and the growing international legal recognition of FPIC as a right of indigenous peoples,[168] governments and companies often interpret FPIC as a right not to prevent but only to have a say in the development of a mining project, and to be compensated or benefit from it.[169]

Moreover, in some countries mining operates under a "free entry" system whereby anyone can stake a claim in available land.[170] This system assumes that mining is the preferred use of land and resources, preempting other uses,[171] and seems incompatible with a needs-based approach to mining.

---

[163] *Earth Charter* (n 6) Principle 12(b).

[164] C Doyle and A Whitmore, 'Indigenous Peoples and the Extractive Sector: Towards a Rights-Respecting Engagement' (Tebtebba, PIPLinks and Middlesex University 2014) at 5.

[165] ICMM, 'Sustainable Development Framework' <www.icmm.com/our-work/sustainable-development-framework/10-principles> accessed 19 February 2014.

[166] Other legal means may be used to that effect. For example, the Traditional Healers' Association of South Africa has stopped a mining project at a site protected under heritage laws. Katharine Child, 'Ancestors Thwart Mine Bosses' (timeslive.co.za 15 January, 2015) <http://www.timeslive.co.za/thetimes/2015/01/15/ancestors-thwart-mine-bosses> accessed 11 February 2015.

[167] See for example, Alexandra Pedersen, 'Power, Violence and Mining in Guatemala: Non-Violent Resistance to Canada's Northern Shadow' (30 January 2014) <http://upsidedownworld.org/main/news-briefs-archives-68/4672-power-violence-and-mining-in-guatemala-non-violent-resistance-to-canadas-northern-shadow-> accessed 20 February 2014.

[168] Tara Ward, 'The Right to Free, Prior, and Informed Consent: Indigenous Peoples' Participation Rights within International Law' (2011) 10 Nw J Int'l Hum Rts 54 <http://scholarlycommons.law.northwestern.edu/njihr/vol10/iss2/2> accessed 8 December 2014.

[169] ICMM, 'Indigenous Peoples and Mining' (2013) <http://www.icmm.com/our-work/sustainable-development-framework/position-statements> accessed 19 February 2014.

[170] Barry Barton, *Canadian Law of Mining* (Canadian Institute of Resources Law 1993) 165.

[171] Maureen Carter-Whitney and Justin Duncan, *Balancing Needs, Minimizing Conflict: A Proposal for a Mining Modernization Act, 2008* (Canadian Institute for Environmental Law and Policy 2008) 2.

Under the *Earth Charter*, mining activities would require the FPIC of indigenous peoples, and communities would have the right to prevent mining activities that negatively affect them. A recent amendment to Quebec's *Mining Act* which allows municipalities to identify areas considered incompatible with mining activities exemplifies that this is feasible.[172]

Many poor and marginalized people, however, depend on mining,[173] so the rule to *protect the rights of people* may require implementation of the other two rules in developed countries first and other transitional trade-offs. For example, it may involve supporting initiatives like the Alliance for Responsible Mining, which seeks to "transform artisanal small-scale mining into a socially and environmentally responsible activity that improves the quality of life of marginalized artisanal communities".[174] An illustration of the challenges is "new progressive extractivism", whereby left-leaning governments are looking to their mineral resources for poverty eradication and social programs, at the expense of other priorities like the rights of nature and alternatives to development, such as "buen vivir".[175] However, in the long term the incentive to mine for profit would arguably be superseded as mining transitions globally from a focus on the exchange value of minerals to their use value.

Tools, Actors, and Institutions

New mining governance under the *Earth Charter* principles implies profound change, but it could be achieved by building on many existing tools. Protected areas, land use and sustainable development planning at all levels,[176] best practices,[177] trusteeship institutions, and commons governance could be adapted and expanded to support the implementation of these *Earth Charter*-derived rules. Approaches to production and manufacturing processes

---

[172] Bill 70, *An Act to amend the Mining Act*, 1st Sess, 40th Leg, Quebec, 2013, cl 1 (assented to 10 December 2013), SQ 2013, c 32, cl 108 (inserting new section 304.1.1).

[173] Davis (n 154) 37.

[174] Alliance for Responsible Mining, <http://www.communitymining.org/en> accessed 11 February 2015.

[175] Eduardo Gudynas, 'Diez tesis urgentes sobre el nuevo extractivismo. Contextos y demandas bajo el progresismo sudamericano actual' in *Extractivismo, Política y Sociedad* (CAAP and CLAES 2009) 187; Eduardo Gudynas, 'Development Alternatives in Bolivia: The Impulse, the Resistance, and the Restoration' (2013) 46(1) NACLA Report on the Americas 22.

[176] *Earth Charter* (n 6) Principles 5-a and 5-b.

[177] John P Williams, '"International Best Practice" in Mining: Who Decides and How-And How Does It Impact Law Development?' (2007-2008) 39 Geo J Int'l L 693.

like industrial ecology,[178] design-for-reuse/recycling, and mineral "servicizing",[179] as well as the concept of a circular economy,[180] will be critical for transitioning to a sustainable way of mining.

As the *Earth Charter* underscores, "[t]he partnership of government, civil society, and business is essential for effective governance".[181] The current roles each of these plays in mining must change fundamentally. There may be little room for governments as revenue-seeking promoters of mining, for civil society as unquestioning consumers of goods and services supported by mining, and for mining companies as largely unaccountable profit seekers.

The *Earth Charter's* call for acting in the public good and for recognizing the duties derived from power and rights sets a high bar for all of society. In particular, the *Earth Charter* sets a transformational vision for corporations by "[requiring] multinational corporations and international financial organizations to act transparently in the public good, and [be held] accountable for the consequences of their activities".[182] Mining corporations acting in the public good would approach the questions about what is extracted, where, how, and how much, not in terms of profits and growth, but of sustainability and equity. Planned obsolescence and marketing to promote rapid replacement of products would have no place in determining demand for minerals.[183] A fundamental change in corporate law would be needed to require mining corporations to act in the public good. Some change is already happening with the emergence of benefit corporations – profit corporations with a public good mandate – notably in the United States.[184] The transformation of mining could also be advanced through changes in property laws to define minerals as commons, or as "public

---

[178] See for example, John Ehrenfeld and Nicholas Gertler, **'**Industrial Ecology in Practice: The Evolution of Interdependence at Kalundborg' (1997) 1(1) Journal of Industrial Ecology 67.

[179] Timothy Prior, Patrick A Wäger, Anna Stamp, Rolf Widmer and Damien Giurco, 'Sustainable Governance of Scarce Metals: The Case of Lithium' (2013) 461–462 Science of the Total Environment 785–791.

[180] See for example, Damien Giurco, 'Circular Economy: Questions for Responsible Minerals, Additive Manufacturing and Recycling of Metals' (2014) 3 Resources 432 doi:10.3390/resources3020432.

[181] *Earth Charter* (n 6) The Way Forward.

[182] Ibid Principle 10(d).

[183] Ponting (n 24) 334.

[184] J William Callison, 'Benefit Corporations, Innovation, and Statutory Design' (2013-2014) 26 Regent U L Rev 143. See also James Gustave Speth, *The Bridge at the Edge of the World: Capitalism, the Environment, and Crossing from Crisis to Sustainability* (Yale University Press c2008) 165-182.

natural resources", as proposed in the United Kingdom through a "*Legacy Act*" that "would define public natural resources that must be preserved for future generations, and would prohibit all actions that would degrade or deplete them".[185] Clearly, parallel reform of the international system of trade and finance would also be required – no small task but an essential one.

Some may object that this sketch of new mining governance implies potentially inefficient and dangerously authoritarian central planning. It need not. The *Earth Charter* is deeply rooted in the pursuit of democracy and civil society engagement.[186] Under the *Earth Charter*, planning and decision-making regarding mining would likely involve community-based processes and reframed enterprises embedded in a global trusteeship framework. The local processes may be akin to cooperatives governance or to the community watershed committees envisaged by Hughes.[187] The global framework may involve a renewed system of international agencies with global trusteeship functions.[188] Humanity has ample expertise for assessing needs and prioritizing production of certain goods. In democratic countries this expertise has been highly developed to support the military sector and global business. The challenge is to refocus it to support the transition to a sustainable, equitable and peaceful society.

Conclusion

With its far-reaching effects on society and the environment, mining has a crucial role to play in building a sustainable world, and must be profoundly transformed. The *Earth Charter* offers an ethical grounding for the transition to a world of sustainability, equity, and peace. This transition becomes ever more urgent as the global ecological, economic, and social crises deepen.

---

[185] Peter Roderick, 'Feasibility of Environmental Limits Legislation: A Discussion Paper for WWF-UK' (WWF-UK 2011) <http://www.wwf.org.uk/wwf_articles.cfm?unewsid=5098> accessed 20 February 2014, 12.

[186] *Earth Charter* (n 6) Principle 13.

[187] Elaine L Hughes, 'Fishwives and Other Tails: Ecofeminism and Environmental Law' (1995) 8 Can J Women & L 502, 526.

[188] Klaus Bosselmann, Peter Brown and Brendan Mackey, 'Enabling a Flourishing Earth: Challenges for the Green Economy, Opportunities for Global Governance' (The Earth Charter Initiative 2011) <http://www.ieg.earthsystemgovernance.org/publications/enabling-flourishing-earth-challenges-green-economy-opportunities-global-governance> accessed 20 February 2014, 8; Brown and Garver (n 15) 111-137.

This paper argues that the *Earth Charter* provides guidance for ecological mining reform, and draws from it three overarching rules: *cause no serious environmental harm, minimize depletion*, and *protect the rights of people*. To mine in a way that is consistent with these principles of ecological justice and ecological integrity would entail a profound transformation of mining. It would eliminate the use of certain minerals, set a broader range of places off limits to extractive activities, and tighten the operational rules to prioritize ecological integrity. Determining the details would demand close collaboration among all sectors of society. Changing what, from where, and how to mine would involve abandoning certain entitlements, grappling with the question of needs, and transforming resource governance. While very challenging, this surely would be easier than experiencing collapse, and the reward might be nothing less than an ecologically just society.

TEMPORALITIES OF ENVIRONMENTAL GOVERNANCE:
Insights from Australia's Marine Reserves Review

Benjamin J. Richardson* and Lauren Butterly**

As the biosphere perches on the precipice of irreparable collapse, many explanations have been offered for our weak environmental laws. But one that lacks currency is how environmental law deals with time. The emphasis is on spatial dimensions (for example, property interests, jurisdiction and the physicality of ecological problems).[1] To the extent that it considers time, environmental law dwells narrowly on the 'present future',[2] namely, how our present actions may have future effects such as global warming.[3] The mantra of sustainable development, environmental governance's preeminent norm and temporal ballast, underpins this future bias.

There are other important temporal dimensions to environmental governance that warrant attention, such as the past, timing and the 'pace' of time. Without apparent essence, time's significance is primarily as a marker of changes in phenomena, including environmental changes and those wrought by society. We need both a deeper understanding of how environmental governance in practice deals with these temporalities and elaboration of the normative principles about how it should address time. The ensuing brief remarks illustrate these issues by reference to Australia's recently initiated Marine Reserves Review. It's a pertinent example of the partiality in governance to space over time, and the value of using temporal concepts to critique an environmental initiative.

---

* Professor, University of Tasmania

** Associate Lecturer, Australian National University

[1] Jane Holder and Carolyn Harrison (eds), *Law and Geography: Current Legal Issues* (OUP, Oxford 2003).

[2] Lisa Heinzerling, 'Environmental Law and the Present Future' (1999) 87 Georgetown Law Journal 2025; Daniel Farber, 'From Here to Eternity: Environmental Law and Future Generations' (2003) University of Illinois Law Review 289.

[3] Edith Brown Weiss, *In Fairness to Future Generations: International Law, Common Patrimony, and Intergenerational Equity* (Transnational Publishers, New York 1989).

Commonwealth (or federal) marine reserves can be declared pursuant to *the Environment Protection and Biodiversity Conservation Act (EPBCA) 1999 (Cth)*,[4] Australia's principal federal environmental legislation.[5] The federal government (in partnership with state and territory governments) committed to establishing a national representative system of marine protected areas by 2012.[6] Marine protected areas have been gradually established, but in November 2012 a significant expansion occurred with an additional 2.3 million square kilometres of ocean being protected.[7] These reserves were established with much fanfare. The then Federal Environment Minister declared: 'Australia's most precious ocean environments will be protected by the world's largest network of marine reserves'.[8] Management plans were developed and were due to come into effect in July 2014.

A change of government in late 2013, to a politically conservative regime under Prime Minister Tony Abbott, saw these management plans discarded, but the boundaries of the reserves remained.[9] As described by an Australian Senator for the Greens Party, the marine reserves are now 'little more than lines on a map'.[10] Given this, even the idea of 'space' is

---

[4] Act no. 91 of 1999.

[5] For an overview of the relevant legislation, see: Department of the Environment, 'Commonwealth Marine Reserves - Legal framework', <http://www.environment.gov.au/topics/marine/marine-reserves/overview/legal-framework> accessed 30 September 2014.

[6] Department of the Environment, 'Goals and principles for the establishment of the National Representative System of Marine Protected Areas in Commonwealth waters', <http://www.environment.gov.au/resource/goals-and-principles-establishment-national-representative-system-marine-protected-areas> accessed 30 September 2014.

[7] The Hon. Tony Burke MP, 'Gillard Government Creates the World's Biggest Marine Reserves Network' (Press release, 14 June 2012) <http://www.environment.gov.au/minister/archive/burke/2012/mr20120614.html> accessed 25 September 2014.

[8] Ibid. This press release noted that: 'The new marine reserves take the overall size of the Commonwealth marine reserves network to 3.1 million square kilometres, by far the largest representative network of marine protected areas in the world….Together the Great Barrier Reef Marine Park and the Coral Sea Commonwealth marine reserve will become the largest adjoining marine protected area in the world, covering 1.3 million square kilometres'.

[9] The Hon. Greg Hunt MP and Senator the Hon. Richard Colbeck, 'Supporting Recreational Fishing while Protecting our Marine Parks' (Press release, 14 December 2013) <http://www.environment.gov.au/minister/hunt/2013/mr20131214.html> accessed 26 September 2014.

[10] Senator the Hon. Rachel Siewert, 'Protecting our Marine Future', <http://rachel-siewert.greensmps.org.au/marine> accessed 30 September 2014.

currently of limited value. The new government initiated a so-called Marine Reserves Review (MRR), the agenda for which is to rebalance the management of marine reserves towards greater economic opportunities, especially fishing.[11] The reports of the MRR will be considered by the government and inform development of new marine management plans.

The first temporal dilemma about the MRR is its *timing*. The review was delayed for about one year, and further setbacks are likely because of the public consultation planned by the Abbott government in order to enhance the legitimacy its agenda.[12] In the meantime, economic access to the marine areas continues under the pre-2012 regime; there are no changes 'on the water' for 'users'.[13] Such an unhurried approach to modernizing environmental management contrasts to the lightening speed with which this government abolished Australia's carbon 'tax'.[14] Authorities like to fast-track economic development or remove hindrances to it,[15] but typically procrastinate in legislating pro-environmental controls. Ironically, the current Australian government justifies its leisurely approach to the MRR because the previous marine management arrangements were supposedly 'rushed' by its predecessor.[16]

Another interesting temporal dimension of the MRR relates to the lack of treatment of the *past*. The review focuses, according to the terms of reference of the expert scientific panel,

---

[11] Department of the Environment, 'About the Commonwealth Marine Reserves Review', <http://www.environment.gov.au/marinereservesreview/about> accessed 30 September 2014. Also, Oliver Milman, 'Marine Reserves Review: Coalition Says Recreational Fishers Have Been Left Out' *Guardian* (London 12 September 2014) <http://www.theguardian.com/environment/2014/sep/12/marine-reserves-review-coalition-says-recreational-fishers-have-been-left-out> accessed 30 September 2014.

[12] Further, as noted on the MRR website, the 'development of new management plans will be a separate statutory process, involving two periods of public consultation' under the EPBCA: Department of the Environment, 'About the Commonwealth Marine Reserves Review' <http://www.environment.gov.au/marinereservesreview/about> accessed 30 September 2014.

[13] Ibid.

[14] Emma Griffiths, 'Carbon Tax Scrapped: PM Tony Abbott Sees Key Election Promise Fulfilled After Senate Votes to Repeal' ABC News (18 July 2014) <http://www.abc.net.au/news/2014-07-17/carbon-tax-repealed-by-senate/5604246> accessed 30 September 2014.

[15] Another example is the state of Victoria's Major Transport Projects Facilitation Act 2009 (Vic), Act no. 56.

[16] The Hon. Greg Hunt MP, 'Review of Commonwealth Marine Reserves Begins' (Press release, 11 September 2014).

on 'future priorities' and 'understanding of threats to marine biodiversity'.[17] Further, the bioregional advisory panels are directed in the terms of reference to provide advice on 'areas of contention' (which one can assume means *current* contention). This temporal orientation thus downplays historic losses to marine life. The prevailing environmental baseline – current fisheries populations – becomes the 'normal' benchmark for management, rather than healing past damage. Furthermore, until the MRR is completed, past fisheries practices are grandfathered[18] – a measure to protect the seafood industry, which has enthusiastically welcomed the Review.[19] Effective environmental governance sometimes requires tilting our gaze to the past in order to restore and 'rewild' damaged ecosystems whose present condition is not sustainable. An example is the need for bush regeneration in Australia to restore habitat for viable populations of threatened mammals.[20] The MRR lacks attention to the goals of environmental restoration and regeneration.

Thirdly, a spatial management bias is strongly evident in the MRR and the government's 'Goals and Principles for the Establishment of the National Representative System of Marine Protected Areas in Commonwealth Waters'.[21] Zoning is the principal means by which management units are designated to demarcate allowable activities. Zoning can certainly be very useful for governing competing uses for natural resources, but it can be problematic when zones foster a 'static' view of nature that emphasizes relative stability over flux in ecosystems.[22] Climate change will likely intensify such flux. Because nature is thus difficult to predict, we should not assume that marking boundaries in the oceans (or land) and leaving nature alone would achieve our environmental goals. Instead, we need management

---

[17] Department of the Environment, 'Marine Reserves Review – Terms of Reference' (2014).

[18] Department of the Environment, 'Commonwealth Marine Reserves – Management' (see section on 'Transitional management arrangements', <http://www.environment.gov.au/topics/marine/marine-reserves/overview/management> accessed 30 September 2014.

[19] 'Fisheries Association Welcomes Commitment to Marine Reserves Review' (16 September 2014), <http://www.thefishsite.com/fishnews/24094/fisheries-association-welcomes-commitment-to-marine-reserves-review> accessed 30 September 2014.

[20] Robin A Buchanan, *Bush Regeneration: Recovering Australian Landscapes* (TAFE Student Learning Publications, Sydney 1989).

[21] Department of the Environment, <http://www.environment.gov.au/resource/goals-and-principles-establishment-national-representative-system-marine-protected-areas> accessed 30 September 2014.

[22] On addressing the dynamism of nature, see Bryan Norton, 'Change, Constancy, and Creativity: The New Ecology and Some Old Problems' (1996) 7 Duke Environmental Law and Policy Forum 49.

policies that are designed to be flexible and adjustable in an iterative, learning process.[23] The philosophy of 'adaptive management' speaks most directly to this challenge, but it does not appear to be prioritized in the MRR other than a broad reference to making 'suggestions' about continued engagement with regional stakeholders in the terms of reference.[24]

The problems with Australia's marine management planning process are indicative of the malaise in much environmental law worldwide. Its guiding philosophy of sustainability focuses on prospective actions. In downplaying other relevant temporalities, especially healing past losses, we don't have enough temporal depth to understand and resolve anthropogenic ecological changes. Cultural and psychological filters heavily modulate our understandings of time and the changes it signifies, and reformers must be more attentive to how law influences and distorts our temporal perception in ways that may harm the environment. As a starting point, our challenge to the MRR is for the expert scientific panel to think of governance approaches other than 'static' zoning and for the bioregional panels to investigate historical fisheries in their respective areas (including engaging with Indigenous communities and Indigenous knowledge).

---

[23] Holly Doremus, 'Precaution, Science, and Learning while Doing in Natural Resource Management' (2007) 82 Washington Law Review 547.

[24] Adaptive management is listed among the cluster of management principles in Australia's administrative framework for marine reserves, but the concept is not found in the governing legislation of the EPBCA: <http://www.environment.gov.au/topics/marine/marine-reserves/overview/legal-framework> accessed 30 September 2014.

THE NATIONAL CONTAMINATED LAND REGIMES IN THE EU AND THE BASELINE REPORT PROVIDED FOR BY THE IED DIRECTIVE: European or National Rules for the Remediation of Soil and Groundwater

Luciano Butti*

Abstract:

The obligation to draw up a Baseline Report (BR) has been introduced in European Union (EU) law by the *Industrial Emissions Directive 2010/75/EU (IED)*. The aim of the baseline report is to allow a quantifiable comparison between the state of soil and groundwater at the site of an industrial installation before starting operations and its condition upon definitive cessation of activities. This short note invokes debate on how the implementation of the Baseline Report (BR) under the *IED Directive* may affect the Contaminated Land Regimes (CLRs) of EU Member States.

Note

Art. 22 of the *Industrial Emissions Directive 2010/75/EU* (IED) introduces a new, important tool in European Environmental Law: the Baseline Report (BR).[1] The IED entered into force on January 6th 2011 and should have been transposed into national legislation by Member States by January 7th 2013. Some Member States have already complied with this obligation, while others are yet to do so.

---

* Lecturer in International Environmental Law at the University of Padova, B&P Avvocati – Partner - www.buttiandpartners.com

[1] "Where the activity involves the use, production or release of relevant hazardous substances and having regard to the possibility of soil and groundwater contamination at the site of the installation, the operator shall prepare and submit to the competent authority a baseline report before starting operation of an installation or before a permit for an installation is updated for the first time after 7 January 2013".

The IED only contains a generic description of the BR content. It requires that the report include information on the present and past (when available) uses of the site, as well as on soil and groundwater contamination by those hazardous substances to be used, produced or released by the installation concerned.[2]

The aim of the BR is to allow a quantifiable comparison between the state of the site as described in the report ("the original state") and its condition upon definitive cessation of activities. An increase in the pollution level between the two points in time would trigger the obligation for operators to return the site to its original state. This is made clear by art. 22 of the IED in the following terms: "*Upon definitive cessation of the activities*" the operator shall assess and compare the contamination levels, as well as take the necessary measures to address that pollution so as to return the site to its initial state.

Given this context, the point I would like to invoke a debate on is the following: *To what extent can and does the implementation of the Baseline Report (BR) under the IED Directive affect national Contaminated Land Regimes (CLRs)?*

A country's Contaminated Land Regime (CLR) can be defined as the national regulation applicable to the land polluted by substances likely to cause significant harm to the health of living organisms or to affect the subsoil and/or the water table.

At present, no detailed EU legislation on CLRs is in place, thereby leaving relevant legislative and policy decisions to the discretion of the Member States. Moreover, little guidance in this regard is offered by case law from the EU Court of Justice, and solely with respect to allocation of liability for contamination in conformity with the Polluter-Pays Principle as incorporated into the *Directive 2004/35/EC on Environmental Liability (ELD)*.[3]

---

[2] Article 22, par. 2 of the IED.

[3] This can be observed in the most relevant interpretative rulings of the European Court of Justice (ECJ) on the ELD (judgments of 9 March 2010 - Cases C-378/08, C-379/08 and C-380/08), which concluded that a Member State may establish a rebuttable presumption if "plausible evidence" exists to link an operator's activities to diffuse pollution. As a consequence, an operator will be liable for remediation unless the aforesaid presumption is rebutted by proving that its activities did not cause the pollution. More recently, the Plenary Session of the Italian Council of State (Decision n. 21 of 25 September 2013) submitted a reference for a preliminary ruling to the ECJ. The ECJ was asked to determine whether, in circumstances where it is impossible to identify the polluter or to have that person adopt the restoration measures, EU law precludes national legislation which does not require

The resulting scenario consists of a rather mixed framework, where Member States' CLRs often respond very differently to common regulatory issues, such as: does the operator of an installation bear the duty to look for the existence of possible contamination in soil or groundwater? [4] What level of pollution causes a site to be legally regarded as 'contaminated'? [5] How are the remediation targets identified? [6] Is the remediation to be

---

the owner of the land (who did not cause the contamination) to take on the burden of remedying pollution. On 4 March 2015 the ECJ adopted the following decision (Case C-534/13): "Directive 2004/35/EC … on environmental liability must be interpreted as not precluding national legislation … which, in cases where it is impossible to identify the polluter of a plot of land or to have that person adopt remedial measures, does not permit the competent authority to require the owner of the land (who is not responsible for the pollution) to adopt preventive and remedial measures, that person being required merely to reimburse the costs relating to the measures undertaken by the competent authority within the limit of the market value of the site, determined after those measures have been carried out". This decision is expected to influence Italy's ongoing judicial controversy over the allocation of environmental liability between the person who caused the contamination and the owner of the land.

[4] In France, upon changing the operating conditions of their installations, site operators must submit to the authorities an operating review document assessing any potential land contamination impacts arising therefrom (Article L.512-18, Environment Code). By contrast, UK law holds that any remediation mechanism concerning potentially contaminated land is triggered solely by local authorities, who are under a statutory duty to survey their land to assess which land is contaminated, only to serve a remediation notice on the appropriate persons when they do not voluntarily implement remediation (Environmental Protection Act, hereinafter 'EPA' 1990, 78B-78H). For a comprehensive review of the CLR in France, see Chantal, C., Makowiak, J., 'Code de l'Environnement 2014, Commenté' (17th edition), March 2014, Dalloz; for a comprehensive review of the CLR in the UK, see Fogleman, V., 'The Contaminated Land Regime: Time for a Regime that is Fit for Purpose' (Part 1 and 2), (2014) 6 The International Journal of Law in the Built Environment, 43-68, 129-151.

[5] In France, there are no legal definition or regulatory value limits indicating what contamination is. By contrast, Title V, Section 4 of the Italian Environmental Code (Legislative Decree n. 152/06) not only defines contaminated land and land at risk of contamination, but also contains information regarding specific contamination thresholds, the exceeding of which triggers the obligation to carry out clean-up interventions. For a comprehensive review of the CLR in Italy, see Cassa, G., Leonforte, A., 'Contaminated Land in Italy', Practical law Environment Multi-Jurisdictional Guide 2014/2015, 2014 Practical Law Company, Thomson Reuters.

[6] In France, there are only technical guidelines issued by the Ministry of Environment to provide guidance for site operators, including as regards the proposed remediation measures to limit the identified risks ("La loi responsabilité environnementale et ses méthodes d'équivalence - guide

carried out as soon as the pollution is discovered or just upon definitive cessation of the activity?[7] If the responsible party is not in a position to finance the remediation, does the landowner bear any legal duty to remediate the site?[8]

Analysing if and how the BR implementation affects national CLRs first requires an in-depth study of the European Commission Guidance concerning baseline reports under Article 22(2) of the IED (2014/C 136/03), which was released to promote a consistent implementation of the IED by Member States. The available national guidelines issued by Member States could also prove an interesting examination in this regard.[9]

Although this short piece by no means aims to provide a solution to the problem, it appears to this writer that some aspects of the CLRs will be heavily influenced by the implementation of the BR.

---

méthodologique"), issued in July 2012. By contrast, Title V, Section 4 of the Italian Environmental Code holds that remediation targets must be identified through a site-specific risk analysis.

[7] In Italy, the operator may be required to conduct investigation and adopt clean-up measures either during operation or after closure of the installation (Environmental Code, Title V, Section 4). By contrast, in the UK operators are required to act solely upon receiving a remediation note from the enforcing authorities, which is subject to suspension upon appeal in a way whereby the remediation may be delayed for several years (EPA 1990, 78H).

[8] In France, if the responsible person has disappeared or is insolvent, the Agency for Environment and Energy Management (Agence de l'Environnement et de la Maîtrise de l'Energie) may be entrusted with the site remediation (Article L.556-3, Environment Code) but under no circumstances can the landowner be charged for the clean-up obligations unless it is proven that he/she has behaved as the site operator. By contrast, UK law holds that only if the person who caused or knowingly permitted the contamination cannot be found after a reasonable inquiry can the landowner or occupier be held liable (EPA 78F); however – as Emma Lees notes – in practice authorities rarely impose clean-up costs on landowners (and rather end up paying the clean-up themselves) under the assumption that charging them with any costs of remediation necessarily causes hardship (see Lees, E., 'Interpreting the Contaminated Land Regime: Should The 'Polluter' Pay'?, Environmental Law Review 14 (2012), 98-110).

[9] France was the first State to issue a "Guide méthodologique pour l'élaboration du rapport de base prévu par la directive IED" in May 2013, a year ahead of the release of the EC Guidance. Other notable guidelines include: "Baseline report in accordance with the Environmental Protection Act – guidelines for operators and permit and supervisory authorities" issued by Finland in November 2014; a "Guidance for the preparation of the baseline report on the state of soil and groundwater" issued by Germany in August 2013; Ministerial Decree n. 242/2014 issued by the Italian government in November 2014; Resolution of 25 October 2013 issued by the Autonomous Region of Murcia (Spain).

First of all, virtually all Member States' legislation will now incorporate a duty to investigate the state of soil and groundwater contamination (at least) at two points in time throughout an installation's life cycle, followed by a duty of remedying pollution, though only upon definitive cessation of the activity. Secondly, where a CLR imposes immediate remediation upon discovery of contamination at any point in time,[10] the premise of the BR obligation to conduct a "quantifiable comparison" between the original state and that upon cessation of the activity could become severely frustrated. Finally, by posing relevant clean-up duties solely on the operator, the BR obligation might significantly alter the balance of duties allocated by a given CLR between the party who is responsible of the pollution and the non-responsible site owner.[11]

Arguably, an in-depth evaluation of the breadth and direction of these changes makes for a fascinating theme for research.

[10] Italian legislation offers a rather fitting example in this regard: upon discovery of a potential contamination, the person responsible is obliged, within 24 hours, to carry out the necessary preventive measures and execute a preliminary investigation to verify whether the contamination threshold has been exceeded. When the threshold is exceeded, a characterisation plan is executed, followed by clean-up interventions to remediate the contamination, if necessary (Environmental Code, Title V, Section 4).

[11] Italian legislation provides a further example in this regard: Environmental Code, Title V, Section 4 poses relevant obligations upon the "person responsible for the land contamination", who may or may not be the owner of the contaminated site.

CAN GEOGRAPHICAL INDICATIONS BRING VALUE TO ENVIRONMENTAL PROTECTION?

Nicoleta Rodica Dominte*

Rocheffort cheese, Bordeaux wine and Pingu Peach are protected designations of origin (PDOs) at national and/or European Union level that acknowledge that a particular product's "*quality or characteristics are essentially or exclusively due to a particular geographical environment with its inherent natural and human factors*".[1] It is generally considered that "Geographical Indications (*GI) are an umbrella term, covering inter alia the EU Protected Designations of Origin (PDO) and Protected Geographical Indication (PGI)…..*" [2] "*The fundamental concept behind GIs is that specific geographic locations yield product qualities that cannot be replicated elsewhere.*"[3] The uniqueness of the characteristic features of the similar French notion of "*terroir*" is highlighted by the European Commission in the following definition: "*le goût du terroir* as: *a distinct, identifiable taste reminiscent of a place or locality...Foods and beverages that evoke the term terroir have signature qualities that link their taste to a specific soil with particular climate conditions. Only the land, climate and expertise of the local people can produce the product that lives up to its name."*[4] Thus, the description of the French notion "terroir" acknowledges the embodiment of an original blend of geographical and human factors in a product. So too does a decision of the Appeal Board from Jerusalem that notes that while "*Citrus fruit from South Africa may be of high quality, just like citrus fruit produced in Israel, but differences may result from conditions that pertain to one country alone. [...] the fruit raised in Israel still contained the distinctive qualities*

---

* Ph.D, Assistant Professor, Faculty of Law, University "Alexandru Ioan Cuza" Iasi, Romania

nicoleta_dominte@yahoo.com

[1] Article 5, paragraph 1, letter b) from Regulation (EU) no. 1151/2012 of the European Parliament And of the Council of 21 November 2012 on quality schemes for agricultural products and foodstuffs, O.J. L 343/14.12.2012

[2] Susan Hall, *Geographical Indications: a Signposted Route to the Future or an Impenetrable Labyrinth?* (2013) 8 Journal of Intellectual Property Law & Practice 252

[3] Kal Raustiala and Stephen R. Munzer, *The Global Struggle Over Geographical Indications*, (2007) 18 The European Journal of International Law 338.

[4] Ibid at 344.

connected to the geographic locale identified by the designation [Jaffa] to merit its continued registration as an appellation of origin."[5] Here, a direct connection between the quality of the fruits, food and beverages and a certain geographical area was emphasized. The unique combination of the geographical factors, from a certain space, is a prime criterion in order to obtain juridical protection for a PDO. The argument presented in this insights piece is that these characteristics might also open the door to environmental protection. The preservation of geographical factors will likely entail environmental conservation.

Support for this idea is found in the work of Kerkhoff and in the work of some NGOs such as the Slow Food Foundation for Biodiversity, known as Slow Food Presidia[6] which aims to protect "*quality production at risk of extinction, protect unique regions and ecosystems, recover traditional processing methods, safeguard native breeds and local plant varieties*".[7] This foundation created a project that emphasizes the three European Union quality schemes of protection,[8] as a shield for its goals. According to Kerkhoff, designations of origin play a role in safeguarding the quality of the products, as well as local territories, each of which is viewed as a "*homogeneous geographic space because of its resources and agricultural specialization and its interaction with natural and human factors in the production standards that ensure the characteristics of the product.*" [9] The maintenance of homogeneous space involves the conservation of geographical and human factors. According to this view, the PDO symbol on the label of a product guarantees certain characteristics of that particular product through the preservation of natural conditions. Similarly, GIs may involve the protection of local products that are manufactured using traditional skills and knowledge.

---

[5] Neil Wilkof and Shir Uzrad, *In the Matter of the Appellation of Origin for 'JAFFA'*, (2008) 3 Journal of Intellectual Property Law & Practice 19.

[6] http://www.slowfoodfoundation.com/presidia

[7] Ibid.

[8] Protected designation of origin, protected geographical indication and traditional speciality guaranteed by Regulation (EU) No 1151/2012 on quality schemes for agricultural products and foodstuffs, O.J. L 343/14.12.2012.

[9] Rudolf Kerkhoff, The Fuentes de Ebro, *Sweet Onion: Autonomy through Globalisation*, in Yassine Essid&William D. Coleman, *Two Mediterranean Worlds. Diverging paths of globalisation and autonomy* (UBC Press Canada 2012) 189.

Thus it appears that GIs occupy an important position in the preservation and development of biodiversity, since they have the capacity to protect uniqueness and authenticity.[10] Furthermore, the link between geographical indications and biodiversity is highlighted by article 8 j) from the Convention of Biological Diversity.[11] Although article 8 j) does not mention expressly any form of GIs, GIs are a national and European pattern of protecting "*traditional lifestyles relevant for the conservation and sustainable use of biological diversity*" and thus fall within the definition. As Verrier argues "*A Protected Designation of Origin (PDO) supports the conservation of local breeds and their production environments through marketing of typical products.*"[12] Indeed the Parties to the Biodiversity Convention have already acknowledged biodiversity may progress through a wide variety of ways, one of which is food production using traditional knowledge.[13]

In practice GIs have proved very important in the conservation of a number of species and ecosystems, including small ruminants in the Mediterranean states. Similarly rice cultivation in the Albufera lagoon from Spain sustains the conservation of diverse flora and fauna. This link was recognized at the "International Year of Rice", celebrated in 2004 by the United Nations. As has been noted, rice cultivation will protect the ecosystem of the lagoon if

---

[10] See, G.E. Evans and Michael Blakeney, *The Protection of Geographical Indications After Doha: Quo vadis?* (2006) 9 Journal of International Economic Law 579; Mariano Riccheri, Benjamin Görlach, Stephanie Schlegel, Helen Keefe, Anna Leipprand, *Impacts Of The IPR Rules On Sustainable Development*, Contract No. SCS8-CT-2004-503613, Workpackage 3 *Assessing the Applicability of Geographical Indications as a Means to Improve Environmental Quality in Affected Ecosystems and the Competitiveness of Agricultural Products*, Final Report, 53 – 55, http://www.ecologic.eu/download/projekte/1800-1849/1802/wp3_final_report.pdf (accessed at 26.11.2014)

[11] See Armelle Caron, Valérie Boisvert, Christophe Berthelot, Philippe Chambon, Alain Gueringer and Valérie Angeon, *Biodiversity Conservation as a New Rationale for Localized and Sustainable Agro-Food Systems. The Case of Two French PDO Mountain Cheeses*, 9th European IFSA Symposium, 4-7 July 2010, Vienna (Austria), 1638, http://ifsa.boku.ac.at/cms/fileadmin/Proceeding2010/2010_WS4.1_Caron.pdf (accessed at 4.01.2015)

[12] http://www.wageningenur.nl/en/article/Breeding-programs-for-rare-local-breeds-to-conserve-and-use-their-unique-traits.htm (accessed at 3.01.2015)

[13] „Biodiversity: The Foundation for Sustainable Development" in *CBD – Get Ready For 2015*, February 2014, http://www.cbd.int/development/doc/sdg-feb2014-info-en.pdf (accessed at 4.01.2015)

carried out with traditional methods.[14] In turn, the PDO Arroz de Valencia may enhance the use of traditional methods, which will reflect positively on environmental conservation of the lagoon. Although, in practice the influence of the PDO is limited, because only 11% of the rice produced in the area is labelled as such, other research has also pointed to the benefit of GIs in that they do not endanger local breeds, due to their final low crop yield.[15] A similar finding was made with regard to the conservation of plant genetic resources from rural communities in Italy and Portugal.[16]

In contrast, specialists[17] from some European universities argue that the effects of GIs regarding the issue of environmental protection vary in accordance with different classes of products. Some GIs have a positive influence on the conservation of the natural elements of the environment, while others wield a negative effect on soil, water and biodiversity due to the use of fertilizers and chemical substances destined for the protection of plants.[18] Despite this there is support for the use of PDOs from the public. In part, this may be explained by a study of two French PDO mountain cheeses, Salers and Saint-Nectaires, which pointed out that while legislation does not yet embody the link between environmental protection, biodiversity and the PDO French system, they were connected in public debates referring to the new French agricultural law from 2006. In addition, consumers requested a combination between the PDO system and organic farming labels. In the authors' opinion, the results of this study may be used as a prompt to amend the law.[19]

---

[14] See further, Mariano Riccheri, Report for Case Study "Arroz de Valencia", Universidad de Alicante, 12 – 35, http://www.ecologic.de/download/projekte/1800-1849/1802/arroz_de_valencia.pdf (accessed at 7.01.2014)

[15] See further, M. Zjalic, A. Rosati, A. Dimitriadou and E. Murelli, *Geographic Indication of Animal Products and Farm Animal Biodiversity: Case of Twelve Northern and Five Mediterranean Member States of the European Union*, in I. Casasús, J. Rogošiç, A. Rosati, I.Štokoviç, D. Gabina, Editors *Animal Farming and Environmental Interactions in the Mediterranean Region*, (Wageningen Academic Publishers 2012) 145 – 157.

[16] See, European Cooperative Programme for Plant Genetic Resources, *Report of a Task Force on On-farm Conservation and Management*, Third Meeting, 2-3 October 2007, Ljubljana, Slovenia, 4 - 5, http://www.ecpgr.cgiar.org/resources/publications/publication/report-of-a-task-force-on-on-farm-conservation-and-management-2009/ (accessed at 6.01.2015)

[17] Riccheri et al n. 14.

[18] For example, geographical indications for potatoes and pickled cucumbers are associated with negative effects.

[19] See further, Caron, et al n.15.

Conclusions and Recommendations

The ecological effects of GIs seem largely to arise as a result of voluntary work. One may say that GIs play a Lilliputian role within the generous area of environmental policies, but their importance in trade and on consumer preferences should not be overlooked. The combination of their impact on trade and on the environment may be best embodied through the creation of a new form: GIs with ecological effects. The examples discussed above provide support for this idea. If, however, this concept is to work, local communities should be familiarized with the concept of GIs and its potential impact upon environmental protection.

COUNTRY REPORT: ARMENIA

New EIA and SEA Legislation: Does It Bring Effective Solutions?

Aida Iskoyan,* Heghine Hakhverdyan** and Laura Petrossiantz***

This Country Report focuses on the new EIA legislation, namely *the Law of RA* «On environmental impact assessment and expertise» *(hereinafter EIA Law or law)* enacted in Armenia in August 2014 replacing the Law of RA «On Environmental Impact Expertise» (1998). It brings forward several novel legal processes into national environmental legislation and is thus worth scrutinizing. Bearing in mind the wide scope and interlinkages of EIA legislation, this report does not aim to cover all aspects, but is limited to consideration of the main features in the context of the principles of environmental law and the international obligations of Armenia.

The process of drafting has been more than transparent, with wide involvement of the public. In order to prepare the law, a draft working group had been established with its membership made up of representatives of different executive bodies, environmental NGOs, university specialists and individual experts. Afterwards, the law has been subject to several public hearings, initiated both by the Government and by the environmental NGO community.

Background for Elaboration of New EIA Law

The elaboration of new EIA legislation had already been underway for 10 years, and several drafts had been introduced during this period. The main driver for these attempts was the goal of approximation with EU legislation on EIA, and a need to meet the public participation requirements of *the UNECE Convention «On access to information, public participation in decision-making and access to justice in environmental matters», UNECE Convention "On*

* Professor, Faculty of Law, Yerevan State University (YSU); Head of Environmental Law Research Centre (ELRC) of YSU; National Coordinator to the Aarhus Convention in Armenia. Email: aidaisk@arminco.com.

** PhD Student; Lecturer, Faculty of Law, YSU; Research Fellow at ELRC; Member of Compliance Committee to the Aarhus Convention. Email: h.hakhverdyan@ysu.am.

*** PhD Student; Junior Researcher at ELRC. Email: laurapetrossiantz@gmail.com.

Environmental Impact Assessment in Transboundary Context" and its Protocol "On Strategic Environmental Assessment". However, no one of the previous drafts had been successful.

Among other factors, preparation of the draft of the current law was launched mainly in response to *the Decision IV/9a «On Compliance by Armenia with its obligations under the Convention»* of the Meeting of the Parties of the Aarhus Convention[1] (hereinafter Decision IV/9a). Decision IV/9a identifies a range of shortcomings with regard to public participation procedure under the previous law, and draws up corresponding recommendations to improve the national legal framework. These recommendations amount to the following:

- setting out in a clear manner the thresholds of activities subject to an EIA procedure, including public participation;
- ensuring early public notification in the decision-making procedure, when all options are open;
- setting out reasonable time frames for the public to consult and comment on project-related documentation;
- defining in a clear manner the responsibilities of different actors (public authorities, local authorities, developers) in the organization of public participation procedure; and
- designing a system of prompt notification to the public concerned of the final conclusion of environmental expertise[2] through the website of the Ministry of Nature Protection of RA.

[1] ECE/MP.PP/2011/L.12.

[2] The development control systems in most former Soviet countries (including in Armenia) are largely based on an *environmental impact assessment/expertise mechanism* with environmental impact assessment preceding the State environmental expertise. Environmental impact assessment, however, should not be understood as an environmental impact assessment as it is used in EU legislation. The environmental impact assessment and expertise stages are closely interlinked and together constitute the system of environmental decision-making. The *expertise* is to review the statement of environmental impact assessment by the competent public authority and issue a positive or negative conclusion which has a permitting nature.

Conceptual Basis of the Law

Both the normative theory of law-making[3] and existing national legislation welcome the approach according to which elaboration of core legal acts should be preceded by the adoption of a conceptual document, crystallizing the main directions of future legal regulation. However, rather strict time frames for adoption of the law rendered this stage impossible, thus adding difficulties and reducing the efficiency of the drafting procedure.

Though a formal concept document was lacking, the main ambition of the Law was to address the recommendations of the Decision V/9a, and also establish new regulations in order to simplify the EIA procedure both in terms of the procedural content and time frames, which are covered below.

Design of State Environmental Expertise

The new *Law of the Republic of Armenia «On Environmental Impact Assessment and Expertise»* envisages two stages for the state environmental expertise, which replaces the unified regime under the previous law. The state environmental expertise consists of the initial (preliminary) stage and the main stage.

The initial stage is designed to assess the completeness of the initial assessment application, of the main characteristics of the strategic document, and the possible impact framework of planned activities, to identify the circle of participants during the process, and to elaborate the technical requirements for the EIA report to be submitted for the main stage, as and if necessary.

After examining the application at the initial stage, the public authority makes one of the following decisions:

1. Declare the strategic document or planned activity inadmissible based on their incompatibility with the requirements of the environmental legislation of RA.
2. Return the application to the developer to correct information, if needed, or to provide a complete package of documentation.

[3] Plott C (1967) 'A notion of equilibrium and its possibility under majority rule'. American Economic Review 95: 673-693.

3. Complete the initial stage and proceeding to the main stage of EIA for the proposed activity or to the development of a strategic document.
4. Issue a positive EIA conclusion for activities under category C.

The main stage of the assessment starts when the initiator submits the main EIA report, prepared in accordance with technical requirements provided by the Ministry of Nature Protection, and based on the characteristics of the proposed activity or strategic document. The main stage of EIA shall not exceed 60 working days for strategic documents and proposed activities under category A, and 40 working days for planned activities under category B. Such differentiation allows for flexibility, while the previous law established maximum duration of 180 days for all types of activities and strategic documents.

Thresholds for Activities Subject to EIA

In terms of public participation, the ambit of the Aarhus Convention is not limited, and goes beyond the EIA procedure. The idea is that Annex I of *the Aarhus Convention* provides minimum requirements and thresholds for a range of activities for which the Parties need to provide public participation procedures. At the same time, the Convention welcomes Parties' initiative to establish wider possibilities for public participation. Projecting this general framework onto Armenian legal practice, a negative trend is visible, since the new law has narrowed down the list of activities subject to EIA. And since full-scale public participation under national legislation is provided only within the EIA procedure, the current regulation appears to be inconsistent with the Annex I of the Aarhus Convention.

Compared with the previous legal regime, the new law brought forward a completely different approach, classifying the activities into 3 categories (A, B, C) based on descending scale and impact on the environment (thresholds are set out). This classification will enable differentiation of the time frames of the EIA procedure, and introduces rather basic requirements for activities with lower impact.

Design of SEA System

Traditionally, the legal framework for strategic environmental assessment is regulated within the same law as the EIA. This approach is followed also for the new law, since several legal regimes are shared by both. Furthermore, this time the law gives clear-cut definitions of several key concepts, such as *conceptual document, plan, program* and *policy.*

Without any prejudice to this model *per se* - bringing the two close institutions under the same umbrella - it should be mentioned that such an approach would require differentiated regulation taking into consideration the peculiarities of the subjects of EIA and SEA, i.e. type of activity and strategic document accordingly.

Disregarding the actual differences of EIA and SEA created a situation where a range of questions may arise:

- Since there is not a list of strategic documents (sectoral and intersectoral classification) in the law subject to SEA, identification as to whether the document should undergo SEA becomes problematic, especially when it relates not to the environment directly, but involves certain environmental aspects.
- Unlike the activities subject to EIA which have certain geography of impact, and hence the public concerned can be identified, documents subject to SEA generally cover issues touching the interests of the wider population, where geographical criteria do not have a decisive role. Therefore, additional rules are required to fix such an uncertainty.
- Given the scope, volume and content of strategic documents, time-frames for public participation procedures (7 working days) may not seem reasonable. Therefore, some kind of differentiation should have been applied.

Public Participation Procedure

Compared with the previous law, which fully incorporated the public participation procedure, the new one follows another approach, creating a dualism in that the main provisions are set out in the law, and detailed regulation is to be established on the sub-law level. Though the law is already enacted, the Governmental decree on public participation regulation is not yet approved, which means that currently the public participation procedure is legally incomplete.

As far as the new design of the public participation procedure, derived from the recommendations of Decision IV/9a, this report will focus on those elements which have consequences for the recommendations above.

As for the requirement of early public notification, the problem is solved, since the law ensures involvement of the public at an early stage, when the developer submits the application to the Ministry of Nature Protection of RA. The time frame for public notification is

at least 7 working days, which meets the Aarhus requirements. However, the time-frame between public notice and public hearings (which is again minimum 7 working days) might not be feasible, since no distinction is made based on the scale and scope of the proposed activities. Moreover, in some circumstances 7 working days may be too short for getting acquainted with voluminous documentation and preparing well-reasoned feedback.

The recommendation regarding distribution of responsibilities among different actors in the public participation procedure is essential, as it may have a direct bearing on the quality and impact of the public participation. Allocating certain responsibilities to the public authority, local authority and the developer, the new law does not identify a particular actor, but mentions them collectively where again it is unclear who is responsible for what. For example, the public authority and the local authority should ensure notification of the public, however, concrete elements of the notification process are not attributed to either, which limits accountability and the possibility of liability for a failure to notify properly.

In order to ensure that the final EIA decision is publicly available, the law establishes a clear requirement to publish it on the official website of the Ministry of Nature Protection of RA within 7 days after the decision is taken.

Conclusion

Analyzing the approaches applied within the new legal regime, it is clear that it is a step forward when compared with the previous law, at least in terms of a newer, more progressive ideology. However, some reservation is warranted. Certain elements of the legal regulation are incomplete, and require further elaboration. It is apparent that after only 2 months of application, several changes have already been introduced to the Law with regard to the design of EIA stages. Concerning the SEA system within the Law, results of expert evaluation initiated by the Secretariat of *the UNECE Convention «On Environmental Impact Assessment in Transboundary Context»* have demonstrated inconsistency of the SEA institution with the main conditions of the Kiev Protocol “On Strategical Environmental Assessment”, pointing out flawed regulation, without due evaluation of the SEA purpose and its subject.

COUNTRY REPORT: AUSTRALIA

Sophie Riley*

In 2014, Australia's environmental regulation was largely characterised by a steady winding back and weakening of environmental safeguards, particularly with respect to climate change. The changes in this area are occurring rapidly and this report is correct up to the date of writing which was early November 2014. The Federal government has also weakened (or attempted to weaken) environmental regulation in protected areas such as the World Heritage-listed Tasmanian Wilderness region and the nationally-listed Victorian Alpine National Park. On a more positive note, Australia was successful in the International Court of Justice (ICJ), with respect to its challenge against Japan's scientific whaling program in the Southern Ocean. The first part of this report sets out a summary of the ICJ decision, followed by a description of recent developments in the areas of climate change regulation, biodiversity protection and activities of the EDO (Environmental Defenders Office). The second part of this report contains a critique of these developments; and the report concludes with a memoriam to Glen Turner, a compliance officer with the NSW Office of the Environment, who was killed in the line of duty on 29 July 2014.

PART 1 – RECENT DEVELOPMENTS IN POLICY, STATUTE AND CASE LAW

1.1 Whaling in the Antarctic (Australia *v.* Japan: New Zealand intervening)

In May 2010, Australia commenced proceedings in the ICJ arguing that Japan's scientific whaling program (JARPA) breached Article VIII of the International Convention for the Regulation of Whaling (ICRW).[1] The ICJ handed down its decision on 31 March 2014,[2] and by a majority of 12 to 4 held that Japan had in fact violated Article VIII and should cease

---

*Dr Sophie Riley, Senior Lecturer, University of Technology Sydney. The author is a member of the National Environmental Law Association (NELA) and gratefully acknowledges the use of their monthly newsletters to provide guidance for this report, in addition to material sourced from the EDO. The websites of the two organisations are: http://www.nela.org.au/ and http://www.edo.org.au/

[1] Whaling in the Antarctic (Australia *v.* Japan: New Zealand intervening). Case available from http://www.icj-cij.org/docket/index.php?p1=3&p2=1&case=148&code=aj&p3=1

[2] Whaling in the Antarctic (Australia *v.* Japan: New Zealand intervening). Judgment available from http://www.icj-cij.org/docket/files/148/18136.pdf

implementing JARPA II immediately. The prohibition on whaling also extended to the revocation of existing licenses and permits that may have been issued by Japan.[3] The Court, however, refused Australia's application that the ICJ should restrain Japan from issuing licenses and permits in contravention of Article VIII, pointing out that the obligation to

> *…refrain from authorizing or implementing any special permit whaling which is not for purposes of scientific research within the meaning of Article VIII… already applies to all States parties. It is to be expected that Japan will take account of the reasoning and conclusions contained in this Judgment as it evaluates the possibility of granting any future permits under Article VIII, paragraph 1, of the Convention.*[4]

Although Japan is currently complying with the ICJ findings, it has already indicated that it intends to modify its scientific whaling program to conform to Article VIII. Accordingly, whaling in the Southern Ocean is still on the agenda.

1.2 Energy Matters: Carbon Tax and Renewable Energy

The Abbott government has wasted no time in making good on its pledge to repeal the carbon tax and other provisions introduced in the Clean Energy Legislation package enacted by the Gillard government in 2011. However, the passage of the government's legislation has proved to be contentious, as it does not control the Senate, which is the Upper House in the Australian Parliament. Accordingly, the government has had to negotiate with the minority parties. For example, although legislation to repeal the carbon tax, the *Clean Energy Legislation (Carbon Tax Repeal) Act*, was introduced into Federal Parliament in December 2013, it was only passed by Parliament on 17 July 2014 after extensive government lobbying and compromise. Australia now has the dubious distinction of being the only country to have introduced a carbon tax and then repeal it. In line with government policy, the repeal was backdated to 1 July 2014.

Another tranche of legislation that has stumbled in the Senate includes *the Climate Change Authority (Abolition) Bill 2013.* That Bill aims at removing the carbon pricing mechanism that is no longer needed since the abolition of the carbon tax; however, it also includes the repeal of parts of other legislation such as *the National Greenhouse and Energy Reporting Act*

---

[3] Ibid, paras 244-5.

[4] Ibid, para 246.

2007 and *the Renewable Energy (Electricity) Act 2000*.[5] Although *the Climate Change Authority (Abolition) Bill 2013* easily passed the lower house, where the government has a clear majority, it has stalled in the Senate, where it was rejected on the 3rd March 2014. As at the date of this report, the government has not sought to reintroduce the Bill.

The government is also pursuing further policy objectives by re-configuring the renewable energy target (RET) and initiating the Direct Action Plan. The RET is a target designed to encourage the use of renewable energy and is administered by the Clean Energy Regulator. The RET had been set so that Australia would have produced a minimum of 20% of its energy from renewable sources by 2020. The government announced a review of the RET on 17 February 2014 and the RET Review Report was released on 28 August 2014.[6] The report primarily concluded that the costs of implementing the RET outweigh its benefits, although it did not recommend that the RET be abolished. Stakeholders fear that one option available to the government will not only close off the RET scheme to new wind and solar farms, but will also jeopardize incentives for households to adopt renewable energy sources such as solar panels. The Clean Energy Council, a peak industry body representing the renewable energy sector, is critical of the report pointing out that if implemented, the recommendations will have severe and negative impacts for the uptake of renewable energy.

As a precursor to implementing its Direct Action Plan (DAP), the government released an "Emissions Reduction Fund Green Paper" on 20 December 2013.[7] According to the government, the DAP will protect the environment, create jobs and maintain Australia's international competitiveness. As already noted in Australia's Country Report in the 2013 edition of this eJournal, proposals for the DAP have drawn criticism from economists and academics who argue that the Plan will not be as effective as an emissions trading scheme.[8]

---

[5] Climate Change Authority (Abolition) Bill 2013 http://www.aph.gov.au/Parliamentary_Business/Bills_Legislation/Bills_Search_Results/Result?bId=r5136

[6] RET Review Report, https://retreview.dpmc.gov.au/ret-review-report-0

[7] Australian Government, Department of the Environment, "Emissions Reduction Fund Green Paper" (2013). Available from http://www.environment.gov.au/climate-change/emissions-reduction-fund/green-paper

[8] See for example, report in the Sydney Morning Herald, by Matt Wade, Gareth Hutchens, ' Tony Abbott's New Direct Action Sceptics' 28 October 2013, available from http://www.smh.com.au/federal-politics/political-news/tony-abbotts-new-direct-action-sceptics-20131027-2w9va.html#ixzz2jGBpuh1f ;

In order to establish the DAP the government needs to create an Emissions Reduction Fund from which it will pay polluters to reduce their carbon emissions through specific projects. The enabling legislation had been delayed in the Senate; however, following intensive negotiations on 28-30 October 2014 the government announced that an arrangement had been concluded with the minority parties. It is a matter of some irony, that part of the compromise includes a review of emission trading schemes operating in other countries and the possibility of establishing a modified scheme in Australia.

1.3 Biodiversity Protection

In similarity with the winding back of the carbon tax and emissions trading scheme, the Federal Government has also attempted to wind back protection in the World Heritage Listed Tasmanian Wilderness area, and has already wound back protection in the Victorian Alpine National Park. The events in Tasmania are mirrored by the Tasmanian State Government's repeal of the *Tasmanian Forests Agreement Act 2013*. More positive developments include the appointment of a Federal Threatened Species Commissioner and the Victorian State Government updating its regulation with respect to invasive species.

1.3.1 The Tasmanian Wilderness

The Abbott government has a policy platform of de-listing some 74,000 hectares of the Tasmanian wilderness from the World Heritage Register on the grounds that the land in question is "degraded". The government has already made application to the World Heritage Committee to de-list these areas and set up a Senate Committee to evaluate the matter. The report of the Senate, which was released on 15 May 2014, concluded that:

> *…the argument that 'degraded' areas, such as previously logged forest and plantations, should be removed from the extended Tasmanian Wilderness World Heritage Area because they detract from the integrity of the property is without merit. Further, the committee considers that the Government, by not providing adequate detail to the World Heritage Committee as to how much of the 74,000 hectares actually fits this description, undermines its own arguments for the delisting.*[9]

Stephen McGrail, 'Climate Action Under an Abbott Government', 10 May 2013, available from http://researchbank.swinburne.edu.au/vital/access/manager/Repository/swin:32811

[9] Environment and Communications References Committee, *Tasmanian Wilderness World Heritage Area,* Commonwealth of Australia, (2014) parag 4.3. http://www.aph.gov.au/Parliamentary_Business/Committees/Senate/Environment_and_Communicatio

The Government did not accept this decision; it did, however, agree to undertake community engagement with Tasmania's Indigenous community concerning the impact of government policies on Indigenous cultural heritage values.[10] It is also telling that the proposed de-listing has been disallowed by the World Heritage Committee and has been criticised by the International Union for the Conservation of Nature (IUCN), which was providing advice to the World Heritage Committee.[11] Notwithstanding the recommendation of the Senate Committee and the decision of the World Heritage Committee the government has announced it intends to pursue its objectives through other channels.

The approach of the Federal Government is consistent with the current Tasmanian Government's push to open up the Tasmanian Forests to logging. Some three years ago, on 7 August 2011 the Gillard government and the former Tasmanian government entered into the Tasmanian Forests Intergovernmental Agreement. That Agreement provided approximately $AU276 million to allow the Tasmanian forest industry to convert to a "more sustainable and diversified footing" while protecting old growth forests and identifying additional areas that could be placed into an informal conservation reserve. The Agreement was eventually made operational by *the Tasmanian Forests Agreement Act 2013*. However, the new State Government is on the record as wanting to "tear up" *the Tasmanian Forests Intergovernmental Agreement*.[12] Accordingly, on 25 September 2014, that government repealed *the Tasmanian Forests Agreement Act 2013* and replaced it with *the Forestry (Rebuilding the Forest Industry) Act 2014*, which opens up the Tasmanian forests to logging.

---

ns/Tasmanian_Wilderness_World_Heritage_Area/Report/~/media/Committees/Senate/committee/ec_ctte/tasmanian_wilderness/report/report.pdf

[10]Commonwealth of Australia, *Australian Government Response to the Senate Environment and Communications References Committee Report: Tasmanian Wilderness World Heritage Area*, October 2014.

[11] World Heritage Committee, IUCN Evaluations of Nominations of Natural and Mixed Properties to the World Heritage List, WHC-14/38.COM/INF.8B2.ADD , IUCN Report for the World Heritage Committee, 38th Session Doha, Qatar, 15 - 25 June 2014 (page 33). Available http://whc.unesco.org/archive/2014/whc14-38com-inf8B2-Add-en.pdf

[12] Stephen Smiley, *Tasmanian Liberals Unveil Details of Legislation to Repeal Forest Peace Deal*, 8 May 2014, http://www.abc.net.au/news/2014-05-08/tasmanian-liberals-unveil-details-of-legislation-to-repeal-fore/5440554

1.3.2 Threatened Species Commissioner

On 2 July 2014 the Federal Government appointed its first Threatened Species Commissioner. [13] A Department of the Environment media release notes that the appointment is intended to halt the tide of extinctions and bring national focus to conservation efforts:

> *The Threatened Species Commissioner will work with the community to increase awareness of threatened species and bring together the partners and resources necessary to implement priority practical actions needed to protect our species. One of his roles as Threatened Species Commissioner will also be to contribute to the streamlining and reform of Australia's statutory recovery processes.[14]*

The new commissioner is especially interested in minimising the impacts of invasive species, and the development of a new feral cat bait that is regarded as effective and humane.

1.4.3 Invasive and Non-native Species

In a success story, the Tasmanian Parks and Wildlife Service announced that it had successfully eradicated pests such as rabbits, mice and rats from Macquarie Island.[15] The total eradication of invasive species from any area, even a contained one such as an island, is a challenging undertaking. The project was jointly funded between the Tasmanian and Federal governments to the tune of $AU24.6 million, representing a substantial investment in the eradication project.

On a less positive note, the Federal Environment Minister, Greg Hunt has approved a trial of cattle grazing in the Victorian Alpine National Park, notwithstanding the Park's classification on the National Heritage Register. Cattle grazing had been banned since 2005 and the issue has been simmering since. Mr Hunt has indicated that the trial "will compare the effectiveness and impacts of livestock grazing regimes"; however, the move has been

---

[13] Australian Government, Department of the Environment, Fact Sheet, Commissioner's Role http://www.environment.gov.au/biodiversity/threatened/commissioner/role

[14] Media Release on appointment of Threatened Species Commissioner http://www.environment.gov.au/minister/hunt/2014/mr20140702.html

[15]Macquarie Island Pest Eradication Project http://www.parks.tas.gov.au/indeX.aspX?base=12997 .

criticized as a futile exercise that will only cause damage to the park.[16] Greens Senator, Richard Di Natale, introduced a private member's bill into the Senate (*Environment Protection and Biodiversity Conservation Amendment (Alpine Grazing) Bill 2014*)), to ban the cattle grazing. The Bill is likely to be defeated in the lower house, but is a strong symbolic gesture.

On 20 August 2014, the Victorian Government introduced *the Invasive Species Control Bill.*[17] The Bill was developed under the auspices of the Department of Environment and Primary Industries and is designed to update and replace noxious weeds and pest animal provisions in legislation such as *the Catchment and Land Protection Act 1994* and *the Conservation Forests and Lands Act.* The new legislation is also designed to enhance Victoria's biosecurity regulation in accordance with *the Intergovernmental Agreement: National Environment Biosecurity Response Agreement (NEBRA)*.[18]

1.4 EDO

Previous Country Reports for Australia discussed the work of the EDO (Environmental Defenders Offices) and the challenges they face following withdrawal of funding by various State governments. On 21 May 2014, the Victorian branch of the EDO was re-branded as Environmental Justice Australia. The EDO is involved with cutting-edge environmental litigation and the following are two examples:

- The NISW EDO has successfully defended an appeal in *Warkworth Mining Limited v Bulga Milbrodale Progress Association* [2014] NSWCA 105. In the original decision in *Bulga Milbrodale Progress Association Inc v Minister for Planning and Infrastructure and Warkworth Mining Limited* [2013] NSWLEC 48 the NSW Land and Environment Court held that an application by Warkworth Mining Ltd to expand its mining operations should be refused because impacts relating to "biological diversity, noise

[16] James Bennett, 'Cattle grazing trial set to be approved for the Alpine National Park' ABC News, 6 March 2014 available from http://www.abc.net.au/news/2014-03-06/cattle-grazing-trial-set-to-be-approved-for-the-alpine-national/5302258.

[17] Invasive Species Control Bill: http://www.legislation.vic.gov.au/domino/Web_Notes/LDMS/PubPDocs.nsf/ee665e366dcb6cb0ca256da400837f6b/98644BB588B23D75CA257D3A007B3B49/$FILE/571332bi1.pdf

[18] *National Environment Biosecurity Response Agreement (NEBRA)* https://www.coag.gov.au/node/74

and dust, and social impacts" had not been adequately addressed.[19] On Appeal, the Court was unanimous in confirming the reasoning of the NSW Land and Environment Court and dismissing the application of Warkworth.

- The Victorian branch of the EDO, Environmental Justice Australia, has commenced litigation against the Commonwealth Bank in a test case to determine the extent of shareholders' power at the annual general meeting (AGM). Environmental Justice Australia is arguing that under the *Corporations Act 2001* shareholders have the right to request a resolution be added to the agenda for the AGM that compels the board of directors to report "on the amount of climate change causing carbon pollution it finances."[20] Under section 198A of the *Corporations Act 2001*, directors are traditionally given wide powers of management. The courts have interpreted this type of provision as constituting a primary grant of power in favour of the board of directors, and one which generally cannot be usurped by the general meeting.[21] As expected, the Commonwealth Bank is defending the action. The case is still in progress, but as Environmental Justice Australia notes, the case potentially creates an important precedent for clarifying shareholder rights in a range of environmental issues.

PART 2 – A CRITICAL CONSIDERATION OF RECENT DOMESTIC DEVELOPMENTS

Environmental regulation at the Federal level has been characterised by a regrettable tendency to wind the clock back that is frequently underpinned by deal-brokering and policy made on the run. This is strikingly illustrated by the winding back of the Clean Energy Legislation package. Not only has the government had to negotiate with the minority parties, but it was also was forced to re-visit the possibility of establishing an emissions trading scheme. Coupled with the changes to the RET, these types of compromises are likely to cause confusion and uncertainty in the renewable energy sector, something that does not bode well for Australia's being able to meet its international climate change obligations.

---

[19] *Bulga Milbrodale Progress Association Inc v Minister for Planning and Infrastructure and Warkworth Mining Limited* [2013] NSWLEC 48, paragraph 14 Available from: http://www.caselaw.nsw.gov.au/action/PJUDG?jgmtid=164038

[20] For more information see fact sheet, '*We're Taking the Commonwealth Bank to Court'* available from http://www.envirojustice.org.au/blog/we%E2%80%99re-taking-the-commonwealth-bank-to-court

[21] *Automatic Self-Cleansing Filter Syndicate Co v Cuninghame* [1906] 2 Ch 34; *John Shaw & Sons (Salford) Ltd v Shaw* [1935] 2KB 113.

Another prominent illustration derives from the decision to permit cattle grazing in the Victorian Alpine National Park. As already noted, the ban on cattle grazing dates back to 2005. At that time, the Victorian government released a report on the impacts of cattle grazing, titled: *Report of the Investigation into the Future of Cattle Grazing in the Alpine National Park* (Alpine Report).[22] The Alpine Report found that cattle were damaging the park's biodiversity[23] and concluded that "cattle grazing is inconsistent with the primary objects …of national parks and wilderness areas [and is also] not compatible with the national and International standards for a national park".[24] The cattle were thus banned from the national park. Consequent to this, on 7 November 2008, the Victorian alpine region was added to the Australian National Heritage List as part of the Australian Alps National Parks and Reserves. The decision to re-allow cattle grazing not only opens the park to the environmental damage as identified in the 2005 Report, but also goes against the spirit of listing the park on the National Register.

Finally the activities of the Government in seeking to de-list some 74,000 hectares from the World Heritage Listed, Tasmanian Wilderness have drawn widespread condemnation and opprobrium. This is yet another regrettable example that reveals a deep-seated desire to favour development over conservation and that also displays a short-sighted approach to environmental matters. Australia is in danger of damaging its reputation as the Abbott government pursues economic objectives at the expense of Australia's hard-fought environmental protection.

IN MEMORIAM

On 29 July 2014, Mr Glendon Turner, a compliance officer with the NSW Office of Environment and Heritage, was shot dead by a land owner. The land owner and Mr Turner (in his capacity as a compliance officer) had been involved in a long-running dispute with respect to illegal land clearing. A newspaper report states that Mr Turner "has been remembered as a passionate advocate for the farming community who loved to help other

---

[22] Department of Sustainability and Environment, *Report of the Investigation into the Future of Cattle Grazing in the Alpine National Park*, Victorian Government (2005). <http://www.environment.gov.au/epbc/notices/assessments/victoria-alpine-national-park/pubs/b6-alpine-grazing-taskforce-2005.pdf >.

[23] Ibid, 5.

[24] Ibid at 6.

people out."[25] The implementation of the *Native Vegetation Act 2003* (NSW) has been contentious, with conservationists and land managers frequently at odds with each other. Partly as a result of this friction, the NSW Government introduced the *Native Vegetation Regulation 2013* to reduce red tape and provide land managers with more flexibility to rotate crops, manage invasive species and use self-assessable codes. These regulations would not have applied to the land clearing in question, as these pre-dated the amendments and would in any case have exceeded the scope of the self-assessable codes.

[25] Lucy Carter and Tim Lamacraft, 'Environment Officer Glen Turner, Shot Dead Near Moree, 'Loved the Farming Community'', ABC News, 31 July 2014, available from http://www.abc.net.au/news/2014-07-31/tributes-for-slain-nsw-environment-officer-glen-turner/5637656

COUNTRY REPORT: BAHAMAS
The Problem of Unpermitted Development and Fragmented Environmental Laws

Lisa Benjamin*
with assistance from
Theominique Nottage** and Renee Farquharson***

Introduction

This report is a brief overview of two cases which appeared before the courts in The Bahamas concerning improperly permitted developments. The first case involved a captive marine mammal facility on Blackbeard's Cay, and the second case involved the dredging of almost 1,000,000 cubic feet of seabed, including the destruction of coral reefs and other marine resources, in Bimini and the building of a 1,000 foot dock, to accommodate a fast cruise ferry from Miami. Both cases demonstrated a misunderstanding of the requirements of national statutes by government departments and, in the second case, the courts. In a small jurisdiction it is unusual to have such a busy year of environmental litigation. The second case, involving Bimini Bay, garnered both national and international attention. Jurisprudence in the Bimini Bay case relied heavily on the Belizian BACONGO case, covered in the IUCN eJournal's 2014 national report of The Bahamas,[1] further illustrating the regional importance of the majority decision in that case. Very little attention was paid to lack of public consultation in both cases, further highlighting the need for comprehensive

* Assistant Professor, The College of The Bahamas

** Second year Eugene Dupuch Law School student, and member of the environmental law clinic (a collaboration between the Eugene Dupuch Law School and the College of The Bahamas LL.B. programme)

*** First year Eugene Dupuch Law School student, and member of the environmental law clinic (a collaboration between the Eugene Dupuch Law School and the College of The Bahamas LL.B. programme)

[1] 'Country Report: The Bahamas, Access to environmental information, EIAs and Public Participation in Development Decisions' by Lisa Benjamin, IUCN eJournal 2014(5), http://iucnael.org/en/component/docman/doc_download/1137-iucn-academy-of-envionmental-law-ejournal-issue-5-2014.html

legislation requiring EIAs, public consultation, a freedom of information act, and a statutorily incorporated environmental protection agency to enforce environmental legislation.

Captive Marine Mammals on Blackbeard's Cay

In July 2014 the Bahamian environmental NGO, reEarth, brought an action against Blue Illusions Ltd and certain government officials to quash the issuing of permits to house dolphins on Blackbeard's Cay.[2] The cay is situated close to New Providence, the most populated island in the archipelago. Blue Illusions constructed a destination facility for cruise passengers, including a captive marine mammal facility. The dolphins had been imported from Honduras under permits obtained under CITES in June 2013, and the facility began operations on 23 July 2013. reEarth claimed that the facility did not have the proper premises licence to operate *under the Marine Mammals Protection Act (MMPA)* (s6(1)(b)), nor did it have site approval under *the Planning and Subdivision Act (PSA)* (s14). reEarth claimed that the site did not provide sufficient depth to house dolphins, was too close to cruise operations risking exposure to the leakage of fuel and other oil into their enclosures, had no proper separation between pens risking infection and disease, and provided for neither sun protection nor adequate hurricane protocols.[3] The NGO obtained 64,631 signatures through a petition to close the facility; a significant number in a country of just over 350,000 people. Blue Illusions had plans to dredge the area to deepen the pens. This, however, would have caused damage to coral reefs and other marine resources in an area that The Bahamas National Trust was due to designate as a major marine protected area.[4]

Justice Isaacs reviewed the matter in the Supreme Court and determined that two necessary permits under two statutes were missing. He stated that although an import licence, and a licence to operate had been obtained under CITES and the MMPA, a premises licence had not been obtained under the MMPA by the date the facility opened in July 2013. Blue Illusions subsequently applied for a premises licence in January 2014, six months after the dolphins had arrived. Justice Isaacs reviewed *Regulation 4 of the Marine Mammal (Captive Facilities) Regulations* which prohibit a premises licence being issued under stipulated circumstances. These include where there exists odours, dust, or other air contamination,

---

[2] The Queen Minister of Agriculture and Marine Resources, Director of Fisheries and Marine Resources, Town Planning Committee, Minister responsible for Crown Lands, and Blue Illusions Ltd ex parte reEarth 2013/PUB/jrv/00034, 17th July 2014.

[3] Ibid paragraph 26.

[4] Ibid.

where no potable water or sewage system exists, or in a facility which is not well-drained or subject to flooding. He stated that in the circumstances it was reasonable to conclude that the premises would not have obtained a premises licence.[5]

Justice Isaacs also determined that Site Approval had not been obtained *under the Planning and Subdivision Act (PSA).* The developers had obtained Preliminary Site Approval under the Act with four conditions attached, but there was no evidence that the four conditions had been fulfilled, and no environmental impact statement or Site Approval had subsequently been issued. The developers only had a Building Permit, and under the PSA, a Site Approval is a precondition for a Building Permit to be issued. In addition, the lease granted for the operation of a facility on Blackbeard's Cay had been issued to Blackbeard's Cay Ltd, not Blue Illusions Ltd. The seabed lease was limited to the operation of a stingray facility, and could be terminated if any other use of the seabed was employed. Any sublease necessitated consent of the Prime Minister, as Minister for Crown Lands. No evidence of variation of the lease or consent of the Prime Minister was provided to the Supreme Court.

As a result Justice Isaacs quashed the approval of the facility. The case illustrates that the authorization of the project was inadequate, and the necessary approvals had not been issued by government officials under the PSA or MMPA. The facility was in fact operating without the requisite permits, and it is unlikely that this would ever have come to light unless the judicial review had been undertaken. The government planned to appeal, but no appeal records or documents were filed by the requisite date, and reEarth has filed to dismiss the appeal.

The Bimini Bay Judgments: 'Machiavellian' Decision Making by Developers or Excessive Legislative Fragmentation?

A coalition of residents in Bimini formed the Bimini Blue Coalition, and took action against government officials and a number of respondent companies, including Resorts World Bimini, to stop the dredging of almost 1,000,000 cubic feet of seabed, including the destruction of coral reefs and other marine resources, as well as the erection of a 1,000 foot dock and manmade island, to accommodate a fast cruise ferry from Miami. The development was intended to deepen the shipping channel into Bimini Bay to enable passengers to step directly from the cruise ship onto a dock, instead of ferrying them in

[5] Ibid.

small boats from the cruise ship to the island of Bimini. The dredging would take place in an area rich with coral reefs and marine biodiversity. As a result, the case garnered both national and international attention, eliciting a number of divers, scientists and fishermen to caution that the destruction of such a fragile eco-system could jeopardise diving and fishing industries, as well as important ecosystems in Bimini.[6]

The case took a tortured route through the courts, involving a number of decisions regarding violation of an undertaking, judicial review of the decision authorizing development, and security for costs. A number of the decisions question whether a permit is required for the development under *the 1997 Conservation and Protection of the Physical Landscape of The Bahamas Act (CPPL).*

On 23rd January 2014 a letter was provided by the Minister Responsible for Lands and Surveys granting approval to the developers to carry out dredging activities removing 220,000 cubic yards of seabed, in exchange for a permit fee of $110,000. On 24th January 2014 the Supreme Court heard the initial action requesting an injunction to stop the development due to the negative environmental effects set out in the EIA, lack of public consultation on the project, and to allow time for full judicial review of the project.[7] Justice Longley employed the balance of convenience test and refused the injunction, ordering security for costs in the amount of $650,000 Bahamian dollars.[8] The lack of public consultation barely figured in the judgment.

At the time of the Supreme Court decision the developers had all the necessary permits, except those for dredging, and so on 9th May 2014 the respondent companies gave an undertaking not to commence dredging on the site until all the necessary approvals and permits had been provided to the Bimini Blue Coalition. On 13th May 2014 the developer sent permits to the Coalition, and started dredging the next day on 14th May 2014, using a dredger curiously named the Nicolo Machiavelli.

---

[6] 'Questionable demand for Bimini ferry' The Nassau Guardian 25 October 2013 available at: http://www.thenassauguardian.com/index.php?option=com_content&view=article&id=42748&Itemid=2 , 'Islands in the Steam: the battle for the soul of Bimini' The Telegraph 6 July 2014 available at: http://www.telegraph.co.uk/news/worldnews/centralamericaandthecaribbean/bahamas/10947445/Islands-In-The-Stream-The-battle-for-the-soul-of-Bimini.html.

[7] Bimini Blue Coalition v Minister Responsible for Crown Lands et al, PUB/JRV/FP-3 2013, rough transcript dated 24th January 2014.

[8] This was subsequently reduced to $315,000 in Court of Appeal on 18th July 2014.

On 19th May 2014 the Coalition brought an action for breach of the undertaking of 9th May 2014 by the developers,[9] claiming that a permit under *the CPPL Act* had not been obtained. Justices Allen, Adderley and Conteh, in a majority decision, stated that no breach of the undertaking had taken place. Justices Allen and Adderley decided that a permit under *the CPPL Act* was not required for dredging, and therefore no breach of an undertaking had taken place. Both justices relied on the BACONGO decision, with Justice Adderley also relying on the good administration and deference to the affairs of the state argument employed by High Court Justice Bereaux in the Fishermen & Friends of the Sea judgment.[10] Justice Adderley acknowledged the irony of this argument, as it encourages developers to carry out unpermitted work quickly, so that the courts are reluctant to order the removal of an almost completed development. Justice Adderley suggested that to cure this defect, timely judicial review proceedings should be undertaken before a project begins.[11] However, without strict and enforced statutory requirements for access to environmental information, consultation, or a freedom of information act,[12] it is difficult for the public to obtain information about projects before they begin, and therefore extremely difficult to bring judicial review proceedings. Conteh provided a powerful dissenting opinion,[13] stating that a permit under *the CPPL Act* was indeed required, and the developers had acted in a Machiavellian way by dredging the very day after sending the permits to Bimini Blue, without affording any time for the Coalition to determine if the permits were in fact the appropriate ones. He stated that the developers have, 'presented not only the applicant, but this court and the proper administration of justice with an unacceptable *fait accompli*.'[14] He went on to state that by carrying out the dredging activities had used expediency to their advanctage, and therefore 'rendered nugatory'[15] the ongoing judicial review proceedings. As a result he would have granted the injunction. In a prescient statement at the end of his judgment, Conteh noted:

---

[9] Bimini Blue Coalition Limited v Minister Responsible for Crown Lands et al, SCCiv App Side No. 35 2014.

[10] Re: Fishermen and Friends of the Sea (2002) TT HC, upheld by Fishermen and Friends of the Sea v The Environmental Management Authority et al (2003) TT CA, but subsequently critiqued by Lord Walker in the Privy Council, Fishermen and Friends of the Sea v Environmental Management Authority and BP (205) TT PC 15.

[11] Bimini Blue Coalition, (n8), Justice Adderley, paragraph 44.

[12] See 'Country Report: The Bahamas, Access to environmental information, EIAs and Public Participation in Development Decisions' by Lisa Benjamin, IUCN eJournal 2014(5).

[13] Conteh was a judge in the High Court Belize BACONGO decision in [2005].

[14] Bimini Blue Coalition (n8) Justice Conteh, paragraph 80.

[15] Ibid paragraph 81.

> *'…it is not the role or function of the courts to decide or approve what projects are in the interest of the country. That is the function of elected officials. The court's proper role and duty, however, is to ensure that when there is a challenge to any project, however laudable and beneficial that project might be, that those projects are approved and executed in accordance with the laws of the country.'*[16]

The issue of breach of the undertaking was appealed to the Privy Council. In an emergency sitting on 22nd May 2014, the Privy Council heard arguments as to whether all of the required permits had been provided. It became clear to all parties on the 22nd May that the Privy Council was strongly favouring Conteh's minority opinion in the Court of Appeal: that a permit under the CPPL was in fact required for the dredging. A second day of hearing was allowed on 23rd May 2014, and on that day Bahamian government officials produced a permit under the CPPL from the Director of Physical Planning, dated 22nd May 2014, with no supporting evidence as to why it was produced. The Privy Council was rightly suspicious as to the reasons why a permit had been produced so quickly, and granted the injunction subject to any further decisions on the issue by national Supreme or Appellate courts. The Privy Council was concerned that the production of a permit overnight indicated an arbitrary use of government power, without the requisite considerations being given to the environmental effects of the development. The Privy Council was also aware that refusing the injunction could negatively impact the ongoing judicial review proceedings.

The issue was returned to the Supreme Court, and in an oral judgment on 30th May 2014, Justice Longley determined that the permit under the CPPL dated 22nd May 2014 was in fact a permit that the developers could rely on, and was prima facie a valid one. He relied heavily on an affidavit provided by the Director of Physical Planning.

Bimini Blue appealed Justice Longley's decision, claiming he had erred in law. On 5th June the Court of Appeal provided a preliminary judgment upholding, in another majority decision, Justice Longley's judgment. Conteh again provided a dissenting judgment. Fuller judgments from the Court of Appeal were provided on 11th June 2014.[17] Both Justices Allen and Adderley decided that the permit was produced overnight because it was clear that the Privy Council was leaning towards Justice Conteh's minority judgment on 19th May (that a permit

---

[16] Ibid paragraph 94.

[17] Bimini Bay Coalition v Minister Responsible for Crown Lands et al, SCCiv App No. 35 of 2014, 11th June 2014.

under the CPPL was in fact required). However, Justice Adderley's decision stated that it was not the developer's fault that they had not obtained the correct permit. In fact the developers had approached the Director of Physical Planning for a permit, and had been directed to the Department of Lands and Surveys instead. As a result, he decided that the CPPL was not in the contemplation of the developers when they provided their undertaking on 9th May 2014.[18] According to this logic, an error by the government in failing to provide a permit enables a developer to provide an undertaking and carry on development without the requisite approvals. This is what, in fact, occurred. The government had failed to provide the developers with the required permit under the CPPL, and the developers had therefore given an undertaking not to dredge unless the required permits were furnished. The required permits were not furnished, and the development was allowed to proceed, unimpeded by the courts, because a permit produced overnight was allowed to retroactively validate an unpermitted development.

Justice Conteh again provided a powerful dissenting judgment. He likened the permit to a rabbit produced out of a hat.[19] Justice Conteh decided that Longley had in fact erred in law as he had failed to consider the fundamental issue of whether the permit of 22nd May was in fact valid. He decided that it could not in fact be valid, as no application for the permit was ever produced, and the permit clearly contemplated 'proposed dredging', when it was issued after the dredging had already taken place.

The issue was again appealed to the Privy Council which provided their opinion on 24th June 2014. Lord Toulson decided that Justice Longley had not in fact erred in law, and, by relying on the affidavit of the Director of Physical Planning, was right to decide that the developers could in fact rely on the permit. Lord Toulson did not decide the issue of lack of public consultation, as he stated that this was an issue for judicial review proceedings. Judicial review proceedings never took place as the claimants were stymied by a security for costs order in the amount of $315,000.

Impact and Relevance of the Judgments

Both cases illustrate that developments have proceeded without the requisite permits, and that government approvals are often provided without any form of oversight by an overarching environmental agency whose mandate is to ensure that all permits are in order.

[18] Ibid Justice Adderley paragraph 10.

[19] Ibid Justice Conteh, paragraph 13.

While the development on Blackbeard's Cay was shut down as a result, the Bimini Bay project was allowed to proceed with little public consultation, and dredging proceeded in the absence of the required permit. A full judicial review of the Bimini Bay development decision never took place.

There are a number of issues that the Bimini Bay case raises about environmental justice concerns in The Bahamas. Firstly, security for costs of such a high amount effectively stymied a full judicial review claim, and prevented access to environmental justice. Secondly, a thorough hearing on lack of public consultation on a development with such high environmental impacts never took place, in part due to the security for costs judgment. Lack of enforced and thorough statutory provisions on EIAs, access to environmental information and public consultation, combined with the unsatisfactory Guana Cay decision on this issue, left the public very few protections in law to have their views taken into account. Thirdly, lack of a freedom of information act meant that the Coalition's time and resources were spent trying to determine, through the courts, whether a permit under the CPPL was ever provided for the development. A simple freedom of information request could have resolved the issue, and enabled a full judicial review of the decision making process to have taken place.[20] Fourthly, the judiciary continue to rely excessively on the good administration and deference to affairs of the state defence, encouraging developers to pursue unpermitted developments before the issue ever made it to trial. This defence is part of the legacy in the region of the Belize BACONGO decision. Unpermitted development is therefore rubber stamped by the courts.

Finally, in his dissenting judgment in June 2014, Justice Conteh summarized the entire debacle as being characterized by a fundamental misunderstanding of the CPPL. Neither government officials, nor the majority in the Court of Appeal, appreciated that the CPPL was in fact applicable to the development. It was only at the Privy Council level that the applicability of the Act was determined. This constitutes a serious failure to understand the applicability of environmental legislation at the national level, due to either neglect, or, perhaps, more likely, the negative impacts of excessive fragmentation of environmental legislation and government institutions involved in the permitting process. The jurisdiction clearly needs a comprehensive and well-funded environmental protection agency, properly established by statute with officials who are thoroughly familiar with existing environmental legislation. These officials should have the legal mandate and obligation to carry out public

[20] The government is in the process of reviewing the 2012 FoIA which was never enacted, and it is hoped that significant deficiencies in the Act are rectified and it is passed shortly.

consultation, issue the required permits, oversee the permitting process, monitor developments, and fine developers who violate of the laws of the country.

COUNTRY REPORT: BELGIUM
Public Participation and Access to Justice in Large Scale Infrastructure Projects: How Deep is the Gap between Law and Reality?

An Cliquet* and Hendrik Schoukens**

The Legal Framework

International environmental law includes procedural rights with regard to environmental matters, such as rights to information, participation and access to justice. The most important documents for Europe in this regard are the *Aarhus Convention on Access to Information, Public Participation in Decision-Making and Access to Justice in Environmental Matters,*[1] and corresponding European Union legislation.[2] From a theoretical perspective at least, the European legislation with regards to these procedural rights is probably one of the

* Professor, Department of European, Public and International Law, Ghent University; email: An.Cliquet@ugent.be

** Assistant, Department of European, Public and International Law, Ghent University; email: Hendrik.Schoukens@ugent.be

[1] UNECE Convention on Access to Information, Public Participation in Decision-making and Access to Justice in Environmental Matters, 25 June 1998, Aarhus; Convention text at http://www.unece.org/env/pp/treatytext.html; approved in Flanders by Flemish Decree of 6 December 2002, *Belgian Official Journal*, 7 January 2003.

[2] Directive 2003/4/EC of the European Parliament and of the Council of 28 January 2003 on public access to environmental information and repealing Council Directive 90/313/EEC, *OJ L* 41, 14 February 2003; Directive 2003/35/EC of the European Parliament and of the Council of 26 May 2003 providing for public participation in respect of the drawing up of certain plans and programmes relating to the environment and amending with regard to public participation and access to justice Council Directives 85/337/EEC and 96/61/EC - Statement by the Commission, *OJ L* 156, 25 June 2003; Regulation (EC) No 1367/2006 of the European Parliament and of the Council of 6 September 2006 on the application of the provisions of the Aarhus Convention on Access to Information, Public Participation in Decision-making and Access to Justice in Environmental Matters to Community institutions and bodies, *OJ L* 264, 25 September 2006.

most progressive. The question is how these procedural rights are implemented in practice. In this country report we will look at an ongoing development project in Flanders (Belgium), being the expansion of the railway station in the city of Ghent and project development around the railway station.[3]

Project Development in and around the Railway Station in Ghent: The 'Construction Site of the Century'

In 2007, work started on modernising the railway station of 'Gent-Sint-Pieters' (the main railway station in Flanders).[4] The railway station is situated in the southern part of the city, and is for the most part in a residential area with several primary and high schools, as well as the university college of Ghent.

The modernisation works aim to increase the number of passengers to 60 000 per year. The project includes the modernisation of all railway tracks, as well as the building of a new bus and tram station. The project not only modernises the railway station itself, but also includes project development in the immediate surroundings of the station. This encompasses plans for several high office and apartment blocks. It also includes the construction of the largest underground parking station in the Benelux, providing parking places for 2800 cars, and the construction of an access road to the parking station. The access road cuts through a nature area, destroying more than 14 000 square metres of the area. Although this might not seem much in absolute figures, the loss took place in a densely populated city environment where nature was already very scarce. As compensation for the loss, part of the remaining nature area was made accessible to the public and developed into a small nature park (6.8 hectares).[5] The works on the railway station started in 2007 and were supposed to end in 2017. The last prognosis is that the works will end in 2024. The scale of the project and duration of the works lead people in Ghent to call this the 'Construction site of the century'.

---

[3] This report is based on a presentation given by An Cliquet at the European Environmental Law Forum, 10 September 2014, Brussels.

[4] For a description of the project, see the project website (in Dutch): http://www.projectgentsintpieters.be; in English see: Tom Coppens, *Conflict and Conflict Management in Strategic Urban Projects* (PhD, KUL, Leuven 2011) 118-134, https://lirias.kuleuven.be/bitstream/123456789/312151/1/TC+KU+20110827+Doctoraat+TC.pdf

[5] The obligation to compensate follows from the standstill principle in Flemish nature conservation legislation, see article 8, Flemish Decree on nature conservation, 21 October 1997, see consolidated version at http://codex.vlaanderen.be/

Participation and Information

The project involves several partners, including the city of Ghent, the Flemish Region, the Belgian railway company (NMBS), the Belgian railway infrastructure manager (Infrabel), the station project developer (Eurostation) and the De Lijn bus company. At the beginning of the project there was often a lack of information and participation. In general, the strategy of the project partners was to ignore any protest against the project. The project partners did not intend to negotiate or enter into dialogue with the protesters.[6] Only in a later phase did the project partners provide several mechanisms for information and participation. These included the establishment of an Information Centre ('Infopunt') and specific website for the project.[7] At regular times, newsletters were sent to the whole neighbourhood.[8] Several information meetings were organized where information was given and representatives of the project partners answered questions from citizens.[9] Regular visits to the construction site are also organised.[10] There are also legal obligations for public inquiries, such as within the procedures for environmental impact assessment,[11] the public inquiry for the spatial zoning plan for the Gent-Sint-Pieters area,[12] and the public inquiries for building permits.[13]

Probably the most innovative element of participation was the establishment in 2005 of a Feedback group ('Klankbordgroep'). The group consists of representatives from the project partners on the one hand, and representatives of certain groups such as bikers, local schools, environmental NGOs and interested citizens on the other hand.[14] The City of Gent

---

[6] See also: Coppens, n.4 221-225.

[7] http://projectgentsintpieters.be/

[8] http://projectgentsintpieters.be/nieuwsbrief1

[9] http://projectgentsintpieters.be/communicatie/inspraak/info-en-inspraakmomenten

[10] http://projectgentsintpieters.be/nieuwsarchief/p/categorie/info-en-inspraakmomenten

[11] WES, *Milieueffectrapport. Masterplan Station Gent Sint-Pieters en omgeving* (Brugge 2005), http://www2.vlaanderen.be/ruimtelijk/grup/00150/00171_00001/data/212_00171_00001_MER_rapport.pdf

[12] Decision by the Flemish Government of 15 December 2006 (Besluit van de Vlaamse regering van 15 december 2006 houdende de definitieve vaststelling van het gewestelijk ruimtelijk uitvoeringsplan 'stationsomgeving Gent Sint-Pieters – Koningin Fabiolalaan'), http://projectgentsintpieters.be/voorstelling-project/studies-en-bestuurlijke-documenten/rup

[13] For the different building permits that have already been given, see: http://projectgentsintpieters.be/voorstelling-project/studies-en-bestuurlijke-documenten/bouwvergunningen

[14] http://projectgentsintpieters.be/communicatie/inspraak/klankbordgroep

received an international Civitas award for public participation in projects such as the railway project.[15]

However, most of the initiatives for information and participation have been taken after the establishment of the project plans. Negotiations between the project partners date back to 1998, and requests by the neighbourhood for information at this time were refused due to the 'embryonic' stage of the plans. This is not in accordance with the *Aarhus Convention*, which requires that the public concerned shall be informed early in the environmental decision-making procedure. When the information was finally released it seemed that the plans were well-advanced, and it was made clear that no changes were possible to the essential elements of the plan.[16] It was even explicitly mentioned by the city that certain aspects of the project could not be discussed, including the car park, the access road and the project development near the station.[17] These are exactly the aspects of the project that are contested by the neighbourhood.

Reactions from the Neighbourhood

From the very beginning, the project was confronted with concerns and protests from the neighbourhood. The modernisation of the railway station as such has not been contested, and is even appreciated. However, there have been some concerns about the impact of the works, such as heavy traffic, including trucks and tractors, on the residential area.

Most of the arguments brought forward by the neighbourhood relate to the scale of the project, the scale of the underground parking station and access road, and the impact this road and the additional buildings in the area will have on traffic and road safety. A major concern relates to the impact on health, especially that caused by the impact on local air quality. The limit values of particulate matter in the area are already exceeded. Another concern is how the increase of activities and traffic, and their environmental consequences, will affect quality of life in the residential area. Also criticised is the loss of part of the nature area and the negative effects of the development on the quality of the remaining nature area.

---

[15] http://www.civitas.eu/content/ghent-wins-european-civitas-award-public-participation-and-communication-mobility

[16] Piet Dedecker, 'Natuurpark Overmeers open voor het publiek' (2013) 4 *SNEP* 40, 41.

[17] Coppens, n.4 231 and 236.

From the very beginning, a local environmental group ('Sint-Pieters-Buiten') protested against construction of a road through the nature area.[18] In the past, local politicians promised on several occasions that no road would be built through the nature area, going so far as to oppose previous plans for the construction of a tramway through the nature area.[19] In spite of these promises, a contrary decision was taken.

In 2005, a new action group was created ('Buitensporig') specifically to gather citizens in their protest against some aspects of the project.[20] Buitensporig holds regular meetings with the neighbourhood, maintains a website, and informs people through newsflashes.[21] They have also published several press releases, making their objections towards the project more public. Also, legal steps were taken and court cases were initiated.[22] Especially, the court cases led to some nervous reactions amongst the project partners. The protesters were described as people who suffer from the 'Not in My Back Yard' syndrome and act in their own interests.[23]

Both NGOs and concerned citizens participated in the Feedback group. Once it became clear that the project itself could not be stopped, proposals were made for mitigation measures during and after the works. According to an evaluation on the implementation of the mitigations measures, the assessment was mostly negative.[24]

Legal Complaints

Some local inhabitants, as well as the NGO Buitensporig, started several legal proceedings. A complaint was submitted to the European Commission for not respecting the EU Directive on ambient air quality.[25] The Commission rejected that complaint in 2008.[26] According to the

---

[18] Formerly called the Milieugroep Sint-Pieters-Aaigem; 'Protest tegen autoweg door Schoonmeersen' *De Standaard* (28 April 2003).

[19] Dedecker, n.16 40-43; see also Coppens, n.4 217-218.

[20] "Buitensporig" literally means 'excessive', but is at the same time a combination of the words 'buiten' (meaning 'outside') and 'sporig' (meaning 'the railway tracks').

[21] http://www.buitensporig.be

[22] See for a description of the protest: Coppens, n.4 134-135.

[23] Interview with Jannie Haeck (NMBS) in 'Mondige burgers worden lastpakken' *De Standaard* (19 May 2009).

[24] http://projectgentsintpieters.be/userfiles/files/klankbord/KBG_20120313_eisen_antwoorden.pdf

[25] Directive 2008/50/EC of the European Parliament and of the Council of 21 May 2008 on ambient air quality and cleaner air for Europe, *OJ L* 152, 11 June 2008.

[26] Letter from the European Commission, 10 December 2008 (ENV A.2/MV/sb Ares(08) 57921).

Commission, the mere fact that a project can lead to an exceedance of limit values is not as such in contradiction with the air quality rules. Member States have a wide discretionary margin when taking measures to reduce possible violations of air quality standards. The Commission was of the opinion that the EU rules on ambient air quality basically require Member States to opt for a programmatic approach to combatting air pollution, entailing that the air quality rules are not to be used as a strict standard of review in the context of permitting procedures for one specific source of pollution. A Member State need only consider halting a project if it would appear that the measures adopted to combat air pollution are insufficient to attain the limit values, and the operation of the project would lead to a further deterioration of air quality. At the time of the complaint, the Commission found that in spite of the continuous exceedance of the limit values in the Flemish Region, such evidence had not been presented to it.

Several cases were submitted to the Belgian Council of State for the suspension and annulment of the spatial zoning plan and the building permit for the access road.[27] The main arguments of the plaintiffs included the following:

- the project will lead to a further violation of the limit value for particulate matter;
- the building permit has been based on an incomplete environmental impact assessment with no research on the zero-alternative;
- no measures are taken against avoidable damage to nature;
- there is no quantitative compensation for the nature damage; and
- there is a lack of sufficient motivation for not taking into account the objections by the local inhabitants.

All the arguments were rejected by the Council of State, both in the suspension decision of 2008 and the annulment decision of 2010. It is outside the scope of this article to deal with all the arguments of the Court. However, we would like to point to one aspect, namely the argumentation on the air quality. According to the Court, the building of the parking station and access road have no direct link with air quality and thus, in line with the above mentioned rationale of the European Commission, the air quality standards cannot serve as a benchmark throughout the permitting procedures. Spatial decisions also have no direct impact on air quality. Reaffirming that the EU rules on air quality are based on a purely programmatic approach under which Member States enjoy wide flexibility with regards to the

[27] Council of State, nr. 183.359, 26 May 2008 (case A. 181.445/X-13.199); Council of State, nr. 209.868, 20 December 2010 (case A. 181.445/X-13,199) and other similar cases; http://www.raadvst-consetat.be/

choice of policy and measures, the Council ruled that, *in casu*, the exceedance of the limit values merely obliges authorities to draw up additional reduction plans. To that end, the Council of State, in line with recent case-law development at the Court of Justice,[28] acknowledged that the affected citizens might, whenever the inadequacy of the existing programmatic approach would be prevalent, enforce the adoption of additional reduction measures before the civilian Court. Such action has indeed been pursued by some of the affected inhabitants. However, following a settlement with the competent authorities, the legal proceedings came to an end in 2011 without any ruling on the merits of the case.

Conclusion

At the early stage of the project, there was insufficient information and participation, which was not in accordance with the *Aarhus Convention*. By the time the inhabitants were informed, the main decisions had been taken and there was no room to change them. Once the works started, several efforts were taken by the city and the other project partners to inform the neighbourhood. There were also opportunities to participate through public inquiries or public hearings. Access to justice was provided and was been used in several legal procedures. However, the project is largely being realised as planned: the access road has been built and part of the nature areas has been destroyed, the underground parking has been built, a large office building has been constructed and other project development near the station is being prepared.

One of the main possibilities to participate in the process is through the Feedback group. In spite of the efforts of both the city administration and representatives of the project, as well as the efforts of citizens in preparing and attending these meetings, the feeling remains that there is little capacity for citizens to actually change the project. At one point the 'association of bikers' withdrew from the Feedback group but later rejoined. Sometimes the question is asked if initiatives like these are meaningful participation or rather meant to keep citizens 'busy'.

On the substance of the court cases, and although several infringements of environmental legislation were invoked, one of the main arguments related to the effect on the air quality on the neighbourhood. In spite of the European legislation on air quality, it seems that it has not enough 'legal teeth' to stop large infrastructure projects, even though more and more

[28] Court of Justice, Case C-237/07, Janecek, 25 July 2008, ECR I-06221.

scientific evidence is presented on the impact of air pollution on human health,[29] as well as its high economic cost.[30] Furthermore, other project developments are being planned in the wider area (including a huge outlet center), which, if permitted by the authorities, will create additional traffic problems and will even further worsen the air quality of the area in Ghent. It seems that 'bigger' interests still outweigh the human health of the population. However, as illustrated by a recent (2014) judgment of the European Court of Justice in the UK air quality case, the tide may slowly be turning. Following this case, brought by environmental group Client Earth, individuals will now be able to sue Member States for breaching EU pollution laws, while competent authorities will be forced to prepare and implement plans to improve the air quality 'as soon as possible'.[31] While the Court did not go as far as specifying the exact content of these plans, this landmark ruling will, in the long run, undoubtedly compel Member States to take their commitments to combatting air pollution seriously. They will now have to come up with urgent plans to rid towns and cities of cancer-causing diesel fumes, which will, in turn, urge them to reconsider the issuance of permits for unsustainable project development prone to draw even more traffic into congested cities.

---

[29] See for example European Environmental Agency, *Air Quality in Europe – 2014 report* (EEA Report No 5/2014, Luxembourg 2014), http://www.eea.europa.eu/publications/air-quality-in-europe-2014

[30] European Environmental Agency, *Costs of air pollution from European industrial facilities 2008–2012 — an updated assessment* (EEA Technical Report No 20/2014, Luxembourg 2014); http://www.eea.europa.eu/media/newsreleases/industrial-air-pollution-has-high

[31] Court of Justice, Case C-404/13, Client Earth, 19 November 2014 (not yet published).

COUNTRY REPORT: BELGIUM
Marine Spatial Planning and the Protection of the Marine Environment in the Belgian Part of the North Sea

Thary Derudder and Frank Maes

Introduction

With a surface of 3454km^2, or barely 0.5% of the total surface area of the North Sea, the Belgian part of the North Sea (BNS) can hardly be named impressive. The BNS only stretches out 83km from the coast and has a coastline that measures approximately 65 km. The maximum depth is about 45 meters, with an average of only 20 meters or less due to the presence of about thirty sandbanks. Nevertheless, the BNS is one of the busiest sea areas in the world, aggregating a huge variety of activities, such as: shipping, fishing, renewable energy developments, potential aquaculture, dredging works, sand and gravel extraction, tourism, military exercises and nature conservation. Together they serve a plurality of economic, ecological, social, cultural and safety objectives. Some activities are mobile (fishing, shipping) or temporary (dredging, sand exploitation), while others are fixed (offshore wind mills); some activities can be combined (shipping, fishing and dredging) while others cannot. To avoid conflicts between users, spatial planning is required, either to separate activities or to plan their coexistence. This can be achieved by marine spatial planning (MSP). MSP is often seen as a planning tool, encompassing a process leading to a spatial management plan. Belgium is one of the first countries that developed a MSP, but it took until 20 March 2014 to adopt a legally binding plan based on predefined processes, including stakeholder participation and public participation.[1] In many countries MSP fails due to a lack of 'authority'. Without a clear mandate and authority a lot of MSP attempts result in constant competence bickering between the various government institutions involved in ocean management. Belgium avoided this pitfall by appointing a minister coordinating the federal competences over the North Sea.

[1] Royal Decree of 20 March 2014 establishing the marine spatial plan, Belgian Official Gazette (BOG) 28 March 2014, 26936.

History and Evolution of the MSP

The new MSP is to a large extent based on the so-called 'Master Plan North Sea'. Phase one of this Master Plan (2003) was based on the Law of 1999 on the exclusive economic zone in Belgium, and was clearly designed from an economic perspective (sand and gravel extraction and exploitation of renewable energy). Phase two of the master plan (2005) implemented the nature conservation measures foreseen in the 1999 Law on the protection of the marine environment in the sea areas under Belgian jurisdiction.[2]

The 2014 Marine Spatial Plan

Legal Basis

The 2014 MSP has its legal basis in the Law on the protection of the marine environment in the sea areas under Belgian jurisdiction. A legislative amendment of 20 July 2012[3] alters the heading of the law, which is now called the Law on the protection of the marine environment and organizing MSP in the sea areas under Belgian jurisdiction (referred to as the Law herein). By choosing this Law as the legal basis for the MSP, the federal parliament opted for a clear environmental dimension. The environmental principles on which this Law is based, namely the principle of prevention, the precautionary principle, the sustainable development principle, the polluter pays principle and the recovery principle, are fundamental environmental principles that both the users and the government must take into account when operating in the BNS. Government is required to take these principles into account when developing the MSP (art. 4 Law). The Law includes a brief, but important chapter on the organisation of the MSP. The Law also provides a mandate for the executive powers to further elaborate and adopt legislation for the planning process by making use of Royal Decrees. This mandate requires consultation with the sectors and agencies concerned (stakeholders), and contains a procedure with at least the following obligations: 1. a planning process; 2. a public investigation; 3. a strategic environmental impact assessment concerning the new plan; and 4. an amendment procedure for the plan. The amendment procedure indicates the adaptive character of the planning process and plan. Once the plan has been accepted by a Royal Decree discussed in the Council of Ministers,

[2] Law of 20 January 1999 protecting the marine environment in the sea areas under Belgian jurisdiction, BOG 12 March 1999, 8033.

[3] Law of 20 July 2012 amending the law of 20 January 1999 protecting the marine environment in the sea areas under Belgian jurisdiction, with respect to the organization of the marine spatial planning, BOG 11 September 2012, 56962.

the plan becomes legally binding for both the users of the North Sea, as well as for government. The plan will be evaluated every six years, and altered if necessary. The Law also establishes an advisory commission competent to provide non-binding advice. Finally, this Law also lays out the substantive elements for the spatial plan. The plan starts from a spatial analysis of the BNS and develops a long term vision, indicating the measures, instruments and actions necessary to implement the plan. The plan aims to pursue economic, social and environmental objectives (components of sustainable management) as well as safety objectives, and should indicate how these objectives will be achieved (art. 5bis Law).

The Royal Decree of 20 March 2014 Adopting the MSP for the BNS.

The new MSP was adopted by a Royal Decree on 20 March 2014 and is the product of a series of consultations with scientists, stakeholders and the public at large. The MSP includes 4 annexes. The first annex provides a spatial analysis of the BNS, discusses its physical features and the current environmental and natural situation, provides an inventory of the current activities, an overview of the spatial synergy and possible conflicts and clarifies the planning and the policy context. Annex 2 contains a long term vision, the objectives, indicators and spatial policy choices made for the BNS. Annex 3 contains actions for executing the MSP and annex 4 holds the maps for the new spatial plan. These maps are indicative since they lack exact coordinates. The precise coordinates can be found in the Royal Decree itself.

Reaching the Transparent Proposed Environmental Goals

As was mentioned above, annex 3 of the MSP Royal Decree sets forth the actions that government wishes to implement by 2020. The environmental objectives of the MSP are fourfold: 1. obtaining a ‘good environmental status’ under the EU Marine Strategy Framework Directive (2008/56/EG) and reaching a good status for coastal surface water according to the Water Framework Directive (2000/60/EG); 2. obtaining a favourable conservation status according to the Habitat and Birds Directives; 3. implementing the biodiversity strategy under the Convention on Biological Diversity (Aichi targets 2011-2020) and; 4. stimulating sustainable energy growth at sea.

New Rules under the MSP to Protect the Marine Environment

The seabed and the integrity of its ecosystems are threatened by many activities in and on the North Sea. Since the seabed is of vital importance for several ecosystems, any external activity, such as sand and gravel extraction, dredging and trawl fishing, causing alterations to the seabed, can have harmful consequences for the marine environment (MSP Royal Decree annex 1, 34). MSP therefore introduces a number of measures to protect the marine environment from these threats.

Nature Protection and Fishing

In the upcoming planning period of six years, the MSP does not envisage the establishment of any new marine protected areas (MPAs), nor does it envisage changes to the delimitation of existing MPAs. Instead, the focus of the MSP lies on implementing effective protective measures in the already existing MPAs (*MSP Royal Decree* 17 annex 2).

The MPAs situated in the BNS were designated by a Royal Decree of 2005[4] (three special protective areas for birds (SPAs) and two zones for nature conservation as habitats, namely 'the Trapegeer Stroombank' and 'the Vlakte van Raan'[5]) (see Map 1 & 2 *infra*). A Royal Decree of 2006[6] created a marine reserve east of the port of Sea Bruges adjacent to the Flemish reserve at the beach of Knokke-Heist (Bay of Heist), which has been extended by a Royal Decree of 2012.[7] This Royal Decree of 2012 leaves out 'the Vlakte van Raan', since the Council of State ruled that there was insufficient scientific proof to justify the protection of

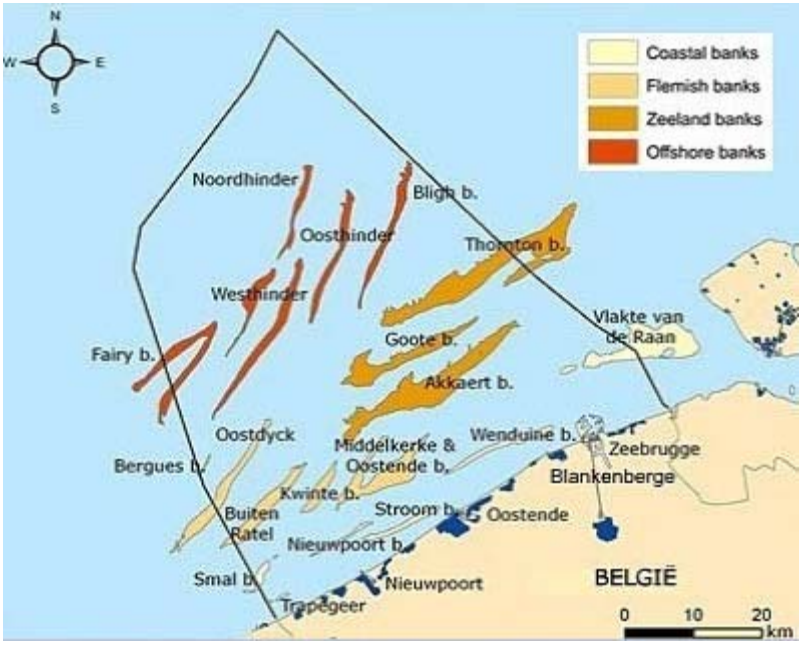
[4] Royal Decree of 14 October 2005 establishing special protective zones and special zones for nature preservation in the sea areas under Belgian jurisdiction, BOG 31 October 2005, 47207.

[5] Trapegeer, Stroombank and the Vlakte van Raan are sandbanks located in the BNS.

[6] Royal Decree of 5 March 2006 establishing a focused marine reserve in the sea areas under Belgian jurisdiction and amending the Royal Decree of 14 October 2005 establishing special protective zones and special zones for nature preservation in the sea areas under Belgian jurisdiction, *BOG* 27 March 2006, 17242.

[7] Royal Decree of 16 October 2012 amending the Royal Decree of 14 October 2005 establishing special protective zones and special zones for nature preservation in the sea areas under Belgian jurisdiction, *BOG* 5 November 2012, 66465.

this zone[8] and it adds 'the Flemish banks' as a special zone for nature conservation with a surface of about 1100 km^2, containing SPA 1, about half SPA 2 and 'the Trapegeer Stroombank'. In total the MPAs in the BNS cover a surface of about 1240 km^2, which is slightly over 1/3 of its total surface (see Map 1 & 2 *infra*).



Map 1. Source www.seawitch.be

In the SPAs for birds certain activities are prohibited, namely civil engineering, industrial activities and activities of advertising and commercial enterprises (art 5 Royal Decree 2005 and art. 7§5 MSP Royal Decree). The MSP Royal Decree adds the phrase 'for as far as these activities are not submitted to an appropriate assessment'. This entails that the prohibited activities mentioned above can take place under certain stringent conditions and if proven not to have an effect on the conservation targets. An assessment of the consequences of these activities for the protection of birds needs to be done, taking into account the area-specific conservation objectives (art. 1°14 MSP Royal Decree). This new phrase introduced in the Royal Decree therefore creates more flexibility in allowing certain activities in the SPA's. The protective measures that are specific to each species in SPA 1 and SPA 2 are taken over from the 2005 Royal Decree in article 7§6 of the MSP Royal Decree.

[8] See H. Schoukens, A. Cliquet & F. Maes, "Wind Farm Development in the Belgian Part of the North Sea: A Policy Odyssey without Precedent", *Zeitschrift für Europäisches Umwelt- und Planungsrecht* 2012, 304-312.

All activities are prohibited in the marine reserve 'Bay of Heist', save for supervision and control, monitoring and scientific research commissioned by government, shipping, professional fisheries, management, conservation, restoration or nature development measures and military activities, as foreseen in the Law (art. 8 Law 1999). The Royal Decree of 2006 further allows the placing and maintenance of cables and pipelines, the digging of trenches and the raising of the sea bottom, and activities that are the subject of a user agreement (art.5 Royal Decree 2006). The MSP Royal Decree adds activities to the list that have been subject to an appropriate assessment (art. 7 §9 MSP Royal Decree).

The Royal Decree of 2005 and the Royal Decree of 2012 forbid the following activities in the habitat area 'Trapegeer Stroombank': activities of civil engineering, industrial activities, activities of advertising and commercial enterprises (art. 5 Royal Decree 2005) and the deposit of dredging species and inert materials of natural origin (art. 2 Royal Decree 2012). The MSP Royal Decree takes over these prohibitions and adds once again the phrase 'for as far as these activities are not submitted to an appropriate assessment' (art. 7§3 MSP Royal Decree), being an assessment of the consequences for that zone, taking into account the area-specific conservation objectives.

By including the provisions concerning which activities are allowed in the MPAs contained in the Royal Decrees of 2005, 2006 and 2012, in the MSP Royal Decree, the legislator has clearly indicated its will to respect these provisions when allowing activities in the MPAs under the MSP.

As has become clear above, the MSP Royal Decree introduces the possibility to allow certain activities in an MPA after they have been subjected to an appropriate assessment. This allows more flexibilty when permitting activities in MPAs under the MSP while at the same time respecting the conservation targets set forth in each MPA.

Map 2. Source: www.health.belgium.be/eportal

Due to its shallow coastal waters and sand banks, the BNS is a productive fishing area with intensive fisheries. The majority of fishermen in the BNS make use of beam trawls that severely damage the seabed and the species depending on it as a habitat. In order to preserve and strengthen the richness of the BNS, to ensure the integrity of the seabed and to make the fishing industry more sustainable and cost-efficient, the MSP strives towards sustainable fisheries. The MSP Royal Decree introduces for the first time in a MSP context, measures towards a certain type of fisheries in particular areas. The Decree and the plan indicate four zones in the area of 'the Flemish Banks' wherein limitations are imposed to certain fishing techniques to protect the integrity of the seabed with the objective to reach a good environmental status. These zones have been selected on the basis of their vulnerability, high biological value and the measures that have been taken with a view to repairing the sandbank and reef-habitats. In zone 1, located in 'the Trapegeer Stroombank' from the French-Belgian coast up to and past Newport, the existing coastal fishing industry is required to use rolling beam heads on its fishing gear, and for shrimp fishing the use of separator trawls is obligatory (see Map 3). Existing vessels can be replaced, but in zone 1 new vessels can only fish with techniques that do not disturb the seabed. Zone 1 lies within the 45 nautical miles zone, measured from the baseline, wherein it is forbidden to fish with

vessels above 70 gross tonnage (see Map 3). In the second zone, located approximately in between Newport and Ostend, beginning from the 4,5 nautical miles line further seawards, existing fishing techniques remain valid for a further three years as a transition period to the abolition of the use of bottom trawling techniques. Testing alternative bottom trawling techniques however remains possible (see Map 3). In zone 3, which is the furthest from the coast and is situated in the exclusive economic zone nearby the 'Westhinderbank', only non-bottom trawling fishing techniques are allowed. This is the zone where the strictest fishing limitations apply (see Map 3). Finally, in the fourth zone, situated at the 'Westhinderbank' adjacent to zone three, only non-bottom trawling techniques can be used, leaving however the possibility to test alternative bottom trawling techniques (see Map 3). Zones 2 and 4 are thus reserved for testing new fishing techniques that have a smaller impact on the life on the seabed (MSP Royal Decree annex 2, 17-18 and 34-35).

Map 3. Source: www.health.belgium.be/eportal

All of these fishing limitations apply to Belgian fishing vessels. They will, however, in certain zones impact fishing activities by other EU member states as well, especially Dutch and to a lesser extent French vessels. To ensure that the fishing restrictions are enforceable against

foreign ships, the approval of the EU Commission will be required on the basis of scientific evidence supporting the reasons why these measures are necessary.

As for sports fishing, the idea is that this is allowed in the Flemish Banks, in so far as the seabed will not be disturbed, for example fishing with a fishing rod is permitted. Two specific types of fishing that disturb the seabed are, however, not prohibited: 1. shrimp fishing by horse or on foot and; 2. recreational shrimp fishing using bottom trawling techniques by fishermen who have been active for at least three years – such fishermen can continue to sail a maximum of ten times a year after obtaining a permission from the minister for a maximum period of six years (MSP Royal Decree annex 2, 17). In the so-called 'Paardenmarkt' area (the munition deposit), nearby Knokke-Heist, any activity that disturbs the seabed is prohibited for safety reasons.

Sustainable Energy Development

One of the most spectacular developments introduced by the MSP is the designation of two zones for electricity storage (energy-atolls). One zone is situated on the 'Wenduinebank' and another seawards North East of the harbor of Sea Bruges. This entails that two islands can be constructed for the storage of electricity in combination with active nature conservation developments (MSP Royal Decree annex 2, 24-25) (see Map 2). New infrastructures at sea, such as wind energy facilities, energy atolls, etc. – if optimally developed – offer the potential for an increase in biodiversity (MSP Royal Decree annex 2, 19). An example of this is the creation of two artificial reefs that are already in place within the windmill parks of C-power and Belwind (see Map 2).

Sand and Gravel Extraction

To fulfill the needs of the building industry and coastal protection, an annual amount of about 2-3 bilion m^3 sand and gravel is extracted from the BNS. This is done within four areas and is subject to a permit and a reporting duty. By paying compensation for every m^3 extracted, research on the possible environmental consequences is facilitated. The results of this research increase our understanding of possible effects of this exploitation for a particural area at sea. Insofar as environmental harm arising from such extraction activities is detected as part of ongoing monitoring efforts, the zone will temporarily be closed (MSP Royal Decree annex 1, 108-116) (see Map 4).

In order to give a number of sensitive habitats located in the special zone for nature protection 'Flemish banks' the opportunity to recover, a so called appropriate assessment is introduced by the MSP Royal Decree. This is an additional component to the environmental impact assessment for obtaining a concession and permit for sand and gravel extractions in this specific habitat area (MSP Royal Decree annex 2, 38-39) (see Map 4).

Map 4. Source: www.health.belgium.be/eportal

Underwater Cultural Heritage

Although shipwrecks can be considered as a disturbance of the marine environment since they form hard substrates on the seabed of the BNS, which mainly consists of sand, often these shipwrecks have an ecological value as 'rocky' habitats. Research has shown that a rather large ammount of biodiversity can be found nearby and on shipwrecks which function as a nursery room for diffferent sorts of fauna and flora. The idea of protecting shipwrecks because of their value as habitats for several species is included in the second annex *of the MSP Royal Decree* (MSP Royal Decree annex 2, 48).

Conclusion

The MSP Royal Decree is based on the 1999 Law on the protection of the marine environment in the BNS and therefore has a clear environmental basis, entailing that the environmental principles as laid down in the Law must be respected when drafting a marine spatial plan and when conducting activities in the BNS. The new MSP has integrated a number of measures to protect the marine environment both directly, focussing on a number of sensitive areas, as well as indirectly. It may therefore be said that the MSP has the potential to benefit and even improve the marine environmental status of the BNS. However since the new plan has only been drafted recently the extent of these possible positive effects will only become clear in the future.

COUNTRY REPORT: CANADA
Canadian Environmental Asessment Reform:
A Glimpse at Regressive Reforms in Canadian Environmental Law

Pierre Cloutier de Repentigny*

Introduction

Often as jurists we seek through our work to propose legislative changes and reforms, to point out flaws in legislation or decisions, and to overall better the law. We thus often welcome legislative reforms as they offer an opportunity to improve the law and to bring relevance to our research. Thus the recent wave of Canadian environmental law reforms should have been an exciting occasion to improve a critical area of the law. Sadly not all reforms are progressive; in facts these legislative changes may be regarded as regressive from an environmental point of view.[1] Among the victims of this reform lies the now defunct *Canadian Environmental Assessment Act* (hereafter *CEAA 1995*),[2] once the centrepiece of federal environmental legislation.

This Country Report explores the modifications made to the federal environmental assessment regime by the adoption of the *Canadian Environmental Assessment Act, 2012* (hereafter *CEAA 2012*).[3] The report first briefly summarizes the previous regime of federal environmental assessments. It then points out key differences between the old and the new regime, while highlighting how these changes will affect comprehensive environmental assessments in Canada, a country who relies heavily on the exploitation of natural resources. It concludes with some words of caution and lessons to learn from such reforms.

---

* University of British Columbia, contact: pa_cloutier@hotmail.com

[1] I use the terms “progressive” and “regressive” not in their political sense, but in their literal sense of making advancements or improvements to something.

[2] Canadian Environmental Assessment Act, SC 1992, c 37 [CEAA 1995].

[3] Canadian Environmental Assessment Act, 2012, SC 2012, c 19, s 52 [CEAA 2012].

A Holistic Approach to Environmental Assessment: CEAA 1995 and its Predecessor

Environmental assessments have become a widely used tool to determine and mitigate environmental impacts of decisions and developments, and to integrate environmental and other social concerns into decision-making processes.[4] In the words of Justice La Forest of the Supreme Court of Canada:

> *"Environmental impact assessment is, in its simplest form, a planning tool that is now generally regarded as an integral component of sound decision-making. Its fundamental purpose is summarized by R. Cotton and D. P. Emond in "Environmental Impact Assessment", in J. Swaigen, ed., Environmental Rights in Canada (1981), 245, at p. 247:*
> *The basic concepts behind environmental assessment are simply stated: (1) early identification and evaluation of all potential environmental consequences of a proposed undertaking; (2) decision making that both guarantees the adequacy of this process and reconciles, to the greatest extent possible, the proponent's development desires with environmental protection and preservation."*[5]

The first federal piece of legislation on the matter was the *Environmental Assessment and Review Process Guidelines Order* adopted pursuant to s 6 of the *Department of the Environment Act*.[6] The mandatory nature and constitutional validity of the Order was confirmed in *Friends of the Oldman River Society v Canada (Minister of Transport)*.[7] In 1992, the Parliament adopted *CEAA 1995*, which replaced the Order in 1995, to give formal statutory authority to the federal environmental assessment regime and eliminate any remaining uncertainties created by the *Environmental Assessment and Review Process Guidelines Order*.[8]

Under *CEAA 1995*, any project needing federal approval, benefiting from federal money, situated on federal land, initiated by the federal government, impacting aboriginal people, or

---

[4] Neil Craik, *The International Law of Environmental Impact Assessment: Process, Substance and Integration* (Cambridge (UK): Cambridge University Press, 2008), 5; and Jamie Benidickson, *Environmental Law*, 4th ed (Toronto: Irwin Law, 2013) 254 [Benidickson].

[5] Friends of the Oldman River Society v Canada (Minister of Transport), [1992] 1 SCR 3 at 71.

[6] Environmental Assessment and Review Process Guidelines Order, SOR/84-467; and Department of the Environment Act, RSC, 1985, c E-10.

[7] See also Canadian Wildlife Federation Inc v Canada (Minister of the Environment), [1989] 3 FC 309 (TD), aff'd (1989), 4 CELR (NS) 1 (FCA).

[8] Benidickson, supra note 4, 258.

having interprovincial or international effects is subject to an environmental assessment, unless explicitly excluded through regulations or is the result of an emergency situation.[9] Environmental assessments pursuant to *CEAA 1995* are conducted in one of four ways: self-assessment screenings or comprehensive study, panel reviews, or mediation.[10]

The scope of the assessment is determined by the responsible authority (a federal department or agency, a crown corporation, the Canadian Environmental Assessment Agency, or another body designated through regulations) who defines the project for the purpose of the assessment.[11] This scoping is however limited by s 15(3) of *CEAA 1995* which states that all works that are likely to be carried out in relation to the project as proposed by the proponent are subject to the assessment.[12] This provision created a floor for the scope of environmental assessment while allowing the responsible authority to expand it if necessary.

All assessments have to consider the environmental effects of the project, the significance of these effects, comments from the public, technically and economically feasible mitigation measures, and any other relevant matter such as the need for or alternatives to the project.[13] Assessments of a project subject to a comprehensive study, a mediation or a panel review must also consider the purpose of the project, technically and economically feasible alternative means to the project and their environmental effects, the need for and requirements of follow-up programs, and the capacity of renewable resources likely to be

---

[9] *CEAA 1995*, supra note 3, ss 2, 5, 46 & 48. See also Natalie Nicole, "Le processus fédéral d'évaluation environnementale et les projets de développement hydroélectrique", in Barreau du Québec, *Développements récents en droit de l'environnement 2002*, (Cowansville (QC): Éditions Yvon Blais, 2002); and Benidickson, supra note 4, 259-260.

[10] Screening was the default process and applied unless the project was covered by the *Comprehensive Study List Regulations*, SOR/94-638 or is referred by the Minister of the Environment to a mediator or a review panel: *CEAA 1995*, supra note 3, ss 21 & 28. A referral is required when the Minister is of the opinion that the project may cause significant adverse environmental effects or that public concerns warrant a reference.

[11] *CEAA 1995*, supra note 2, ss 2 "federal authority" & 11 & 15(1).

[12] Mining Watch Canada v Canada (Fisheries and Oceans), 2010 SCC 2, para 39.

[13] *CEAA 1995*, supra note 2, s 16(1).

significantly affected to meet the needs of present and future generations.[14] Traditional Aboriginal knowledge may be considered, but it is not required.[15]

Following a screening, the responsible authority must reject the project if it is likely to cause significant adverse environmental effects that cannot be justified in the circumstances; otherwise it may exercise its power.[16] When there is uncertainty, the project is likely to cause significant adverse environmental effects but could be justified, or when public concerns warrant it, the project is referred to a mediator or a review panel.[17] In the case of a comprehensive study, the Minister of the Environment may, after considering the report, issue an environmental assessment decision statement indicating whether in the Minister's opinion the project is likely to cause significant adverse environmental effects and the necessary mitigation measures and/or follow up programs.[18] The responsible authority then takes a decision as in a screening to approve or not the project.[19] However, if the Minister found that the project is likely to cause significant adverse environmental effects, the project must also receive the approval of the Governor in Council (the federal cabinet).[20] In the case of a project subject to mediation or a review panel, the report is submitted for a response to the Governor in Council who then approves or rejects the project following the same criteria as in other assessments.[21] Finally, decisions made pursuant to *CEAA 1995* are final and subject only to judicial review by the Federal Court.[22]

---

[14] Ibid, s 16(2).

[15] Ibid, s 16.1. Nevertheless, *CEAA 1995* and arguably its successor must be applied in a manner consistent with the Crown constitutional duty to consult aboriginal people: *Quebec (Attorney General) v Moses*, 2010 SCC 17, para 45.

[16] *CEAA 1995*, supra note 2, s 20(1)(a)&(b).

[17] Ibid, s 20(1)(c).

[18] Ibid, s 23(1).

[19] Ibid, s 37(1).

[20] Ibid, s 37(1.3).

[21] Ibid, s 37(1)&(1.1).

[22] An application for judicial review cannot be grounded solely on a defect in form or a technical irregularity: Ibid, s 57. For more on grounds of review see *Dunsmuir v New Brunswick*, 2008 SCC 9 in general, and Andrew Green, "Discretion, Judicial Review and the Canadian Environmental Assessment Act", (2001-2002) 27 Queen's LJ 786 and *Inverhuron & District Ratepayers Ass v Canada (Minister of the Environment)*, 2001 FCA 203, specifically.

One Step Forward, Ten Steps Backward: CEAA 2012

While *CEAA 1995* was not perfect, the regime had the advantage of covering a large number of projects. For example, during the fiscal year of 2004-2005, the federal government conducted over 6000 screenings and 11 comprehensive studies.[23] The first key change brought by the 2012 reform is the drastic reduction in the number of projects subject to an environmental assessment. This was firstly done through modification of other statutes, mainly the *Fisheries Act* and the *Navigable Waters Protection Act* (now known as the *Navigation Protection Act*), which would have triggered federal environmental assessments through various approval processes under the old regime.[24] Secondly, *CEAA 2012* changes completely the scope of environmental assessment by moving away from a regime applicable to all federal decisions to one where only projects designated by the government are subject to an assessment.[25] Even when a project is designated, the Canadian Environmental Assessment Agency has considerable discretion to determine if an assessment is warranted.[26] Environmental assessments used to be the norm, now it seems they are the exception.[27]

The second change brought by the enactment of *CEAA 2012* is the limitation of environmental effects to be considered by the responsible authority. While under *CEAA 1995* all environmental effects had to be considered, now only effects within the legislative authority of Parliament are taken into account.[28] This is a considerable change to the regime which limits substantially the effectiveness of federal environmental assessment.[29]

---

[23] Jamie Benidickson, *Environmental Law*, 3rd ed (Toronto: Irwin Law, 2009) 249-250.

[24] See Robert Daigneault, "C-38 et C-45: l'environnement, les pêches, la navigation et le mammouth" in Barreau du Québec, *Développements récents en droit de l'environnement 2013* (Cowansville (QC): Éditions Yvon Blais, 2013) [Daigneault] for these modifications.

[25] Regulations Designating Physical Activities, SOR/2012-147; and CEAA 2012, supra note 4, s 14.

[26] Meinhard Doelle, "CEAA 2012: The End of Federal EA as We Know It?" (2012) 24 JELP 1, 6-7 [Doelle]; and Benidickson, supra note 5, 262-263.

[27] Penny Becklumb & Tim Williams, *Canada's New Federal Environmental Assessment Process* (Ottawa: Library of Parliament, 2012) 3 [Becklumb & Williams].

[28] *CEAA 2012*, supra note 4, s 5. Such effects include effects on fish and fish habitat as defined by the *Fisheries Act*, aquatic species as defined by the *Species at Risk Act*, migratory birds as defined by the *Migratory Bird Convention Act*, *1994*, components listed in Schedule 2 of *CEAA 2012*, environmental changes occurring on federal lands or in more than on province or outside of Canada, and certain effects on aboriginal people.

[29] Doelle, supra note 26, 12-13.

Additionally, *CEAA 2012* allows for a much narrower scoping of projects and gives the Minister of the Environment the discretion to decide if a federal environmental assessment is warranted when a provincial one exists, thus further reducing the usefulness of the regime.[30] A more positive change was to move away from self-assessment and transfer the authority for environmental assessments mostly to the Canadian Environmental Assessment Agency.[31] Two bodies however retain control over environmental assessments of project under their regulatory authority: the Canadian Nuclear Safety Commission (hereafter the CNSC) and the National Energy Board (hereafter the NEB). Interestingly both agencies are responsible for important natural resources and energy projects such as the construction and refection of nuclear power plants for the CNSC, and oil and gas pipelines for the NEB. Both agencies do not have a primarily environmental nature/purpose and one wonders if they are well suited to conduct environmental assessments of controversial projects such as the Enbridge Northern Gateway pipeline, Kinder Morgan's Trans Mountain pipeline and TransCanada's Energy East pipeline, all connected to the tar sands.[32] In fact, recently, the NEB deemed that climate change was an irrelevant consideration in its analysis of Enbridge Line 9B Reversal and Line 9 Capacity Expansion Project, a decision upheld as reasonable by the Federal Court of Appeal.[33]

Decision-making has also been modified by *CEAA 2012*. Designated projects are now either subject to a "standard" environmental assessment or referred to a review panel.[34] Responsible authorities are required to determine if a designated project is likely to cause significant adverse environmental effects. If such a determination is made, the Governor in Council is responsible to determine if the significant effects are justified in the circumstances. If they are deemed justifiable, the responsible authorities must then determine the conditions for approval; conditions that must be "directly linked or necessarily incidental to the exercise of a power or performance of a duty or function by a federal

---

[30] Ibid, 11 & 13-15; and *CEAA 2012*, ss 2(1) & 32-37 "designated project".

[31] Doelle, Ibid, 4-5.

[32] Ibid, 5-6.

[33] *Forest Ethics Advocacy Association v National Energy Board*, 2014 FCA 245. The decision also highlights the limits of public participation in the NEB, see also Becklumb & Williams, supra note 27, 4-5. Other challenges to the NEB decision are still pending before the Federal Court of Appeal. Of note, the situation of tar sand projects assessments was no better under the old Act: see Heather McLeod-Kilmurray & Gavin Smith, "Unsustainable Development in Canada: Environmental Assessment, Cost-Benefit Analysis, and Environmental Justice in the Tar Sands" (2010) 21 JELP 65.

[34] *CEAA 2012*, supra note 3, ss 22 & 38; and Benidickson, supra note 4, 263.

authority that would permit a designated project to be carried out, in whole or in part" further limiting the effectiveness of federal environmental assessments.[35]

Finally, one of the most troubling aspects of the 2012 environmental law reforms, including the adoption *CEAA 2012*, is the lack of transparency of the process used for their enactment.[36] One might expect that such reform, considering the numerous and important changes brought to the federal environmental assessment regime amongst others, would be subject to a rigorous analysis by Parliament. Sadly, the opposite happened in this case as these reforms were all adopted through two budget implementation bills, C-38 and C-45 (dubbed omnibus bills). It took only two months and minimal committee review to adopt *CEAA 2012* compared to the years it took to adopt its predecessor. It is clear that the federal government wanted to pass those legislative changes as fast as possible and with little scrutiny.

Conclusion

An overview of *CEAA 2012*, the process used for its enactment, and the move from a holistic and comprehensive approach where environmental assessments are the rule to a narrow one where they are the exception, indicate that the environment, thus the Canadian population and specifically the aboriginal population, is not the beneficiary of the reform. There is no doubt that the reform is regressive from an environmental point of view and will only benefit proponents, mainly the natural resource exploitations industry.[37] The fact that the federal government viewed environmental assessments as an impediment to economic development is telling.[38] *CEAA 2012* is far from the "planning tool […] generally regarded as an integral component of sound decision-making" described by the Supreme Court in *Friends of the Oldman River Society*. In the words of Doelle, "the process under *CEAA 2012* is an [environmental assessment] process in name only". [39] Moreover, even the implementation of *CEAA 2012* has attracted critics.[40]

---

[35] Ibid, ss 52-53; and Doelle, supra note 26, 10-11.

[36] Doelle, ibid, 1-4; and Daigneault, supra note 24.

[37] Doelle, ibid, 16-17.

[38] Becklumb & Williams, supra note 27, 1.

[39] Doelle, supra note 26, 17.

[40] Office of the Auditor General of Canada, "Chapter 4: Implementation of the Canadian Environmental Assessment Act, 2012" of the *Report of the Commissioner of the Environment and*

I derive two main conclusions from this reform relevant for jurists, whether advocates or academics. The first is that due to the limited scope of *CEAA 2012*, both in terms of covered projects and of considered environmental effects, we will have to increasingly pay attention to provincial environmental assessments. The benefit of a federal state is that federal lacuna can be partially mitigated through provincial action. Moreover, some provincial governments might be more willing to lead on environmental matters than the current federal government. The recent decisions of the Superior Court of Québec concerning the protection of beluga whales and works conducted for the Energy East pipeline show how provincial regulations can potentially act as a safeguard for federal inaction.[41]

The second conclusion is broader. It is easy to think that established environmental legislation are secured (in French “les aquis”) and to focus our mind on what the next step forward can be. However, those aquis are, as demonstrated by this report, much more fragile than one might have thought. We must, as members of the public and as jurists, be mindful of how quickly decades of progress can be set aside. For the road ahead, it is worthwhile to start thinking about the best way to protect the environmental aquis from the changing whims of governments, such as constitutional protection or special parliamentary procedures, and ensure that environmental reforms, even in times of economic downturn, does not equate with regression.

Sustainable Development - Fall 2014 (Ottawa: Public Works and Government Services Canada, 2014).

[41] Centre Québécois du droit de l’environnement c Oléoduc Énergie Est ltée, 2014 QCCS 4147; and Centre Québécois du droit de l’environnement c Oléoduc Énergie Est ltée, 2014 QCCS 4398.

COUNTRY REPORT: THE PEOPLE'S REPUBLIC OF CHINA
Access to Justice under the Newly Revised Environmental Protection Law in China: When Theory Meets Practice

Miao He*

Introduction

After more than 10 years' research and more than 3 years' practical investigation undertaken by the relevant environmental authorities, as well as more than 14,000 suggestions from the public,[1] the Standing Committee of the National Peoples' Congress in China promulgated the newly revised *"Environmental Protection Law of the People's Republic of China"* (2014 version) (hereinafter the "newly revised environmental law") on 24 April 2014, which will enter into force from 1 January 2015. Compared with the "Environmental Protection Law of the People's Republic of China" (1989 version), there are some valuable improvements. Firstly, from the point of view of the content, some innovations were made for practical issues such as institutions and mechanisms for protecting the environment.[2] The newly revised environmental law also provides for more stringent environmental control measures and penalties.[3]

---

* PhD candidate, Department of Jurisprudence, Law Faculty, Wuhan University, P.R. China;

PhD candidate, Department of European, Public and International Law, Law Faculty, Ghent University, Universiteitstraat4, B-9000 Ghent, Belgium. Email address: miaohe2014@gmail.com; Tel: 0032/9264 8443; Fax: 0032/9264 6989

[1] The Standing Committee of the National Peoples' Congress called for suggestions and comments on how to revise the "Environmental Protection Law of the People's Republic of China" (1989 version) twice. In the first round, it received more than 12,000 suggestions from the public. In the second round, more than 2,000 suggestions were received. See Ministry of Environmental Protection. The newly revised environmental law supported by the consensus from various parties. Published on 27 April 2014, http://www.mep.gov.cn/gkml/hbb/qt/201404/t20140427_271054.htm accessed 22 August 2014.

[2] Jiwen Chang, 'The Newly Revised Environmental Law: the Most Strict Law but the Most Difficult to Implement in the History' (Law Online, 6 June 2014),

Amongst the most remarkable innovations is the fact that the newly revised environmental law expands on the notion of public interest litigation and empowers the public with more operable rights,[4] such as the right to access to environmental information and the right to access to justice. Respect and protection of human rights can only be guaranteed when citizens have access to effective judicial remedies including a fair trial.[5]

This country report focuses on access to justice in the newly revised environmental protection law. It provides details about the content, its progress and problems in theory and its challenges in practice in China.

Access to Justice in the Newly Revised Environmental Protection Law: Progress and Problems

There is no provision explicitly referring to the right to access justice in environmental matters in the *Chinese Constitution*. However, Article 41 of *the Constitution*[6] points out that *"Citizens have the right to appeal or sue or report the actions of any State authority or any official staff that violate the law or neglect their duty (…)". This is the basis for the right to access justice in China.*

In addition, various provisions of the relevant environmental law and regulations provide for some level of environmental activism in the courts. For instance, Article 41 of *the "Environmental Protection Law of the People's Republic of China"* (1989 version) provided that

---

http://www.chinalawinfo.com/LawOnline/ArticleFullText.aspx?ArticleId=83832 accessed 22 August 2014.

[3] Ibid.

[4] Renmin Net (人民网), 'It was the First Time to Fundamentally Revise the Environmental Law in the Past 25 Years, More Than 300 Organizations Meet the Requirements for being Plaintiffs in the Public Interest Litigation. (环保法 25 年来迎首次大修，合格公益诉讼原告超 300 家), (24 April 2014), http://sn.people.com.cn/n/2014/0424/c356442-21070239.html accessed 22 August 2014.

[5] The Rights Practice: Partnerships for Rights and Justice, 'Improving Access to Justice', http://www.rights-practice.org/en/programmes/access.html accessed 22 August 2014.

[6] The "Constitution of the People's Republic of China" was adopted in 1982 and newly amended on 14 March 2004, http://www.for68.com/new/201007/he60492159127010212383.shtml in both Chinese and English, accessed 3 September 2014.

> *"A natural or juristic person that has caused an environmental pollution hazard shall have the obligation to eliminate it and make compensation to the natural or juristic person or individual that suffered direct losses. A dispute over the liability to make compensation or the amount of compensation may, at the request of the parties, be settled by the competent department of environmental protection administration or another department invested by law with power to conduct environmental supervision and management. If a party refuses to accept the decision on the settlement, it may bring a lawsuit in a People's Court. The party may also directly bring a lawsuit in a People's Court (…)."*[7]

The *"Water Pollution Prevention and Control Law of the People's Republic of China*"[8] also provides some similar provisions. For instance, Article 86 advocates that "*For a dispute over liability for damage or amount of compensation in a water pollution accident, (…) the parties concerned may also file a lawsuit with the People's Court directly without going through the mediation procedure*."[9] Besides these, Article 87, Article 88 and Article 89 provide some detailed information on the burden of proof, the number of parties, liability for damage and the amount of compensation if litigation happens. Article 84 of *the "Law of People's Republic of China on Prevention and Control of Environmental Pollution by Solid Waste Law"*[10] states that "*Natural or juristic persons and individuals that have suffered damage from solid waste pollution shall have the right to claim compensation according to law (…)*." All these provisions provide to some extent for access to justice in environmental matters; however, these provisions do not clearly address the issue of legal standing.

---

[7] Article 41 of the "Environmental Protection Law of the People's Republic of China" (1989 version) is similar to Article 64 of the "Environmental Protection Law of the People's Republic of China" (2014 version). The Article 64 says "Those who cause damages due to environmental pollution and ecological destruction shall bear tort liability in accordance with provisions of Tort Liability Law of the People's Republic of China." The "Environmental Protection Law of the People's Republic of China" (2014 version) was newly modified based on the "Environmental Protection Law of the People's Republic of China" (1989 version) on 24 April 2014 and shall enter into force since 1 January 2015, http://edu.sina.com.cn/en/2014-05-20/144680376.shtml accessed 30 June 2014.

[8] The "Water Pollution Prevention and Control Law of the People's Republic of China" was issued on 28 February 2008 and entered into force on 1 June 2008, http://www.lawinfochina.com/display.aspx?lib=law&id=6722 accessed 11 August 2011.

[9] Article 86, the "Water Pollution Prevention and Control Law of the People's Republic of China".

[10] The "Law of the People's Republic of China on Prevention of Environmental Pollution Caused by Solid Waste" was issued in 1995 amended on 29 December 2004 and effective on 1 April 2005, http://www.lawinfochina.com/display.aspx?lib=law&id=119 Accessed 3 December 2011.

Furthermore, access to justice in environmental matters is also discussed in civil and administrative law, for instance, Article 98 of *the "General Principles of the Civil Law of the People's Republic of China"*[11] states "*Citizens shall enjoy the right of life and health*."[12] Article 124 points out "*Any person who pollutes the environment and causes damage to others in violation of State provisions for environmental protection and the prevention of pollution shall bear civil liability in accordance with the law*."[13] Article 55 of the "Civil Procedural Law of the People's Republic of China"[14] proposed states that "*the relevant agency, or social groups can sue against the actions which harm social public interests, such as environmental pollution (…).*"[15] Article 2 of *the "Administrative Procedural Law of the People's Republic of China"*[16] points out that "*If a citizen, a legal person or any other organization considers that his or its lawful rights and interests have been infringed by a specific administrative act of an administrative organ or its personnel, he or it shall have the right to bring a suit to a People's Court in accordance with this law*."[17]

A primary issue regarding access to justice in environmental matters relates to the legal standing of individuals or NGOs to enforce provisions aimed at environmental protection. However, the various laws mentioned above do not regulate this issue. The newly revised "Environmental Protection Law of the People's Republic of China"[18] addresses this important gap. For instance, Article 57 points out that

---

[11] The "General Principles of the Civil Law of the People's Republic of China" was adopted in 1986 and entered into force on 1 January 1987, http://www.china.com.cn/policy/txt/2012-01/14/content_24405953.htm accessed 22 November 2013.

[12] Article 98, the "General Principles of the Civil Law of the People's Republic of China".

[13] Article 124, the "General Principles of the Civil Law of the People's Republic of China".

[14] The "Civil Procedural Law of the People's Republic of China" was adopted on 9 April 1991 and amended on 31 August 2012, http://www.kd325.com/ShowArticle.shtml?ID=201051016355390786.htm accessed 22 August 2014.

[15] Article 55, the "Civil Procedural Law of the People's Republic of China".

[16] The "Administrative Procedural Law of the People's Republic of China" was adopted on 4 April 1989 and entered into effective on 1 October 1990, http://www.law-lib.com/law/law_view.asp?id=5641 accessed 22 November 2013.

[17] Article 2, the "Administrative Procedural Law of the People's Republic of China".

[18] The "Environmental Protection Law of the People's Republic of China" was promulgated by Order No. 22 of the President of the People's Republic of China on December 26, 1989, and was effective on the date of promulgation; it was newly modified on 24 April 2014 and shall enter into force since 1 January 2015, http://edu.sina.com.cn/en/2014-05-20/144680376.shtml accessed 30 August 2014.

> "*Citizens, legal persons and other organizations shall be entitled to report and raise a complaint about environmental pollution and ecological damage activities of any natural or juristic persons and individuals to competent environmental protection administrations or other departments with environmental supervision responsibilities. In the event that the local people's government and its environmental protection administrations or any other relevant departments fail to fulfill their responsibilities in accordance with the law, any citizen, legal person or other organizations has the right to report it to the competent higher level governments or the supervisory department according to law (…).*"

Furthermore, Article 58 provides that

> "*For activities that cause environmental pollution, ecological damage and public interest harm, social organizations that meet the following conditions may file litigation to the people's Courts: (1) having been registered at the civil affair department of people's governments at or above municipal level with sub-districts in accordance with the law; (2) specializing in environmental protection and public interest activities for five consecutive years or more without any record of breaking the law. Courts shall accept the litigation filed by social organizations that meet the above criteria. The social organizations that file the litigation shall not seek economic benefits from the litigation.*"[19]

The newly revised environmental law makes remarkable progress on access to justice in environmental matters in China. Firstly, the above Articles provide the legal basis for public interest litigation. Secondly, although environmental issues cannot be solved only by public interest litigation, litigation can function as a powerful tool for individuals and NGOs to supervise and prevent some illegal actions. These Articles substantially enhance the enforcement of environmental law and regulations. Thirdly, the legal standing for public interest litigation will be expanded for NGOs on 1 January 2015 when the law enters into force. It has been reported that in April 2014, among more than 3,000 social organizations, more than 300 would meet the requirements set out in the law for plaintiffs in public interest litigation,[20] as proposed in Article 58. This is a good sign which reflects the progressive development of public interest litigation in China.

---

[19] Article 58, the "Environmental Protection Law of the People's Republic of China" was promulgated by Order No. 22 of the President of the People's Republic of China on December 26, 1989, and was effective on the date of promulgation; it was newly modified on 24 April 2014 and shall enter into force since 1 January 2015, http://edu.sina.com.cn/en/2014-05-20/144680376.shtml accessed 30 August 2014.

[20] Supra No. 4.

Notwithstanding this progress, judicial guidance is needed to explain two key unresolved problems of interpretation regarding the criteria for identifying qualified public interest organizations. Firstly, how does one count the "five consecutive years" for "specializing in environmental protection public interest activities" for social organizations in practice? Secondly, how should one judge the requirement that the organization is "without any record of breaking the law" for social organizations?

Progress and Challenges for Access to Justice in Practice

It is interesting to examine the position regarding access to justice through a practical example. The Minister of the department of supervision and litigation from the All-China Environmental Federation (ACEF),[21] Yong Ma, reported that in 2013 as plaintiff, the ACEF pursued 8 different environmental public interest cases in China's courts, collectively seeking more than 100 million Yuan in compensation.[22] However, the People's Court did not accept jurisdiction to hear any of the cases for the reason that the Court thought the ACEF did not have legal standing to bring the cases (despite the ACEF having had some successful previous experience with public interest litigation). The provisions of the newly revised environmental law have filled this gap in practice. With the new Articles, there are now clearer guidelines regarding the legal standing of social organizations to bring such cases. This combined with the increase in tribunals (since the establishment of the first environmental tribunal in China in the Qiaokou Area of Wuhan city in 1989, the number has grown steadily and as of 2013 there are 134 permanent environmental tribunals in different courts in China)[23] will make public interest litigation more feasible. It is noted that the environment and resource tribunal was newly established at the supreme level in June

[21] The All-China Environmental Federation (hereinafter, as "ACEF"), established in 2005, is a nationwide non-profit civil society organization in the field of the environment. Although it is regarded as a NGO in China, its budget is supported by the Ministry of Environmental Protection.

[22] The "Civil Procedural Law of the People's Republic of China" was adopted on 9 April 1991 and amended on 31 August 2012, accessed 22 August 2014.

[23] Xiazichengqi, 'Why Is There No Case in Environmental Court in China?' (14 August 2013), http://toutiao.baike.com/article-1264543.html accessed 18 September 2013.

2014.[24] These environmental tribunals will undoubtedly also play a great role in realizing the right of access to justice in environmental matters in China.

However, challenges regarding access to justice remain. Firstly, those who live in poverty – mostly in rural areas – have limited access to legal services.[25] The concentration of financial and human resources in urban areas has excluded much of the rural population from access to lawyers and the courts,[26] even though in many instances serious environmental damage occurs in rural areas. Secondly, due to the short history of the research and education on environmental law, capacity-building is a critical problem not only for a potential plaintiff, such as individuals or NGOs, but also for lawyers and judges. The realization of public interest litigation requires some specialized skills from the plaintiff in the litigation, for instance the skill to collect environmental information required as evidence in the litigation. It will take some time for lawyers and judges to acquire relevant knowledge and practical experience in public interest litigation. Thirdly, a Court or a judge may lack the necessary ability to solve a particular environmental dispute because of the disputes' characteristics. For instance, environmental pollution may damage a person or an ecological system over a long period of time, creating challenges for assessing the quantum of damage.[27]

Conclusion

The Articles on access to justice in the newly revised environmental law address a major gap by providing invaluable guidelines on legal standing for access to justice in environmental matters in China. These provisions could be regarded as remarkable progress in safeguarding the people's environmental interests. However, courts remain inaccessible in many instances due to lack of capacity of individuals, NGOs, judges and lawyers, and a lack of resources. In addition, some judges might be unwilling to accept a case. How to overcome the challenges in practice is the next key issue for realizing access to environmental justice in China.

---

[24] Wangyi News, 'The Environment and Resource Tribunal was Newly Established at the Supreme of People's Court: Its Name Has Been Changed Several Times' (30 June 2014), http://news.163.com/14/0630/09/9VVQHKB600014AED.html accessed 30 June 2014.

[25]'The Rights Practice: Partnerships for Rights and Justice. Improving Access to Justice.' http://www.rights-practice.org/en/programmes/access.html accessed 22 August 2014.

[26] Ibid.

[27] Rui Zeng, 'The Real Obstacle and Practical Path for Chinese Environmental Judicial Activism'. (2014) *Journal of Henan University of Economics and Law*, 3.

COUNTRY REPORT: THE PEOPLE'S REPUBLIC OF CHINA
China's New Environmental Protection Law

Nengye Liu*

Introduction

China is currently the world's second largest economy and is facing serious environmental challenges. Since China adopted its "open door" policy and market economy reform in 1978, the astronomical growth in the Chinese economy has coincided with a corresponding decline in environmental quality. The ubiquitous smog that blankets the skies of most Chinese cities is a constant reminder of the extent of Chinese environmental problems. Clean air, water and soils have become luxuries beyond the reach of most inhabitants of mainland China.

Chinese law does intend to protect the environment. *The Environmental Protection Law* was first adopted in 1979 and revised in 1989.[1] This revision has however proved grossly inadequate to address the severity of Chinese environmental problems. Neither the 1989 Environmental Protection Law, nor the copious instruments formulated with the purpose of environmental protection, such as *the Atmospheric Pollution Prevention and Control Law,*[2] *the Circular Economy Promotion Law,*[3] *the Energy Conservation Law,*[4] *the Renewable*

---

* Marie Curie Fellow, School of Law, University of Dundee, Dundee, DD1 4HN, United Kingdom

E-mail: n.x.liu@dundee.ac.uk

The author thanks Dr. Michelle Lim for her comments on the earlier draft.

[1] 中华人民共和国主席令第 22 号[Decree of the President of P. R. China (No. 22)], 中华人民共和国环境保护法 [Environmental Protection Law of P. R. China], 26 December 1989.

[2] 中华人民共和国主席令第 32 号[Decree of the President of P. R. China (No. 32)], 中华人民共和国大气污染防治法 [Atmospheric Pollution Prevention and Control Law of P. R. China], 29 April 2000.

[3] 中华人民共和国主席令第 4 号[Decree of the President of P. R. China (No.4)], 中华人民共和国循环经济促进法 [Circular Economy Promotion Law of P. R. China], 29 August 2008.

Energy Law,[5] *the Cleaner Production Promotion Law,*[6] *the Forest Law,*[7] *or the Grassland Law,*[8] have succeeded in stopping the deterioration of China's environment.

On 24 April 2014, *China's New Environmental Protection Law* (2014 EPL)[9] was adopted, entering into force on 1 January 2015. The 2014 EPL replaces the 1989 EPL, with the hope

---

[4] 中华人民共和国主席令第 77 号[Decree of the President of P. R. China (No.77)], 中华人民共和国节约能源法 [Energy Conservation Law of P. R. China], 28 October 2007.

[5] 中华人民共和国主席令第 33 号[Decree of the President of P. R. China (No.33)], 中华人民共和国可再生能源法 [Renewable Energy Law of P. R. China], 28 February 2005; 中华人民共和国主席令第 23 号 [Decree of the President of P. R. China (No.23)], 全国人民代表大会常务委员会关于修改中华人民共和国可再生能源法的决定 [Decisions on the Amendments to the Renewable Energy Law of P. R. China by Standing Committee of National People's Congress], 26 December 2009.

[6] 中华人民共和国主席令第 72 号[Decree of the President of P. R. China (No.72)], 中华人民共和国清洁生产促进法 [Cleaner Production Promotion Law of P. R. China], 29 June 2002; 中华人民共和国主席令第 54 号 [Decree of the President of P. R. China (No.54)], 全国人民代表大会常务委员会关于修改《中华人民共和国清洁生产促进法》的决定 [Decisions on the Amendments to Cleaner Production Promotion Law of P. R. China by Standing Committee of National People's Congress], 29 February 2012.

[7] 中华人民共和国森林法 [Forest Law of P. R. China], 1984 年 9 月 20 日第六届全国人民代表大会常务委员会第七次会议通过, 根据 1998 年 4 月 29 日第九届全国人民代表大会常务委员会第二次会议《关于修改〈中华人民共和国森林法〉的决定》第一次修正, 根据 2009 年 8 月 27 日第十一届全国人民代表大会常务委员会第十次会议《关于修改部分法律的决定》第二次修正 [adopted in 1984 by the 7th Meeting of Standing Committee of National People's Congress, as amended in 1998 by Decisions on the Amendments to Forest Law of P.R. China, 2nd Meeting of Standing Committee of National People's Congress and in 2009 by Decisions on the Amendments to Several Laws, 10th Meeting of Standing Committee of National People's Congress].

[8] 中华人民共和国主席令第 26 号[Decree of the President of P. R. China (No. 26)], 中华人民共和国草原法 [Grassland Law of P. R. China], 18 June 1985, as amended by 中华人民共和国主席令第 82 号 [Decree of the President of P. R. China (No. 82)], 28 December 2002.

to combat China's environmental problems. The question therefore is whether the 2014 EPL will bring clean air, water and soil back to Chinese people in the foreseeable future? This country report first discusses the content of 2014 EPL. It then sheds some light on the weaknesses of the 2014 EPL and concludes with recommendations for the effective implementation of this law.

The 2014 EPL

A proposal for amending the 1989 EPL was first submitted to the National People's Congress (NPC) in 1995. The NPC Standing Committee commenced the legislative procedure of amending the EPL in 2011. The NPC was initially conservative in its approach and intended to revise only some parts of the 1989 EPL. It then recognized the fact that the 1989 EPL was completely obsolete and that fundamental change was unavoidable if there was to be any hope of reversing past and current trends of environmental degradation. The 2014 EPL should therefore be seen as a new law rather than a revised version of the 1989 EPL. It contains 7 Chapters and 70 Articles. This is far more detailed than the 1989 EPL (6 Chapters, 47 Articles).

Chapter 1 defines general principles of the 2014 EPL. It is stated by the 2014 EPL that protection of the environment is the priority, while economic development should take a back seat.[10] For the first time, principles such as the precautionary principle, public participation and integrated management are enshrined in the EPL.[11] Moreover, the 2014 EPL provides that local government is responsible for environmental quality within its jurisdiction.[12] World Environment Day (5 June each year) is recognized in the 2014 EPL as China's National Environment Day.[13]

---

[9]中华人民共和国主席令第 9 号[Decree of the President of P. R. China (No. 9)], 中华人民共和国环境保护法 [Environmental Protection Law of P. R. China], 24 April 2014.

[10] Art.1, 2014 EPL: "The purposes for the adoption of this law are to protect the environment, prevent and control pollution and other disasters, ensure public health, advance the society towards eco-friendly and promote sustainable development of the economy and society".

[11] Art. 5, 2014 EPL.

[12] Art. 6, 2014 EPL.

[13] Art. 12, 2014 EPL.

Chapter 2 sets out governmental responsibilities for the management and supervision of environmental protection. According to the 2014 EPL, the environment must play a very important part in the government's social and economic development plans.[14] The Law requires the State Council to enact national standards for environmental quality and pollution discharge. It is noted that local governments are encouraged to adopt more stringent standards than national standards.[15] The Ministry of Environmental Protection shall establish a national network for monitoring environmental data.[16] The 2014 EPL also emphasizes the role of environmental impact assessment (EIA). Any development plan and construction project without an EIA shall not be pursued.[17] A further interesting provision which warrants highlighting is Art. 20. This Article addresses pollution across administrative regions. It requires the central government to identify key areas and establish an integrated approach with uniform planning, standards, monitoring and pollution prevention and control measures so as to combat pollution in river basins and ecological loss across different administrative areas.

Chapter 3 concerns measures for the protection and improvement of the environment. Protected areas shall be established for areas that are ecologically important, sensitive and vulnerable (so called "red line").[18] The 2014 EPL pays attention to the protection of biodiversity. It provides that preventive measures shall be taken to control the spread of alien species. Through the 2014 EPL, China has established an ecological compensation mechanism. Under this scheme, funding shall be transferred to protected areas. At the same time, local governments are enabled to negotiate details of ecological compensation based on market rules.[19] The 2014 EPL addresses the protection of air, water, soil and oceans.[20] It however relies on specific legislation such *as the Atmospheric Pollution Prevention and Control Law* for the execution of these provisions. Finally, the government encourages the public (citizens, companies and other organizations) to use more environmental friendly

[14] Art. 13, 2014 EPL: "local government (above county level) shall include environmental protection in its social and economic development plan"; Art. 14: "The State Council and Provincial government shall fully consider environmental impact and consult with experts before any policy making on economy and technology".

[15] Art. 15 and 16, 2014 EPL.

[16] Art. 17, 2014 EPL.

[17] Art. 19, 2014 EPL.

[18] Art. 29, 2014 EPL.

[19] The negotiation is between local governments of regions that benefit from protected areas and local government of regions where protected areas are established. Art. 31, 2014 EPL.

[20] Art. 32 and 34, 2014 EPL.

commodities. In government procurement preference shall also be given to environmental friendly products, equipment and facilities.

Chapter 4 addresses pollution and other public nuisance. Several measures in the 1989 EPL are retained in the 2014 EPL. These measures include provisions related to pollution prevention. Pollution control facilities must be designed, built and used at the same time as the project.[21] Companies that cause pollution must pay a pollutant discharge fee or environmental tax.[22] The Central government shall establish total allowance for discharging pollutants in the whole country.[23] Therefore, even if companies have paid a pollutant discharge fee or environmental tax, they must not exceed the pollution allowance in their region. Companies shall also apply for the pollutant discharge permit before conducting any activities that may result in pollution.[24] Some new elements are also introduced in Chapter 4. For example, the use of clean energy is promoted.[25] The use of environmental pollution liability insurance is encouraged.[26] Where companies have paid environmental protection tax, the pollution discharge fee shall be waived.[27] As a response to the many environmental disasters of recent years, the 2014 EPL refers to the Emergency Response Law[28] for risk control, contingency planning, emergency response and restoration pursuant to any environmental disasters.[29] The 2014 EPL requires local governments to disclose information when environmental pollution may affect public health and environmental security.[30]

Chapter 5 concerns information disclosure and public participation. It is clear from the 2014 EPL that citizens, corporations and other organizations are entitled to access environmental data, and to participate in and supervise environmental protection.[31] The Ministry of Environmental Protection is required to publish information regarding the quality of the

---

[21] Art. 41, 2014 EPL.

[22] Art. 43, 2014 EPL.

[23] Art. 44, 2014 EPL.

[24] Art. 45, 2014 EPL.

[25] Art. 40, 2014 EPL.

[26] Art. 52, 2014 EPL.

[27] Art. 43, 2014 EPL.

[28] 中华人民共和国主席令第 69 号[Decree of the President of P. R. China (No. 69)], 中华人民共和国突发事件应对法 [Emergency Response Law of P. R. China], 1 November 2007.

[29] Art. 47, 2014 EPL.

[30] Art. 47, 2014 EPL.

[31] Art. 53, 2014 EPL.

environment and pollution. Similarly provincial governments are required to prepare and regularly update reports on the environment.[32] Local governments can make use of a "black listing" system to name and shame companies that are in violation of environmental legislation.[33] The most important development in Chapter 5 is the public interest litigation provisions. This issue has been discussed for years in China. According to Art. 58, NGOs that have registered on a local government list (above city level) and have been continuously active in environmental protection and public interests for at least 5 years are qualified to bring litigation to local courts.

Chapter 6 focuses on liability. Several penalties can be applied where the 2014 EPL has been breached. These include fines, restoration, suspension of the project and imprisonment of responsible persons. It is noted that penalties imposed on companies that are in violation of pollutant discharge standards can be charged on a daily basis.[34] In contrast to the 1989 EPL, the 2014 EPL provides for government liability in addition to liability of corporations and citizens. Staff of the Environmental Protection Agency and other relevant institutions can be punished or dismissed according to Art. 68.

Weaknesses

The 2014 EPL is a clear improvement on previous legislation. There are however weaknesses within the 2014 EPL. Firstly, the 2014 EPL relies on legislation such as the Marine Environmental Protection Law, the Emergency Response Law and the Atmospheric Pollution Prevention and Control Law. Although it can be said that the 2014 EPL has the potential to guide the implementation and enforcement of other Chinese environmental legislation, the relationship between the EPL and other legislation is not clarified in the 2014 EPL. Secondly, the national ecological compensation scheme established under the 2014 EPL needs further legislation to provide details regarding the definition of beneficial regions and clarification of specific market rules for the negotiation between beneficial regions and protected areas. A further limitation of this scheme is that it maintains the traditional view of protected areas as excluding human activities. Thirdly, there is a whole new chapter on public participation in the 2014 EPL. Nevertheless, several constraints limit public involvement. Individuals are not allowed to initiate public interests litigation at all. Moreover, the barriers to qualifying as an NGO that can pursue public interest litigation in a Chinese

[32] Art. 54, 2014 EPL.

[33] Ibid.

[34] Art. 59, 2014 EPL.

court remain great. In practice, it is very difficult for NGOs to register. Therefore, only NGOs that have government backing or are trusted by the government, such as the All-China Environment Federation, can make use of the 2014 EPL to sue polluters in court. Finally, the 2014 EPL provides for government liability in the field of environmental protection. For example, the Chief of Environmental Protection Agency shall resign in case a serious damage to the environment occurs. However, it is not clear under what circumstances the government can be sued for not actively protecting the environment.

Conclusions

The 2014 EPL brings hope to Chinese people that in the future they can once again live in a good environment with clean air and water. In the author's opinion, it is too early to applaud the formulation of new legislation as a success in itself. Though the 2014 EPL provides more detailed tools for combating environmental problems in China, weaknesses remain. The 2014 EPL is in itself insufficient for overcoming the Chinese environmental crisis. The government definitely plays a very important role in this battle. The question that remains for all Chinese citizens is this: "Is there another way to have a decent life while avoiding environmental destruction?" If people of this rising economy on the one hand blame their government for failing to curb pollution while on the other hand talk about buying their first car as demonstration of wealth, then the future for this battle is bleak.

COUNTRY REPORT: THE PEOPLE'S REPUBLIC OF CHINA
Public Interest Environmental Litigation and the Revised Environmental Protection Law of People's Republic of China

Jingjing Zhao*

Introduction: Public Interest Environmental Litigation

Public interest environmental litigation normally refers to the fact that institutions and related organizations provided for by relevant law may file a suit against actions polluting the environment or disrupting the ecology that have already harmed the public interest, or have a significant risk of harming the public interest.[1] It may serve as an effective way for the public to participate in environmental protection, by putting pressure on environmental polluters and monitoring the enforcement of environmental law by administrative organs.

Public interest environmental litigation is relatively a new phenomenon in China where it has only started to develop in the past decade. In practice, Chinese courts have made some attempts regarding public interest environmental litigation through the setting up of environmental courts at the municipal level. However, there existed no clear reference to public interest environmental litigation at the legislation level until the revision of the *Environmental Protection Law of People's Republic of China* (EPL) in April 2014.

---

* Doctoral Candidate, Part-time Lecturer and Tutor, the Law School, University of Strathclyde, UK.
The author would like to thank Mrs Fenghuan Lu, Mr Yunduo Zhao and Conghai Wang for their support, and thank Miss Zhaotong Wang for the inspirations she has given. Email: daisyzhao2006@gmail.com or jingjing.zhao@strath.ac.uk.

[1] The Supreme People's Court Interpretation on Several Issues Regarding the Application of Law in Public Interest Environmental Civil Litigation (Draft for soliciting opinions), Article 1, available at: http://www.court.gov.cn/gzhd/zqyj/201409/t20140930_198250.htm.

The Environmental Protection Law (2014 revised version)

Although the *Civil Procedure Law* (2012 revised version)[2] includes a general reference to public interest environmental civil litigation, it does not provide workable procedural rules in detail and appears to be difficult to implement in practice. Article 55 of the Civil Procedure Law states that: 'where the environment is polluted, the lawful rights and interests of the collective are infringed upon, or other acts impairing the public interest are committed, the organs stipulated by law and relevant organisations may bring actions to the people's court.' This brief statement is seen to be rather difficult to implement in practice, since it does not clearly rule on technical questions such as the range of the subject of litigation, conditions for initiating litigation, the scope of review and judgement, methods for bearing liability, burden of litigation costs, etc. The most controversial question appears to be which subjects are qualified to initiate public interest environmental litigation.

The revised EPL[3] was passed by the 8th Meeting of the 12th Standing Committee of the National People's Congress on 24 April 2014, to enter into force on 1 January 2015. This is the first revision of the existing Environmental Protection Law which was originally issued on 26 December 1989. The revision has seen changes to the majority of the existing EPL to meet the current circumstances, 25 years after the promulgation of the existing EPL, and is claimed to be the strictest Chinese environmental protection law in history. Among all the changes, the revised EPL sets up a specific mechanism for public interest environmental litigation for the first time through legislation. Article 58 of the revised EPL reads that:

> *'For activities that cause environmental pollution, ecological damage and public interest harm, social organizations that meet the following conditions may file litigation to the people's courts:*
> *(1) Have their registration at the civil affair departments of people's governments at or above municipal level with sub-districts in accordance with the law;*
> *(2) Specialize in environmental protection public interest activities for five consecutive years or more, and have no law violation records.*
> *Courts shall accept the litigations filed by social organizations that meet the above criteria.*
> *The social organizations that file the litigation shall not seek economic benefits from the litigation.'*

---

[2] The Civil Procedure Law of People's Republic of China 1991, as amended by the Standing Committee of the National People's Congress respectively in 2007 and 2012. Aavailable at: http://www.npc.gov.cn/npc/xinwen/2012-09/01/content_1735841.htm.

[3] Available at: http://www.npc.gov.cn/npc/xinwen/2014-04/25/content_1861279.htm.

Article 58 clarifies the subject range of public interest environmental litigation. It provides a legal channel for social organisations (and for citizens to participate through social organisations) which meet the abovementioned criteria to file litigation. It is estimated that a total number of 300 social organisations in China would be qualified to initiate public interest environmental litigation.[4] It should be clarified that since the EPL is the fundamental law in the area of environmental protection, its articles (including the provisions on public interest environmental litigation) are normally drafted in a general way which needs to be further specified by other legislation or judicial interpretation.

The scope of the subject of public interest environmental litigation has been widened in the four revision drafts considered by the Standing Committees of the National People's Congress respectively in August 2012, June and October 2013, and April 2014.[5] The previous three drafts were not able to be passed because of controversies over their content. The 1st consideration in August 2012 did not refer to public interest environmental litigation in any of its provisions. The 2nd consideration introduces the mechanism for public interest environmental litigation, but restricted the subject to All-China Environment Federation (a non-profit social organisation under the regulation of the Ministry of Environmental Protection) and Environment Federations in provinces, municipalities and autonomous regions. The 3rd consideration extended the scope of subject to nation-wide social organisations which are registered at the civil affairs department of the State Council, and have specialised in environmental protection public interest activities for five consecutive years or more, and have no law violation records. The 4th and final consideration further extended the scope to social organisations which have their registration at the civil affair departments of people's governments at, or above, municipal level with sub-districts.

In addition, the revised EPL clarifies the method for bearing liability which is also relevant for public interest environmental litigation. It reads that 'those who cause damages due to environmental pollution and ecological destruction shall bear tort liability in accordance with provisions of *Tort Liability Law of the People's Republic of China'.*[6] In addition, it stipulates that the validity period for prosecution with respect to compensation for environmental

[4] Available at: http://news.china.com.cn/2014-04/25/content_32200980.htm.

[5] Ibid.

[6] Environmental Protection Law, Supra note 3, Article 64.

pollution damage shall be three years, counted from the time when the party becomes aware of, or should become aware of, the damage.[7]

Relevant Policy and Practice on Public Interest Environmental Litigation

At the policy level, China is determined to tackle environmental pollution and take environmental protection forward in a way that conforms to the law. On 23 October 2014, the *Chinese Communist Party Central Committee Decision Concerning Several Major Issues In Comprehensively Advancing Governance According To Law* was published as a policy guide for the country. It decided to 'use strict legal structures to protect the ecological environment, accelerate the establishment of ecological civil law structures to effectively restrain exploitative behaviour and stimulate green development, recycling development and low-carbon development, strengthen the legal liability of producers for environmental protection, and substantially raise the costs of violating the law'.[8] This serves as a policy direction for the development of environmental protection law and practice, including the area of public interest environmental litigation.

Public interest environmental litigation is treated as one of the focuses of the work of the people's courts in practice. On 23 June 2014, the Supreme People's Court published its *Opinion of the Supreme People's Court on Comprehensively Strengthening Judicial Work Related to Environmental Resources to Provide Effective Judicial Safeguards to Promote the Construction of Ecological Civilisation* (SPC Opinion).[9] The SPC Opinion is divided into 7 sections which contain 26 provisions. It introduces the guiding ideology, basic principles, and mission goals for judicial work relating to natural resources, and serves as the guiding documentation for current and future work in environmental resources litigation. The SPC Opinion emphasises that public interest environmental litigation would serve the key point of strengthening environmental litigation, and includes a specific section (Section 4) entitled 'greatly promoting public interest environmental litigation'. The SPC Opinion introduces methods to fully protect the rights of legally designated organs and social organisations to file public interest environmental litigation (Article 11). It explores ways to improve trial procedures in public interest environmental litigation (Article 13). It also endeavours to determine (according to law) methods for responsibility and the scope of compensation for

[7] Environmental Protection Law, Supra note 3, Article 66.

[8] Available at: http://news.xinhuanet.com/politics/2014-10/28/c_1113015330.htm.

[9] Available at: http://www.chinacourt.org/law/detail/2014/06/id/147914.shtml.

public interest environmental lawsuits (Article 14). It then attempts to establish rational mechanisms for bearing litigation costs (Article 15).

In order to specifically deal with environmental litigation, the Supreme People's Court set up its Environmental Resources Tribunal in June 2014.[10] One of the focal points of the work of the Environmental Resources Tribunal is public interest environmental litigation, including launching trials of public interest environmental litigation at the provincial level and drafting relevant judicial interpretation.

By July 2014, people's courts in 16 provinces (municipalities and autonomous regions) have established a total number of 134 environmental protection tribunals, collegiate panels, and circuit courts to deal with environmental litigation.[11] The Environmental Resources Tribunal of the Supreme People's Court has selected 5 provinces (Jiangsu, Fujian, Yunnan, Hainan, Guizhou) as experimental units for public interest environmental litigation.[12]

The Environmental Resources Tribunal also bears the responsibility of publishing typical cases and drafting judicial interpretation on public interest environmental litigation. It published 9 typical environmental resources civil cases in July 2014. Although those cases are not legally binding for future judicial tribunals, they are likely to serve as direction and guidance for future environmental litigation. The 5th case issued was concerned with both public interest and private environmental litigation, and is an attempt to answer the question as to who would be eligible to file public interest environmental litigation. In this case, Zhu Zhengmao, an affected citizen and representative of other affected citizens, together with All-China Environment Federation, jointly sued Jiangyingang Container Ltd for environmental pollution. They were treated as suitable subject of litigation, and the case was accepted and heard by the Intermediate People's Court of Wuxi.[13]

In order to further clarify technical questions regarding public interest environmental litigation and facilitate its practice, the Environmental Resources Tribunal has drafted a judicial statement named *The Supreme People's Court Interpretation on Several Issues Regarding the Application of Law in Public Interest Environmental Civil Litigation* (Draft for soliciting opinions) (SPC Interpretation) in October 2014 and sought comments from the

[10] Available at: http://www.court.gov.cn/xwzx/xwfbh/twzb/20140703xwfbh/.

[11] Ibid.

[12] Available at: http://www.chinanews.com/fz/2014/11-13/6769020.shtml.

[13] Available at: http://www.court.gov.cn/xwzx/xwfbh/twzb/20140703xwfbh/.

public. The SPC Interpretation answers in detail which social organisations would be eligible to initiate public interest environmental litigation;[14] rules on methods for bearing liability including preventative responsibility, restorative liability, compensatory liability, and punitive liability;[15] decides on the influence of public interest judgements on private litigation;[16] and provides judicial assistance to the plaintiffs in public interest environmental litigation.[17] Once passed and published, the SPC Interpretation would provide detailed rules on the application of the EPL, and serve as guidance for the courts at lower levels in terms of public interest environmental litigation.

Conclusion

Public interest environmental litigation in China is still in its infancy. The number of existing cases is relatively small, the public's understanding of public interest environmental litigation is rather limited, and the operable procedural rules on such litigation have recently started to form at the legislative level. However, it is envisaged that both the law and practice regarding public interest environmental litigation will be further enhanced and developed.

The mechanism for public interest environmental litigation as stated in the revised EPL is the result of deliberate consideration by legislators, taking into account the opinions of the public, policy-makers and relevant scholars. The broadening of the subject of litigation enables more qualified social organisations to file public interest litigation. It thus serves as an effective way for the public to participate in environmental protection.

[14] Supra note 1, Articles 2-5.

[15] Ibid, Articles 17-23.

[16] Ibid, Article 28.

[17] Ibid, Article 31.

COUNTRY REPORT: DEMOCRATIC REPUBLIC OF COLOMBIA
Climate Change Governance: Existing Legal Tools, Regional Best Practices and Challenges for Colombia

Gilberto Rincón and Catalina Vallejo*

Introduction

This report is based on a study conducted by the Centre of Studies for Sustainable Development - Colombia (CEID) and the Legal Preparedness for Climate Change Initiative (IPJCC) of the International Development Law Organization (IDLO).[1] The study was carried out through a process of multi-stakeholder consultation in the field that allowed constructing a diagnosis of the legal and governance state of affairs, to systematically identify major barriers and legal and institutional innovations in Colombia, Ecuador, Guatemala and Mexico. To develop this country report on Colombia, we will start by analysing the country's main climate governance challenges, subsequently we will describe the existing legal tools and innovations, and lastly we will describe some of the identified best climate governance practices in the region. We will end the analysis with some recommendations for the particular situation of Colombia.

Colombia's Main Climate Governance Challenges

As a country with a high level of income concentration[2] and about 45% of its population living under conditions of poverty, Colombia`s vulnerability to climate change is considered

---

* Gilberto Rincón is the founder and current director of CEID-Colombia; Catalina Vallejo is a lawyer and PhD student at Los Andes University School of Law (Bogotá, Colombia).

[1] IDLO and CEID, *Preparación Juridica para el Cambio Climatico y el Deasrrollo Rural en América Latina: Resumen Transversal de Mejores Prácticas y Lecciones Aprendidas* [Legal preparedness for climate change and rural development in Latin America: Cross Summary of best practices and lessons learned], 2013.

[2] Despite being the fourth largest economy in Latin America, Colombia has a Gini coefficient of 53,5 (2012), one of the highest in the region. The World Bank, "GINI Index," 2014 <http://datos.bancomundial.org/indicador/SI.POV.GINI>.

as significant.[3] The country's geological conditions and location make it especially vulnerable to heavy floods in some areas and extreme droughts in others. This happens both in coastal and mountainous regions during rainy seasons when the intensity of precipitation is affected by El Niño and La Niña climate phenomena.[4] Amongst other effects, climate change in Colombia is likely to cause deaths, loss of property, damage to agriculture and it threatens biodiversity and food security. Moreover, due to armed political conflicts Colombia has one of the highest rates of internally displaced people in the world; these approximately 4 million people are especially vulnerable to the adverse effects of climate change.[5]

The issues raised above highlight adaptation as the most important climate related challenge for Colombia. In addition, mitigation measures remain a matter of concern for the country. Even though Colombia's emissions of greenhouse gases (GHG) do not surpass 1% of total global emissions, human induced deforestation and changes in land use are significant problems for the country. Deforestation affects the rainforest of the Amazon and Pacific regions significantly, which are among the world's richest in biodiversity and key GHG sinks. Amid factors contributing to deforestation in Colombia are increasing levels of economic activity that substitute tropical forests for mono-plantations such as palm oil, and armed conflict dynamics. Interestingly, drug cartels are also believed to have had a significant impact on deforestation in Colombia due to the plantation and harvest of illegal corps.[6]

In this line of thought, climate change impacts are expected to pose significant and long-term effects on Colombia´s ecosystems, to accelerate the speed of deforestation, impact water quality and agricultural production, contribute to a decline in biodiversity and to increase the exposure of citizens to socio-economic vulnerability.[7] In short, the country

---

[3] Leonardo Freire de Mello, *Colombia*, ed. by S. George Philander, *Encyclopedia of Global Warming and Climate Change*, 2 edition (SAGE Publications, 2012), p. 353.

[4] Ibid.

[5] The World Bank, Global facility for disaster and recovery and Climate change team, *Climate Risk and Adaptation Country Profile*, 2011 <http://sdwebx.worldbank.org/climateportalb/doc/GFDRRCountryProfiles/wb_gfdrr_climate_change_country_profile_for_COL.pdf>.

[6] Ibid.

[7] The World Bank, Global facility for disaster and recovery and Climate change team.

clearly faces serious governance challenges.[8] Thus, the Colombian State requires legal innovations and institutional reform so as to protect the rights of vulnerable populations and minimize the effects of climate change on its natural resources.

Existing Governance Tools and Innovations

Institutional design can have an inhibiting or facilitating effect on climate governance. They can prohibit or encourage certain activities, but also provide an enabling framework that guides the activities of the public and private sectors towards the desired ends. During the last decade, the Colombian agenda for climate governance has gained some prominence in the context of global climate change negotiations. In this section we will describe some of the legal and institutional measures that Colombia has implemented to tackle its very own climate challenges. To date the most significant legal tools relevant for climate governance are to be found in Colombia's: (i) Political Constitution, (ii) National Development Plan 2010-14, (iii) National Climate Change System (SISCLIMA), (iv) Adaptation Fund created by Decree-Law 4819 of 2010, and (v) Law 1523 of 2012 on Risk Management.[9]

The Colombian Political Constitution (1991), known as "*la Constitución ecológica*" [the "ecological constitution"][10] contains some aspects relevant to climate change. Amongst these are: (i) the collective right to a healthy environment, (ii) a right to public participation, (iii) actions to enforce the implementation and protection of collective rights, (iv) a shared constitutional obligation between the State and individuals to protect biodiversity and environmental integrity and to preserve areas of special ecological importance, (v) the stated ecological function of private property (vi) environmental obligations of the State, (viii) environmental rights and duties of citizens, (ix) the formulation of environmental policies

---

[8] According to a quantitative analysis by Wheeler, Colombia could be on the Top 20 Countries running extreme weather risk in 2015. David Wheeler, *Quantifying Vulnerability to Climate Change: Implications for Adaptation Assistance* (Washington, 2011) <http://www.cgdev.org/files/1424759_file_Wheeler_Quantifying_Vulnerability_FINAL.pdf> [accessed 17 November 2014].

[9] See IDLO and CEID.

[10] The 1991 Constitution has been referred to as "ecological" by the Colombian Constitutional Court for having a significant number of articles, which transversally effect environmental protection. This happens in contrast to previous Colombian constitutional texts where environmental and ecology matters were not a priority. To expand on this issue see: Colombian Constitutional Court - Judge Vladimiro Naranjo Mesa, Rulling C-431, 2000 <http://www.alcaldiabogota.gov.co/sisjur/normas/Norma1.jsp?i=14510>.

under the National Development Plan, and (x) the notion of sustainable development as a goal for society. In this Constitution environmental matters reached maximum legal hierarchy when compared to previous Colombian constitutional texts.

The National Development Plan 2010 - 2014 'Prosperity for All' adopted by Law 1450 of 2011, is the formal, legal instrument under the Constitution by which the objectives of the government are set out allowing the subsequent evaluation of their management. The plan states that the government should develop four strategies related to climate change, namely: (i) a national plan for adaptation to climate change, (ii) a low carbon emissions development strategy (iii) a national Reduced Emissions from Deforestation and Forest Degradation REDD+ strategy, and (iv) a strategy for financial protection in case of environmental disasters.

The National Climate Change System (SISCLIMA) was created by a legal document on strategic national policy planning known as CONPES 3700 (2011),[11] which allows for building an institutional architecture to articulate the functions and roles of public and private stakeholders on climate change. This system is not yet in operation, but this innovation will provide Colombia with a great opportunity to create cross-sectorial synergies, develop actions and coordinated projects on mitigation, adaptation and access to international climate finance.[12]

The *Adaptation Fund* created by *Decree Law 4819 of 2010* was designed in order to finance concrete adaptation projects (infrastructure, housing, forestry and land use) to respond to damage from the climate phenomenon La Niña in Bogotá and other Colombian cities in 2010 and 2011. This adaptation fund was in essence implemented to allow for a better management of climate change associated risks. The Colombian General System of

---

[11] National Planning Oficce of Colombia, "Conpes 3700: Estrategia Institucional Para La Articulación de Políticas Y Acciones En Materia de Cambio Climático En Colombia [Institutional Strategy for the Articulation of Policies and Actions on Climate Change in Colombia]," 2011 <http://www.andi.com.co/Archivos/file/Gerambiental/Conpes3700.pdf> [accessed 17 November 2014].

[12] The Colombian Government has not yet issued legislation to establish the SISCLIMA. Under CONPES 3700 of 2011, once it has been established, a body called "The Inter-sectorial Commission on Climate Change" will govern it. See further: The REDD Desk, "Intersectorial Commission on Climate Change (Colombia)" <http://theredddesk.org/countries/actors/intersectorial-commission-climate-change-colombia> [accessed 17 November 2014].

Royalties has also opened up opportunities for financing renewable energy projects, environmental recovery and stabilization, reforestation, ecosystem recovery and adaptation programs specific for Afro-Colombian communities.

Similarly*, Law 1523 of 2012* introduced a new approach to risk management. It shifted institutional risk management from a post-disaster assistance and relief intended method, to a more comprehensive risk-prevention approach. Risk management now aims to provide protection to the population, improve security, increase wellbeing and quality of life and contribute to sustainable development. This approach focuses on the protection of citizens. Amongst other issues, this law mandates the creation of a National System for Disaster Risk Management, which is to be a network of institutional associations to coordinate, plan and execute the actions and responsibilities outlined by the law itself. Beyond the allocation of roles and responsibilities, the National System will also help promote the participation of government, private sector and the public, to stimulate the social, economic and environmental development of the country, recognizing the responsibility that all stakeholders carry in the protection and promotion of sustainable development.

In addition to the above, Colombia has made several efforts to counteract the adverse effects of climate change. Among these actions are the research projects outlined below.

National Adaptation Pilot (INAP), this project had a five-year development period and was financed by The World Bank.[13] During this time, the country acquired the necessary technical knowledge for installation, operation and maintenance of marine automatic weather stations. The data obtained has allowed forecasting and better understanding of certain climate events where weather stations are installed.

Lastly, in the Pacific area there is an on going project called “Conservation Corridor Chocó-Darién”, which includes about 13,500 acres of rainforest located in the northeast region of Colombia. It used the Verified Carbon Standard (VCS) approach and received certification to reduce deforestation, avoiding issuing a hundred thousand tons of carbon in less than two years. It is the first project whose direct beneficiaries are Afro-Colombian collective landowners.

---

[13] See further The World Bank, “Colombia: Integrated National Adaptation Program,” 2011 <http://www.worldbank.org/projects/P083075/colombia-integrated-national-adaptation-program?lang=en> [accessed 17 November 2014].

Best Practices

As a result of the analysis of legal and institutional frameworks for climate change impacting rural development in Colombia and other Latin American countries that was conduced by CEID and IDLO[14] some enabling practices whose scope could be considered for replication in Colombia were identified. The aim of a compilation of these practices is to strengthen legal preparedness for climate change and to enhance strategies that impact rural development for the most vulnerable communities.

Sustainability Criteria and State Commitments with a Long-Term Vision:

Laws may establish enabling frameworks and operating rules to address climate change in a sustainable and comprehensive manner. Importantly, this could be achieved through State commitments beyond electoral and political cycles. Political commitment is needed to ensure continuity, accountability and transparency of processes and actions to mitigate and adapt to climate change. It can also contribute to constructing an appropriate environment for establishing and maintaining the institutions and frameworks created for such purposes.

This good practice has been identified in Mexico. The General Law on Climate Change recognizes climate governance efforts as a State commitment that must be addressed with transversal and long-term vision, and that establishes responsibilities at different levels of government to promote inter-sectorial collaboration. Similarly, Ecuador's Constitution demands the State to take on the responsibility for appropriate and transverse action to mitigate climate change. Also in Guatemala, the new Framework Law on Climate Change is to establish the necessary regulations to prevent, plan for and to respond adequately to, the sustained impacts of climate change in the country. In a similar way, the National Climate Change System of Colombia (SISCLIMA) has a design that allows for articulating the roles of public and private stakeholders on climate change. Unfortunately, as mentioned earlier, this system is not yet in operation. However, when it will be, it will constitute a great opportunity for cross-sectorial synergies and State commitment.

[14] See IDLO and CEID above.

Social Participation and Comprehensive Strategies:

Policy planning schemes that involve different levels of government and multiple stakeholders, including local civil society and interested communities, enable better coordination of comprehensive climate responses. They also allow for building strategies beneficial to sustainable rural development. Such has been the case of the *Ley de los Consejos de Desarrollo Urbano y Rural* of Guatemala,[15] which is part of the strategy for public administration's decentralization. Similarly, the creation of structures of multi-sectorial dialogue with social participation is highlighted through the National Roundtable on Climate Change, *Mesa Indígena de Cambio Climático* and *Comité Nacional de Salvaguardas Ambientales.*[16]

Establishing Institutional Powers, Duties and Responsibilities through the Use of Clear Laws

Establishing obligations, roles, powers and responsibilities, and operating procedures through clear and articulated laws, can facilitate the realization of written rules into concrete actions. This not only promotes the development of relevant mechanisms, but also gives institutions the powers needed to perform the tasks that the law requires them to do. In addition, it enables citizens to better know the mechanisms and respective procedures to follow.

Furthermore, climate change is a dynamic, complex and evolving phenomenon. Thus, laws and institutions must be equally dynamic and sophisticated to allow change and adaptation of roles and responsibilities according to new situations. One of the first countries in the world that made legislative progress in this area was Mexico, with its General Law on Climate Change, which clearly defines the powers of the Federation, the States and municipalities, and creates new multi-sectorial agencies dedicated specifically to address climate change.

Meanwhile, the flexibility of the legal system in Ecuador enables the creation of high standards through the issuance of administrative acts that allow for the verification of the

[15] Law of the Boards of Urban and Rural Development. Translation by the authors.

[16] Climate Change Indigenous Bureau and the National Committee of Safeguards in Guatemala, respectively. Translation by the authors.

effectiveness of the law and for taking the necessary corrective measures progressively, with the ultimate aim that environmental authority exercises its role adequately.

Citizen´s Engagement and Public Participation

We think that the most successful models of policies and actions on climate change and rural development lie in inclusive processes that promote the participation of all stakeholders, especially indigenous peoples, rural communities and marginalized groups. This allows for more effective responses against climate challenges that hinder sustainable rural development. Some key elements in achieving these objectives relate to fostering a sense of civic engagement and the encouragement of informed participation of citizens, as well as to the recognition of human rights, particularly those of vulnerable groups such as women and indigenous communities.

In relation to indigenous peoples, the observance of individual and collective rights, and the application of the rules for the Free, Prior and Informed Consent (FPIC) are required. Guatemala, through its Community Development Councils, provides a good example of popular instances of social participation whose function is to provide input for planning and for the recognition of communal rights, like in the case of Guatemalan *forest users groups*.

In turn, in Ecuador there is the Council of Citizens Participation and Social Control, which promotes and encourages the exercise of participatory rights, and develops and establishes mechanisms for social control in matters of public interest.

Creation of Solid Funding Structures

Funding structures are essential to support initiatives, attract investment and distribute economic benefits equitably, particularly for the most vulnerable and marginalized rural sectors of society. Strengthening mechanisms of solid and sustainable funding - with fiscal controls - can ensure transparency, accountability, trust and commitment of investors. We believe funding structures are critical to ensure the adoption and continuation of comprehensive strategies on climate change, to facilitate the transition to an inclusive green economy, and to promote sustainable rural development.

Funding structures should enable the mobilization of financial resources from a broad spectrum of stakeholders: public and private investors, domestic and international institutions. They must also have the ability to channel resources to fulfil the objectives of national development and to fund initiatives for the communities that need it the most. The use of economic incentives, as implemented in the *Progrmana de incentivos forestales* (PINFOR) [17] and *Programa de incentivos forestales para poseedores de pequeñas extensiones de tierra de vocación forestal o agroforestal* (PINPEP)[18] programs and soon the PROBOSQUE [19] program in Guatemala as well as the creation of permanent funding mechanisms such as the National Environmental Fund in Ecuador, demonstrate innovative ways of resource management that promotes sustainable economic development for an integrated response to climate change.

Legal Frameworks for Sustainable Rural Development

With climate projections predicting an increase in temperature of greater than 2°C, the impacts of climate change on vulnerable rural areas has also moved into the focus of attention. Any detrimental impacts on these areas due to climate change have the potential to reverse the economic gains made over the past decades. As mentioned above, in Colombia, Law 1523 of 2012 on Risk Management addressed this issue with a comprehensive vision creating a new system for risk control based on prevention. To support this new approach, the law calls for the creation of a national network of institutional associations to coordinate, plan and implement the actions identified by the regulations, and to help engage the population, the government and the private sector, who together should promote social, economic and environmental development.

Challenges for Colombia

Despite the value and importance of the legal innovations in Colombia described above, these are not free of tensions and problems. In this section we will mention some climate governance challenges that we consider the most relevant for the country, i.e. land tenure

[17] Forestry incentives program. Translation by the authors.

[18] Forestry incentive program for owners of small extensions of land for forestry or agroforestry. Translation by the authors.

[19] For more information on this programs, see further: FAO, “Lessons Learned from Community Forestry Initiatives, Payment for Environmental Services and Other Incentives,” 2014 <http://www.fao.org/docrep/018/i2875e/i2875e05.pdf> [accessed 15 November 2014].

issues and articulation of efforts by different sectors of government. Based on the discussion of these challenges, we will then outline some recommendations.

As we mentioned earlier, property is poorly distributed in Colombia. Big portions of the total land available are owned by a rather small number of citizens. Consequently, informal tenure of land is common, especially in rural areas where conservation projects are most likely to take place. This leads to difficulties in the formalization of the terms of conservation agreements and the distribution of benefits and obligations in places where irregular and unregulated land tenancy is the rule.

Similarly, characteristics of the Colombian population such as ethnic diversity affect the legal property regime. Land tenure in the country can have the form of communal or individual private property, leading to different legal acquisition and possession regimes. Attention then must be paid to bringing clarity to regulatory land use.

Another governance challenge that Colombia faces is the abduction of forest reserve areas by armed parties to the political conflict. The prolonged armed confrontations in combination with the opening of Colombia to international trade treaties have facilitated deforestation through expansion of agricultural frontiers and ranching due to both legal and illegal activity. In this regard, a barrier to achieving well functioning climate governance programs is the lack of legal clarity over forest and environmental services property rights.

Considering the possibilities that collectively owned land offers for climate change mitigation initiatives, where Annex I countries[20] could for instance benefit from REDD+ projects in developing countries, it is vital to fill the gaps in REDD+ processes regarding equitable sharing of benefits, and to make sure communities are informed and properly involved in decision making. Difficulties in interpreting the Convention 169 on the rights of participation of communities is a direct barrier for consolidating REDD+ projects, since there still are many difficulties with the effective application of existing constitutional norms and procedures for prior consultation in Colombia.

Finally, as mentioned above, Colombia shows relevant climate governance efforts coming from different sectors. In this regard, the challenge they face is to achieve proper articulation

[20] State Parties in the frame of the United Nations Framework Convention on Climate Change (UNFCCC).

to allow inter-sectorial coordination, especially considering the lack of a legal framework for interagency coordination in the country.

Recommendations

Based on Colombia's main institutional challenges and considering the best climate governance practices identified at a regional level, we believe it is pressing for the national government to operationalize the SISCLIMA promptly, so it allows it to function, create legally binding State commitments, and permits the system's promising design features to have effects. Also, it is critical to regulate the existing laws on sustainable risk management, which combine sustainable development, natural resources management, and climate change management. A preventive approach based on sustainability criteria is essential for better territorial planning, which reduces environmental risk.

Likewise, the development of a legal framework for environmental services, carbon ownership, emissions reduction, and carbon sinks that is respectful of local communities' rights is also imperative. Implementing tax reduction schemes to incentivize cleaner and more energy efficient production processes is another possible way towards a functioning climate governance system that Colombia could consider.

Regarding REDD+ projects, the Colombian national strategy for reduction of emissions needs to be strengthened in at least two important respects. Firstly, it needs a robust national measuring, reporting and verifying system (MRV) for carbon accounting. The lack of such a system is a barrier hindering the promotion and financing of carbon markets. Secondly, it requires a well-functioning legal process for previous consultation of the communities involved as otherwise it will be difficult to ensure citizens' engagement and public participation.

COUNTRY REPORT: COSTA RICA

Energy and the Environment: A New Dilemma for Costa Rica

Rafael González Ballar*

Since the 1960s, Costa Rica has made outstanding progress towards environmental protection. Reformist actions include the Forest Credit Certificate project, the Payment for Environmental Services programme, recent open-pit mining bans and the plan to become carbon neutral by 2021.[1] Perhaps the most progressive action was the 1994 entrenchment of environmental rights in *the Costa Rica Constitution*:

> *Every person has the right to a healthy and ecologically balanced environment, being therefore entitled to denounce any acts that may infringe the said right and claim redress for the damage caused. The State shall guarantee, defend and preserve that right. The Law shall establish the appropriate responsibilities and penalties.*[2]

Subsequent laws and jurisprudence opened the possibility for an extensive interpretation of this constitutional provision. Today, the right applies to a wide range of environmental matters.

Despite these advances, a recent State of the Nation report made strong recommendations for Costa Rica to improve its environmental management and pay greater attention to a range of environmental issues, not just conservation. Other areas meriting attention include

---

* Professor at the University of Costa Rica.

[1] The deforestation of the 70s and 80s that had the country with a 26 per cent forest coverage in the 1980s to 52 per cent as of 2010. Both programmes have helped biological diversity. It has been accepted that in 50.000 square km Costa Rica has 4 per cent of the world's biodiversity. Most of our information will come from the "Estado de la Nación", (State of the Nation) the most recent edition in 2014 and from 2012 editions also. Available in www.estadonacion.or.cr/files/biblioteca_virtual/018/Cap-4-Armonia-con-la-Naturaleza.pdf.

[2] Ley Orgánica del Ambiente, 7554 of 4 of October 1995.

[3] Costa Rica Constitution s 51.

maritime protection, fossil fuel reliance, and effective land use planning. Water pollution is a particular concern as Costa Rica has the highest per capita use of pesticides in the world.[3]

The El Diquís Dam Construction Project

The El Diquís project involves the building of a new dam and hydroelectric plant on the Río Grande de Térraba. There is concern that the project will affect Indigenous and non-Indigenous communities living within this area of the country.[4] A related concern is the lack of consultation with affected communities. The dam is also likely to impact the environment as it changes the course of the river and stamps out part of the Térraba-Sierpe wetland.[5] A 2011 report by the Special Rapporteur on the Rights of Indigenous Peoples recommended the Costa Rica Government engage with Indigenous peoples that may be affected by the dam, 'bearing in mind that the consultation should be undertaken with the goal of obtaining the free, prior and informed consent of the Indigenous peoples affected.'[6] The report also recommended the Costa Rica Government 'develop clearer guidelines for effective consultation with all stakeholders' and 'translate complex scientific and technical information into language that is easily accessible and comprehensible to non-experts'.[7] The Costa Rica Government has delayed dam construction in order to implement these recommendations.

The Production of Geothermal Energy in National Parks

Costa Rica law generally prevents extractive, commercial and industrial projects within national parks. Exempt areas include those within two kilometres of the craters of Barba,

---

[4] John H. Knox, Report of the Independent Expert on the issue of human rights obligations relating to the enjoyment of a safe, clean, healthy and sustainable environment on his mission del Costa Rica (28- 1 of August 2013). A/HRC/25/53/Add.1

[5] James Anaya on his report on Costa Rica(A/HRC/18/35/Add.8, para. 2) on the situation of the indigenous peoples affected, he indicated, the reservoir and part of the dam would cover about 10 per cent of the territory of the indigenous Teribe people, and the reservoir would also flood a portion of the China Kichá indigenous territory of the Cabecar people. Furthermore, the Rey Curré and Boruca indigenous territories, which belong to the Brunca people, are located downstream of the proposed dam and therefore could be affected by changes in the course of the river. The project could also affect indigenous areas upstream, including the Cabagra and Salitre indigenous territories of the Bribri people, the Ujarrás territory of the Cabecar people, and the Coto Brus territory of the Ngobe people. The project would also displace, in whole or part, a number of non-indigenous communities.

[6] Ibid.

[7] Ibid.

[8] Ibid.

Poas, Arenal, Chato, Tenorio, Santa Maria, Rincon de la Vieja, Miravalles and Irazu. These areas may be important geothermal sources of power. The geothermal capacity of Costa Rica and El Salvador make up 73% of the total Central American geothermal capacity.[8] The expectation is that Costa Rica will transform its capacity into power supply. The problem is that there is no law obliging the Costa Rica Government to consider the social and environmental impacts of geothermal projects carried out in exempt national park areas. This is particularly concerning in light of the finding that geothermal exploration, construction and operation all impact the environment.[9] Exploration and construction might involve building trails and roads, eliminating vegetation, noise pollution, fuel handling, waste generation and wastewater production. The operational phase 'can produce hydrogen sulfide emission and pollution of nearby waters with substances such as arsenic and ammonia':[10]

> *Thermal pollution and deterioration of the landscape is also produced by the power plant and in particular the power transmission lines. Because of all this, it requires a detailed and thorough Environmental Impact Assessment.*[11]

Complicating the issue further is Costa Rica's ratification of the *Convention for the Protection of Flora, Fauna and Scenic Beauty of the Americas*. This commits Costa Rica to maintaining national park boundaries and ensuring national park resources 'are not exploited for commercial purposes'.

The Costa Rica legislature is currently considering four legislative bills that make vastly different recommendations with regards to the regulation of geothermal exploitation in national parks.[12] The number of geothermal projects under consideration is indicative of the importance of the subject in Costa Rica today. Even projects that do consider the environment raise concerns. For example, one proposal specifically addresses measures to

---

[9] MINAE. (Ministry of the Environment), VI Plan Nacional de Energía 2012-2030. San José, Costa Rica, diciembre, 2011.

[10] Estado de la Nación, 2014 sobre la explotación de energía geotérmica en parques nacionales.

[11] Estado de la Nación, 2014 sobre la explotación de energía geotérmica en parques nacionales.

[12] Estado de la Nación, 2014 sobre la explotación de energía geotérmica en parques nacionales.

[13] The law project number 18789 (Ley de Biocombustibles) and the number 16788 (Ley de Generación de Electricidad) and the number 19.233.

repair environmental damage and carry out feasibility and environmental impact studies.[13] On the other hand, there is strong opposition to the proposal with regards to its impact on native flora and fauna and the 32 rivers that begin in the project area, and the potential loss of connectivity between biological corridors.[14] This highlights the urgent need for innovative approaches to geothermal exploitation and proposals to ensure the environmental sustainability of our national parks.

As the authors of the recent State of the Nation Report emphasise, a main challenge facing the Costa Rica Government today is the need to achieve economic growth without discriminating against the environment or Indigenous peoples. This requires strengthening participatory structures and social institutions, and ensuring a transparent, efficient, independent and accountable public administration.[15]

[14] 19233 called 'Authorization to the Instituto Costarricense de Electricidad to exploit geothermal energy in protected areas'.

[15] Declaration of the assembly of the University of Costa Rica School of Biology the 29 de Octubre de 2014.

[16] PNUD, Gobernanza sistémica y desarrollo en América Latina, Revista de la CEPAL 85 • Abril.

COUNTRY REPORT: DEMOCRATIC REPUBLIC OF CONGO

Dignité Bwiza*

Introduction

It was highlighted in the previous DRC country report that environmental laws in the DRC are maladaptive and need to be reviewed to match social, economic and political realities. Examining the situation of the DRC from another angle, one could question whether the population of the DRC is adequately skilled and is ready to implement and abide by existing and upcoming national environmental laws. This country report attempts to answer this question.

The report draws from interviews and observations undertaken in a field research carried out by the author in the Eastern DRC from January 2014 to August 2014. The report is divided into two sections. The first section provides an overview of environmental laws adopted in 2014. The second section exposes the outcome of the interviews of various groups of people and subsequent problems/obstacles to environmental protection in the DRC.

Recent Developments in Environmental Laws

Two laws on environmental protection were adopted in 2014: A law on nature conservation and a decree on the implementation of environmental protection processes.

Law N° 14/003 of 11 February 2014 on Nature conservation brought in various innovations including:

- Placing an obligation on the government to clearly define and establish mechanism to increase awareness of the population about environmental issues and to take adequate

* LLB in Private Law, Université Ouverte (DRC); LLM in International Human Rights Law, University of the Western Cape (South Africa), PhD Fellow in International Environmental Law, Witwatersrand University (ongoing). E-mail: bwizadignite@hotmail.com.

actions in order to increase the participation of the population in environmental protection activities;

- The obligation on the state to establish and implement a national policy on conservation of biodiversity;
- The obligation for the state to fund national action plan in various fields of environmental protection, and so forth.

On 2nd august 2014 *Decree n° 14/019* establishing the rules of functioning of environmental protection processes was adopted. This decree was adopted in order to clearly establish rules of the various environmental protection mechanisms mentioned in *law N 11/009* of 09 July 2011 on fundamental environmental principles applicable in the DRC.[1] This Decree provides detailed definitions of environmental protection mechanisms that were only listed in the 2009 law. Furthermore, a detailed list of all types of activities enclosed in each category of work was annexed to this law.

Environmental Protection as Perceived by the Population in the DRC

The author conducted a field work early 2014, in the eastern DRC (Oriental province) to scrutinise the extent to what environmental laws, particularly forest laws, were enforced. Hence she met with various actors involved in environmental protection among which traditional chiefs; legal practitioners, employees of the ministry of nature conservation and programmes funded by international donors. Here is what emerged from the interviews and observation done on the field.

Misreading of Environmental Protection by the Political Elite

Administratively, the DRC has one central parliament and eleven provincial parliaments. Parliamentarians represent the population at provincial and national level, and are the ones to adopt, amongst others, environmental laws. The majority of the parliamentarians in the DRC (at the national and provincial level) are unfamiliar of recent developments in the field of environmental protection. Most of them are aged above 45 years, went to schools in the DRC when environmental protection was not part of the curriculum in secondary schools or

[1]Article 3. For more information about this law, see Dignité BWIZA Democratic Republic of Congo: country report 2013 (2014) IUCN Academy Environmental Law

universities.[2] Besides, most of these parliamentarians have not furthered their training outside the country and are less likely to have taken time to learn or get information about current international principles and theories in environmental protection within the country.

This lack of knowledge is often revealed in comments of parliamentarian within local medias. For instance, in July 2014 it was reported that a parliamentarian of the Oriental Province stated on a talk show on one of the local radio *'we (the DRC) have plenty of forests from which other countries are taking advantage. These countries should pay us for taking advantage form our forests. If they don't pay us then we will burn all the forests'.*

Such statement portrays the need for parliamentarian and other political actors to understand the basics and relevance of environmental protection not only for global purposes, but also for local population and for the DRC. Local lecturers contend that the lack of a national policy on environmental protection is the result of the limited knowledge of parliamentarian in the field of environmental protection, and that this is also valid in other fields.

Timid Involvement of Members of the Civil Society in Environmental Protection

The need of training is also expressed on the side of members of the civil society. The DRC hosts a wide range of national Non-Governmental Organisations (NGOs), the majority of which works in the field of human rights protection. Very few are those involved in environmental protection, often referred to as 'development'. Development activities include mainly training of farmers on agriculture techniques, merely in order to increase their production and not with the aim to protect the environment. Less than 5 % of local NGOs in the DRC have set environmental protection as their main objective and/or conduct environmental protection activities per say.

Available information on activities undertaken by local NGOs regarding environmental protection proved that information provided by local NGOs was either out-dated or incomplete. For instance, some NGOs encouraged the population to '*burn all the dirt in order to keep our environment clean*' as the only and appropriate way to deal with domestic waste.

[2] Even to date, environmental protection is not taught in secondary school. Selected options in university have modules on environmental protection, and the law faculty has only one course for the 4 year programme.

Another significant issue is the high level of illiteracy in the DRC which makes it difficult for the majority of the population to understand abstract concepts such as air pollution, climate change, and so forth.

Insecurity, Poverty and Illiteracy

In addition to illiteracy, the political and economic situation in the DRC is a significant obstacle to environmental protection. The economic situation prevailing in the country makes it difficult for the population to accept some messages on environmental protection. For instance, it is difficult to talk about deforestation while the population does not have an alternative source of energy to replace charcoal and firewood for domestic consumption: '*If population does not cut trees, how would they cook? There is no other source of energy, no gas, and the majority has no access to electricity*'.

Furthermore, members of the civil society met affirmed that '*each time there is an armed conflict or a movement of population subsequent to activities of rebel armed groups (which is very frequent in the eastern DRC – once every two months) either internally displaced persons, members of the governmental army or rebel armed groups cut the trees (and crops) planted by population.'* This discourages any idea of planting trees as it results in '*planting trees for others.'*

According to local NGOs, there are three main environmental issues as perceived by the population:

1) The need to manage domestic waste,
2) the lack of an alternative source of energy of domestic use and
3) perturbation of seasons.

Demographic growth has generated more domestic waste. To date, domestic waste is visible in markets and streets all over the country. The DRC is yet to have organised waste management systems, either private or public. Besides, there is no industry recycling or transforming domestic waste in the DRC, thus the majority of the population ignores what recycling is and how to recycle domestic waste. What appears to be the practice and which have turned into the 'perfect' and obvious way to manage domestic waste burning domestic waste: *'If we don't burn, how else could we manage domestic waste?*'

The issue pertaining to the continuously increasing cost of firewood/charcoal is perceived more as an economic matter than an environmental issue: '*If every one received an increase of their salary, they could afford the cost of charcoal.*'

Although all acknowledge the drastic perturbation of seasons and its impact on agricultural production, there seem to be no particular quest toward understanding the origin of such change.

Lack of a National Awareness Campaign on Environmental Protection

While messages on the need to elude malaria, HIV and sexual violence are multiple; there is no widespread national mass communication about environmental related issues. Offices of the ministry of environment and nature conservation installed in remote areas of the country do not conduct awareness raising campaign about environmental related issues and lack libraries for those who would like to inform themselves about techniques of environmental protection.

Few International Actors in Environmental Protection

Contrary to the significant number of International NGOs working in the field of human rights, health and emergencies; the number of programmes on environmental protection is narrow. Besides, on-going projects on environmental protection are either limited in natural reserves or forests or are not well known by the population. For instance, Wildlife Conservation Society[3] is conducting a project in the Epulu national reserve, yet it is not known by population in nearby towns.

While UN agencies such as UNICEF, UNHCR and others are well known; organisations such as UNEP, GIZ, and WCS are totally unknown.

Limited Information in the Local Media

Medias in the DRC rarely emphasize issues pertaining to environmental protection. While all local medias mentions women's rights, protection of children in conflict with the law and

[3] http://www.wcs.org/epulu

rights of prisoners; the right to a clean environmental is a concept that is practically unnamed.

Environmental Protection, Not Forest Protection Only

It is necessary to mention the growing concern towards forest protection. Tree planting by individuals have increased in towns, villages and schools. Yet, 'forest protection' is referred to as environmental protection. Local Medias have increased their talk shows on environmental protection, yet 90% of them talk about deforestation. For instance, none of the local medias in Oriental Province mentioned air pollution over the last six months, while they all mentioned deforestation.

Perception of Elders and Traditional Chiefs

The elders and traditional chiefs play an important role in the administration of the DRC. Until today, they are involved in the land acquisition process in rural areas and in forest exploitation. In rural areas the power of traditional chiefs is very strong. Actors form the government and humanitarian sector often recourse to traditional chiefs to ensure the participation of all the population.

Yet their understanding of environmental issues remains very low. Although elders and traditional chiefs agree that there is perceptible change in seasons which negatively impact daily life and farming production and reduce the quality of crops; they are convinced that this is due to demography and nothing else.

To the question to know where this change in season came from, elders contented that

> *'if seasons have changed in our village, this is due to the increasing number of foreigners in our village. Their number has increased over the last decade, creating warmth and change in season.' Asked whether there could be a relation between the lack of tree and slash and burn agriculture, the elders answered that 'the reason why it is getting hotter has nothing to do with deforestation. This is due to the growing number of population. If one is in a cold room where there are two persons, if the number of person increases to 20, the temperature of the room will increase. At a given point one might even start sweating while the temperature outside the room is very low. This is what has happened to our villages. The increasing number of*

> *population has resulted in the increase of heat and thus in the perturbation of seasons. The issue is not to plant more trees but to reduce the number of people'.*

This shows the urgent need to train elders and traditional chiefs on environmental protection

Law Practitioners

Findings from interview of members of the judiciary showed that the majority of law practitioners (lawyers, judges, and magistrates) ignore applicable national laws in the DRC. Contrary to what one could think, 90% of the people interviewed (including lawyers, judges, and magistrates) ignored the Forest Code adopted in 2002 and the law establishing principles of environmental protection in the DRC. This was true for magistrates who have recently joined the profession as well as those practicing for more than 10 years. This lack of information will necessarily hinder enforcement of environmental laws.

Conclusion

In addition to the need to institute adaptive environmental legislation, there is a vast need to train and increase awareness of the Congolese population on environmental related issues at all levels. This is indispensable due to the prevailing economic situation which places the population in a situation whereby environmental resources are more an opportunity for growth than assets to protect.

Besides, the unstable political situation discourages environmental protection actions such as reforestation. Measures should be put in place in order to reduce the impact of armed conflicts and internal displacements on the environment. The government could ensure that camps of internally displaced are installed in areas where the environmental impact would be as minimal as possible. On the other hand, the civil society could draft a tool increasing awareness of the population to environmental related issues, and on the attitude they should have towards environmental could they be in situation of displacement.

Furthermore, it could be useful if civil society, scholars and politicians of SADC countries shared their experience on ways to increase involvement of members of the civil society in the DRC. This could bridge the significant issues exposed within this article.

COUNTRY REPORT: DEMOCRATIC REPUBLIC OF CONGO

Kennedy Kihangi Bindu*

Introduction

The protection of the environment in the Democratic Republic of Congo (DRC) remains a challenging issue that scholars need to research and elaborate on in order to improve the lives of the present and future generations. The implementation and enforcement of the existing legal and regulatory framework pertaining to the environment remains a complex process in DRC. The shocking degradation of the environment in the country should not be justified by the consequences of the armed conflict in the past. This is because the preservation of the environment is at risk in times of peace as well as in times of armed conflict. The challenges pertaining to the management of the environment, the implementation and the enforcement of the legal instruments within the country should attract the urgent attention of the international community. This is because environmental problems such as global warming and air pollution cannot be addressed nationally by one country alone.[1]

This report highlights the current environmental legal and regulatory framework and the improvements made through the enforcement of the new law on nature conservation. The proposals of the law on hydrocarbon and the Mining Codes under examination at the National Assembly will also be considered. The structure of the report is as follows: an overview of the current environmental legal and regulatory framework (I); the project on the exploration and the future exploitation of oil in Virunga National Park by Sydney Oil Company (SOCO) and disputes on the cross-border exploitation of natural resources (II); the

* Prof Dr Kennedy Kihangi Bindu/LLD, Deputy Vice Chancellor in charge of Administration at the *Université Libre des Pays des Grands Lacs* (ULPGL/Goma), Coordinator at the Centre for Research on Democracy and Development in Africa, CREDDA/ULPGL, Associate Professor, Member of the editorial committee of the international journal *Meritum de UniversidadeFumec, Belo Horizonte,* Brasilia, Email : kenedybindu@yahoo.fr

[1] Kihangi Bindu Kennedy, “Environmental legal requirements and the exploitation of natural resources in a post conflict country: A case study of the Democratic Republic of Congo” (2013), *The A38 Journal of International Law*, Vol 1, Ed. 3, p. 1.

exploitation of natural resources and the rights of local communities (III); the justiciability of environmental rights (IV); and concluding remarks (V).

Overview of the Environmental Legal and Regulatory Framework of the Democratic Republic of Congo

The legal and regulatory framework relating to the environment in DRC has been fleshed out by the enactment of new laws and the proposals under examination at the National Assembly:

- *Law No 14/003 of 11 February 2014 on Nature Conservation*: This is a new law enacted to support the national government strategies concerning the conservation of nature. This law repeals the Ordinance Law No 69-041 of 22 August 1969 on the Conservation of Nature and introduces important innovations in the protection of the environment. The innovations include public participation in the decision-making process, local communities involvement in the strategic steps for establishing and managing protected areas, social and environmental impact studies for all projects relating to the creation of protected areas, traditional knowledge on nature conservation, access to biological and genetic resources, just and equitable benefits derived from resources. Strong measures and criminal provisions are defined through six chapters: General Dispositions; Conservation Measures; Biological and Genetic Resources and Traditional Knowledge; Financial mechanisms; Infractions and Punishments and the Final Repeal clauses.

Keeping with its international obligations on the management of the environment, DRC has made an important step on the road to sustainable management of biodiversity and ecosystems through this law. It is however, disappointing to point out that its implementation and enforcement has not been effective. There are no proper mechanisms to allow the public to hold the government accountable should it fail to uphold its obligations. While implementing this law, particular attention should be given to the following provisions:

- Protection of wild fauna and flora species threatened with extinction;
- Management of biological and genetic resources and traditional knowledge of local communities;
- Guarding protected areas against any direct or indirect pollution of waters, rivers and water areas;
- Protection against any exploration or logging, mining, oil and gas areas.

In this vein, a fruitful collaboration between the managers of protected areas, local communities and civil society organizations for the sustainable management of protected areas is required.

In addition, written proposals for new laws are under examination at the National Assembly:

- Proposal of the law on hydrocarbon code. Considering the debate concerning the dafting of a programme for oil exploration and exploitation, there is a critical need to update the Ordinance Law No 81-013 of 2 April 1981 pertaining to General Legislations on Mines and Hydrocarbon and drafting a national policy on Oil exploration and exploitation.[2]
- Proposal of the revised mining code under examination at the National Assembly.

Project on the Exploration and the Future Exploitation of Oil within Virunga National Park by Sydney Oil Company (SOCO) and Disputes on the Cross-Border Exploitation of Natural Resources

A critical analysis of the balance that needs to be struck between the economic and environmental interests reveals the challenge that DRC faces in the management of natural resources. The case that has gained international attention is that of the oil exploration and exploitation project in Virunga National Park. The boundaries of the park largely coincide with areas under exploration around Lake Albert and Lake Edward. With the authorisation from the government of DRC, the British Company SOCO commenced the activities of oil exploration within the Park. SOCO misrepresented that it had taken all the necessary measures and safeguards to ensure that its operations will not have a negative impact on the environment. The WWF became aware of the misrepresentation and decided to file a complaint with the UK's National Contact Point to bring attention to this violation of the OCED guidelines for multinational enterprises. Thus, the debate has opposed different stakeholder's political leaders, local civil society organizations and international organizations such as UNESCO and WWF while questioning socio-economic and environmental interests of the Virunga National Park and oil economic exploitation interests. It is disappointing to note that local communities are not directly involved in the decision-making process despite the fact that the law adopted in 2011 pertaining to the fundamental principles on the protection of the environment through the Environmental Impact Study

[2] Kihangi Bindu Kennedy, « L'exploitation du pétrole du Lac Edouard et la loi environnementale en République Démocratique du Congo », (2011) ,*Legal aspects of sustainable natural resources, Legal Working Paper Series,* CISD, p. 7.

must take into consideration the rights of local communities through the consultation process.[3]

Through the Virunga Campaign launched by WWF and UNESCO; the World Heritage Committee called for the cancellation of all Virunga Oil permits stating that oil and mining exploration and exploitation are incompatible with the World Heritage status of the area. The Committee urged the government of the DRC to ensure that companies based in its territory do not damage properties with World Heritage status. According to the Independent Consulting firm Dalberg Global Development Advisors commissioned by WWF, the potential future economic value of Virunga National Park could be more than US1.1 billion per year in "a stable situation characterized by the absence of conflict, secure access to the park, and sufficient resources to protect the ecosystem". In line with the above, WWF has called on all stakeholders involved in the management of this park to act together towards the protection of the park from oil exploration and exploitation:[4]

- WWF calls on SOCO to publicly commit to cease all exploration within Virunga, respecting the park's current boundaries, and respecting all World Heritage Sites.
- WWF calls on SOCO investors to warn the company about the risks of stranded assets, reputational risks and operational risks.
- WWF calls on the DRC government to uphold and respect DRC law and regulations that prohibit environmentally harmful activities such as oil exploration and exploitation in protected areas including Virunga.
- WWF calls on all governments to hold accountable those companies proven to circumvent national laws and international treaties in the pursuit of unsustainable financial gains.

According to the WWF, oil exploration and exploitation in Virunga National Park would threaten the long term value of the park, limit sustainable economic development prospects

---

[3] Articles 21 & 22 of the Law No 11/009 of 9 July 2011 on the fundamental principles relating to the protection of the environment; articles 15 & 42 of the Law No 007/2002 of 11 July 2002 on Mining Code; articles 407 & 430 of Decree No 038/2003 of 26 March 2003 relating to Mining Act; article 20 of the Decree of 8 April 2008 defining the content of the environmental impact study in the DRC; articles 66 – 71 of the law No11/022 of 24 December 2011 on fundamental principles relating to agriculture.

[4] The Economic Value of Virunga National Park, Protecting Virunga National Park: Following Dalberg and WWF report, OECD agency launches examination of company exploring for oil in park, available on: http://dalberg.com/blog/?tag=the-economic-value-of-virunga-national-park

in the country, lead to greater instability, harm resident's health and compromise human rights. This statement was drawn from the debate going on in DRC's Bas Congo province relating to the socio-economic impact of oil exploitation by the British Firm PERENCO and its negative effect on the environment in the area (pollution for instance). In addition, according to Olivier Petitjean,[5] PERENCO intends to expand its operations into other districts of Bas Congo, including into the agricultural area of Mayombe. PERENCO's operations in Bas-Congo are an example of how oil extraction can destroy the environment and the livelihoods of local communities, without giving them anything in return. In Muanda, the 'poorest oil city in the world,' exploitation of petroleum by the Anglo-French company PERENCO has brought no real developmental benefits.

In fact, Virunga National Park is Africa's oldest national park, founded in 1925 and located in the Eastern Part of DRC in the North Kivu Province, a World Heritage Site listed as in danger, and a wetland of international importance. This park remains important because of its diverse habitats that include dense forests, savannahs, rivers, marshland, active volcanoes, permanent glaciers, and snow on Mt Ruwenzori. Virunga contains more species of mammals, reptiles and birds than any other protected area in Africa, and possibly in the world, including important species of elephants, chimpanzees, hippopotami, and other iconic species. Eighty five per cent of Virunga has been included in oil concession blocks.[6]All stakeholders are waiting for the result of the exploration that has to be released by SOCO or the government in 2015.

Exploitation of Natural Resources, Local Communities Rights and Disputes with regards to the Cross-Border Exploitation of Natural Resources

The exploitation of natural resources in DRC is linked to armed conflicts particularly in the Eastern Part of the country and the extraction of mineral resources. International Crisis Group noted in its report in 2012 that "inadequate legislation, absence of state regulation, a lack of financial transparency and the bureaucracy of this strategic sector risk casting a curse on the oil industry – much like the mining sector – and becoming a new centre of tension between local and foreign interests. Similarly, without an institutionalized dialogue

[5] Olivier Petitjean, Perenco in the Democratic Republic of Congo: When oil makes the poor poorer, http://multinationales.org/Perenco-in-the-Democratic-Republic, September 2014.

[6] The Economic Value of Virunga National Park, Protecting Virunga National Park: Following Dalberg and WWF report, OECD agency launches examination of company exploring for oil in park, available on: http://dalberg.com/blog/?tag=the-economic-value-of-virunga-national-park

with civil society and genuine decentralization, provinces and communities where fossil fuel reserves are located may not benefit from the revenues, which could fuel resentment and further weaken national cohesion".[7]

In addition, it has been emphasized that cross-border natural resources, namely oil reserves and minerals, are at the heart of the misunderstanding, mistrust and tensions between DRC and several other countries such as Uganda, Angola, Burundi, Zambia and Congo Brazza Ville. To date, a border demarcation program is dealing with problems relating the allocation of exploration blocks in disputed areas between DRC and Uganda and between DRC and Angola. Dealing with the dispute between DRC and Uganda, both countries have signed agreements "Ngurdoto Accord", that is at the heart of debates relating to its implementation. On the other side, the necessity of having a comprehensive and amicable agreement to end disputes between DRC and Angola is an urgent matter that needs to be addressed.

Civil society organizations within the country have been more concerned about the level of corruption taking place in the mining sector, mismanagement, and the abuse of human rights. The Resources Network Coalition in the country has been campaigning for the adoption of a legal framework on fossil fuels that would bring more transparency and ensure public participation, in line with international norms. Indeed, DRC has not yet established a proper legal code for oil operations, and the sector is still governed by out-dated and an incomplete sets of rules, which fail to deal with social and environmental issues.

The DRC finally joined the Extractive Industries Transparency Initiative (EITI) after having missed several opportunities to do so since 2005. One believes that the government will act according to international standards dealing with accountability and transparency for good management of the extractive sector and economic growth. Olivier Petitjean points out that "the ultimate goal is ensuring that decisions about the exploitation of oil in the Congo and the social and environmental impact thereof will be taken in a democratic and transparent

[7] Black Gold in the Congo: Threat to Stability or Development Opportunity? Available on http://www.crisisgroup.org/en/regions/africa/central-africa/dr-congo/188-black-gold-in-the-congo-threat-to-stability-or-development-opportunity.aspx

manner, weighing all the costs and benefits, and ensuring that these benefits will be distributed fairly to the population of the DRC".[8]

Justiciability of Environmental Rights

The 2006 Constitution of DRC that has paved the way to constitutionalism and democracy entrenches environmental rights as fundamental human rights. On the one hand, the right to a healthy environment is constitutionally guaranteed, on the other, citizens must defend the environment in order to give effect and meaning to the right guaranteed. Public authorities must ensure that the good health of the population is protected through the protection of the environment. Under the constitutional umbrella, the law of 2011 integrates the right to a healthy environment, which is an individual and collective right, and provides the public with a mechanism to hold the government accountable should it fail in implementing the right.[9]

Unfortunately, there is a critical gap between the legal provisions and the reality on the ground. Environmental rights (such as the right to have access to clean drinking water, the right to decent housing, the right to electricity) provided by the constitutional bill of rights are not respected. Obviously, political leaders are more concerned by their economic gain at the expenses of the environment. Judges are ill prepared to deal with cases relating to environmental matters. Moreover, the public are unaware of the mechanisms provided to hold the government accountable. Jurisprudences on matters of the environment are lacking within the country to further the understanding on environmental rights and other related environmental matters. Considering the political picture portrayed by the government, one is skeptical of the government's willingness in implementing the above rights and meeting the UN Millennium Development Goals. It seems there is a long journey ahead.

Concluding Remarks

In spite of the fact that the Democratic Republic of Congo has been developing an impressive legal and regulatory framework pertaining to the environment, the degradation of the environment is distressing. All efforts towards the implementation and enforcement of

---

[8]Olivier Petitjean, Perenco in the Democratic Republic of Congo: When oil makes the poor poorer, http://multinationales.org/Perenco-in-the-Democratic-Republic, September 2014.

[9]Article 46 of the Law No 11/009 of 9 July 2011 on the fundamental principles relating to the protection of the environment; article 134 of the law No 11/2002 of 29 August 2002 on Foresty Code of 2002 of the Democratic Republic of Congo.

the above legal texts do not bear fruits due to political whims. Discussions on environmental matters do not have concrete impact on the ground. The project on the exploration and/or the future exploitation of oil in Virunga National Park, recognized by UNESCO for its outstanding natural value in 1979 and described as a World Heritage Site, is a strong illustration of political leaders undermining environment concerns. In the context of a weak state, poor governance, massive poverty, insecurity and lack of a national political environment plan, an oil rush will certainly have a great impact; unless the government adopts effective steps to avert such a devastating scenario. Environmental education programs within the country need to be drafted and implemented. Certainly, the improvement of the legal and regulatory framework in place is needed within the country. However, this will only be meaningful through the process of implementation and enforcement and its impact at the ground. A good life is still possible in DRC for the benefit of present and future generations.

COUNTRY REPORT: CZECH REPUBLIC

Milan Damohorsky* and Petra Humlickova**

Introduction

In 2014, the Czech Republic only adopted a few new laws or amendments in the environmental field. The reasons for this are as follows. First, parliamentary elections in the Czech Republic took place in October 2013. As a result, individual ministries are only just beginning to prepare drafts of new legislation for approval in 2015 and 2016. Additionally in 2014, three more elections ran to the European Parliament, Senate and municipalities. Politicians devoted extraordinary efforts to these elections, which lacked for the usual discussions on legislation. Third, the main theme of the previous election was anti-corruption policy and the greatest effort was therefore devoted to such legislation.[1]

Part 1 of this article considers two minor amendments to the *Clean Air Act* and *Waste Act*. The rest of the article we devote to amendments to public participation and access to courts rules, which are close to approval, and novelties in this area of jurisprudence.

Recent Statutory Developments

The Senate has prepared one novel amendment to the *Clean Air Act*.[2] At present, operators of small stationary sources of air pollution are significantly disadvantaged by the wording of

---

* Milan Damohorsky is the professor of environmental law at the Law Faculty of the Charles University in Prague, Czech Republic. He is the Vice Dean, Head of the Environmental Law Department and President of the Czech Society for Environmental law. Contact information is damohors@prf.cuni.cz.
** Petra Humlickova is a Lecturer in Law Faculty of Charles University in Prague, Czech Republic. She teaches environmental law. She has published on issues of Aarhus Convention and environmental liability in English, Deutsh, Polish and Czech. Contact information is humlic.prf@gmail.com.

[1] E.g., Law on Civil Servants, legislative process, Law on Public Register of Contracts or Law on Public Prosecutor's Office, the last two of them have still not been approved despite the ruling coalition having a clear majority in both chambers of parliament after these elections.

[2] Amendment No. 87/2014 Coll

the *Clean Air Act*. Large operators with many air pollution resources can divide their investments to reduce their total emissions. Smaller operators have to implement costly pollution reduction measures despite having no corresponding increase in pollution. The *Clean Air Act* amendment allows smaller operators to exchange emission permits that fall within emission limits. This benefits smaller operators and excludes the possibility of increasing emissions in the Czech Republic as a whole, and within the most affected areas.

A recently approved amendment to the *Waste Act* prohibits the landfilling of mixed municipal waste from 2024.[3] The amendment has not addressed whether mixed municipal waste will be incinerated or treated differently, for example recycled. The amendment does require the separate collection of bio-waste and metals in municipalities from1 January 2015. In 2014, the Ministry of Environment also presented for public comment the draft Czech Republic Waste Management Plan for 2015-2024.

Public Participation and Access to Court Rules

The fundamental change in public participation rules that occurred in 2014 stemmed from the recommendations and findings of the Aarhus Convention Compliance Committee (ACCC). These findings have informed the European Commission's investigation into the Czech Republic's implementation of the EU Environmental Impact Assessment Directive. In 2014, the European Commission began to condition funding to the Czech Republic on changes to national public participation and access to justice rules. In the following paragraphs, we describe the situation before 2014.

The first ACCC finding was delivered on 29 June 2012 and adopted by the Meeting of the Parties in June 2014.[4] The first Czech submission to the ACCC was made by Environmental Law Service in June 2009. The submission did not relate to any particular case. On the contrary, it was a very complex document based upon many years of experience with the application of the *Aarhus Convention* in the Czech Republic. Environmental Law Service, a non-governmental Czech organisation, claimed the Czech Republic was not complying with obligations arising from *Aarhus Convention* articles 3(1), 6(3), 8, 9(2), 9(3) and 9(4).

The ACCC and European Commission addressed some of the concerns of Environmental Law Service. They found the Czech definition of 'the public concerned' too narrow and

---

[3] Amendment No. 229/2014 Coll.

[4] ACCC/C/2010/50; The full text of findings (including all documents submitted during the compliance mechanism) is available for free download here:
http://www.unece.org/env/pp/compliance/Compliancecommittee/50TableCz.html.

restrictive in light of the impairment of rights doctrine. Many land-use plans and building projects need only consider interferences with property rights. There is no need to consider the rights of tenants. Tenants also have limited rights to object to plans or projects. In fact, the Building Code expressly excludes tenants from participating in land-use planning and decision-making. These matters are particularly worrying as about 22% of Czech households live in rented flats. More troubling is the validation of the Building Code by the Czech Supreme Administrative Court,[5] and the Supreme Administrative Court rules that exclude tenants from proceedings even when the Building Code does not.[6] The Supreme Administrative Court has ruled that 'the tenant of real property on the area regulated by the land-use plan does not have standing to sue for abolishing of the respective land-use plan or its part' because the rights of tenants 'are not related directly to the area (land) in question, but to the person (owner) who enabled them to use it on the base of contract'. Another problem is the status of non-profit organisations (NGOs). In Czech legal theory, environmental NGOs have no rights to life, privacy or a favourable environment.[7] This limits the standing of NGOs in environmental proceedings.

Land-use and building projects that have, or could have, a negative impact on the environment are often permitted in the Czech Republic via a multilayer decision-making process that involves environment impact assessments (EIAs).[8] EIA findings are not decisions in themselves, but a basis for subsequent permit decision-making. EIA procedures are open participatory processes, whereas participation in subsequent decision-making is limited to members of the public recognised by law as 'the public concerned' with the proceedings. The *Building Act* limits 'the public concerned' to natural persons whose rights are affected or likely to be affected by the decision.[9] This means that tenants and NGOs have limited rights to participate in procedures that occur after the EIA process because the law does not recognise them as parties to those subsequent procedures. The ACCC and European Commission noted that environmental decision-making is not limited to EIA processes, but also applies to permit decision-making as long as the planned activity has an impact on the environment. This means that the public must have an opportunity to

---

[5] See Supreme Administrative Court decision No. 2 As 1/2005–62 of 2 March 2005.

[6] See Supreme Administrative Court decision No. 1 Ao 1/2009–120 of July 2009.

[7] At the first time, the Constitutional Court expressed this view in its Decision dated 6 January 1998, ref. no. I. ÚS 282/97.

[8] The building permit constitutes the final permit/decision in the context of article 6 of the Convention.

[9] See e.g. § 85 sec. 2 let. b Building Act: persons whose property or other property right to neighbouring buildings or adjacent land or buildings on them may be directly affected by land-use decisions.

participate in subsequent decision-making processes. Also, as the results of the EIA are taken into account in subsequent decision-making phases, members of the public must be able to examine and comment on EIA elements that contribute to the final decision.

The Commission also noted that although the multi-layer decision-making rules provide for fairly extensive public participation during the EIA stage, there is no requirement for decision-makers to take public participation results into account. NGOs and tenants are also excluded from attending follow-up stage meetings and cannot require consideration of their comments. Further, only the public concerned can challenge land-use and building decisions and the law generally defines the public concerned as property owners who can demonstrate that their rights are affected ('impairment of rights doctrine'). [10] Although individual persons have procedural and substantive rights that include rights or interests relating to the environment,[11] NGOs as legal persons only have procedural rights. They do not have substantive rights such as the right to a healthy environment. This reduces the status of NGOs before the courts because NGOs can only enforce procedural rights, not substantive rights.

Another concern is that proceedings before the Czech courts take a very long time, and the criteria for granting injunctive relief of suspensory effect are interpreted and implemented in a very limited way. This constitutes non-compliance with the requirements for effective judicial protection. The criteria did not change with new legal conditions for granting suspensory effect and a shift in case law. [12] For example, in 2007 the Supreme

---

[10] See Supreme Administrative Court decision No. 1 Ao 1/2009–120 of July 2009.

[11] The Constitutional Court has ruled that "NGOs cannot claim a right for a favourable environment, as it can self-evidently belong only to natural, not legal persons . . . In the administrative procedure concerning permission for starting the operations in thenuclear power plant, rights of an environmental NGO for protection of life, privacy or favourable environment could not be affected, because these rights cannot belong to legal persons. Therefore, they also cannot claim violation of the right for access to court (due process of law) with that respect." Decision of the Constitutional Court No. I ÚS 2660/08 of 2 September 2010.

[12] Compare the wording of § 73 paragraph 2 of Act No. 150/2002 Coll., on Administrative Procedure after the amendment effective from 1st January 2012: *"The court at the request of the applicant after the response of defendant admits suspensory effect, if the execution or other legal consequences of the decision meant for the applicant disproportionately greater harm than may occur to others by granting suspensory effect, and if it does not conflict with important public interest. "*and the version prior to this amendment*," the Court at the request of the applicant after the response of defendant admits suspensory effect, if the execution or other legal consequences of the decision meant*

Administrative Court stressed that courts should grant suspensory effect if requested by a member of the public concerned in judicial proceedings relating to environmental protection.[13]

A separate question arose with regards to the approach of the Supreme Administrative Court to the scope of judicial review proceedings. The Supreme Administrative Court had ruled that 'article 9 of the *Aarhus Convention* shall not be interpreted in a way that it requires separate review of any decision, act or omission in the scope of permitting the activities subject to article 6 in a separate review procedure', and that 'it is sufficient if such acts are subject to the review procedure at the stage when they can infringe the subjective rights of the affected persons'.[14] Specifically, the Supreme Administrative Court stated that in general there is no need to separately examine decisions about whether or not a land-use or building proposal came under the EIA Directive or *Aarhus Convention*, and that EU law leaves it to member States to decide at what stage decisions, acts or omissions can be challenged.[15] The ACCC and European Commission stated that access to justice necessarily includes a review of decisions about whether or not a project is subject to the *Convention* or Directive. Therefore, members of the public concerned should have access to a review procedure to challenge the legality of the screening process.

In response to the above described failures, the Czech Ministry of Environment prepared a draft amendment to the Czech EIA rules.[16] The amendment was approved by the Government on 3 September 2014, and has since been approved by the Chamber of Deputies. The amendment shall apply from the 1 March 2015. We will outline the amendment in the discussion that follows, although we are aware of possible changes that may occur during the final approval process. We are convinced that most of the changes suggested by Government are necessary to comply with international and EU law. We alternatively argue that even if the amendments are not adopted, it is necessary to apply and interpret current legislation in a similar way.

---

irreparable harm to the applicant, the granting of suspensory effect will not unreasonably affect the rights acquired by third parties and is not contrary to the public interest."

[13] See for example the judgments of the Supreme Administrative Court of 28 June 2007 No. 5 As 53/2006-46 or 29 August 2007, No. 1 As 13/2007-63. Available from: http://www.nssoud.cz .

[14] See Supreme Administrative Court decision No. 1 As 13/2006–63 dated 29 August 2007.

[15] See Supreme Administrative Court decision No. 1 As 13/2006–63 dated 29 August 2007 and No. 2 As 68/2007–50 of 5 September 2009.

[16] Act No. 100/2001 Coll.

The permit system, in terms of the EIA Directive, comprises several successive phases. The multi-layer decision-making process was evaluated by the Court of Justice of EU in relation to its compliance with the EIA Directive. Under Czech legislation, EIA statements prepared during the multi-layer decision-making process are considered expert opinions, non-binding for the purposes of later proceedings regarding land-use or building decisions. The draft amendments to the EIA Act change the legal status of EIA statements to binding opinions.[17] This will make EIA statements a compulsory consideration in subsequent proceedings. The draft Act also requires the content of EIA statements to meet the basic requirements of administrative decisions. That is, statements must not be formulated in general terms and must include the reasons, documents and considerations which directed the administrative authority in the evaluation and interpretation of the relevant legislation. In subsequent proceedings, public authorities would be obliged to base their decisions not only on the EIA statement itself, but also on the other documents and data obtained during the EIA process. The draft Act also eliminates the exclusion of the Administrative Code so that EIA processes will be part of normal administrative proceedings based upon the Administrative Code.

The draft Act makes changes to the EIA process to help ensure the project assessed in the EIA process is the same as the realised project. The aim here is to guarantee that the assessed and realised projects are identical, or have minor changes that will not cause any new negative effects on the environment. This will be verified through a binding opinion that culminates in a ‘coherence stamp’. The stamp is only granted once the EIA public authority confirms there are no changes to the project or plan which could have a significant negative impact on the environment.[18] If the EIA authority finds that changes with possible significant negative impacts occurred in the project, the authority takes a negative binding opinion which prevents realisation of the project. At that stage, the applicant must either modify the project or reassess the project through the EIA process. The identity of the project and the conditions in the affected area are also checked when applications are made to extend the validity of EIA statements. The validity of statements is 5 years from the date of issuance. Validity may be extended by 5 years at the request of the developer, and even repeatedly. The developer must demonstrate that there have been no significant changes in project implementation, and provide information on conditions in the affected area and the development of new technologies applicable to project. The draft Act allows for judicial review of this assessment procedure, as the assessment may result in a finding that there is

[17] Pursuant to § 149 of Administrative Code.

[18] See art. §9a par. 4 of the amended Act EIA.

no reason to undertake an EIA. Access to justice requires, and the EIA Directive guarantees, that the public be able to participate in the making of such decisions.

The draft Act redefines the 'public' and 'the public concerned'. 'Public' means one or more legal or natural persons. The draft Act grants the public the right to participate in the EIA process and subsequent procedures. In subsequent procedures, the public will only have a consultative role, being the right to information and to make comments. This excludes the right to lodge applications for administrative or judicial review of decisions. The 'public concerned' will be entitled to participate in subsequent procedures. The public concerned will be:

- subjects whose rights will be affected by decisions, primarily the owners of land or buildings in the neighbourhood of project;
- environmental NGOs, being, NGOs existing for more than 3 years; and
- ad hoc environmental NGOs whose legitimacy to tackle the decisions is declared by a supporting signature list of 200 unverified signatures.

The rights of legitimised NGOs as a public concerned under the EIA Directive will be guaranteed through full participation in subsequent proceedings. These entities will be parties to the proceedings, meaning they will have the same rights as a developer or neighbouring owner. A legitimised NGO will have the right to appeal against a decision, regardless of previous participation in the proceedings, and the right to access the court. Legitimised NGOs will also be entitled to bring actions to protect the public interest. All members of the public concerned will be able to challenge the substantive and procedural legality of decisions. Actions against decisions will always have a suspensory effect, meaning a permit decision cannot be issued or executed until a final court ruling. The draft Act will help fulfil the requirements of EU law concerning timely and effective judicial protection.

Recent Case Law

A new trend in terms of NGO access to justice in environmental matters is seen in a recent Constitutional Court case:

> *[A]ccording to the above described evolution of the international obligations of the Czech Republic, EU law and Czech regulation of environmental NGO status, the older practice of the Constitutional court (case No. I. ÚS 282/97) can be seen as outdated. Individuals, which associated to the form of NGO, whose purpose is the nature and landscape protection, may*

> *realize their right to a favourable environment (enshrined in Art. 35 of the Charter of Fundamental Rights and Freedoms) through this NGO.*[19]

The Constitutional case was approved by the Supreme Administrative Court.[20] The Court stated that NGOs have the right to access court in land-use cases. This was not possible until this ground-breaking judgment. However, the Court did start to define the conditions under which an NGO has legal standing, including that the NGO must have a concern in the project.

Critical Consideration of Recent Developments

The year 2014 was a breakthrough year for the Czech Republic, specifically with regards to public participation and access to justice in land-use planning. First, the Constitutional Court recognised the standing of NGOs to take action against planning decisions, a right which up until that time they had not had. In the next few years we can expect further discussion about the precise scope of NGO standing, and the conditions NGOs must meet.

The second major change was the draft amendments to the EIA Act. The draft Act guarantees public participation and access to justice rights for NGOs in subsequent procedures, and in related procedures such as land and building management. NGOs will have the right to challenge the procedural and substantive legality of decisions, and such actions will have a suspensory effect. However, this may change as the obligatory suspensory effect has been the most discussed question during the draft legislative procedure.

The proposed changes can significantly improve public participation and access to justice in the Czech Republic, although they are unlikely to solve all problems. For example, they are unlikely to protect against omissions of public authorities. The effectiveness of any changes will very much depend upon the details of approved laws and the application of these laws in practice.

---

[19] Case No. I. ÚS 59/14.

[20] Case No. 5 Aos 3/2012-70.

COUNTRY REPORT: FRANCE

Nathalie Hervé-Fournereau* and Véronique Inserguet-Brisset**

Summary: France is formally engaged on the road to ecological transition since 2012 with an emphasis both on energy and biodiversity. With regard to energy, new legislation was introduced in July 2014 which, among other things, sets targets for reduction of greenhouse gases by 2030 and 2050 and aims for a percentage of 32% of renewable resources in the overall consumption of energy by 2030. It also provides for a 50% reduction of the nuclear sector in the production of overall production of electricity by 2025. However, a radical transformation of the French model in the energy section will not be easily achieved. As for biodiversity, new legislation was also tabled in May 2014, putting forward new concepts and approaches. Again, however, there will be challenges in implementing this initiative. For instance, it is not clear how the principle of "Ecological solidary" will be transposed on the ground. Likewise, a number of concerns have already been raised regarding measures to implement the Nagoya Protocol. As a result, the adoption of this proposed legislation has been delayed, with the priority given to the legislation on energy. Finally, the authors also comment in detail on new laws introduced in 2014 to promote agro ecology, including a law on the future of agriculture, food and forests. The following are some of the matters addressed by these laws: a new labelling regime, an expansion of the types of leasing agreements that can include environmental clauses, new obligations with regard to annual reporting of nitrogen, and many additional measures to protect agricultural and natural lands as well as forest from urban sprawl.

"*Devenir une puissance écologique de premier plan*".

Énoncée lors du vote du projet de loi sur la transition énergétique devant l'Assemblée nationale en octobre 2014, l'ambition de la Ministre de l'écologie[1] répond à la volonté

* Directrice de Recherche CNRS (Centre national de la recherche scientifique), Institut de l'Ouest : Droit et Europe - UMR (unité mixte de recherche) CNRS 6262, Faculté de droit et de science politique - Université de Rennes 1

** Maître de Conférence, IDPSP, Faculté de droit et de science politique, Université de Rennes 1

[1] Ségolène Royal, Ministère de l'écologie, du développement durable et de l'énergie. Dossier du Ministère, La transition énergétique pour la croissance verte, 22 pages. www.developpement-durable.gouv.fr consulté 1/12/2014

exprimée par le Président de la République lors de la première conférence environnementale de 2012 de faire de la France le pays de *l'excellence environnementale*. Au delà des discours, il importe d'apprécier la réalité des engagements pris conformément à la feuille de route de cette conférence environnementale consacrée à la transition écologique.

I- Les chemins sinueux de la transition écologique : Modernisation du droit de l'environnement et projets de lois sur l'Energie et la Biodiversité

Cinq priorités ont été sélectionnées en 2012: la transition énergétique, la reconquête de la biodiversité, la prévention des risques sanitaires et environnementaux, le financement de la transition écologique, l'amélioration de la gouvernance écologique.

En écho au processus de modernisation de l'action publique, le gouvernement affirme le besoin de simplifier le droit de l'environnement et organise en 2013 les **Etats généraux de la modernisation du droit de l'environnement**. Sur la base d'un questionnaire, les parties prenantes du dialogue environnemental sont invitées à contribuer au diagnostic des forces et faiblesses de ce droit[2]. Le récent colloque de la Société française pour le droit de l'environnement sur « L*es futurs du droit de l'environnement: modernisation, simplification, régression? La voie étroite »* reflète l'ambivalence du processus actuel de réforme du droit de l'environnement supervisé par une commission du Comité national de la transition écologique[3].

A- Le projet de loi sur la transition énergétique : le choix de la procédure d'urgence

La transition énergétique constitue toujours la prioritaire première du gouvernement français. A l'occasion de la troisième conférence environnementale en novembre 2014, le Président de la République confirme l'exigence d'exemplarité dans la perspective de la COP 21 à Paris en vue d'obtenir un accord historique sur le climat en 2015. A l'issue du débat national sur la transition énergétique en 2013, un projet de loi relatif à la transition énergétique pour la croissance verte est présenté en juillet 2014 en Conseil des Ministres. Ce projet vient d'être adopté par l'Assemblée nationale le 14 octobre 2014[4] selon la procédure d'urgence et sera examiné prochainement par le Sénat. En l'état du processus

[2] Exemple de contribution : Société française pour le Droit de l'Environnement www-sfde.u-strasg.fr consulté 1/12/2014

[3] www.developpement-durable.gouv.fr consulté 1/12/2014

[4] Plus de 2000 amendements déposés. Texte adopté n°142/2014 du 14 octobre 2014, 176 p.

législatif, de nouveaux objectifs chiffrés sont établis pour la politique énergétique française. Concernant les émissions de gaz à effet de serre, une réduction de 40% entre 1990 et 2030 est prévue ainsi que la division par quatre desdites émissions entre 1990 et 2050. La réduction de 50% de la consommation énergétique finale en 2050 par rapport à 2012, avec un objectif intermédiaire de 20% en 2030, est fixée. De même, il est attendu une réduction de la consommation énergétique primaire des énergies fossiles de 30% en 2030 par rapport à 2012. La part des énergies renouvelables devra être portée à 23% de la consommation finale brute d'énergie en 2020 et à 32% de cette consommation en 2030. Pour le bâtiment, très important gisement d'économies d'énergie, le parc immobilier devra être rénové en fonction des normes de basse consommation ou assimilé à l'horizon 2050. Enfin et pour la première fois, est programmée la réduction de la part du nucléaire dans la production d'électricité à 50% à l'horizon 2025. Nonobstant ces objectifs ambitieux, de nombreuses interrogations demeurent sur le financement de ces engagements et les nouvelles obligations juridiques instituées. Parallèlement à l'adoption de ce projet de loi, l'abandon du dispositif de l'écotaxe sur les poids lourds et le report probable de l'arrêt de la centrale nucléaire de Fessenheim démontrent l'impossibilité à brève échéance d'engager la transformation radicale du modèle énergétique français.

B-Le projet de loi sur la biodiversité en *standby*

La reconquête de la biodiversité, seconde priorité de la feuille de route sur la transition écologique, s'est également traduite par la présentation d'un projet de loi en mai 2014, destinée à concrétiser les orientations de la stratégie nationale de biodiversité (2011-2020) conformément aux engagements internationaux et européens. Ce projet de loi promeut une vision renouvelée de la biodiversité en introduisant de nouveaux concepts et mécanismes de protection et de valorisation socio-économique des ressources et services écosystémiques. La future loi sur la biodiversité propose ainsi d'intégrer les processus biologiques et la géodiversité parmi les constituants du Patrimoine commun de la Nation. Elle suggère d'inclure, parmi les objectifs d'intérêt général de protection et de gestion de ce patrimoine, la *connaissance, la préservation de la capacité à évoluer et la sauvegarde des services qu'ils fournissent*. Elle consacre le principe de solidarité écologique, notion apparue dans la loi 2006/436 sur les parcs naturels nationaux et régionaux, qui invite *à prendre en compte les interactions des écosystèmes, des êtres vivants et des milieux naturels ou aménagés.* Par contre, elle ne précise pas les modalités de traduction de ce principe. De même, de manière contestable, le projet de loi assimile la séquence *éviter, réduire, compenser* comme un principe de l'action préventive.

Afin de respecter le *Protocole de Nagoya* sur l'accès aux ressources génétiques et le partage juste et équitable des avantages résultant de leur utilisation, le projet de loi prévoit une série de dispositions qui suscitent déjà des débats. L'institution d'une servitude contractuelle de protection de l'environnement *intuiti rei* durable et automatiquement transmissible à ses ayants causes est prévue pour permettre de mobiliser les propriétaires en faveur du développement d'actions de gestion d'éléments de la biodiversité et des services écosystémiques; toutefois, ce nouveau mécanisme suscite également des réserves sur l'absence de précisions sur la liste des clauses qui devront figurer obligatoirement dans le contrat, sur les modalités d'établissement et de publicité. Parmi les autres nouveautés, figure également la création d'une agence française pour la biodiversité qui génère déjà d'importantes critiques au vu de la faiblesse des moyens alloués et le regroupement d'autres organismes publics tels l'Office national des eaux et milieux aquatiques, l'agence des aires marines protégées, les parcs nationaux de France. Objet de discussions à l'Assemblée nationale en juin 2014, le projet de loi est, depuis lors, en *stand-by* au profit du projet de loi sur la transition énergétique pour la croissance verte. L'autonome 2014 a été marquée par la disparition brutale d'un jeune militant écologiste lors d'affrontements avec les forces de police sur le site d'un projet de barrage à Sivens (Tarn) où s'étaient regroupés plusieurs opposants à ce projet d'infrastructure. A l'occasion de la conférence environnementale de novembre 2014, le Président de la République a rendu hommage à ce jeune écologiste, Rémi Fraisse, et exigé une amélioration de la concertation démocratique afin que "*tout soit fait pour que sur chaque grand projet, tous les points de vue soient considérés, que toutes les alternatives soient posées, que tous les enjeux soient pris en compte et que l'intérêt général puisse être dégagé*". Outre la démocratisation renforcée des procédures de concertation lors des évaluations environnementales de ces projets d'infrastructure, cet exemple du projet de barrage de Sivens, tout comme celui du projet d'aéroport Notre Dame des Landes (entre Nantes et Rennes) interrogent sur la pertinence scientifique des mesures de compensation écologique proposées par les maître d'ouvrage pour les zones humides qui seraient détruites par le projet et le respect effectif des obligations imposées par les directives de l'Union européenne sur l'eau (DCE 2000/60/CE), sur l'évaluation des incidences environnementales (projets d'ouvrages Directive 2011/92/UE, plans et programmes Directive 2001/42/CE) (la conservation des habitats naturels, faune et flore sauvages (Natura 1992/43/CE). Pour conclure sur cette actualité 2014, il nous est apparu important d'analyser l'intégration des exigences environnementales dans la récente loi d'avenir sur l'agriculture, l'alimentation et la forêt censée avec pour toile de fond la réforme de la politique agricole commune de l'Union européenne.

II- La loi d'avenir sur l'agriculture, l'alimentation et la forêt: Agro-écologie et environnement

L'un des objectifs majeurs de la loi 2014/1170 du 13 octobre 2014 d'avenir pour l'agriculture est de promouvoir l'agro-écologie dont la définition est d'ailleurs insérée à l'article 1er du code rural (Code rural, art.L.1). Il s'agit de promouvoir une agriculture écologiquement intensive en mettant en œuvre des systèmes de production à la fois plus rentables, moins consommateurs de ressources naturelles et de produits phytopharmaceutiques en privilégiant les interactions biologiques et l'utilisation des services écosystémiques, cette dernière recevant ainsi une consécration officielle expresse en droit français.

A- La création des groupements d'intérêts économique et environnemental (GIEE)

L'un des moyens privilégiés pour engager l'agriculture dans cette logique est d'encourager les démarches collectives des exploitants et des forestiers qui répondent à une problématique liée à un territoire donné. A cette fin, l'Etat va pouvoir, dès 2015, reconnaître la qualité de groupement d'intérêt économique et environnemental ou de groupement d'intérêt économique environnemental et forestier à des structures regroupant des exploitants ou des forestiers qui s'engagent dans un projet pluriannuel de modification ou de consolidation de leurs pratiques en visant à la fois des objectifs économiques, environnementaux et sociaux. Ce label, attribué par le préfet de région, sera accordé aux projets qui satisfont à dix critères nationaux. Les cinq premiers, parmi lesquels figurent la performance environnementale et la pertinence technique des actions proposées au vu des principes d'agro-écologie, sont déterminants pour bénéficier des avantages que procure le label GIEE, notamment en termes de bonification des aides publiques (Code rural, art.L.315-4). De façon significative, le décret précisant la procédure de reconnaissance du GIEE et les modalités de suivi des programmes choisis a été publié le même jour que la loi d'avenir (Décret n°2014-1173 du 13 oct.2014, relatif au GIEE, JO 14 oct. ; Code rural, D.315-1 à 9).L'Etat paraît donc déterminé à mettre rapidement en œuvre le nouveau dispositif et à faire oublier les épisodes des contrats territoriaux d'exploitation, puis des contrats d'agriculture durable qui en 1999 et en 2003 visaient déjà à favoriser le développement d'une agriculture plus respectueuse de l'environnement. Il est vrai que ces contrats n'engageaient les exploitants qu'à titre individuel et que la dérive financière du dispositif avait conduit à son abrogation.

B- Les clauses environnementales insérées dans les baux ruraux

La loi d'avenir conforte le mécanisme du bail environnemental initié en 2006 et abroge les restrictions qui pouvaient entraver son développement. Il est désormais permis d'insérer des clauses environnementales dans un bail rural, quels que soient la qualité du bailleur et le territoire concerné. Cette faculté n'était jusqu'à présent ouverte qu'à quelques bailleurs particuliers (personnes publiques, associations agréées de protection de l'environnement, entreprise solidaire ou fondations) ou pour des parcelles incluses dans des espaces protégés, limitativement énumérés (parcs nationaux, réserves naturelles, sites classés, zones humides, zones Natura 2000, périmètres de protection des captages, ….). De manière plus efficace, le législateur s'est, cette fois, attaché à privilégier l'objet des clauses. Il est, en effet, beaucoup plus utile de permettre au bailleur et au preneur de définir une ou des clauses de préservation de la ressource en eau ou de la biodiversité, dans l'hypothèse où les parcelles concernées ne font justement l'objet d'aucune protection particulière. (art.4, III modifiant l'art.L.411-27 du code rural et de la pêche maritime.).

C- L'extension du champ d'application de la déclaration annuelle des quantités d'azote au service de prévention de la pollution de l'eau par les nitrates d'origine agricole

La loi d'avenir étend, de manière significative, le champ d'application de la déclaration annuelle des quantités d'azote. Ce dispositif ne pouvait, jusqu'à présent, être mis en œuvre que dans les bassins versants dont les plages connaissent d'importantes marées vertes, envers les utilisateurs et producteurs d'azote d'origine animale ou minérale, notamment les exploitants agricoles, les gestionnaires publics et privés d'installations de traitement d'effluents et de déchets et les utilisateurs d'engrais ou d'amendements azotés au sein des services publics locaux. Dès le 1er octobre 2014, les préfets pourront également instaurer cette déclaration dans les zones vulnérables atteintes par la pollution à l'encontre des personnes qui détiennent ou commercialisent à titre professionnel des matières fertilisantes azotées. Les transporteurs et prestataires des services d'épandage, les expéditeurs et livreurs d'azote dans la zone seront contraints d'effectuer la déclaration qui devra intégrer les quantités d'azote traitées, reçues, livrées, cédées à titre gratuit ou onéreux dans la zone ou encore cédées ou livrées à partir de la zone (art.4, I modifiant l'art.L.211-3 du code de l'environnement).

D- Une protection renforcée des espaces naturels, agricoles et forestiers contre l'étalement urbain

La nécessité de protéger les espaces naturels, agricoles et forestiers a conduit à la mise en place de dispositifs toujours plus nombreux. Néanmoins, la publication du premier rapport de l'Observatoire national de la consommation des espaces agricoles, en mai 2014, lors de l'examen parlementaire du projet de loi d'avenir agricole, met en évidence la perte continue de surfaces agricoles (entre 40.000 et 90.000 hectares par an, depuis 2000). Bien que la loi d'accès au logement et à un urbanisme rénové ait, il y a six mois, déjà œuvré pour limiter l'étalement urbain responsable de l'artificialisation des sols, le nouveau texte consacre un titre entier à cette problématique pour contrôler plus efficacement les choix d'aménagement des collectivités, repréciser les conditions dans lesquelles les projets pourront être admis dans les zones agricoles et naturelles et faciliter la constitution des ceintures vertes autour des agglomérations.

1- Le contrôle administratif des choix d'aménagement arrêtés dans les documents d'urbanisme

La loi d'avenir étend, de manière parallèle, les missions de l'Observatoire national de la consommation des espaces agricoles et des commissions départementales de la consommation des espaces agricoles, créés par la loi de modernisation de l'agriculture et de la pêche du 27 juillet 2010 (Loi n°2010-874, art .51, JO 28 juill.). L'évolution de leur dénomination respective est significative : l'Observatoire des espaces naturels, agricoles et forestiers et les commissions départementales de la préservation des espaces naturels, agricoles et forestiers devront aussi inclure dans leur expertise, l'évolution des espaces naturels ou forestiers (art.25, I.1° et 2° modifiant les art.L.112-1 et L.112-1-1 du code rural et de la pêche maritime.). En revanche, le rôle fondamental de chacun reste inchangé. L'Observatoire est chargé d'élaborer des outils pertinents de mesure des changements de destination et d'homologuer des indicateurs pour assister les collectivités ; celles-ci sont, en effet, tenues lors de l'élaboration des schémas de cohérence territoriale et des plans locaux d'urbanisme d'analyser la consommation d'espace sur 10 ans et de prendre des engagements de limitation de la consommation d'espace. Le 1er rapport de l'Observatoire, publié le 15 mai 2014, mettait l'accent sur les difficultés d'évaluer de façon très fiable la consommation des espaces agricoles, faute d'un outil unique de suivi et de calcul. L'assistance de l'institut national de l'information géographique et forestière, mentionnée expressément par l'article L.112-1, est à l'évidence d'autant plus nécessaire que les outils

doivent maintenant intégrer les surfaces naturelles et forestières. La composition des nouvelles commissions départementales est élargie en liaison directe avec l'extension de leurs attributions : elles intégreront, à titre supplémentaire, des représentants de la profession forestière, des chambres d'agriculture et organismes nationaux à vocation agricole et rurale, des fédérations de chasseurs. Les hypothèses de consultation des commissions seront mécaniquement plus nombreuses puisqu'elles peuvent être saisies de toute question relative à la réduction des surfaces naturelles, forestières et à vocation ou usage agricole et demander à être consultées sur tout autre projet ou document d'aménagement ou d'urbanisme à l'exception des projets de plans locaux d'urbanisme concernant des communes dont le territoire est couvert par un Schéma de cohérence territoriale (SCOT) approuvé après promulgation de la loi d'avenir. Le texte rend d'ailleurs obligatoire la consultation de la commission lors de l'élaboration d'un plan local d'urbanisme (PLU) ou d'une carte communale qui réduit la surface des espaces naturels et forestiers sur un territoire qui n'est pas couvert par un SCOT. Jusque là, son intervention était limitée à l'hypothèse d'une réduction des surfaces agricoles (art.25, VI, 7° et 8° modifiant les articles L.123-6 et L.124-2 du code de l'urbanisme).

La loi d'avenir vise indéniablement à renforcer la portée juridique des avis restitués par les commissions départementales. Deux dispositions nouvelles, d'importance inégale, ont été adoptées à cet effet. Lorsque le projet ou le document à propos duquel la commission s'est prononcée est soumis à enquête publique environnementale, l'avis doit être joint au dossier d'enquête. Les administrés pourront donc prendre connaissance de l'appréciation donnée et éventuellement en tirer des arguments contentieux (C.rur. , art.L.112-1-1, al.8 nouveau). De manière plus inattendue, la commission est investie, pour la première fois, d'une possibilité de bloquer l'adoption d'un projet d'élaboration, de modification ou de révision d'un PLU, d'un document en tenant lieu, ou d'une carte qui aurait pour conséquence une réduction substantielle des surfaces affectées à une production AOP ou provoquerait une atteinte substantielle aux conditions de production d'une appellation (C.rur. , art.L.112-1-1, al.4 à 7 nouveaux). Sur saisine du représentant de l'Etat, elle rend, en effet, un avis conforme. Si l'Etat n'a pas considéré comme substantielle la réduction de surfaces ou l'atteinte, l'avis défavorable émis par la commission impose à l'autorité qui approuve le document d'urbanisme de justifier l'absence de suivi de l'avis. L'autorité juridique des avis des commissions est donc significativement renforcée, alors qu'en matière d'adoption des documents de planification urbaine, le principe systématiquement retenu était jusque là celui de l'avis simple, qui ne peut en aucun cas lier la collectivité. S'agissant d'une limitation incontestable du principe de libre administration, le législateur a prévu l'intervention d'un décret pour préciser les hypothèses dans lesquelles ce nouveau dispositif sera mis en

œuvre et l'a rendu inapplicable à la mise en compatibilité d'un PLU nécessaire à l'adoption d'un projet d'utilité publique ou d'intérêt général (Code de l'urbanisme, art.L.123-14) et à la mise en compatibilité imposée du fait de l'adoption de normes hiérarchiquement supérieures au PLU, dont la plupart sont étatiques (Code de l'urbanisme, art.L.123-14-1).

La prise en considération plus précise des besoins agricoles par les SCOT et les PLU

La loi du 12 juillet 2010 a imposé aux SCOT et PLU la détermination d'objectifs de limitation de la consommation d'espaces agricoles, naturels et forestiers, sur le fondement d'une analyse de cette consommation au cours des 10 ans précédant l'adoption de nouveaux documents. Bien que ce dispositif inédit suscite des difficultés réelles tenant notamment à l'absence de méthodologie claire pour mesurer la consommation, le législateur n'a de cesse d'en renforcer les exigences pour juguler l'étalement urbain. La loi d'avenir s'inscrit pleinement dans ce mouvement. Ainsi, les SCOT « Grenelle » devront définir des objectifs chiffrés de limitation de la consommation d'espaces par secteur géographique en décrivant, pour chacun de ces secteurs, les enjeux qui leur sont propres, et ce après avoir pris en considération dans le diagnostic de territoire, la préservation du potentiel agronomique (art.25, VI, 2° et 3° modifiant respectivement les art.L.122-1-2 et L.122-1-5 du code de l'urbanisme). La ventilation des objectifs par secteurs était jusqu'à présent facultative, le SCOT pouvant se contenter de fixer une enveloppe globale de superficie consommable pour sa durée d'application. Il s'agit clairement de contraindre davantage les auteurs des PLU qui doivent également prendre en compte les besoins en surfaces et développement agricoles pour arrêter leurs propres objectifs de modération de la consommation d'espaces (art.25, VI, 5° modifiant l'art.L.123-1-2) ; la Loi 2014/366 pour l'accès au logement et un urbanisme rénové (« ALUR ») avait d'ores et déjà imposé que ces objectifs soient chiffrés. De façon classique, la loi d'avenir permet cependant aux auteurs des SCOT et PLU déjà engagés dans une procédure de transformation du document, de reporter l'application de ces exigences à la prochaine révision du document (art.25 VIII, 3° modifiant l'art.139 de la loi n°2014-366).

En revanche, la possibilité de « ressusciter » les POS dont la disparition est programmée depuis la loi du 13 décembre 2000 est surprenante voire incongrue, puisque ces documents n'intègrent, par postulat, aucun des impératifs d'usage économe de l'espace. La loi d'avenir admet cependant qu'en cas d'annulation ou de déclaration d'illégalité d'un PLU après le 31 décembre 2015, la collectivité pourra remettre en vigueur le POS immédiatement antérieur, alors même que la loi « ALUR » a posé le principe de caducité automatique des POS à cette date (art.25, VIII, 2° modifiant l'art.135, II de la loi n°2014-366, portant création de l'article

L.123-19 du code de l'urbanisme). Ceci démontre, s'il en était encore besoin, combien il est difficile de se débarrasser définitivement des POS, dont la « mise à mort » ne cesse d'être repoussée au fil des textes…

2- Les clarifications quant aux projets admis dans les espaces naturels et agricoles

La commission départementale de la préservation des espaces agricoles, naturels et forestiers est saisie après l'adoption de la délibération du conseil municipal, lors de la mise en œuvre de la 4e exception à la règle de constructibilité limitée définie par l'article L.111-1-2 du code de l'urbanisme (art .25, V, 11° modifiant l'article L.111-1-2, I, 4°).

La loi du 24 mars 2014 avait prévu que la demande d'autorisation fondée sur le caractère d'intérêt communal du projet soit soumise à l'avis conforme de la commission, de manière à contrôler plus étroitement l'implantation de constructions et d'installations en dehors des parties urbanisées de la commune. Son intervention plus précoce, dès que le conseil municipal s'est prononcé favorablement sur l'intérêt du projet, met immédiatement un terme à la procédure en cas d'avis négatif. Cela évite ainsi au pétitionnaire d'avoir à assumer les frais de dépôt d'une demande d'autorisation qui aurait été vouée à l'échec.

Les conditions dans lesquelles les plans locaux d'urbanisme peuvent admettre, en zone agricole, l'extension et le changement de destination des bâtiments implantés en dehors des secteurs de taille et de capacité d'accueil limitées, sont assouplies. Le législateur a sans aucun doute pris conscience qu'il avait fait preuve d'une sévérité excessive lors de l'adoption de la loi « ALUR » en mars dernier.

Le texte du 24 mars 2014 a défini plus strictement les conditions d'utilisation des sols dans les zones agricoles et naturelles afin que ne soient pas admises trop aisément des constructions et installations dépourvues de tout lien avec l'exploitation agricole. En conséquence, l'implantation de constructions nouvelles ne peut être autorisée en dehors des « STECAL », lesquels doivent être délimitées par les PLU en respectant les conditions reprécisées par l'article L.123-1-5, 6° du code de l'urbanisme. La réalisation de travaux sur des constructions existantes a également été encadrée de manière très rigoureuse. Une correction est apparue rapidement nécessaire à propos de ces projets qui ne sont pas les plus menaçants pour la pérennité de l'agriculture. La réécriture des derniers alinéas de l'article L.123-1-5 permet également l'instauration d'un régime juridique plus lisible car applicable à l'identique aux zones agricoles et naturelles (art.25, V, 6°).

Hors STECAL et de façon constante, le PLU peut donc autoriser le changement de destination des bâtiments qu'il a désignés dans son règlement, dès lors que ce changement ne compromet pas l'activité agricole ou la qualité paysagère du site. L'harmonisation des règles applicables conduit cependant à prohiber l'extension limitée admise par la loi ALUR au seul profit d'un changement de destination en zone agricole. En revanche, la loi d'avenir supprime le critère jusque là imposé aux auteurs du PLU pour identifier les bâtiments susceptibles de faire l'objet d'une transformation. Depuis l'adoption de la loi « Urbanisme et habitat » du 2 juillet 2003, seuls les bâtiments présentant un intérêt architectural ou patrimonial pouvaient, en effet, bénéficier du dispositif (ancien L.123-3-1 du code de l'urbanisme). Cette exigence a suscité nombre d'interrogations, tout particulièrement à propos de l'intérêt patrimonial, difficile à distinguer de l'intérêt architectural. L'abrogation de la mention doit néanmoins être interprétée avec prudence : le changement de destination ne devient pas un droit susceptible d'être mis en œuvre pour l'ensemble des bâtiments. Les auteurs de PLU devront toujours sélectionner le bâti qui peut faire l'objet d'une transformation, et par là même justifier ce choix, à peine d'illégalité du document d'urbanisme. Il est, à ce titre, probable que l'intérêt architectural restera en bonne place parmi les motivations retenues. La loi d'avenir conforte, au demeurant, le mécanisme de verrouillage mis en place par ALUR : le changement de destination est soumis, en zone agricole, à l'avis conforme de la commission départementale de la préservation des espaces agricoles, naturels et forestiers, et à celui de la commission départementale de la nature des sites et des paysages en zone naturelle.

Est également autorisée l'extension limitée des bâtiments d'habitation dès lors qu'elle ne compromet pas l'activité agricole ni la qualité paysagère du site. Le règlement du PLU précise à cet effet les conditions de hauteur, d'implantation et de densité des extensions permettant d'assurer leur insertion dans l'environnement et leur compatibilité avec le maintien du caractère naturel, agricole ou forestier. La loi d'avenir prend ici le contre-pied d' «ALUR » puisque le texte publié en mars se bornait à admettre l'adaptation et la réfection des constructions autres qu'agricoles ou forestières. Ce rigorisme conduisait à interdire l'agrandissement pour l'adjonction d'un garage ou pire, celui indispensable à l'accueil de personnes handicapées. Désormais, l'autorité administrative compétente ne pourra pas s'opposer à une extension compatible avec la vocation de la zone agricole ou naturelle et qui respecte les conditions posées par le règlement d'urbanisme.

La loi d'avenir soumet à étude préalable les travaux, ouvrages, aménagements publics ou privés qui par leur nature, dimension ou localisation sont susceptibles d'avoir des conséquences négatives importantes sur l'économie agricole. Conformément au formatage désormais habituel des évaluations, l'étude devra décrire le projet, analyser l'état initial de l'économie agricole, exposer les effets et présenter les mesures destinées à les éviter, les réduire ou les compenser de manière à consolider l'économie agricole du territoire. Un décret est annoncé pour identifier les projets visés et préciser les modalités de l'étude, le dispositif devant entrer en vigueur au plus tard le 1er janvier 2015 (art.28 portant création de l'art.L.112-1-3 du code rural et de la pêche mar.). Dans ce délai particulièrement bref, plusieurs questions fondamentales vont devoir être tranchées. La première est relative au champ d'application de cette procédure, alors que le droit français comporte déjà de nombreuses évaluations. Seuls sont visés les travaux, ouvrages et aménagements, ce qui paraît exclure les documents d'urbanisme et d'aménagement. En revanche, nombre de projets déjà soumis à des évaluations environnementales, notamment à étude d'impact, pourraient être concernés. L'objectif est à l'évidence d'obliger les maîtres d'ouvrage à envisager spécifiquement les impacts des projets sur l'organisation des exploitations et des productions, considérations qui n'apparaissent en général qu'à titre accessoire dans les évaluations existantes, si l'on excepte l'hypothèse de réalisation des grands ouvrages publics provoquant la disparition d'exploitations agricoles ou leur grave déséquilibre (Code de l'expropriation, art.L.23-1 et C.rur., art.L.123-24 et L.352-1). D'autres projets que ceux nécessitant une déclaration d'utilité publique seront certainement concernés pour donner un plein effet utile au nouveau texte.

S'agissant de la portée de l'évaluation, il est vraisemblable qu'elle soit limitée à une obligation de compensation des impacts négatifs : la loi se borne, en effet, à mettre à la charge du maître d'ouvrage ces mesures. Une évaluation même désastreuse pour l'économie agricole existante ne contraint donc pas, automatiquement, à abandonner purement et simplement le projet. Il est vrai que seule l'évaluation Natura 2000 est à même de développer ce caractère impératif, et admet aussi des exceptions (Code de l'environnement., art.L.414- 4).

3. La relance des périmètres d'intervention relatifs aux espaces agricoles et naturels périurbains

La loi d'avenir pour l'agriculture tend à accélérer la mise en place des périmètres d'intervention initiés par la loi du 23 février 2005 relative au développement des territoires

ruraux (L.n°2005-157, art.73, JO 24 fév.).Les établissements publics ainsi que les syndicats mixtes susceptibles d'élaborer un SCOT sont désormais compétents, au même titre que les conseils généraux, pour définir un périmètre sur le territoire des communes qui les composent. Les enquêtes préalables à l'approbation du SCOT et du périmètre pourront d'ailleurs être concomitantes (art.25,VI, 9° modifiant l'art.L.143-1 du code de l'urbanisme). Cette évolution reste cependant incomplète puisque les programmes d'action nécessaires à la protection des espaces acquis dans les périmètres restent de la compétence exclusive des départements, comme l'exercice des droits de préemption (Code de l'urbanisme, art.L.143-2 et 3). En outre, il n'est pas certain que le droit de veto, conféré aux communes en 2005, ait été abrogé du fait des possibilités conférées aux établissements publics de coopération intercommunale (EPCI) compétents en termes de SCOT.

Bien qu'il soit logique qu'une commune, membre d'une intercommunalité, se plie aux décisions édictées à la majorité par l'assemblée délibérante de l'établissement, la rédaction retenue par le texte du 13 octobre maintient, en effet, l'exigence de l'accord de la commune. Si telle devait être l'interprétation retenue, l'apport de la nouvelle loi serait très limité puisque les communes pourraient toujours s'opposer à l'inclusion des zones identifiées comme agricoles et naturelles dans leur PLU afin de préserver leurs possibilités de les ouvrir à l'urbanisation. Ce droit de veto est à l'origine de nombre de difficultés et de retard pour mettre en place des périmètres, au nombre de 23 actuellement.

COUNTRY REPORT: INDIA

Kavitha Chalakkal*

Introduction

2014 saw some interesting changes in Indian politics, and this was reflected in the prospects for and implementation of environmental law in the country. The national elections in the country saw a new political party coming into power with an overwhelming majority, and immediately there were talks about diluting/relaxing environmental regulations to allow faster industrial growth. The government changed the name of the environment ministry; 'Ministry of Environment and Forests' became 'Ministry of Environment, Forests and Climate Change' (MoEF&CC). A high-level committee was also constituted to review all major environment-related laws in the country: *the Environment (Protection) Act, 1986; Forest (Conservation) Act, 1980; The Wildlife (Protection) Act, 1972 (WPA); The Water (Prevention and Control of Pollution) Act, 1974 (Water Act); The Air (Prevention and Control of Pollution) Act, 1981 (Air Act);* and *the Indian Forest Act, 1927.* The Committee will assess the status of implementation of the Acts against their objectives and recommend and draft specific amendments. While the government planned to change the laws, the National Green Tribunal (NGT) and the Supreme Court of India came out with strong decisions with regard to protection and conservation of the country's environment.

Judicial Bodies and Case Law

National Green Tribunal[1]

The NGT gave many important decisions during the period, on a variety of environmental issues, including biodiversity protection, wildlife conservation, pollution, mining and the role of local communities in forest management.

---

* Assistant Professor, Amity Law School Delhi, India

[1] A specialized national body with expertise and jurisdiction over cases relating to environment, including conservation of forests and natural resources. The Forest Bench of the Supreme Court also deals with forest and wildlife cases.

***Biodiversity Conservation*:** Protection of the ecosystems in Western Ghats, a Biodiversity Hotspot and a World Heritage Site, has been in debate in the country for a long time. Despite two expert-panel reports and many deliberations with multiple stakeholders, the Government of India has been indecisive regarding the conservation of the region's ecosystems. Acting on a plea filed by non-governmental organizations seeking to restrain the authorities from permitting new projects in the region, the Tribunal directed[2] MoEF&CC to expeditiously decide on the Ecologically Sensitive Areas (ESA) in Western Ghats and to stop issuing fresh Environmental Clearance (EC) or permissions to projects, until it issued the final ESA notification. NGT held that an earlier (November 2013) direction to provide immediate protection to the region would apply.

***Environmental Clearances*:** A plea[3] was filed in the NGT regarding publication of complete EC's [by project proponents] provided by the government to various projects. The Environment Impact Assessment Notification 2006 made it mandatory for project proponents of projects to make public the EC granted for their project by advertising it in newspapers; by permanently displaying it on its website; and by providing copies to local self-governments and other relevant bodies. Acting on the plea, NGT said that project proponents cannot by-pass the Notification, and that it expects better compliance from the proponents.

In another case,[4] the Tribunal made invalid the EC granted (by MoEF&CC) to a power company. It directed the proponent to conduct a new Cumulative Impact Assessment Study of the project, after collecting baseline data relevant to the project and comparing it with national standards; assess the possible impacts using appropriate mathematical models and suggest management of the impacts. The study report is to be submitted to the Expert Appraisal Committee (EAC), who should decide on the need for a comprehensive study. The Committee could carry out the appraisal of the study (or the comprehensive study) and recommend/deny EC. The Ministry was asked to consider the EAC's recommendations and decide in accordance with law.

---

[2] Decision Accessed online at:
http://www.greentribunal.gov.in/Writereaddata/Downloads/26_2012(App)_25Sept2014_final_order.pdf

[3] Pushp Jain vs. Union of India & others (Original Application No. 172/2014); Accessed online at
http://www.greentribunal.gov.in/Writereaddata/Downloads/172-2014(PB-II)OA-14-11-2014.pdf)

[4] T. Muruganandam & others vs. MoEF and others (Appeal no. 50/2012); Accessed online at:
http://www.greentribunal.gov.in/Writereaddata/Downloads/50-2012(PB-I)(APL)-10-11-2014.pdf

In another judgment,[5] the Tribunal set aside an order from MoEF&CC, recommending Forest Clearance (FC) and consequent final approval order from the State of Chhattisgarh for clearing nearly 1,900 hectares of forests for coal mining. The proposal, which was (thrice) rejected by the Forest Advisory Committee (FAC), was cleared after the Union Minster for Environment overruled the committee's decision. The Tribunal found that even the FAC failed to examine all relevant facts and circumstances and that the Minister acted arbitrarily in rejecting FAC's advice.

In a significant decision,[6] the NGT Chennai Bench suspended the EC granted by MoEF&CC to a private company to establish a coal-based power plant in Andhra Pradesh. The Tribunal found that the EAC of the ministry failed in its appraisal of the project, and that it violated the Precautionary Principle and the Principle of Sustainable Development. The Tribunal found that the approval was given in "a cursory and arbitrary manner" without considering "the implication and importance of environmental issues". After suspending the clearance for six months, the Tribunal directed the authorities to redo the process. It directed the EAC to discuss in detail the hydrology of the area; the ecology of adjacent riverine systems and impose needed engineering interventions and conditions to be followed by the proponent.

Pollution: In another judgement,[7] the Tribunal imposed fines of Rupees[8] 50 million on Simbhaoli Sugar Mill and Distillery unit for discharging toxic effluents into the Ganga River (Ganges), whose aquatic life was adversely affected. The company had taken none of the precautions mandated by law, and had caused surface and ground-water pollution. Moreover, it functioned without the required licenses during 1974-1991, and has been noncompliant, since. It was held that the fine amount should be used to remove the pollutants and prevent ground-water pollution. A second company, Gopalji Dairy, was also proven to be discharging effluents into the river, and was fined Rupees 2.5 million. In another case[9] in Rajasthan, NGT directed that all industrial units operating without the

---

[5] http://www.greentribunal.gov.in/Writereaddata/Downloads/73_2012(Ap)_24Mar2014_final_order.pdf

[6] APPEAL No. 9 of 2011 (NEAA APPEAL No. 10 of 2010). Decided in December 2013; http://www.greentribunal.gov.in/Writereaddata/Downloads/92011(SZ)(Ap)_13Dec2013_final_order.pdf

[7] http://www.greentribunal.gov.in/Writereaddata/Downloads/879_2013(MApp)_16Oct2014_final.pdf

[8] The exchange rate, at the time of writing this report, is about Rupees 62 for one US Dollar.

[9] Laxmi Suiting versus State of Rajasthan and Others (clubbing 62 appeals/applications); http://www.greentribunal.gov.in/Writereaddata/Downloads/451_2013(THC)(App)_1May2014_final_order.pdf

consent of the State Pollution Control Board will be fined Rupees 500,000 each for causing pollution and failing to establish anti-pollution systems, as specified by law. The Tribunal found that not only were the applicant companies established without permits, but also that they were non-compliant and polluting against *the Water Act*. It directed the authorities to devise a plan for wastewater collection, treatment and reuse to achieve zero discharge.

In another case[10] regarding polluting farmlands, the NGT Pune Bench invoked 'polluter pays' principle to fine Rupees 2.52 million to be paid by Jubilant Industries — which polluted water-bodies by discharging untreated effluents. The government was asked to evaluate loss to the affected farmers, who would be compensated from the deposited amount. In Maharashtra, the Pune Bench found that a company, Lloyds Metal and Engineering Ltd, was not complying with the government's repeated orders for controlling air pollution. The company was fined Rupees 1 million, which would be used for environmental remediation. It also found that the air emissions of certain companies exceeded allowed limits and their pollution-control systems were inadequate. Rebuking the authorities for not making any efforts according to the provisions of *the Air Act* to take remedial measures or to recover cost for remedial measures, NGT ordered them to frame and publish an 'enforcement policy' within 12 weeks from the judgment.

***Community Participation in Forest-Land Use*:** In May, NGT Bhopal Bench decided[11] on a Public Interest Litigation [12] regarding the functioning of the Madhya Pradesh Forest Development Corporation (MPFDC) and the State Forest Department (FD), with regard to handing over forest land to the Corporation to raise plantations and involving local communities in the process. The petitioner has sought to stop MPFDC from cutting trees in the forest. The Tribunal asked the State Government and FD to avoid conflicts with local communities in future and involve them in the activities of MPFDC. It found that the working

---

[10] Janardan Pharande and others versus MoEF, Jubilant Industries and others (Application no. 07(THC)/2014(WZ) on dated 16th May, 2014; Accessed online at: http://www.greentribunal.gov.in/Writereaddata/Downloads/7_2014(THC)(App)(WZ)_16May2014_final_order.pdf

[11] Jagat Ram Chicham Versus the State of Madhya Pradesh and others (Original Application No. 44/2014 (CZ); Accessed online at: http://www.greentribunal.gov.in/Writereaddata/Downloads/44_2014(App)(CZ)_8May2014_final_order.pdf

[12] Originally filed before the High Court of Madhya Pradesh Principal Seat at Jabalpur in Writ Petition No. 3219/2013

relationship between the FD and MPFDC had not been renewed/reviewed since 1979. The government also failed to provide guidelines based on key laws formed since 1979, including amendments to WPA 1972; *Biological Diversity Act, 2002*; and the *Corporate Social Responsibility (CSR)* regulations under the *Companies Act, 2012.* The Tribunal asked the government to convene a stakeholder-meeting; review the existing provisions; update and revise the guidelines; and to encourage community-participation in afforestation and joint forest management (JFM). It also found that the current guidelines to identify and transfer forest areas to MPFDC did not address the interests of local communities. NGT asked the government to revise it to ensure involvement of JFM Committees, so that the land-use is compatible to the needs of local communities. The Tribunal specified that 3-5% of the forest area should be kept aside for biodiversity conservation and planting NTFP-species preferred by the communities and another 3-5% for wildlife-management. It directed MPFDC to create an 'Autonomous Fund' using a part of their profits to maintain wildlife corridors within or adjacent to the handed-over land.

Mining in Forest Areas: In another judgment,[13] the Bhopal Bench observed that mining was to be taken up only if it was compatible with the objective of protecting the environment. The case was taken up *suo-moto* by the Bench, based on a newspaper article on mining affecting tiger habitats.[14] It asked the government to initiate penal action against mining-lease holders found violating the provisions *of the Water Act*; *Air Act*; *Forest Act* and the mining-lease conditions and to examine the need for a cumulative EIA study and then granting the EC under a cluster approach as envisaged in the EIA Notification 2006. Meanwhile, vehicle-movement and mining were to be regulated so as to avoid disturbance to wildlife. Finding serious lack of coordination between relevant departments, NGT directed the government to put an end to this, and to seriously deal with all the mines found violating environmental laws.

Government apathy: In a significant decision regarding continuing government apathy on environmental matters, NGT imposed fine of Rupees 25,000 to be recovered from the

---

[13] Tribunal at its own motion v. Ministry of Environment and Others; Original Application No. 16/2013 (CZ); Accessed online at: http://www.greentribunal.gov.in/Writereaddata/Downloads/16_2013(App)(CZ)_4Apr2014_final_order.pdf

[14] Naveen P. (2013), "Dolomite mining a threat to Tiger corridor in Kanha"; Times of India; Published April 10, 2013; Accessed online at: http://timesofindia.indiatimes.com/city/bhopal/Dolomite-mining-a-threat-to-tiger-corridor-in-Kanha/articleshow/19469163.cms

salaries of the concerned MoEF&CC officers, as the Ministry's Counsel was absent in four part-heard cases. It had warned the Ministry that in case it failed to ensure the presence of a Counsel, it would be compelled to pass Orders against the Ministry, including imposing heavy costs for adjournment of the matters without justification. Another case[15] was filed against the MoEF&CC appointing people lacking the requisite expertise on relevant environmental aspects as members and chair of the State and Central EAC. In July, the NGT directed the Ministry not to appoint experts as members of EAC (State and Central) unless their expertise is directly relatable to the various fields of environmental jurisprudence. It also asked the ministry to provide eligibility criteria and specific requirements for the chairmanship of the committees, within one month from the decision.

Supreme Court of India

Similar to 2013, one of the most important environment-related judicial decisions of the year came from the Supreme Court of India,[16] when it banned *Jallikkattu* (a bull-taming sport played in the State of Tamil Nadu) and other bullock-cart races in the country, while ruling on cases separately filed by the Animal Welfare Board of India[17] (2007), PETA[18] and others. AWBI's investigators had provided detailed reports on the matter, which made it clear that during *Jallikkattu*, bulls were forced to participate and were deliberately taunted, tormented, mutilated, stabbed, beaten, chased and denied even their most basic needs, including food, water and sanitation. The Tribunal examined the cases, "primarily keeping in mind the welfare and the well-being of the animals" and the standard it used was the "Species Best Interest". After finding that the aforementioned events were violating the *Prevention of Cruelty to Animals Act* 1960 (PCA), NGT ordered that bulls cannot be used as performing animals in the country for Jellikkattu, bullock-cart races and other events. It declared that the rights guaranteed to the bulls under *the PCA Act*, along with the five freedoms recognized in Chapter 7.1.2 of the World Organization for Animal Health (OIE) guidelines such as freedom from: (i) hunger, thirst and malnutrition; (ii) fear and distress; (iii) physical and thermal discomfort; (iv) pain, injury and disease; and (v) freedom to express normal patterns of

[15] Kalpvriksh & others vs Union of India (Application no. 116 (THC) of 2013)

[16] Civil Appeal No. 5387 OF 2014 (@ Special Leave Petition (Civil) No.11686 of 2007); Accessed online at: http://supremecourtofindia.nic.in/outtoday/sc1168607.pdf

[17] A statutory Board, established under Section 4 of the Prevention of Cruelty to Animals Act 1960 (PCA Act) for the promotion of animal welfare and for protecting the animals from being subjected to unnecessary pain or suffering.

[18] Writ Petition No. 145 of 2011 challenging the validity of Tamil Nadu Regulation of Jallikattu Act 2009.

behavior; are to be protected and safeguarded by the government. It directed the government to take appropriate steps to ensure the well-being of animals; prevent the infliction of unnecessary pain or suffering; and to take action against erring officials. It also held the *Tamil Nadu Regulation of Jallikattu Act 2009* as constitutionally void.

Statutes: Notifications and Draft Rules

The MoEF&CC's Draft Policy for Sustainable Utilisation of Agar Wood 2014,[19] aims to ensure sustainable utilization of an aromatic tree native to Northeast India, agarwood (*Aquilaria malapcensis*), which has become threatened in the wild, due to illegal, indiscriminate felling, owing to its high prices. The species is protected under the *Convention on International Trade in Endangered Species of Wild Fauna and Flora* (CITES), to which India is a signatory. The draft policy suggests, among others, a comprehensive framework for conservation of wild agarwood populations, including a Non Detrimental Findings Study of the species by the CITES Management Authority of India to ascertain its availability and sustainable harvesting.

Regarding the EC guidelines for coal mining, after considering a request from the Ministry of Coal, MoEF&CC decided[20] that for one-time capacity expansion proposals of existing coal-mining projects with production capacity exceeding 16 million tons per annum (MTPA), the EAC could consider exempting public-hearing, subject to a ceiling of additional production up to 5 MTPA. The Ministry had earlier (2012) provided an exemption ceiling of 2 MTPA for one-time capacity expansion of up to 25% in the existing mining operation. The ministry also uploaded a detailed project report on electronic filing of forest-clearance applications, so as to expedite the process. It also brought out a *Revised Draft Policy on Inspection, Verification, Monitoring and the Overall Procedure Relating to the Grant of Forest Clearances and Identification of Forests*. Through another order,[21] MoEF&CC extended a current relaxation of guidelines on compensatory afforestation against forest land diverted for Central government projects to all strategic defence projects (including infrastructure and road projects) in border areas. The Ministry also brought out a *Draft Guidelines for Liberalizing Felling and Transit Regime for Tree Species Grown on Non-Forest/Private*

[19] No.5-1/2013-SU

[20] No. J-IIOI5/30/2004-IA.I1 (M)

[21] No.11-24q2014FC

Land[22] and a *Draft Guidelines for conservation, development and management of Urban Greens*.[23]

Conclusion

Throughout 2014, it can be observed that NGT has grown into a strong system for legal redress regarding environmental issues in India. While concerns mount regarding the fate of India's environment, especially, after the recent political developments in the country were observed as favouring relaxation of environmental laws[24] to aid unbridled economic growth, the Tribunal can be seen as emerging as a custodian of the natural resources and biodiversity of the country. Its active role in protecting the existing environmental laws and in holding the principles of sustainable development and precaution high, could have forced the government to rethink[25] about its role, as reported in the media.

In the case of protecting Western Ghats, it took active steps and *suo-moto* cases to protect the endangered tiger and its habitats. It also came down heavily at industries polluting the environment; illegal mining operations destroying forests; and on lackadaisical government systems, which fail to prevent environmentally destructive activities. While making one of the significant judgments[26] of the year, the Tribunal took up the issue of transparency of government systems giving clearances to various development projects. After going through several meeting-minutes documenting the clearance committee discussions, NGT found that the documents were 'generic', 'routine' and 'stereotyped'; they lacked clarity and details of discussions went unrecorded or omitted. It directed that "the EAC should record and maintain the details of technical discussion amongst its members... In order to demonstrate

---

[22] F.No.8-14/2004-FP (Vol. 2)

[23] F. No. 1-2/2004-FP

[24] Sethi, N. (2014), "NDA govt to dilute environment rules for projects", Live Mint; Published June 6, 2014;
Accessed online at: http://www.livemint.com/Politics/7GH72uyKdZnrIxBcgfgYQM/NDA-govt-to-dilute-environment-rules-for-industry.html?utm_source=copy

[25] Sethi, N. (2014), "Government planning to clip National Green Tribunal's wings", Business Standard; Published August 6, 2014, Accessed online at: http://www.business-standard.com/article/economy-policy/government-planning-to-clip-national-green-tribunal-s-wings-114080600015_1.html

[26] APPEAL No. 9 of 2011 (NEAA APPEAL No. 10 of 2010). Decided in December 2013; Accessed online at:
http://www.greentribunal.gov.in/Writereaddata/Downloads/92011(SZ)(Ap)_13Dec2013_final_order.pdf

threadbare nature of discussions while considering a project for giving its recommendation, it is essential that the views, opinions, comments and suggestions made by each and every member of the committee are recorded in a structured manifest/ format."

COUNTRY REPORT: ITALY
Environmental Law in 2013: The Waste Management Policy

Carmine Petteruti*

Introduction

This country report reviews two Italian waste management laws that came into effect in 2014, specifically the national waste management law of November 2014[1] and the *Land of Fires Decree* of February 2014.[2] The report begins by considering the European Union positon on waste management, the incorporation of European waste policy into Italian law, and the division of legislative powers within Italy with regards to waste management.

The Approach of European Union to Waste Policy: Directive 2008/98/EC

Directive 2008/98/EC provides that the first aim of any waste policy should be to minimise the negative effects on human health and the environment caused by the production and management of waste. The Directive further provides that waste policies should aim to reduce the use of resources and favour the practical application of a waste hierarchy. These priorities position the Directive within the wider environmental legal framework of the European Union. For example, the *Treaty on the Functioning of the European Union* cites environmental improvement and human health protection as sustainable development priorities. The European Union *Charter of Fundamental Rights* confirms the need for integration between European policies and environmental and health protection.[3] The

---

** Assistant Professor of Public Law, Department of Political Science "Jean Monnet", Second University of Naples.

[1] N. 133 of 12 September 2014 (passed into law n. 164 of 11 November 2014.

[2] Law Decree n. 136 of 10 December 2013 (passed into law n. 6 of 6 February 2014).The name comes from the serious environmental emergency in Campania (especially in the territory between the provinces of Naples and Caserta) affected by the burning of toxic waste, called *Land of Fires*.

[3] The Charter of Fundamental Rights (so called Charter of Nizza) was drawn up by a convention consisting of a representative from each EU country and the European Commission, as well as

important role of waste management in environmental law is confirmed by the sheer number of European regulations and directives on waste, including directives on:

- landfills;[4]
- the prevention and reduction of incinerators pollution;[5]
- the reduction of packaging;[6]
- waste electrical and electronic equipment;[7]
- end-of-life vehicles;[8] and
- industrial waste treatment.[9]

Directive 2008/98/EC in Italy

European statistical data indicates an overall reduction in waste production. Italian statistics suggest a similar trend, with waste reduction corresponding to higher levels of separate collection. Regardless, the amount of waste produced by Italy is still very high.[10] There is a long road ahead to achieve the smart, inclusive and sustainable economy that Europe requests.

Italy transposed *Directive 2008/98/EC* into national law by modifying existing national laws.[11] The modifications aim to facilitate better uniformity in waste management among national,

---

members of the European Parliament and national parliaments. It was formally proclaimed in Nice in December 2000 by the European Parliament, Council and Commission. In December 2009, with the entry into force of the Lisbon Treaty (which in 2009 modified both the TEU and the TFEU), the charter was given binding legal effect equal to the Treaties. To this end, the charter was amended and proclaimed a second time in December 2007 *(http://europa.eu/index_en.htm)*.

[4] Directive 1999/31/EC.

[5] Directive 2000/76/EC.

[6] Directive 94/92/EC.

[7] Directive 2002/96/EC.

[8] Directive 2000/53/EC.

[9] Directive 2010/75/EU.

[10] The Higher Institute for Environment Research and Protection (ISPRA) report on *Quality of Urban Environment – 2014 Edition* (http://www.isprambiente.gov.it) shows that the 2013 national waste production has been of 29,6 million tons, with a decrease of about 400.000 tons, with a decrease trend observed in 2012 and 2011. The separate collection in 2013 was of 42,3% in respect of 65% provided for 2012 but the value is increased compared to previous years.

[11] By virtue of Legislative Decree n. 205 of 3rd December 2010 which modified the Legislative Decree n. 152/06 in the Fourth Part on waste.

regional, provincial and municipal governments. The modifications allow the State to determine the procedures and criteria used to classify dangerous waste, and to define recovery and disposal activities that administrative bodies must include in their authorising provisions.[12] The modifications also allow the State to determine:

- actions to prevent waste production and to reduce the risks they pose;
- criteria for sector plans aimed at reducing and optimising waste flow;
- programs for waste disposal and recovery plants; and
- prevention aims on waste production.

The modifications allow regional governments to devise regional waste management plans and related actions, approve the building of new waste management plants and issue authorisations for waste management and recovery activities.[13]

The Division of Legislative Powers with regards to Waste Management

The aforementioned division of powers between State and Regional legislatures appears to reflect the environmental provisions of the Italian Constitution,[14] specifically article 117 that grants the State exclusive competence with regards to environmental matters, cultural goods and ecosystem protection. On the face of it, article 117 allows the State to define waste laws and waste management tools, with regional governments allowed to regulate only those aspects of waste management connected to regional powers.

The Italian Constitutional Court has taken a more nuanced view of the environmental protection powers of regional governments. It is possible to distinguish two opinions from the Constitutional Court cases.[15] Up until 2008, the Court considered the environment a cross-cutting issue that should be considered in all programs and projects at all levels of government. For example, in 2002, the Court affirmed that the 'environment' is not a field in the strict sense because it is intertwined with other interests and competences.[16] For this

[12] Article 195 of Legislative Decree n. 152/06.

[13] Article 196 of Legislative Decree n. 152/06.

[14] Provided by Legislative Decree n. 152/06.

[15] D. Amirante, Profili di diritto costituzionale dell'ambiente, in P. Dell'Anno, E. Picozza (editors), Trattato di diritto dell'ambiente, Padova, Cedam, 2012, 264; M. Cecchetti, La materia "tutela dell'ambiente e dell'ecosistema" nella giurisprudenza costituzionale: lo stato dell'arte e i nodi ancora irrisolti, in Federalismi.it, n. 7/2009 (http://www.federalismi.it).

[16] Judgment n. 407.

reason, the Court considered that State and regional legislatures share competence for the environment, and regional legislation could modify standards fixed by State law.

In 2008, the Constitutional Court held that the 'environment' consists of different legal goods which can be subjected to different regulations. For example, the Court found that woods and forests comprise at least two legal goods, being an 'environmental multifunctionality' connected to environmental protection and an economic production function.[17] Regional legislatures can exercise concurrent powers on environmental matters where the exercise of power is incidental to an exercise of a power within the competence of regional legislatures.[18] In 2013, the Constitutional Court confirmed that regional laws can include environment protection matters when those matters are an indirect effect of an authorised exercise of regional power.[19] This suggests that regional legislatures can include environmental protection aims in their waste management plans.[20]

The National Waste Management Law

The national waste management law of November 2014, commonly known as the *Unlock-Italy Decree*, promotes the building of new waste plants and introduces a package of measures intended to ensure the capacity of each waste disposal plant to receive waste from every part of Italy. These measures contradict the principles of proximity and self-sufficiency laid out in the Italian *Environmental Act* of 2006[21] and the European Union *Waste Framework Directive*.[22]

The *Environmental Act* of 2006 recommends the use of waste disposal plants near the place of waste production, with the use of special plants for certain kinds of wastes. Additionally, the Act encourages self-sufficiency in urban waste disposal through regional plant networks

[17] Judgment n. 105.

[18] D. Amirante, 272; P. Maddalena, La tutela dell'ambiente nella giurisprudenza costituzionale, in Giornale di Diritto Amministrativo, 3, 2010, 311.

[19] Judgment n. 188 of 3 July 2013 on Environmental Impact Assessment (EIA) and Judgment n. 58 of 25 March 2013.

[20] Judgements referencing article 196 of Legislative Decree n. 152/06.

[21] Legislative Decree No. 152/06 of 3 April 2006; the Legislative Decree No. 152/06 of 3 April 2006 is the Italian Environmental Act. Indeed, it regulates the environmental impact assessment (EIA) and the International Plant Protection Convention (IPPC), water and soil protection and management, wastes, air pollution and environmental damage.

[22] Directive 2008/98/EC.

and the use of best-available technology. In contrast, the 2014 waste management law permits the disposal of waste in any Italian waste disposal plant. Regional governments are seriously worried that this provision will cause excessive flows of waste from other regions.

The European Union *Waste Framework Directive* requires Member States to adopt national measures to realise self-sufficient waste disposal.[23] In 2010, the European Court of Justice confirmed the need for Member States to adopt waste policies that support national self-sufficiency, taking into account territorial peculiarities.[24] In this regard, Member States may choose the optimal geographical area through which to manage waste, as long as the system provides for a network of plants and meets the principle of proximity.[25] In reviewing the regional waste management strategy in place in Italy at the time, the European Court of Justice confirmed that inefficiency at the regional level inevitably produces inefficiency on national scale. Importantly, the Court held that Member States must ensure the treatment and disposal of waste as close as possible to the place where it is produced. This reflects the *Treaty on the Functioning of the European Union* that prioritises the remedying of environmental damage at the source in order to limit the transportation of waste. Provisions in the Italian waste management law of 2014 that promote the disposal of waste at any Italian plant conflict with these directions from the European Court of Justice and the European Union *Waste Framework Directive*.

The Land of Fires Decree

The *Land of Fires Decree* passed into Italian law in February 2014. The Decree was drafted in response to waste emergencies in Campania and Puglia in December 2013.[26] The most important provisions introduced by the Decree concern the criminalisation of illegal waste burning and the monitoring of agriculture land. For example, the Decree provides for technical investigations to map the extent of agricultural land contamination caused by abusive waste disposal, including waste burnings, in Campania. The Decree introduces specific measures to suppress the burning of waste in streets. Specific penalties include

---

[23] Directive 2008/98/EC.

[24] *European Commission v. Italian Republic*, case no. C-297/08 of 4th March 2010, Reports of Cases 2010, I-01749.

[25] In this regard, you can see also the Directive 2006/12/EC.

[26] Law Decree n. 136 of 10th December 2013 (passed into law n. 6 of 6th February 2014).The name comes from the serious environmental emergency in Campania (especially in the territory between the provinces of Naples and Caserta) affected by the burning of toxic waste, called *Land of Fires*.

imprisonment, forfeiture of the means used to transport waste and obligations to restore contaminated area to their original state.[27] The penalties increase in the event that the crime is committed by an enterprise or concerns dangerous waste. Although there were few incidents of street burning at the time of enactment of the Decree, the media campaign surrounding these episodes prompted the Government to intervene. Some scholars have criticised the deterrent capability of the Decree because it was adopted especially to satisfy public opinion.[28] On the other hand, the Decree may be justified in light of repeated European Court of Justice actions concerning waste emergencies in Campania.

The first waste emergency in Campania occurred in 1994 in relation to landfill, the ordinary mode of waste disposal in Campania. In 1997, the Italian Government entrusted the then President of the Campania Region to draft a *Waste Regional Plan* that directed the building of incinerators and the separate collection of waste. Despite these measures, the continued widespread use of landfills continued up until 2000 due to the lack of suitability of waste disposal plants in the Campania region. Over time, Italy was forced to find other countries willing to accept waste from Campania (e.g. Germany). In 2008, the European Commission commenced proceedings against Italy in the European Court of Justice on the basis that Italy did not have a network of waste disposal plants or respect the principle of self-sufficiency.[29] Although the waste emergency in Campania formally stopped in December 2009, waste emergencies still occur. Indeed, Campania and other Italian regions still do not have plant networks capable of ensuring the self-sufficiency of waste disposal. These situations make it difficult to properly implement the *Land of Fires Decree* and the waste management policies of the European Union.

---

[27] The Decree introduced the article 256 bis of the Legislative Decree n. 152/06 which provides for these penalties.

[28] A. Scarcella, *Campania sì, Campania no, la terra dei fuochi…: dal decreto alla legge di conversione*, in *Ambiente&Sviluppo*, 4/2014, 257; Actually Italian law already provides administrative and penal sanctions about uncontrolled waste storages and arson.

[29] Case no. C-297/08).

COUNTRY REPORT: IVORY COAST

CisseYacouba *

Summary: Ivory Coast has adopted a policy of pursuing sustainable development, taking into account the numerous factors that constraints the proper implementation of this policy. The author notes that Ivory Coast has adopted a number of legal codes (Code on the environment, Code on water) as well as other legal instruments applicable to various sectors. In 2011 it adopted seven strategic orientations, namely: 1) information, participation and governance 2) education and training 3) the State at the forefront of sustainable development 4) cities, territorial collectivity's and territorial planning 5) regulatory sector and lead institutions 6) a society respectful of the planet 7) regional and international cooperation. In addition, hundreds of legal instruments (laws, decrees, orders administrative decisions etc.) deal with the management of natural resources and the protection of the environment. The author also identifies a number of key agencies that are tasked with implementing these instruments and also lists the important environmental initiatives currently deployed by the Ivory Coast.

La Côte d'Ivoire a fait de la protection de l'environnement et du développement durable l'un des piliers fondamental devant soutenir son objectif de devenir un pays émergeant à l'horizon 2020. Ayant pris conscience de ce qu'il ne saurait y avoir de développement durable sans protection des ressources naturelles de son environnement global, elle s'est dotée, quelques années après la Conférence de Rio en 1992 d'un outil de référence environnementale appelé le *Livre Blanc de l'Environnement* de Côte d'Ivoire de 1995 qui a procédé à l'inventaire de tous les problèmes environnementaux auxquels le pays s'est trouvé confronté depuis son accession à l'indépendance en 1960.

Les problématiques écologiques identifiées portent notamment sur la disparition à la fois inquiétante et perceptible du couvert forestier ivoirien, de l'appauvrissement des sols du fait de l'utilisation de fertilisants, de la pollution dont la nature et les origines sont diverses, de l'eutrophisation des eaux, de la pollution de l'air, de la dégradation du lieu urbain, avec comme conséquence l'apparition de nouvelles pathologies résultant des nuisances

* Professeur, Faculté de Droit, Université Alassane Ouattara de Bouaké, Côte d'Ivoire

environnementales. Les impacts des changements climatiques sur l'environnement en Côte d'Ivoire demeurent tout aussi perceptibles. Il s'agit de la sécheresse, de la diminution des ressources en eau, de l'imprévisibilité des saisons, de la diminution des rendements agricoles, de la hausse du niveau des océans et des mers, de l'érosion côtière, des pluies diluviennes et des inondations, des glissements de terrains, et la destruction du couvert végétal.

On admet cependant que la mise en œuvre du processus de développement durable est appelée à concilier «logiques économiques » et « préoccupations environnementales » autour des trois dimensions du développement durable telles que définies par l'Agenda « *Action 21* », à savoir la dimension économique, la dimension sociale et la dimension environnementale, en tenant compte par ailleurs de certaines contraintes au plan national, à savoir :

> La « Contrainte économique : garantir une croissance économique soutenue et réduire la pauvreté » ;
> La « Contrainte écologique : maintenir les capacités de renouvellement des écosystèmes naturels qui constituent la base écologique de la croissance et du développement économique et social » ;
> La « Contrainte politique, institutionnelle et juridique : mettre en place des institutions et développer des instruments juridiques efficaces (lois, règlements,.. » ;
> La « Contrainte financière : mettre en place un mécanisme de financement durable de l'environnement (instruments économiques – taxe, marché, subvention, consignation »;
> La « Contrainte socio culturelle : informer, sensibiliser et éduquer l'ensemble des acteurs pour un changement de comportement en vue du développement durable. Soutenir la participation des populations locales dans les prises de décisions, valoriser les savoirs traditionnels et développer la conscience écologique ».

Affichant sa ferme volonté politique de s'engager dans la protection de l'environnement, la Côte d'Ivoire s'est dotée d'une Politique Nationale d'Environnement (PNE) accompagnée par des politiques et stratégies sectorielles de gestion des ressources naturelles, à savoir la protection de la biodiversité, le changement climatique, la lutte contre la désertification, la gestion des ressources hydriques et des produits chimiques impactant sur la foret, la faune, la flore, etc. Si tous ces programmes ont été mis en œuvre, il n'en demeure pas moins que leurs exécutions respectives ne sont pas n'ont pas au même niveau. De sorte qu'au regard

de certaines lacunes et insuffisances, l'Etat ivoirien a adopté un cadre législatif et réglementaire en harmonie avec l'évolution du droit international de l'environnement, à travers l'adoption d'un Code de l'environnement, un Code de l'eau et d'autres lois et réglementations sectorielles en matière de protection de l'environnement et du développement durable. On constate que « la plupart des stratégies et Plans d'Action Nationaux (PAN) sectoriels prennent en compte dans leur conception les préoccupations environnementales et sociales avec comme principe de base l'approche intégrée et participative ».

Pour réaliser son développement économique, en lien avec sa politique de protection de l'environnement, la Côte d'Ivoire s'est dotée d'un Plan National d'Action Environnementale (PNAE-CI) axé sur dix programmes de gestion environnementale allant de 1996 à 2010. Il s'agit des programmes suivants : Le développement d'une agriculture durable – La préservation de la biodiversité – La gestion des établissements humains – La gestion de la zone côtière – La lutte contre la pollution industrielle et les nuisances – La gestion intégrée de l'eau – L'amélioration de la ressource énergétique – La recherche, éducation, formation et sensibilisation – La gestion intégrée et coordonnée de l'information environnementale – L'amélioration du cadre institutionnel et réglementaire. Pour la réalisation de ces programmes, un document de référence dit Document de Stratégie de Réduction de la Pauvreté (DSRP) a été adopté et fait partie intégrante du Plan National de Développement(PND).

Une stratégie nationale de développement durable (SNDD) a été validée en 2011 et dont l'objectif est de promouvoir le développement durable sur la base de sept (7) orientations stratégiques lesquelles sont suivies de plan de mise en œuvre :

- Orientation stratégique 1 : information, sensibilisation, participation et gouvernance ;
- Orientation stratégique 2 : éducation et formation ;
- Orientation stratégique 3 : l'Etat, avant-garde du développement durable ;
- Orientation stratégique 4: villes, collectivités territoriales et aménagement durable du territoire ;
- Orientation stratégique 5 : environnement réglementaire et institutionnel porteur ;
- Orientation stratégique 6 : engager la société dans une économie respectueuse de la planète ;
- Orientation stratégique 7 : coopération régionale et internationale.

Les stratégies, les programmes et les plans de mise en œuvre ne prennent leurs ancrages qu'à l'intérieur d'un dispositif juridique et institutionnel de protection de l'environnement qui se décrit ainsi :

S'agissant du dispositif juridique : il faut mentionner avant tout la Loi n°2000-513 du 1er août 2000, portant Constitution Ivoirienne, qui dispose en ses articles 19 et 28 que : « tout citoyen a droit à un environnement sain ». S'en suit une série de lois relatives aux forêts, aux aires protégées, aux eaux, aux installations classées, à l'utilisation des terres, à la protection de la faune et de la flore. D'où l'adoption de plusieurs codes, notamment le code de l'eau, le code minier, le code forestier, le code foncier, le code pétrolier et le code des investissements, ainsi que leurs décrets d'application respectifs qui rendent obligatoires les règles et procédures relatives aux études d'impact environnemental et social (EIES) des projets de développement qui auront des impacts sur l'environnement. Il en est ainsi des projets à financement international qui sont obligatoirement soumis à une Etude d'Impact Environnemental et Social, préalable à tout financement de projet international. Le dispositif juridique de protection de l'environnement, bien qu'épars, demeure d'une grande richesse puisque ce sont plus de 623 textes juridiques comprenant des lois, des décrets, des arrêtés, des circulaires, des délibérations et des décisions administratives et judiciaires qui assurent la réglementation de l'exploitation des ressources naturelles en Côte d'Ivoire et la protection de l'environnement en toutes ses composantes.

S'agissant du cadre institutionnel : il est structuré et animé par des organes ou directions étatiques poursuivant des objectifs de protection de l'environnement et du développement durable et agissant de manière cohérente et inclusive. Il s'agit des organes suivants :

- Le réseau de réserves biologiques ;
- L'observatoire de la qualité de l'air ;
- L'Agence Nationale de l'Environnement (ANDE);
- L'Agence Nationale de la Salubrité Urbaine (ANASUR)
- La Direction de la Qualité de l'Environnement et de la Prévention des Risques
- Le Fonds National de l'Environnement
- La Bourse des déchets.
- Le Centre Ivoirien Anti-pollution (CIAPOL)
- La Direction de l'Environnement et du Développement durable
- La Commission Nationale du Développement Durable (CNDD)
- L'Office Ivoirien des Parcs et Réserves (OIPR)

- La Fondation pour les Parcs et Réserves

En conclusion, la Côte d'Ivoire a réalisé des progrès notables en matière de protection de l'environnement et du développement durable à en juger par son engagement politique de plus en plus affirmé tant au niveau national par la ratification de nombreux accords et conventions internationales portant sur l'environnement, par la mise en place de cadres politique, institutionnel et juridique, qu'au niveau régional et sous régional africain, ainsi qu'au niveau multilatéral. La forte implication du secteur privé et de la société civile est tout aussi remarquable d'autant qu'ils jouent un rôle capital en matière d'éducation et de sensibilisation de l'opinion publique sur les problématiques environnementales en Côte d'Ivoire.

Sommaire des Initiatives Prises par la Côte d'Ivoire en Matière de Protection de l'Environnement et du Développement Durable

- La dépollution continue des sites contaminés par les déchets toxiques transportés par le navire Probo Koala
- Le projet d'élimination des pesticides obsolètes, source de contamination des sols
- Le projet relatif aux économies de carburant et de l'utilisation de véhicules propres
- La réhabilitation des parcs nationaux après la crise post électorale
- L'ouverture de l'embouchure du fleuve Comoé à Grand Bassam et la dépollution de la baie de Cocody
- L'entrée en vigueur de l'arrêté d'application du Décret interdisant la production, la commercialisation, la détention et l'utilisation des sachets plastiques
- L'adoption d'un programme National des Gestion des déchets
- L'adoption de la législation sur le principe du pollueur-payeur
- L'admission de la responsabilité sociétale des entreprises et des organisations
- Le projet de réforme du Plan Pollumar pour lutter contre les pollutions accidentelles en mer, en lagunes et dans les zones côtières
- La mise en place d'un système de veille à travers le Réseau National d'Observation (RNO)
- L'adoption de la Loi d'orientation sur le concept de développement durable
- La mise en place du Centre Interministériel de lutte contre l'érosion côtière et le Programme National de Gestion du Littoral côtier
- Le plaidoyer pour la réduction de l'empreinte écologique
- L'interdiction de ramassage du sable en bordure de mer

- Le renforcement de la plate-forme de collaboration entre les autorités publiques, les organisations non gouvernementales nationales et internationales, la société civile et le secteur privé œuvrant dans le domaine de l'environnement
- Le plan d'élimination de la prolifération des végétaux aquatiques sur le plan d'eau lagunaire
- L'élaboration d'un guide de Gestion des Déchets Solides Ménagers et Assimilés dans les villes et communes
- L'élaboration d'une étude-diagnostic sur les Déchets d'Equipements Electriques et Electroniques (DEEE)
- La promotion de nouvelles pratiques culturales dans la filière Café et Cacao et la valorisation des déchets organiques du cacao et du café et l'utilisation des engrais biodégradables
- La désignation par la Côte d'Ivoire de son « Entité Nationale Désignée »(END) sur l'atténuation et l'adaptation aux changements climatiques
- La lutte contre l'appauvrissement de la couche d'ozone par l'élimination totale des fraudes sur les hydrocholorofluorocarbones (HCFC) ou fréons de 35% d'ici janvier 2020
- La création de l'Autorité Nationale du Mécanisme de Développement Propre (MDP)
- La création de la Commission Nationale REDD+
- La mise en place de la plateforme de Réduction des Risques et de Gestion des Catastrophes (RRC)
- La mise en place de Programme National du Changement Climatique (PNCC)
- La création du Centre de Rachat et de Recyclage des Déchets Plastiques
- L'adoption d'un Plan National de Lutte contre la Déforestation et la Désertification
- La préparation en cours du projet de mise en place d'un Système d'Information Environnementale (SIE)
- La mise en place d'un Cadre National de Biosécurité et du Centre d'échange pour la prévention des risques biotechnologiques
- L'amorce du processus de création des Aires Marines Protégées (AMP) en vue de la préservation de la biodiversité marine

COUNTRY REPORT: JAPAN

Kazuki Hagiwara*

In 2014, Japan faced significant policy adjustments, in accordance with international decisions in the field of fishery and marine living resource management. First, the International Court of Justice (ICJ) found that the Japanese whaling program breached the rules of the International Convention for the Regulation of Whaling (ICRW). Secondly, Japan was involved in extensive negotiations for limiting the catches of tunas and eels in the international fishery fora. The first part of this report traces these processes and their outcomes, and reviews their impact on Japan's related policies. The second part of this report reviews Japan's new energy policy revised in 2014, and presents the continuing struggle for controlling the situation at the site of the Fukushima Daiichi nuclear power plant.

Part 1. Sustainable Use of Fishery Resources

1.1. Whaling

On March 31, 2014, the International Court of Justice (ICJ) ordered Japan to modify its whaling policy in the Antarctic Sea. The ICJ found that Japan's current whaling program in that ocean violated international obligations.[1] Japan has halted its whaling program in the Southern Ocean in accordance with this judgment.[2] However, the scope of the decision was limited to the question concerning the legitimacy of scientific whaling under Article VIII of *the International Convention for the Regulation of Whaling (ICRW)* in the concerned area.[3] As indicated in the 65th meeting of the International Whaling Commission (IWC), held in Portoroz, Slovenia, in September 2014, the disagreement between those who view whaling

* LL.D. (Yokohama National University), LL.M. (University of Ottawa). khagi026@uottawa.ca

[1] *Whaling in the Antarctic (Australia v. Japan: New Zealand intervening)*, Judgment, March 31, 2014, online: http://www.icj-cij.org/docket/files/148/18136.pdf

[2] Policy towards the Future Whale Research Programs: Statement by Minister for Agriculture, Forestry and Fisheries, the Government of Japan, 18 April 2014, 3(1), online: http://www.jfa.maff.go.jp/e/pdf/danwa.pdf.

[3] Cymie R. Payne, "Australia v. Japan: ICJ Halts Antarctic Whaling" ASIL Insights (April 8, 2014), online: http://www.asil.org/insights/volume/18/issue/9/australia-v-japan-icj-halts-antarctic-whaling.

as a possible method for wildlife resource management and those who believe that whaling should be banned has been left unresolved.

Judgment on 31 March 2014

The ICJ found that Japan violated provisions of the Schedule to the ICRW by conducting the whaling under the second phase of the Japanese Whale Research Program under Special Permit in the Antarctic (JARPA II). The Court found that JARPA II could broadly be characterized as scientific research, but also found that the evidence showed that the design and implementation of the programme was unreasonable in relation to the programme's objectives.

Australia claimed that JARPA II was not a program for purposes of scientific research within the meaning of Article VIII, paragraph 1, of the Convention. In Australia's view, Japan violated obligations stipulated in paragraphs 10(e), 7(b), 10(d), and 30 of the Schedule by issuing Special Permits for the killing, taking and treating of whales under JARPA II that did not fall into Article VIII.[4] Japan contested alleged breaches and argued that JARPA II was a scientific research program and was covered by the exemption provided for in that provision.[5]

An essential question was whether the design and implementation of JARPA II were reasonable in relation to the stated scientific objectives. In reviewing the character of the program, the ICJ identified the standard of review applied to this dispute: the ICJ assessed, first, whether the program involved scientific research; second, if the use of lethal methods in the program's design and implementation was reasonable in terms of its stated objectives.[6] The objective test of whether a program is for purposes of scientific research turned on "whether the design and implementation of a program are reasonable in relation to achieving the stated research objectives"[7]

---

[4] Whaling in the Antarctic (Australia v. Japan: New Zealand intervening), supra note1, at paras. 48-49.

[5] Ibid.

[6] Ibid.,at para. 67.

[7] Ibid., at para. 97. Judge Yusuf criticized that the majority applied the standard of review that was "extraneous to Convention" instead of using applicable law, Article VIII of the Convention, paragraph 30 of the Schedule, and Annex P. Dissenting Opinion of Judge Yusuf, at paras. 9-17. http://www.icj-cij.org/docket/files/148/18148.pdf.

In applying the standard of review, the ICJ carefully limited its scope of judgment to investigate "whether the special permits granted in relation to JARPA II fall within the scope of Article VIII, paragraph 1, of the ICRW."[8] It avoided dealing with the matters of science and policy on whaling, though it noticed the existence of divergent opinions about the appropriateness of whaling.

The ICJ examined whether the use of lethal methods under JARPA II was reasonable in relation to its stated objectives.[9] The Court did not consider the use of lethal method *per se* unreasonable in the relation to the research objectives of JARPA II.

On the other hand, the Court found that the scale of lethal sampling in the programme was unreasonable in relation to achieving its objectives. The Court pointed out several aspects suggesting unreasonableness of the programme.[10] First, there was no clear basis supporting the considerable increase in the scale of lethal sampling in the JARPA II from JARPA whereas both programmes broadly overlapped in their objectives. Secondly, sample sizes for some species were too small to provide the information needed for statistical analysis. Thirdly, the sample size determination process for minke whales lacked transparency. Fourthly, Japan did not pay consideration to the feasibility of using non-lethal methods to achieve the JARPA II research objectives in order to reduce or eliminate the need for lethal sampling. Japan's little attention to the possibility of using non-lethal methods was incompatible with obligations to respect IWC resolutions, Guidelines, and its own statement expressed that it did not use lethal methods more than it considered necessary for JARPA II objectives.[11] In addition, the Court considered the evidence suggested Japan's "funding consideration, rather than strictly scientific criteria, played a role in the programme's design" not to use non-lethal methods.[12]

Thus, the ICJ found the unreasonableness of the design and implementation of JARPA II in the relation to its stated objectives. The ICJ concluded that the special permits granted by

---

[8] Judgment, Ibid., at para. 69.

[9] The Court identified the stated four objectives of JARPA II: (1) Monitoring of the Antarctic ecosystem; (2) Modelling competition among whale species and future management objectives; (3) Elucidation of temporal and spatial changes in stock structure; and (4) Improving the management procedure for Antarctic minke whale stocks. Ibid., at paras. 113-118.

[10] Ibid., at paras. 223-227.

[11] Ibid., at paras. 137-144.

[12] Ibid., at paras. 144 and 225.

Japan for the killing, taking and treating of whales in connection with JARPA II are not "for purposes of scientific research" pursuant to Article VIII, paragraph 1, of the Convention.[13]

IWC 2014

According to a statement released on 18 April 2014, Japan halted its whale research programme conducted in the Antarctic in FY 2014 in accordance with the judgment.[14] On the other hand, regarding the whaling program engaged in the western North Pacific (the Second Phase of the Japanese Whale Research Program under Special Permit in the Western North Pacific (JARPN II)), Japan announced that it would limit the research objectives and reduce the scale of activities.[15] In addition, with regard to continued whaling in 2015, various applicable measures, including non-lethal methods, will be taken in JARPN II.[16] In November 2014, Japan drafted a new whaling programme in the Antarctic which is intended to be submitted to the IWC Secretariat and the Scientific Committee.[17]

In the 65th IWC plenary meeting, New Zealand proposed a draft resolution that requested "no further special permits for the take of whales are issued under existing research programmes or any new programme of whale research" until the Commission has reviewed the report of the Scientific Committee.[18] The proposed resolution passed with 35 votes in favour, 20 against, 5 abstentions and 1 absence. This indicates that the divergent of opinions on whaling, which the ICJ avoided in its judgment, remain unresolved.

---

[13] Ibid., at para. 227.

[14] Policy towards the Future Whale Research Programs Statement by Minister for Agriculture, Forestry and Fisheries, the Government of Japan, 1 at 2. Available at http://www.jfa.maff.go.jp/e/pdf/danwa.pdf.

[15] Ibid., at 1-2.

[16] Ibid.

[17] Proposed Research Plan for New Scientific Whale Research Program in the Antarctic Ocean (NEWREP-A), The Government of Japan, available at http://www.jfa.maff.go.jp/j/whale/pdf/newrep--a.pdf

[18] Draft Resolution for IWC 65, Whaling under Special Permit, Submitted by New Zealand, available at https://archive.iwc.int/pages/view.php?ref=3452&search=%21collection93&order_by=relevance&sort=DESC&offset=0&archive=0&k=&curpos=15.

Japan has a duty to respect the judgment and adjust its whaling programme in line with the Court's order. On the other hand, the judgment has a limited scope – it only applies to JARPA II in the light of relevant provisions and guidelines contained in the ICRW. Arbitrary stretching or shrinking of the meaning and scope of the judgment may impair the ICJ's authority to deal with scientific issues in the future.

1.2. Tuna

Japan is the biggest tuna consuming country, and the change of tuna resource management measure has an impact on Japanese fishery industries. In 2014, international fora on tuna management set up limits of catches of tunas in the Pacific and Atlantic areas.

Member States of the Western and Central Pacific Fisheries Commission (WCPFC) agreed to halve catches of juvenile bluefin tuna weighing less than 30 kg from the 2002-2004 average.[19] The participants also agreed not to increase catches of bluefin tuna 30 kg or larger from the 2002-2004 average level. Any catches above the set catch limit shall be deducted from the catch limit for the following year.[20]

In October, the Inter-American Tropical Tuna Commission (IATTC) adopted a resolution on the measures for the conservation of bluefin tuna in the Eastern Pacific Ocean during 2015 and 2016.[21] During 2015 and 2016, in the IATTC Convention Area, total commercial catches of Pacific bluefin tuna by all IATTC members and cooperating non-members (CPCs) shall not exceed 6,600 metric tons, for an effective annual catch of 3,300 metric tons in each year.[22] The resolution also includes a target of effort that CPCs should endeavor to manage

---

[19] WCPFC, *Conservation and Management Measure to Establish A Multi-Annual Rebuilding Plan for Pacific Bluefin Tuna*, 11th Regular Session (December 1-5, 2014), available at https://www.wcpfc.int/system/files/CMM%202014-04%20Conservation%20and%20Management%20Measure%20to%20establish%20a%20multi-annual%20rebuilding%20plan%20for%20Pacific%20Bluefin.pdf.

[20] Ibid., at 2.

[21] Resolution C-14-06, Measures for the Conservation and Management of Pacific Bluefin Tuna in the Eastern Pacific Ocean, 2015-2016, available at https://www.iattc.org/PDFFiles2/Resolutions/C-14-06-Conservation-of-bluefin-2015-2016.pdf.

[22] Ibid., at 2, para. 1.

catches by vessels under their respective national jurisdictions with the objective of reducing the proportion of fish of less than 30 kg in the catch toward 50% of total catch.[23]

In contrast to the tougher catch limits in the Pacific Ocean, the International Commission for the Conservation of Atlantic Tunas decided to increase the Total Allowable Catch in the period of 2015-2017. Quotas from 2015 to 2017 increase approximately 20% to the previous year.[24]

The Japan Fisheries Agency (JFA) announced its domestic measures for limiting catches to the National Conference on Resources and Aquaculture Management of Pacific Bluefin Tuna, on January 5, 2015.[25] JFA set up the allowable amount of juvenile catch from 8,015t to 4,007t in accordance with the 2014 WCPFC agreement. Among 4,007t of juvenile catch 2,000t is allocated to large and middle scale purse seine catch. The remaining 2,007t is divided into six areas along the Japan's coast, and the catch limit is allocated to these areas based on the past records of catches. JFA will monitor and calculate the amounts of catches and will release different warnings to fishery industries when catch levels exceeds certain levels.

1.3. Japanese Eel

The listing of the Japanese eel on the IUCN Red List has accelerated the negotiation process to establish an international eel resource management framework between concerned parties, namely: Japan, China, Chinese Taipei, and South Korea. Based on the agreement reached in September, Japanese authorities promulgated the related act and allocated the amount of initial input of glass eels (elvers) into aquaculture ponds to business operators in Japan.

---

[23] Ibid., para. 3.

[24] Recommendation by ICCAT Amending the Recommendation 13-07 by ICCAT to Establish a Multi-Annual Recovery Plan for Bluefin Tuna in the Eastern Atlantic and Mediterranean, at 3. Available at https://www.iccat.int/Documents/Recs/7312-14_ENG.PDF. Information provided by JFA is available at http://www.jfa.maff.go.jp/j/press/kokusai/141118.html (in Japanese).

[25] Japan Fisheries Agency, On Resource Management of Pacific Bluefin Tuna, available at http://www.jfa.maff.go.jp/j/study/enoki/pdf/shiryo1.pdf (in Japanese).

On September 17, Japan, China, Chinese Taipei, and South Korea held a meeting in order to set an international framework for eel resource management. It has been agreed to restrict the amount of initial input of glass eels taken from the wild into aquaculture ponds by farmers, by 20 percent from the amount reported in 2013, which was the largest use in the recent four years. The negotiating countries have also agreed to establish an implementation mechanism for monitoring the agreed limits. The mechanism includes the establishment of domestic non-governmental associations in each country and also an international non-governmental organization for effective eel resource management.[26]

On November 1, based on the *Inland Waters Fishery Promotion Act*,[27] eel aquaculture business operators in Japan are required to register their business with the Ministry of Agriculture, Forestry and Fisheries (MAFF).[28] According to the *Ordinance of the MAFF No. 53 (October 1, 2014)*, the operators shall submit their business plan, in which the amount of initial input of glass eels into their aquaculture ponds should be specified.[29]

---

[26] Joint Statement of the Bureau of Fisheries of People's Republic of China, the Fisheries Agency of Japan, the Ministry of Oceans and Fisheries of the Republic of Korea and the Fisheries Agency of Chinese Taipei on International cooperation for Conservation and Management of Japanese Eel Stock and Other Relevant Eel Species [hereinafter, Joint Statement], online: http://www.jfa.maff.go.jp/j/saibai/pdf/140917jointstatement.pdf.
"Initial input" does not include the transfer of glass eels taken from other aquaculture ponds within the Economy. Joint Statement, at 1, fn.1.
In accordance with the agreement, on October 30, a domestic non-governmental organization, Zen-Nippon Jizokuteki Youman Kikou (translation by author: All-Japan Sustainable Eel Farming Organization), is established. That organization will support monitoring the amount of actual input of glass eels with JFA, online: http://news24.jp/articles/2014/10/30/06262416.html (in Japanese).

[27] Kanpou, Gougai 144 (June 27, 2014) (Official Gazette, Extra No. 144, June 27, 2014) at 111-115, online: http://kanpou.npb.go.jp/20140627_old/20140627g00144/20140627g001440113f.html (in Japanese)

[28] Article 28 of the *Inland Waters Fishery Promotion Act*, Ibid. at 113.
http://www.jfa.maff.go.jp/j/press/saibai/141031.html

[29] Article 5(1) of the *Ordinance of the MAFF No. 53*, online: Kanpou, Gougai 218 (October 1, 2014) (Official Gazette, Extra No. 218, October 1, 2014)
http://kanpou.npb.go.jp/20141001_old/20141001g00218/20141001g002180003f.html (in Japanese)

On November 14, JFA established a guideline to set up the limits of the amount of glass eels input.[30] The total allowable amount of the glass eel for initial input in FY2015 is 21.6t.[31] The limits are decided through the parameters such as the average amount in the recent three years.[32] The Appendix to the guideline shows that there are 466 registered business operators.[33] Half of those operators are located in four prefectures: Aichi, Kagoshima, Miyazaki, and Shizuoka, and more than 85% (18.5t) of the total allowable amount is allocated to these four prefectures.[34]

Since 2012, Japan, China, Chinese Taipei, South Korea, and, occasionally, the Philippines have held meetings for sharing information and strengthening cooperation for sustainable use of Japanese eel. However, they have failed to install a positive eel resource management system between them. It was the registration of Japanese eel in the Red List by the IUCN on 12 June, 2014[35], that accelerated the negotiation process to reach the agreement. The registration increases the possibility of Japanese eel to be listed in the Appendices of *the Washington Convention (CITES)*,[36] as a subject of trade restrictions. In order to avoid stricter restrictions by CITES, the concerned countries have changed the direction of the negotiation to establishing an international framework for sustainable use of eel resource from maintaining their cooperative networks prioritizing domestic interests of farmers.

The significance of the agreement in September 2014 is the successful creation of a management framework that enables sustainable use of eel resources in the future, by reducing the amount of initial input of glass eels. However, the implementation of the agreement may be hampered by the fact that it is not legally binding. Hence, successful administration is not obligatory and there is no punishment for breaching the agreement. As

---

[30] http://www.jfa.maff.go.jp/j/press/saibai/pdf/141114_1-01.pdf The guideline and its appendices are available in Japanese.

[31] Ibid., at 1, para. 2.

[32] Ibid., at 2, paras. 3-7.

[33] http://www.jfa.maff.go.jp/j/press/saibai/pdf/141114_1-02.pdf

[34] http://www.jfa.maff.go.jp/j/press/saibai/pdf/141114_1-02.pdf

[35] http://www.iucn.org/?14964/IUCN-Red-List-raises-more-red-flags-for-threatened-species. See Jacoby, D. & Gollock, M. 2014. *Anguilla japonica*. The IUCN Red List of Threatened Species. Version 2014.2. <www.iucnredlist.org>. Downloaded on 17 September 2014.

[36] Convention on International Trade in Endangered Species of Wild Fauna and Flora, 993 UNTS 243.

the last paragraph of the Joint Statement says, further works are required for achieving effective conservation and management for eel stocks.[37]

Part 2. Japan's Basic Energy Plan: Back to Nuclear Power Generation

2.1. Basic Energy Plan 2014

On April 11, 2014, the Japanese Cabinet approved the new *Strategic Energy Plan* under the *Basic Act on Energy Policy*.[38] This is the first occasion for Japan to set up its comprehensive energy policy, after the Great Eastern Earthquake and the subsequent nuclear incident which occurred at the site of TEPCO Fukushima Daiichi Nuclear Power Plant. After the Earthquake, in 2011, in order to facilitate the construction of safety countermeasures, such as a tide embankments, and to implement stress tests, all nuclear power plants in Japan were shut down by May 2012.

The Plan reviews changes of the energy supply-demand structure Japan is facing after the 2011 Earthquake. Japan's energy self-sufficiency rate, as of 2012, declined to 6.0% after all the nuclear power plants were shut down. Halt of the nuclear power generation resulted in an increase of imports of oil and natural gas, as alternative power sources, and Japan's reliance on fossil fuels as a power source rose up from 60% to 90%. The rise of dependency on fossil fuels in the power sector caused the expansion of Japan's trade deficit, the growth of energy cost, and increased greenhouse gas emissions.

The Plan emphasizes Japan's vulnerability in relying on the import of energy and the need to create an optimal energy supply-demand structure for Japan. For the relations with resource-supplying nations, the Plan suggests that Japan ought to maintain strategically diversified supply sources that may reduce the risk of unstable supply. With regard to energy demand, the Plan points out the need for an advanced energy-saving strategy. The *Act on*

---

[37] Joint Statement, supra note 26, at para. 4.

[38] Strategic Energy Plan, April, 2014 (in Japanese),
http://www.meti.go.jp/press/2014/04/20140411001/20140411001-1.pdf
English version (provisional translation) is available at
http://www.enecho.meti.go.jp/en/category/others/basic_plan/pdf/4th_strategic_energy_plan.pdf
[hereinafter Plan].
The Basic Act on Energy Policy (Act No. 71 of June 14, 2002). English translation is available at
http://www.japaneselawtranslation.go.jp/law/detail/?vm=04&id=123&re=02.

the Rational Use of Energy (Act No. 49 of June 22, 1979) [39] obliges business operators of factory, transportation, and construction who have certain amount of energy consumption (more than 1,500 kl/year) to report their energy efficiency measures and improvement of efficiency of energy consuming every year, to the Ministry of Economy, Trade and Industry, Japan.[40] From April 2014, the amended *Act on the Rational Use of Energy* has come into force that promotes equalizing electricity demand.[41]

In addition to the energy-saving activities, the Plan aims to accelerate the introduction of renewable energy. However, it also points out that the introduction of wind and geothermal power involves additional challenges on coordination with local communities, cost, and environmental assessment.[42] The Plan considers solar power as a promising source, though it also has problems of high generation cost and unstable output. The Feed-in-tariff system that has been in place since July 2012, under the *Act on Special Measures Concerning Procurement of Electricity from Renewable Energy Sources by Electricity Utilities (Act No. 108 of August 30, 2011)*,[43] promotes investments in renewable energy, especially, for small to medium scale solar power generation.

Moreover, the Plan considers that nuclear energy is a base-load power source as a low carbon and quasi-domestic energy source and declares Japan's re-establishment of the nuclear energy policy.[44] The Plan indicates the direction of the nuclear energy policy, on which the Government of Japan will follow the Nuclear Regulation Authority (NRA)'s judgment as to whether nuclear plants meet the new regulatory requirements and will proceed with the restart of plants.[45] However, the Plan also mentions that the dependency

---

[39] *Act on the Rational Use of Energy (Act No. 49 of June 22, 1979)* English translation is available at http://www.japaneselawtranslation.go.jp/law/detail/?id=1855&vm=04&re=02.

[40] Article 2(1) of the *Order for Enforcement of the Act on the Rational Use of Energy (Act No. 49 of June 22, 1979)*:Latest Amendment, December 27, 2013, Order for Enforcement No. 370. Available at http://law.e-gov.go.jp/htmldata/S54/S54SE267.html (in Japanese).

[41] Article 1 of the Amended A *ct on the Rational Use of Energy (Act No. 49 of June 22, 1979)*. Available at http://law.e-gov.go.jp/htmldata/S54/S54HO049.html (in Japanese)

[42] Plan, supra note 38 at 42-44.

[43] Act on Special Measures Concerning Procurement of Electricity from Renewable Energy Sources by Electricity Utilities (Act No. 108 of August 30, 2011) English translation is available at http://www.japaneselawtranslation.go.jp/law/detail/?id=2230&vm=04&re=01

[44] Plan, supra note 38, at 24.

[45] Ibid.

on nuclear power generation will be lowered to the possible extent by using renewable energy, power saving, and other technological development.[46]

2.2. Fukushima Daiich Nuclear Power Plant

TEPCO reported to NRA, on February 20, 2014, on the incident of water leakage at the site of Fukushima Daiichi Nuclear Power Plant pursuant to Article 62-3 of *the Act on Regulation of Nuclear Source Material, Nuclear Fuel Material and Reactors*.[47] Highly radioactive water leaked from the upper part of Tank C-1 in H-6 Tank Area, where contaminated water was stored. The amount of water leaked from the storage tank was estimated to be approximately 100 m^3.[48] TEPCO has suffered a number of problems since 2011, including a series of contaminated water leaks.[49] According to the Plan, it is expected to take 30 - 40 years to solve the issues related to measures for the decommissioning the TEPCO Fukushima Daiichi Nuclear Power Plants and the contaminated water.[50]

Conclusions

When Washoku (Japanese cuisine) was registered in the representative list of Intangible Cultural Heritage of Humanity by the UNESCO in 2013, the Intergovernmental Committee described the Japanese dietary tradition as an essential part of Japanese cultural identity and stated that the dietary tradition “is associated with an essential spirit of respect for nature that is closely related to the sustainable use of natural resources.”[51] In 2014, the issues raised by wildlife management affected the Japanese fishery industries and the related policies. Japan has a duty to ensure sustainability of the use of marine living resources in future.

---

[46] Ibid.

[47] Act on Regulation of Nuclear Source Material, Nuclear Fuel Material and Reactors (Act No. 166 of June 10, 1957). English translation is available at http://www.japaneselawtranslation.go.jp/law/detail/?id=1941&vm=04&re=02.

[48] News Release, NRA, Japan, 20 February, 2014, p. 4: http://www.nsr.go.jp/committee/kisei/h25fy/data/0044_06.pdf.

[49] BBC News “Japan's Fukushima nuclear plant leaks radioactive water” (February 20, 2014), online: http://www.bbc.com/news/world-asia-26254140.

[50] Plan, supra note 40 at 47-49.

[51] Decision 8.COM 8.17, ITH/13/8.COM/Decisions at 42-43 (Online: http://www.unesco.org/culture/ich/doc/src/ITH-13-8.COM-Decisions-EN.doc).

Still, about 140,000 people are being forced to live as evacuees three years after the nuclear accident at Fukushima. In addition, issues related to decommissioning, such as leakage of contaminated water, are a major cause for concern, not only for Japan, but also for the international community. Effective countermeasures and continuous efforts to solve these issues are an essential basis for the new energy policy.

COUNTRY REPORT: KENYA

An Anatomy of Evolving Constitutionally Mandated Environmental Law Changes in Kenya during 2014

Robert Kibugi*

Introduction

Since the adoption of a new Constitutional framework in Kenya, in August 2010, a significant number of legal developments have taken place. Primarily, this has been for two reasons. First, the implementation of a new constitution requires all existing laws be amended to avoid conflict with a supreme constitution. Second, in the Fifth Schedule, the constitution sets out a list of laws that should be enacted, including the requisite timeframes within which these laws must be promulgated. Laws regarding environmental management, minerals and land management fall within this category of laws that must be enacted within a defined period. A petition may be brought to the Chief Justice for dissolution of Parliament for failure to implement the constitution. In reality, relief is available to Parliament with an option to vote, with a two-thirds majority, to extend the timelines from time to time. Parliament has applied this relief several times, in some cases justifiably, especially where the subject laws raise significant public debate, and require more engagement with stakeholders. For this, and other reasons, many of the legal developments surrounding environmental and land management set out in this report are therefore in evolutionary stages, rather than in final form. The report also presents a 2014 judicial decision by the Environment and Land Court, which recognizes the existence of ethnic minorities and indigenous people's rights on the basis of identity.

Constitutional Basis of Developments and Changes in Environmental Law

The Constitution of Kenya is considered relatively new, enacted into law only in August 2010. It has introduced fairly significant changes in the overall architecture of environmental management, with clarifications in horizontal and vertical integration of mandates and

* Lecturer, Centre for Advanced Studies in Environmental Law and Policy, University of Nairobi; LL.D (University of Ottawa), LL.B, (UoN) Master of Laws (LL.M), University of Nairobi.

functions. Primarily, the constitution crystallizes its role in horizontal integration, through the creation of a fundamental right to a clean and healthy environment. This Article 42 right, unlike socio-economic rights, is not one of progressive realization, meaning it is of immediate effect and application. For implementation of this right the Constitution, in Article 69, imposes a number of obligations that are required for fulfilment of the right on the Kenyan State, through legislative and other measures. Some of the options set out include putting in place measures to ensure sustainable management and utilization of natural resources, ensuring a national minimum tree cover of 10%, ensuring public participation in environment management, and ensuring implementation of environmental assessment and audit. Significantly, the Constitution creates a duty on the Kenyan state and its people to collectively work for attainment of ecologically sustainable development. The latter merges well with principles of governance set out in Article 10 of the Constitution, which are binding on the State and citizens when implementing the Constitution, law and public policy. One significant principle in Article 10 is sustainable development. Therefore, the supreme law of Kenya sets out environmental management and sustainable development side by side. This means that in implementing vertical integration of environmental law, those sectoral laws that implement the constitution have to observe this link between environment and sustainability.

Modifications to the Framework Environmental Law

Although the Constitution is the basis of horizontal integration of environmental law, Kenya has had since 1999 a framework environmental law in place. That law, the *Environmental Management and Coordination Act* (EMCA), clearly asserts its superiority, in section 148, over other sectoral laws, where environmental management is concerned. Due to changes in the national administration system and the need to align substantive environmental law to the constitution, changes have been proposed to EMCA, including the *Environmental Management and Coordination Act (Amendment) Bill* presently before the National Assembly of Parliament for debate.[1] The Bill sets out a variety of changes, and this report highlights two main ones.

[1] Kenya Gazette Supplements No. 114 (National Assembly Bills No. 31) 25 July 2014

Statutory Regularization of Strategic Environmental Assessment Provisions

Strategic environmental assessment (SEA) has been part of Kenyan environmental law for about a decade. However the principal law, EMCA, only sets out a mandatory requirement for environmental impact assessment (EIA), and SEA is only introduced through the subsidiary legislation enacted for implementation of the EIA requirements. Since SEA is a higher-level legal requirement than the project level EIA, it is arguable that implementation of SEA through subsidiary legislative is *ultra vires* the principal law, EMCA. Nonetheless, no legal challenges have been brought against SEA in court, and quite a number of SEA's have been undertaken on complex development plans. Since the 2010 Constitution now requires the State to implement measures on environmental assessment, to implement the right to a clean environment, the proposed amendments to EMCA include the insertion of a clause which anchors SEA in the principal law.

The scope set out in the Amendment Bill at section 57A is rather broad, stating in part "All policies, plans and programmes shall be subject to strategic environmental assessments." The scope of these policies, plans and programmes includes those prepared by an authority at national, county or local level, or which are prepared for adoption through legislative procedure by Parliament. It includes those plans, policies and programmes between the national and county governments, or their authorities.

A key challenge to these changes is the mechanism proposed as the trigger for the undertaking of an SEA. The Amendment Bill proposes that an SEA would be required where the National Environmental Management Authority (NEMA) makes a determination that the policy, plan or programme in question is likely to have significant effects on the environment. This approach is problematic, especially because it places what appears to be unfettered discretion on NEMA, while at the same time failing to set up criteria through which NEMA may arrive at this determination. In contrast, both EMCA and the Amendment Bill take a more certain approach on EIA implementation, setting out an entire schedule that sets out activities that must undergo an EIA. A similar approach, setting out minimum criteria through which NEMA decides when and how to trigger undertaking of an SEA could be helpful in enhancing the role of SEA as both a planning, and sustainability tool. However this is curable because the same provision of the Amendment Bill empowers NEMA to put in place regulations and guidelines to guide implementation of SEA, such as *National Guidelines for Implementation of Strategic Environmental Assessment* adopted for Kenya in 2014. These guidelines set out broad objectives of the SEA process for Kenya, and detail a procedure

that is to be followed in making a determination on whether an SEA is actually required. This, according to the guidelines, should commence with a screening process, a study with criteria for public participation, identification of alternatives, and validation of the report through a process that includes the public consulted during the study.

Mechanisms for Mandatory Parliamentary Approval of Natural Resource Exploitation Contracts

Article 71 of the Constitution addresses the exploitation of natural resources in Kenya. It provides that the government must seek Parliamentary approval for any agreement that involves the grant of a right or concession, for the exploitation of natural resources. At the outset, it is critical to point that this clause does not clearly set out the desired object of the parliamentary ratification of agreements, and does not set out any criteria that Parliament must apply prior to making a determination. Section 124A of the Amendment Bill attempts to further expound on the constitutional provision, but falls far short, because instead of setting out substantive requirements it merely provides for the enactment of further legislation detailing which transactions on exploitation of natural resources should undergo parliamentary vetting. The provisions of the Amendment Bill, however, set out some normative content, indicating that the future law shall specify the acreage, quantity, quality, value, location and dimensions of natural resources whose agreements will require parliamentary approval. Nonetheless, similar to the constitutional provisions, the one missing part is the desired objective or output of the parliamentary vetting of natural resource exploitation contracts. Since the Constitution requires in Article 69(1) the state to ensure sustainable exploitation of natural resources, that should be a primary consideration – on whether the agreement is binding the parties to sustainable exploitation. In addition, there are a host of challenges that arise in the context of resource exploitation, such as application of stabilization clauses that exempt companies from future changes in national laws – especially around environment, labour and occupational safety. Other issues that Parliament may need to address during vetting include rules pertaining to prevention of transfer pricing, as well as plans for environmental remediation and rehabilitation – for instance, as may be required by an EIA licence.

Introduction of a National Policy and Legal Framework for Climate Change

In 2010, Kenya made a major step in putting in place national strategies for addressing climate change challenges, upon adoption of the *National Climate Change Response*

Strategy. The strategy, among others findings, recommended the development of a *National Climate Change Action Plan*, that would use empirical and qualitative research to determine climate change intervention approaches, priorities, and set out an estimated cost of implementation, including quick wins, medium-term and long-term options. In early 2013, the government completed a complex process of research and public consultations with adoption of the *National Climate Change Action Plan, 2013-2017.* The action plan prominently proposed that Kenya should put in place (1) an overarching national legislation on climate change (2) an institutional framework to govern climate change, and (3) a national policy on climate change. In addition, out of the action plan process, the goal of climate change response in Kenya was identified as the attainment of "low carbon climate resilient development."

In late 2013, and through much of 2014, the government of Kenya commenced the process of enacting a national law and policy framework on climate change. A Climate Change Bill was presented to Parliament and approved in 2012, but was denied Presidential assent in early 2013 due to insufficient public consultations, and objections expressed by various stakeholders. The *National Task Force on Climate Change Law and Policy*, appointed by the Cabinet Secretary for Environment, Water and Natural Resources, spearheaded the 2013-2014 process of developing a new law and policy. It is useful to note that membership to the Task Force was drawn from across the public service sectors, private sector, and civil society. Indeed, a very strong collaboration has evolved between government, civil society and the private sector. This partnership is evidenced by the fact that the National Validation Workshop for the *Draft National Framework Policy on Climate Change* was co-sponsored by the Ministry of Environment, and the Kenya Association of Manufacturers, which is an industry group. Equally, various civil society organizations provided intellectual and financial support, with for instance Transparency International, and a local group, the Kenya Climate Change Working Group, offering to work with government to mobilize the public in rural areas.

The challenges facing the process were tremendous, especially because climate challenges have continued to evolve, but also because in March 2013, a new governance system, with 47 semi-autonomous county governments had come into place, after a general election.

Substantively, a major outcome of the process has been the framing of climate change as a matter of sustainable national development requiring holistic attention. This marks a departure from a common error where climate change has been dealt with as an

environmental problem. Therefore, significant emphasis has been placed in the draft policy on elaborating the linkage between climate change and sustainable development, and demonstrating how failure to firm up this link will result in national inability to address climate change. The object of climate change response in Kenya is therefore identified as attainment of low carbon climate resilient development. Although low carbon development is a critical cog and measures are set out to attain this, much of mitigation would be voluntary, where it affects strategic national interests, and where failure to do so could result in negative outcomes, such as maladaptation. The balance of the focus is on adaptation, through enhancing adaptive capacity, and building resilience.

Both the draft law and policy clearly focus on a functional institutional framework for the administration of mechanisms to combat climate change. There is concurrence that the bulk of implementation would be undertaken by county governments, since the specific sectoral inputs required for adaption, for instance, fall within functions and mandates granted to county governments by the Constitution. In this respect, a high level National Climate Change Council will be established to provide overall policy guidance on implementation of priorities. While a technical department is set up at national level, in the ministry responsible for climate change, the gist of the institutional arrangement is for county governments to bear the responsibility of implementation by mainstreaming climate change actions into sectoral laws, policies and actions. For this reason, Parliament has been asked to legislate a requirement that development planning at both national and county levels should integrate climate change interventions, from planning, to budgeting, to implementation and oversight mechanisms. For the latter, the national Parliament, and county Assemblies would bear responsibility for auditing compliance with climate change obligations by the national, and county governments, respectively. Similar provisions have been set out for the creation of climate change duties for the private sector, through subsidiary legislation – to ensure that there is revolving compliance by business and industry – and that duties evolve with national priorities and the state of knowledge at any given time.

New Dimensions in Judicial Interpretation of Land and Environmental Law - Recognition of Indigenous Peoples Status of the *Ogiek* Community of Kenya

The Decision in Joseph Letuya & 21 others v Attorney General & 5 others [2014] eKLR

The Environment and Land Court in Kenya delivered the judgment, on 17 March 2014. This is a special court created under Article 162(2) of the Constitution, and established through the 2012 *Environment and Land Court Act.* It is a superior court whose primary jurisdiction is

to determine suits arising from disputes in the land and environmental area of law, and therefore well suited to adjudicating the present dispute, which had first been filed in court in 1997.

The Facts:

The Applicants claimed that they are members of the Ogiek community who are also known as the Dorobo, who live in East Mau Forest (which is their ancestral land). Mau forest is one of the Kenya's main protected forests. They stated that about 10% of members of the Ogiek Community derive their livelihood from food gathering and hunting whilst the others practice peasant farming. They further claimed that their ancestors were living in the Mau Forest as food gatherers and hunters but upon the introduction of the colonial rule, their ancestral land was declared a protected forest. They claimed that since that declaration, members of this community have led a very precarious life, which has been deteriorating over the years. Further, they argued that when land for other African communities was set aside as Trust Land between 1919 and 1939, no land was set aside for them, with the consequence that no titles to land have been issued to its members as no adjudicating rights and registration of titles could take place. The Applicants contended that the government started allocating the land that the Ogiek community was occupying to other persons. For instance between 1993 and January 1997 others were mainly allocated land in the Eastern Mau Forest, which was originally occupied by the Ogiek Community. The Ogiek pointed out that continued harassment and eviction from their ancestral land prompted the filing of the suit.

The Issues:

The court framed several issues, two of them key: (1) Whether the members of the Ogiek Community have recognizable rights arising from their occupation of parts of East Mau Forest; (2) If so, whether in the circumstances of the instant case the rights of the Ogiek Community had been infringed by their eviction and allocations of land in East Mau Forest to other persons.

The Court addressed a number of rights raised by the Ogiek, in trying to answer the framed issues. In so doing, the Court noted that the Ogiek, when filing the suit, relied on their rights as a minority group in which they contended discrimination on account of their ethnicity and local connection to the forest. This is contrary to article 27(4) of the Constitution which prohibits the State from discriminating against any person on any ground, including race,

sex, pregnancy, marital status, health status, ethnic or social origin, colour, age, disability, religion, conscience, belief, culture, dress, language or birth. On this account, the Court found that the minority status of a community is determined by the numerical disadvantage of a community that has distinct ethnic, religious or linguistic characteristics. To reinforce this, the Court adopted the definition of indigenous people adopted in Article 1 of *ILO Convention No. 169 on The Rights of Indigenous and Tribal Peoples*, 1989, noting that the distinguishing factor for indigenous communities is their historical ties to a particular territory, and their cultural or historical distinctiveness from other populations that are often politically dominant. For this reason, the Court noted that the need for affirmative action for, and special consideration of minority and indigenous groups arises from the fact that indirect indiscrimination of these groups may result from certain actions or policies which on their face look neutral and fair, but which will have a differential effect on these groups because of their special characteristics.

The Court therefore concluded that, to the extent that the Applicants as an indigenous and minority group are prevented by the eviction and allocations from continuing to live in accordance with their culture as farmers, hunters and gatherers in the forest, they are specially and differently affected and discriminated against on account of their ethnic origin and culture. However, the Court also found that in strict legal terms, the land in question, as a protected forest, was government land subject to strict rules of tenure, and from which no tenure rights could derive on the basis of prescription, or adverse possession. Nonetheless, the Court referred to provisions of Article 63 of the Constitution that provides for community land, which is land held by communities identified on the basis of ethnicity, culture or similar community of interest. Community land, under the Constitution, includes (i) land lawfully held, managed or used by specific communities as community forests, grazing areas or shrines; (ii) ancestral lands and lands traditionally occupied by hunter-gatherer communities. With this clause in mind, the Court found that the provisions of the Constitution on community land are to be given effect to in and by an Act of Parliament on community land, which is yet to be enacted, and once enacted this is the law that will probably eventually settle the issue of the property rights of the Ogiek community in the Mau and other forests in which they claim ancestral rights. In addition, the Court found that the National Land Commission, established under Article 67 of the Constitution, is mandated to initiate investigations, on its own initiative or on a complaint, into present or historical land injustices, and recommend appropriate redress. For this reason, the Court determined that since such mechanisms exist, their claim was not ripe for judicial determination, and should be pursued through the necessary legislative processes on the community land legislation, and with the

National Land Commission. Paying more attention to the latter remedy, the Court directed the National Land Commission, within one year, to identify and open a register of members the Ogiek Community in consultation with the Ogiek Council of Elders, and identify land for the settlement of the said Ogiek members. Bearing in mind that the 2010 decision of the *African Commission on Human and Peoples Rights* that recognized the rights of the Endorois community, as an indigenous and minority community over the Lake Mbogoria National Reserve (wildlife protected area) has not been implemented, only time will tell whether the National Land Commission will implement this 2014 decision of the Court.

COUNTRY REPORT: KENYA
Reforming the Legal Framework for Sustainable Governance of the Extractive Industry in Kenya

Collins Odote*

Context for Kenya's Extractive Discoveries

While the extractive industry has been part of the Kenyan resource base for years, recent events have emphasised not just the importance thereof but also the legislative and policy focus on the extractive industry sector. Kenya has been exploring for oil since 1937.[1] These efforts have however been unsuccessful for over seventy years. The turning point was the announcement in March 2012 by the country's political leadership that Kenya had, for the first time, discovered oil. In March 2012, Kenya officially announced that oil had been found for the first time in the country by the British company Tullow Oil. The discovery of oil by the British Tullow company in Ngamia 1[2] block in Turkana County in the Northern part of Kenya was received with trepidation and enthusiasm by the Kenyan public. The significance of that milestone was aptly acknowledged and publicly captured by the country's top leadership. While assuring the citizenry of the potential of the oil discovery, both the then President and the Prime Minister cautioned on the need to ensure that all Kenyans can benefit from the resources and that the discovery does not turn to the proverbial resource curse.[3] The resource curse refers to a trend where countries with abundant non-renewable resources perform worse off economically after the resource discoveries than before and in comparison to countries without natural resource deposits. The oil discoveries in Turkana

---

* Senior Lecturer, CASELAP, University of Nairobi

[1] Hunton and Williams & Challenge Energy, *Kenya Oil and Gas Sector Development: Review and Update of the Legal, Regulatory and Fiscal Framework*, 3rd July, 2013 available at http://ices.ihubconsulting.org/wp-content/uploads/2014/03/Legal-and-Regulatory-Guidance-3-July-2013-Report.pdf at page 23.

[2] This refers to the name of the oil block where the exploration took place. Under Kenyan law, potential oil sites are divided into block and allocated to prospectors. The current one was given the name *Ngamia,* which stands for Carmel and being the first, was called *Ngamia 1.*

[3] For discussions on oil as a resource curse, See generally Rose, M., *The Oil Curse: How Petroleum Wealth Shapes the Development of Nations,* Princeton University Press, Princeton University, 2012.

County in Kenyan have since been accompanied by those of other extractive resources, including niobium, titanium and coal.

In efforts to ensure that the resources help address the country's developmental needs so as to avoid a resource curse, the country has enhanced its efforts at putting in place adequate legal and policy frameworks. Kenya's efforts and discoveries need to be seen in the wider picture. Although globally, Africa is not a major player in the extractive sector, especially the oil industry, with no African country being in the top ten producing countries,[4] Africa's oil discoveries are significant. Amongst the African countries Nigeria, Algeria, Libya and Angola are still significant producers. In addition in 2013, East Africa represented the largest discoveries of oil than anywhere in the world.[5] Despite these positive trends and its contribution to growth, extractives also result in negative consequences to the environment, society and economy, hence the need for responsive and robust policies, laws and institutions.[6]

Against the above background, this article reviews the legislative developments in 2014 to regulate the extractive industry and assesses the extent to which they promote sustainability of the sector.

Constitutional Underpinnings

The Constitution, as the fundamental law of the land, provides the broad architecture for the governance of the country and its diverse resources. The organizing principle for the management of the natural resource is the concept of sustainability,[7] requiring a balance

---

[4] The Top Ten oil producing countries in 2014 were Russia, Saudi Arabia, USA, Iran, China, Canada, Iraq, United Arab Emirates, Mexico and Kuwait. See http://www.whichcountry.co/top-10-largest-oil-producing-countries-in-the-world/.

[5] See http://www.deloitte.com/assets/Dcom-Kenya/Local%20Assets/Documents/The%20Deloitte%20Guide%20to%20oil%20and%20gas%20in%20East%20Africa.pdf.

[6] For a discussion on the Extractive industry in Africa, and its possible effects, See, Africa Progress Panel, *Equity in Extractives: Stewarding Africa's Natural Resources for All: Africa Progress Report 2013.* Available at http://www.africaprogresspanel.org/wp-content/uploads/2013/08/2013_APR_Equity_in_Extractives_25062013_ENG_HR.pdf.

[7] For a discussion of the Concept of Sustainable development see, World Commission on Environment and Development, *Our Common Future* (Oxford University Press, Oxford, 1987);

between the exploitation of those resources and their conservation. Maintaining the threshold of sustainability is a complex task one which requires well-crafted legislative provisions. Kenya's previous constitutional order did not capture and promote sustainability in the management of natural resources. On the other hand, the current Constitution, as adopted in August 2010, makes sustainable development its organising ideology in the management of the country's resources. The Constitution captures national values and principles of governance in Article 10 and directs that these should guide any entity that applies or interprets the Constitution; enacts, applies or interprets law; or makes or implements any policy.[8] Sustainable development[9] is included in the list of these overarching principles that also includes human rights, good governance and accountability.

The Constitution provides the broad basis for sustainable management of the extractive industry in Kenya. First extractives that comprise of oil, gas and mineral are categorized as part of public land. In Kenya, by virtue of the Constitution, land is a public resource,[10] with all land belonging to the people of Kenya.[11] While all land belongs to Kenyans, in terms of tenure categories, the Constitution recognizes public land as land collectively owned, private land and community land. Extractives are classified as public land by the Constitution.[12] The outcome of this classification is that irrespective of whether the oil or mineral resource is found on private, public or community land, it will be a public resource whose ownership and control is vested as a consequence of sovereignty in the people of Kenya to be exercised on their behalf by the state. The traditional doctrine of *Cujus,* is consequently limited in the context of oil and mineral resources. Thus how it relates to the rights of the owner of the land on which the resource is found whether it is either private or community land must be clarified through legislation.

The other provisions of the Constitution relevant to the governance of the extractive sector are those that address environmental management, those dealing with human rights, those on natural resource contracts and those focusing on benefit sharing. The right to a clean and

---

Preston, B.J., "The Role of the Judiciary in Promoting Sustainable Development: The Experience of Asia and the Pacific" 9(2&3) Asia Pacific Journal of Environmental Law (2005) 109-212.

[8] Article 10(1), Constitution of Kenya (Republic of Kenya, 2010).

[9] See Article 10(20, Constitution of Kenya (Republic of Kenya, 2010).

[10] See Article 61 of the Constitution of Kenya.

[11] Ibid.

[12] Article 62(1)(f), Constitution of Kenya.

healthy environment is now given constitutional recognition.[13] Environmental management is a key issue in the exploitation of extractives be it due to pollution concerns, land degradation or water linkages arising due to the water needs of the extractive industry. As a consequence, the implementation of the constitutional right of a clean and healthy environment is an important benchmark for judging the extractive industry in Kenya.

In areas where oil and minerals are discovered, there are disputes that arise between the local communities, the state and the investors. At the heart of these disputes is the sharing of benefits that derive from the extraction of the resources. The Constitution provides that investment in natural resources must benefit local communities.[14] In practice though adhering to this basic constitutional requirement has largely remained elusive. In public discourse, both the national government and investors will laud the positive outcomes and dividends expected from natural resource extraction. However, if one takes the experience of the local communities in Kenya, all they see and talk about are the problems they face as a result of the discoveries of oil, the expectations that have either not been met or only partially met, their lifestyles that have been disrupted, the sudden increase in cost of living and other problems. To address these concerns, the Constitution has set the basic requirement for benefit sharing by providing that "(t)he State shall ensure sustainable exploitation, utilisation, management and conservation of the environment and natural resources, and ensure the equitable sharing of the accruing benefits."[15]

While the Constitution has robust provisions for the extractive industry, their implementation requires a supportive legal framework. In one instant, there is a requirement for developing of legislation. This is for contracts that govern the exploitation of natural resources, including oil and mineral resources.[16]

Legal Regime Governing Extractives

Despite the existence of the above Constitutional provisions, the legal regime for the extractive industry regime at the time of the discoveries from 2012 were still outdated and

---

[13] See Article 42 of the Constitution of Kenya. See also Collins Odote, "Country Report: Kenya Constitutional Provisions on the Environment", Issue 1(2012) IUCN Academy of Environmental Law E-Journal 136-145.

[14] Article 66(2), Constitution of Kenya, 2010.

[15] Article 69(1)(a), Constitution of Kenya, 2010.

[16] Article 71 and 72 of the Constitution of Kenya, 2010.

out of tune with modern requirements. Although 2014 witnessed tremendous developments in the efforts to update and reform the legislations governing the sector, as the year ends, the main laws still remain *the Mining Act of 1940*[17] and *the Petroleum (Exploration and Production) Act of 1986.*[18]

The Mining Act vests rights over all un-extracted minerals (except common minerals), under or on any land on the government, subject only to any rights that have been granted by the government.[19] The Act creates the office of a Commissioner for Mines and Geology[20] to regulate the sector, including having powers to register and license dealers,[21] power to issue prospecting rights which entitle the holders to prospect for minerals on any land in Kenya.[22]

The law is outdated and out of tune with the modern demands of the extractive sector. Its licensing regimes and procedures have been criticized, even by the Government itself for imbuing opaqueness resulting in the Government cancelling in 2013 all licenses issued to all mining companies in Kenya and appointing a Task Force to review their legality and make appropriate recommendations. Other shortcomings of the law include, lack of provisions on transparency and no reference to environmental management in mining operations.[23] A critical component of modern mining is the different interests of large-scale miners from those of artisanal miners, an issue that *the Mining Act* does not address. The end result is that with renewed interest in the mining sector the Mining Act required urgent overhaul, an issue that became a core focus of legislative developments in Kenya in 2013.

The second aspect of the extractive industry is oil and gas, whose exploitation, production and marketing is currently governed by *the Petroleum by (Exploration and Production) Act*.[24] The title to the Act clearly demonstrates its limited focus on regulating contracting in the oil industry only. It provides that it is a law to "*to regulate the negotiation and conclusion by the*

---

[17] Chapter 304, Laws of Kenya.

[18] Chapter 308, Laws of Kenya.

[19] Supra note 17, Section 4.

[20] Ibid, Section 9.

[21] Ibid, Section 12.

[22] Ibid, Section 13.

[23] Kibugi, Robert, "Mineral Resources and the Mining Industry in Kenya," in C.O Okidi, *et al, Environmental Governance in Kenya: Implementing the Framework Law*, (East African Educational Publishers, Nairobi, 2008)355-371 at 364.

[24] Chapter 308, Laws of Kenya.

Government of petroleum agreements relating to the exploration for, development, production and transportation of, petroleum and for connected purposes."[25] The Act has only thirteen sections. The main issues that the Act deals with include: vesting rights over petroleum to the government subject to any rights recognized by law; regulatory powers of the Minister over petroleum operations in Kenya; provisions that the Government may conduct petroleum operations either through an oil company established for that purpose, currently the National Oil Corporation of Kenya, or through independent contractors. The powers of the Minister under the Act include negotiating and entering into petroleum agreements on the basis of model petroleum agreements; granting non-exclusive petroleum exploration permits and supervising petroleum operations. The Act also has minimum obligations for every contractor[26] and conditions for accessing private land[27] requiring that contractor who intends to enter into any private land for purposes of conducting petroleum operations to give only forty eight hours notice to the occupier of the land. The notice to the actual owner is only to be given if it is practicable to do so. This has the implications of disregarding the property rights of the land owner on which the exploration is proposed to be undertaken and has been a source of unrest.

The Act, like its counterpart for the mining sector, is inadequate to regulate the oil and gas sector in light of the discoveries – discoveries which could potentially convert Kenya from an oil importing country to a producing and exporting country. A consultancy report prepared in 2013 for the Kenyan Government with support from the World Bank, assessed Kenya's legal framework for oil and gas: "In countries that have not previously had any petroleum discoveries, the typical approach is very similar to Kenya's existing regime. The Cabinet Secretary provides notice that blocks are open for applications from contractors who desire to enter into petroleum agreement negotiations. Contractors then submit applications containing prescribed information."[28]

The petroleum sector is typically divided into upstream, midstream and downstream, with the upstream focused on exploration and production, midstream dealing with storage, processing and transportation, while downstream deals with distribution to end users. The current regulatory framework does not adequately address all these stages in the petroleum operations chain, hence the need for its reform following the discoveries of commercial

[25] Ibid.

[26] Ibid, Section 9.

[27] Ibid, Section 10.

[28] Supra, note 1.

deposits of oil in Turkana and subsequent discoveries of other oil and natural gas in the country.

Recent Legal and Policy Developments

Between 2013 and 2014, following the general elections in March 2013, the government prioritized legislative reforms in the extractive sector. These included the amending and updating of *the Energy Act and Policy* and the development of new legislation *including The Petroleum (Exploration and Production) Bill*, and *The Sovereign Wealth Fund Bill.* These reform measures were spearheaded by the two Ministries established by the Jubilee administration following its election, the Ministry for Mining and that of Energy and Petroleum. In addition the Senate has produced a Bill to focus exclusively on benefit sharing, namely the Natural Resources (Benefit Sharing) Bill that is awaiting debate and finalisation by the Senate.

The year 2014 thus saw the development of several laws. However, the main focus of this report is on the one law that was discussed conclusively by the National Assembly, being the Mining Bill, 2014.

Overview of the Mining Bill, 2014

The Mining Bill was presented to the National Assembly in early 2014 and following lengthy debates and consultations passed in November 2014. Its short title is a demonstration that it is more robust than its predecessor, *the Mining Act, of 1940*. The Short title provides that it seeks to incorporate the key constitutional provisions governing extractives which have been discussed in this report and also constitutional principles on national land management. In addition the law seeks to "provide for prospecting, mining, processing, refining, treatment, transport and any dealings in minerals."[29]

The Bill clarifies the ownership of minerals in Kenya by stating that all mineral resources are the property of the Republic of Kenya. [30]This is a departure from the previous position where the law categorised them as belonging to the government hence justifying the government treating them as private property. In the new law, the resources are national and are only vested in the national government as trustee.

[29] Mining Bill, 2014.

[30] Ibid, Section 6.

Another vexing issue in the governance of mineral resources is the relationship between mineral rights and land rights. The law seeks to deal with this by, first clarifying that mineral resources belong to the republic, irrespective of "any right or ownership of or by any person in relation to any land in, on or under which any minerals are found."[31] The law grants the Cabinet Secretary the rights to issue a mineral right authorising prospecting or mineral operations. Out of the appreciation of the linkages with land, it is a requirement that before issuing such a license, that consent must be obtained from the relevant persons and agencies, including land owners. Thus the consent is required of the National Land Commission for public land and the community or private owner for community and private[32] land respectively. Should the consent be unreasonably withheld then the law grants the Cabinet Secretary the power to acquire the land without consent.[33]

The law also recognises that there is a lack of requisite skills to be able to work in the mining sector. As a consequence, the sector invariably employs a lot of foreigners in the skilled jobs with Kenyans being relegated to providing menial and unskilled labour. To redress this, the law requires skills transfer and capacity building for Kenyan citizens in the extractive industry.[34] To ensure this happens the law requires every applicant for a mineral right to submit to the Cabinet Secretary a detailed programme for the recruitment and training of Kenyan citizens,[35] which is a condition to the granting of a mineral right. The Cabinet Secretary will also develop regulations "to provide for the replacement of expatriates, the number of years such expatriates shall serve, number of expatriates per capital investment and provide for collaboration and linkage with universities and research institutions to train citizens."[36] In addition the holder of a mineral right is required to give preference to Kenyans in employment.[37]

The other key issue in the extractive industry is local content, defined as the extent to which the industry supports local economy. A lot of times when people think about benefits from oil, minerals and other extractives only tax revenues and employment are considered. While

---

[31] Ibid, Section 6(2).

[32] Ibid, Section 34(2).

[33] Ibid, Section 38.

[34] Ibid, Section 44.

[35] Ibid. Section 44.

[36] Ibid, Section 44(3).

[37] Ibid, Section 45.

these are important, the discourse around local content argues for innovation in leveraging the extractive industry not only to benefit the local economy but also to build local capacity in the process. It is therefore a broad term. It can encompass job creation, enterprise development and transfer of skills and technologies. The aim is to ensure that the developments in the extractive industry have a more long-term and sustainable positive effect on the country's economy. The law has addressed the issue of local content, by requiring the participation of local equity in the mining sector,[38] and the preference for materials and products made in Kenya, services offered by Kenyan citizens and companies and businesses owned by Kenyan citizens in the conduct of any mining dealings or operations in Kenya.[39]

The law also includes the need to conserve the environment in all mining operations, providing that the holder of a prospecting permit should "take all necessary measures to protect the environment."[40] Similar obligations exist in respect to holders of mining rights.[41] In addition Part IX of the law deals with environmental, health and safety issues, indicating explicitly that the granting of a mineral right does not exempt the holder from complying with the laws relating to the environment.[42] Currently the main law on environmental issues is the Environmental Management and Coordination Act, which has provisions on environmental impact assessment, monitoring and audit all of which are very critical processes for the mining industry.

The law also addresses benefit sharing and provides that seventy percent of the royalties that accrue to the country from mining operations shall be retained by the national government, provincial government shall retain twenty percent and local communities ten percent. The law also recognises artisanal miners and contains detailed provisions to regulate their operations, including establishing a provisional office of the Director of Mines, whose functions will be to:

- grant, renew and revoke artisanal mining permits;
- compile a register of the artisanal miners
- supervise and monitor the operation and activities of artisanal miners;

---

[38] Section 47, Mining Bill, 2014.

[39] Section 48, Mining Bill, 2014.

[40] Section 107(b), Mining Bill.

[41] Ibid, Section 114.

[42] Ibid, Section 149.

- advise and provide training facilities and assistance necessary for effective and efficient artisanal mining operations;
- submit to the Director of Mines, reports or other documents and information on artisanal mining activities within the county, facilitate the formation of artisanal association groups or cooperatives; and
- promote fair trade of artisanal miners.

Conclusion and Emerging Issues

This report demonstrates the efforts that Kenya has embarked on in order to update and modernise its laws to govern the extractive industry. The Mining Bill, 2014 despite its shortcomings in several areas represents the greatest progress in this process. The Bill, however still faces challenges due to the jurisdictional disputes between the National Assembly and the Senate. In Kenya's constitutional framework, laws that touch on devolution have to go to both the Senate and the National Assembly. Defining what it is that relates to devolution has, however, been a vexed question in Kenya despite the Supreme Court having pronounced on the issue. The Mining Bill is caught in this dispute, having originated from the national assembly and containing provisions touching on counties, the Senate has argued that it should pass before going to President for assent, an argument that has merits.

The second challenges relate to the multiple laws that the country has proposed to govern the sectors. From a background of outdated legislation, the country in its modernisation and reform efforts risk the danger of over-legislation. A fact that is exacerbated by legislation being developed by the two Ministries of Energy Petroleum and that of mining without clarity on the linkages within the extractive industry.

In the end, 2014 ended with a progressive mining law, which awaits resolution of the dispute over the role and input of the Senate and Presidential assent. The President will be required to give assent to the law for it to become an Act and thus part of Kenya's legislative framework. This will also require a final determination on whether the Bill will be debated in Senate or not. Hopefully the Petroleum law can also be finalised and adopted. More importantly the development of modern and progressive laws are only a part of the governing process of the extractive sector in Kenya. The other part relates to implementation which is a critical challenge that needs to be addressed urgently.

COUNTRY REPORT: MALTA

Simone Borg

The year 2014 was particularly intensive for environmental and resource management in Malta, both on the horizontal level and the sectoral level. On the other hand there were no particular new developments on the legislative front, although intensive work was carried out to revise existing legislation. Most legislative activity in fact involved amendments to existing legal instruments. Intensive work was dedicated towards drafting new legislation on noise regulation and climate change, as well as revising existing development planning plans. Sectoral issues continued to be further developed and intensified.

Horizontal Measures

Institutional Organisation

At present the Ministry responsible for sustainable development, the Environment and Climate Change (MSDEC) is working upon the necessary administrative and legal requirements to demerge the environmental directorate from the planning directorate at the Malta Environment and Planning Authority (MEPA). The demerger process entails the setting up of the new Development Planning Authority (DPA) and the Environment and Resources Authority (ERA) as two separate and autonomous authorities, one responsible for the environment and resources, and the other responsible for planning and development.

The original merger between environment and planning development into the single authority MEPA occurred in 2001. It was criticised by various environmental non-governmental organisations and developers alike for being neither balanced nor practical. However some, including the government at that time, insisted that integration of the two inter-related government functions would facilitate sustainable development. The contentious debate as to whether the merger was effective or not continued throughout the subsequent years. As the prevailing opinion seemed skeptical about its functionality, the demerger was one of the major issues the government in office proposed in its electoral manifesto and started to work upon as soon as it was elected in 2013.

The Government explained that its intention for the demerger was to give priority to the environment and strengthen its autonomy. The demerger process seeks to restructure the existing institutional set up at MEPA, whose operational functions and responsibilities are currently carried out by the work of four main structures, namely: the Chairman's office, The Chief Executive Officer, the Planning Directorate, the Environment Directorate and the Enforcement Directorate.

The whole process is subject to stakeholder consultation to ensure that the final outcome achieves the desired result of having two entities that are efficient and effective in delivering their regulatory role in what are two very important sectors for society's well-being. In March 2014, the Government (in collaboration with MEPA) finalized two consultation documents with the key features that will characterize the setting up of the new Development Planning Authority (DPA) and the Environment and Resources Authority (ERA). The consultation document, circulated for public consultation, includes over 100 proposals based on electoral pledges together with extensive hours of dialogue carried out with various stakeholders and the public over the past months.

Although nothing is concluded as yet, the two authorities would have separate Boards that would mainly inherit the split functions of MEPA's Chairman's Office and provide the framework within which the respective separate Boards of the DPA and ERA would operate, together with any Commissions and Committees the two authorities would establish. The two authorities would also have a secretariat each, to serve as the point of reference for issuing and communicating decisions, and in this context would remain the primary point of contact for ministries, departments and agencies as well as the general public. Due to the MEPA being the focal point to the Aarhus Convention, the two authorities would both inherit this function of following the Aarhus principles and provide for a communications, public participation and review/complaints office as an integral part of their set up.

It appears that the two authorities would each have a Chief Executive Officer who would be responsible for the implementation of the objectives of the respective authorities and for their overall supervision and control. Together with other directors, the CEOs of the DPA and the ERAs would constitute the executive arm of the two authorities and would develop the necessary strategies for the implementation of the objectives of their respective authority.

The DPA would continue to process development applications and would be responsible for their enforcement, as well as planning, policy development, transport planning and research related thereto. On the other hand, the ERA would advise Government on environmental standards and policies, draw up plans and provide a licensing regime to safeguard and monitor the environment and control the activities having an environmental impact. Since the main regulatory provisions for environment protection and management are found in subsidiary legislation, the changes to the parent *Act for ERA* will not be extensive. The focus will be more on effective implementation, and hence on the need to establish strong operational processes and procedures and to enhance the current legislative framework to provide clear direction and intent.

Both authorities would have an Enforcement Directorate which would support each authority in exercising Direct Action, general enforcement, surveillance as well as actions that are necessary to ensure compliance with the building development permits (in the case of the DPA) and to protect the environment to help achieve a sustainable environmental improvement (in the case of ERA).

It is not yet clear which authority would house MEPA's current Information Technology, as well as Mapping and Land-surveying data. Nor is it clear how the existing boards and committees, which provide strategic guidance for the Directorates under MEPA would be split amongst the two authorities to ensure the organizations fulfil their respective functions and responsibilities efficiently and effectively, in line with their legal obligations.

Green Public Procurement

Work also continued by the National Green Public Procurement Task Force within MSDEC on the implementation of the National Action Plan for Green Public Procurement (GPP) which the government adopted in 2011. The Plan establishes GPP targets for 18 product and service groups and proposes a series of measures for their attainment. Apart from MSDEC the following entities are also represented on the Task Force:

- The Malta Environment and Planning Authority
- The Malta Council for Science and Technology
- The Department of Contracts
- The Malta Enterprise
- The National Statistics Office

- The Malta Competition and Consumer Affairs Authority
- The Local Government Department

The main aim of this Task Force is to ensure that the GPP enables the public sector to obtain the best value for money and procure low-carbon, environmentally-friendly goods, works and services. It therefore represents an efficient use of public finances and promotes environmental improvement. It also represents a business opportunity for the suppliers of goods and services, enhancing opportunities for the growing market for environmentally-positive products and services. Implementation of GPP has been identified amongst the priority actions of the National Environment Policy, where the level of GPP in terms of value and number of tenders is projected to reach 50% of public procurement by 2015.

Sectoral Measures

Air Quality

MEPA continued with its review and assessment of air quality, particularly to make sure that the air quality objectives stipulated by law are achieved. When MEPA finds any places where the objectives are not likely to be achieved, it declares the area in question as being in need of continued Air Quality Management. Due to non-compliance with PM_{10} thresholds, MEPA has continued the process of drafting a holistic air quality plan for the Maltese Islands. This is proving to be a rather lengthy process that was launched following the public consultation exercise in May 2009. Major developments until now have focused on the transport sector, as national monitoring data identifies this sector as the major contributor to air pollution (mainly from exhaust emissions, tyre and break abrasion and the re-suspension of dust that had previously settled on the roads). Consequently, MEPA (in conjunction with Malta Transport Authority (ADT)) has continued to work on a holistic Air Quality Plan for the Maltese Islands that includes and proposes traffic measures as part of this holistic Air Quality Plan for the Maltese Islands.

Furthermore, work has intensified in the proposed Air Quality Plan for the Maltese Islands on outline policy measures to address other man-made pollution sources, namely the sectors of power gene,ration, construction and small industry. This document will also include the MEPA/ADT approved traffic measures and the suggestions it received from the first phase of public consultation. Policies and measures are not only necessary from the point of view of local air quality, but also in respect of national emissions. The National Emission Ceilings (NEC) Directive (2001/81/EC) sets out national emission ceilings for sulphur dioxide,

nitrogen oxides, ammonia and non-methane volatile organic compounds in kilotonnes of pollutant to be achieved by Malta by 2010. The environmental objectives of the NEC Directive are to combat acidification, eutrophication and ground-level ozone. The policies and measures necessary to implement this directive are strongly linked to plans and programmes to reduce air pollution in specific areas, especially where exceeded limits are recorded.

Biological Diversity

MEPA has continued to implement various measures with the aim to prevent and mitigate negative impacts on biodiversity following progress over the last few years in enacting a comprehensive legal framework and in establishing an ecological network of protected areas, with the aim of safeguarding biodiversity. The Maltese Islands boast a diverse range of flora and fauna, especially when considering the relatively small land area, the limited number of habitat types and the intense human pressure as one of the most densely populated states in the worls. Malta's biodiversity shares affinities with other areas of the Mediterranean, not only in view of its central position, but also in view of historical land bridges.

The state of knowledge of species occurring in the Maltese Islands has been overall stable over the years; nevertheless, a number of new records have been published while others await publication. Various species are protected on a national or international level, noting that several native species are threatened and/or endemic. Indeed, Malta has progressed with protecting various habitats and species of importance, especially in recent years, mostly through the enactment of legislation and establishment of an ecological network of protected areas. Various terrestrial and marine habitats of importance are known from the Maltese Islands, some of which are particularly unique. As a result, MEPA’s Environment Directorate has continued to be actively involved in compiling databases in the compilation of the National Database on Biodiversity, as well as a separate database on Alien Species in the Maltese Islands. Data is also collated in databases specifically designed for reporting obligations. These are prepared by institutions such as the Council of Europe and the European Commission. In this respect, one can mention the Natura 2000 database and HABIDES (a database provided in 2009 to report derogations under the European Commission Habitats and Wild Birds Directives).

Work also continued on another database which is updated on an annual basis, namely the Common Database on Designated Areas (CDDA), which as the name implies includes a list

of all the designated areas in the Maltese Islands. More specifically, this database includes a list of the areas protected or scheduled in view of important habitats and species, and which have been included in national legislation. Work has also continued on implementing the draft National Biodiversity Strategy and Action Plan (NBSAP) for Malta, which defines a comprehensive framework for safeguarding Malta's biodiversity over the period 2012 to 2020, as required by the National Environmental Policy. The main purpose of the NBSAP is to serve as a national policy driver to integrate biodiversity concerns into relevant sectoral or cross-sectoral plans, programmes and policies, especially those that can have a bearing on Malta's biological and natural resources. Malta has also continued to fulfil commitments made at the tenth meeting of the Conference of the Parties to the *Convention on Biological Diversity (CBD)* in Nagoya to adopt NBSAPs in line with the CBD's Strategic Plan, and to set in parallel appropriate national targets. To ensure continuity this year saw a focus on the NBSAP implementation phase by ensuring the collaboration of all relevant stakeholders to translate into action the NBSAP measures. The NBSAP targets will only be achieved by securing broad participation, ownership, commitment and collective action at the national and local levels. Through its implementation, the NBSAP will help to mainstream efforts to set Malta on the right track to improve the status of its biodiversity and associated ecosystem services, and to strengthen the integration of biodiversity concerns across relevant sectors.

Waste Management

MSDEC and the Environment Protection directorate within MEPA, as the entity responsible for the regulation of all waste management facilities and activities, continued to work on the incorporation of the essential elements of sustainability in waste management policy. This was achieved through a process of strategic waste management planning, ensuring adequate protection of human health and the environment and monitoring of the waste management regulatory regime. Work also continued on updating the Solid Waste Management Strategy for the Maltese Islands and the preparation of detailed implementation plans.

Climate Action

MSDEC and the Climate Action section of the Malta Resources Authority (MRA) spearheaded the interministerial consultations to finalise the Malta position within the context of the Energy and Climate Package of the European Union, agreed by the European Council in the last quarter of 2014. The interdisciplinary approach in conducting these interministerial consultations has paved the way for Malta to embark upon the drafting of its Low Carbon

Development Strategy, as well as conduct further work on both the review and implementation of its Mitigation Strategy finalised in 2009, and its Adaptation Strategy concluded in 2012. Given the developments in Climate Action Law and Policy over the last few years in line with *the EU's Climate Action Policy*, MSDEC has carried out the drafting of a Climate Action Bill that has also been published for public conultation, which aims to bestow the necessary regulatory powers on the authorities to ensure compliance with reporting requirements, as well as mitigation and adaptation measures across the public and private sectors. The Minister responsible for Climate Action will also have enabling legislative powers to issue regulations to draw legally binding measures should the need arise to ensure that all sectors are on board in meeting mitigation and adaptation targets. The Bill also provides for a Climate Fund. It is envisaged that the Bill will be promulgated as law by the second quarter of 2015 at the latest.

Noise Pollution

MSDEC continued to steer the process for the drafting of adequate legislation to address the fragmented regulation of noise pollution and the difficulties which currently lead to severe problems in regulating neighbourhood noise. The process is an intensive and a complex one as there are various authorities which regulate noise in different sectors, and the new draft bill aims to ensure a smoother synergy between different authorities responsible whilst addressing existing gaps in the law. The Bill will aim at providing remedies to secure better compliance without necessarily seeking redress in court.

Conclusion

The implementation of environmental laws and policies remains a challenging issue for Malta, not least due to the multi disciplinary approach in governance that mainstreaming sound environmental management and sustainable development entails. Civil society is becoming more and more active in environmental consultation fora, and social partners such as trade unions and the Employers Association as well as representatives of vulnerable groups are becoming more and more proactive in demanding higher environmental standards. The tourism sector is increasingly embracing the eco-tourism approach and the construction industry, although still blamed for the majority of complaints of an environmental nature, has developed a keen interest in green solutions and options to make buildings more energy efficient. The public at large perceives a poor compliance and enforcement track record, which is probably largely due to lack of the required capacity building within the various authorities responsible for aspects of environmental compliance.

COUNTRY REPORT: THE NETHERLANDS
The Future Environment and Planning Act and the Impact of the Crisis and Recovery Act

Kars de Graaf* and Hanna Tolsma**

Introduction

This country report is concerned with developments in environmental law in the Netherlands and will discuss some of the topics that were the subject of previous Country Reports. Both the 2010[1] and 2013[2] country reports paid attention to the *Dutch Crisis and Recovery Act (CRA)* that was enacted in 2010 to alleviate the economic crisis in the Netherlands. The most important development in the Netherlands on environmental law however concerns a legislative proposal for a fundamental change in the structure of a large majority of regulations that concern the use and protection of the environment in the broadest sense. The reason for such a fundamental change is that current and future challenges concerning the use and protection of the environment cannot be tackled effectively using the current legal instruments, which are based on a large range of statutory regulations. At the national level there are approximately 4700 provisions spread over 35 Acts, 120 governmental decrees (Orders in Council), and 120 ministerial decrees. To reduce the sheer number of regulatory documents the government announced in 2010 a restructuring of the Dutch environmental and planning law into one *Environment and Planning Act* (hereafter EPA).[3] The first outlines of this ambitious legislative project were sketched by the Minister for Infrastructure and Environment in the spring of 2012 and discussed in the Country Report of

* Prof. dr. K.J. de Graaf is Associate Professor with a chair in Public Law and Sustainability, Department of Administrative Law and Public Administration, University of Groningen, the Netherlands. Email: k.j.de.graaf@rug.nl.

** Dr. H.D. Tolsma is Assistant Professor, Department of Administrative Law and Public Administration, University of Groningen, the Netherlands. Email: h.d.tolsma@rug.nl.

[1] J. Verschuuren, Country Report: Netherlands, IUCN Academy of Environmental Law e-Journal issue 2010(1).

[2] K.D. Jesse, Country Report: Netherlands. Big Changes in Environmental Planning Law on the Way, IUCN Academy of Environmental Law e-Journal issue 2013(1).

[3] In Dutch: *Omgevingswet*.

2013. Firstly this report will consider the findings with regards to the monitoring and evaluation of the effects of the provisions of the CRA that were discussed in the 2010 Country Report. Thereafter section 3 will highlight the new developments in the process of restructuring Dutch environmental law and will conclude with final considerations.

The Crisis and Recovery Act Revisited

When the *Dutch Crisis and Recovery Act (CRA)* was enacted in 2010 it was expected to be in force only for a specific period of 4 years in order to alleviate the economic crisis by introducing special provisions for specific projects. If the provisions proved efficient and effective they would be incorporated in the *General Administrative Law Act (GALA)* and the *Environmental Management Act (EMA).* On 25 April 2013 an Act amending the CRA formally extended the functioning of the CRA indefinitely; in practice, the Act will be revoked as soon as the new *Environment and Planning Act (EPA)* comes into force. A specific objective of the CRA is to ensure that the preparation of specific decisions that allow for the realisation of infrastructure, building, sustainability, energy and innovation projects, and also any appeal procedures against those decisions are conducted as efficiently as possible. To this end, Chapter 1 of the CRA contains several provisions relating to decision-making and legal protection that differ from the corresponding provisions in the Dutch GALA and – in the case of one provision – from the EMA. Chapter 1 contains provisions that alleviate certain obligations. This includes provisions that ease the obligation to produce an environmental impact assessment (art. 1.11), that ease the rules regarding the use of expert advice (art. 1.3) and that lower the burden of investigations in the renewed decision-making process after a decision has been declared invalid by an administrative court (art. 1.10).

Further provisions provide that all grounds of appeal must be submitted before the end of the appeals period (art. 1.6(2) and art. 1.6a), that local and regional government authorities have limited right of appeal (art. 1.4), that the court must expedite appeal procedures (art. 1.6(1)) and must pronounce judgment within 6 months after the appeal period has lapsed (art. 1.6(4)), and that the court if it appoints a specific expert (Stichting Advisering Bestuursrechtspraak, a foundation which gives expert advice to the court in questions relating to environmental and spatial planning disputes) to give expert advice in connection

with the appeal proceedings in question, that a time limit of 2 months applies for the expert to make its recommendations (art. 1.6(3)).[4]

The effects of the mentioned provisions of the CRA were evaluated in 2012 and again – building on that first evaluation – in 2014.[5] The study considered to what extent the instruments under Chapter 1 of the CRA help expedite the implementation procedures of the projects to which the CRA applies. The study also considered if the instruments assist in expediting the commencement of the projects themselves. With regard to the procedures that apply in the administrative court (Administrative Jurisdiction Division of the Dutch Council of State) it was found that the obligation to pass judgment within six months (art. 1.6(4)) has a positive effect on the speed with which CRA-cases are settled. Although the 6 month time limit for passing judgment was not met in 57% of cases, CRA-cases were settled on average in 7.4 months by the court, which is about 40% faster than the time in which comparable cases were settled.

A further issue that was considered was whether the CRA has an effect on the outcome of the appeal as well as on the speed with which it is settled. That could be the case if an administrative body was not allowed to appeal (art. 1.4) or if an appellant has failed to submit all grounds of appeal before the end of the appeals period (art. 1.6(2) and art. 1.6a). Evaluating the judgments that were analysed in the study, there is at most a very limited effect. In 1% of the cases an administrative body was not allowed to appeal, while in 4% of the cases a ground for appeal submitted after the time limit had expired was not considered. In these cases it is conceivable that the outcome of the proceedings might have been different but it is not certain. With regards to the provisions concerning decision-making procedures, there was no evidence that art. 1.3 CRA (that ease-rules on expert advice) has

---

[4] Some of the provisions discussed in the 2010 country report that were originally included in the CRA already found their way to the Dutch GALA, e.g. on 1 January 2013 the so-called 'relativity'-principle (*Schutznorm*), meaning that claimants can only invoke rules that are specifically meant to protect their interests has been transplanted from art. 1.9 CRA to art. 8:69a GALA and the provision that introduced the possibility for the courts to condone small substantive illegalities if interested persons are not affected was transposed from art. 1.5 CRA to art. 6:22 GALA.

[5] K.J. de Graaf, A.T. Marseille & F.J. Jansen, 'Accelerating court proceedings with the Dutch Crisis and Recovery Act. Direct and indirect effects of procedural provisions', Journal of European Environmental and Planning Law 2013/3, p. 276-294. Also see A.T. Marseille, B.W.N. de Waard et al., *Crisis- en herstelwet. Evaluatie procesrechtelijke bepalingen*, Groningen: Vakgroep Bestuursrecht & Bestuurskunde 2012 and A.T. Marseille, B.W.N. de Waard et al., *Crisis- en herstelwet. Tweede evaluatie procesrechtelijke bepalingen*, Groningen: Vakgroep Bestuursrecht & Bestuurskunde 2014.

been applied by administrative bodies or that they benefit from it. It seems very likely that this provision makes no special contribution to expediting projects. The effectiveness of art. 1.11 CRA (that eases the obligations regarding EIA) could not be properly determined because a substantial number of cases were beyond the EIA process stage at the time that art. 1.11 CRA came into force. Furthermore it became evident that the decision by administrative authorities to make use of the provided possibility to ease certain EIA requirements is used almost as frequently as the decision not to make use of that possibility. With regards to art. 1.10 CRA (re-using evidence found previously for renewed decision-making after the invalidation of an earlier decision by an administrative court) not a single judgment was found in which the applicability of this provision was relevant.

One could say that the most important question is what relationship there is between the speed with which an appeal under the CRA is settled and the speed with which the project subject to the appeal proceedings is executed. The study shows that it varies widely. One important finding of the study is that the speed with which the procedures before the administrative court are settled are related only to a limited extent to the speed with which the project is actually executed.

The 2010 Country Report also discussed some of the new instruments that were introduced by Chapter 2 of the CRA such as the Experimental Rules on 'Development Areas' and the 'one stop shop' principle for the development of new residential areas, comprising anything between 12 and 2000 new houses. These provisions were not part of any official evaluation but have been the subject of ministerial progress reports, which claim that the effects of the instruments are positive. Legal scholars have responded to these provisions in both a positive and a negative manner and don't seem to be able to agree.[6] In any case the future EPA will be the reason for the government to revoke the CRA.

The Legislative Proposal for an Environment and Planning Act

In 2014 the legislative process regarding the introduction of an Environment and Planning Act (EPA) was taken to the next level. A legislative proposal for an EPA was submitted to

[6] Predominantly positive: E.C.M. Schippers, A.J. van der Ven & M.C. van der Werf, 'De Crisis- en herstelwet (deel II): een blijvertje!', *Gemeentestem* 2013/65, p. 360-368. Predominantly negative: K.J. de Graaf & H.D. Tolsma, 'Vier jaar ervaring met hoofdstuk 2 van de Crisis- en herstelwet. Over ontwikkelingsgebieden, de experimenteerbepaling en het projectuitvoeringsbesluit', *JBplus* 2014, p. 28-39.

Parliament in June 2014.[7] The EPA will – possibly in 2018 – replace fifteen existing legislative acts concerned with environmental law (including *the General Act on Environmental Permitting, the Water Act, the Spatial Planning Act and the Crisis and Recovery Act*) and incorporate the area-based components of eight other acts (such as the Environmental Management Act). Furthermore the government is working to introduce a new Nature Conservation Act that will be incorporated in the EPA once the latter comes into force. A Country Report is not suited to discuss all the details of this vast change in the structure of Dutch Environmental Law. To give an impression of the impact of this legislative project we could point out that the explanatory memorandum of the proposal amounts to 629 pages. In this Country Report we will highlight some of the important characteristics of the EPA and discuss the main issues that have received criticism. Firstly we will consider the structure of *the Environment and Planning Act* that has now been proposed. Secondly, the main goals for drafting the EPA will be evaluated. Lastly we focus on a few noteworthy aspects of the legal instruments.

Structure of the Proposed EPA

Framework Act

The proposed EPA consists of 23 chapters.[8] One important feature of the EPA is that the content mainly deals with introducing general provisions on the legal instruments which can or shall be used by the competent authorities and includes procedures with regards to implementing those instruments. Therefore the EPA can be classified as a framework act. Current substantive environmental standards will largely be delegated to implementing legislation. To be more specific: these rules will be clustered and streamlined in three governmental decrees instead of the current 120. The government's goal is to bundle many of the existing substantive environmental standards in just three governmental decrees in order to improve accessibility and consistency of the entire body of regulations that is currently considered part of Dutch environmental law. Also the streamlining and clustering at one level of legislation will improve the harmonization of rules, for example on procedures

[7] Parliamentary Papers 2013/14, 33 962, No. 2.

[8] 1. General Provisions, 2. Duties and powers of administrative authorities, 3. Environmental Planning Vision and Programs, 4. General rules on activities in the physical environment, 5. Environmental Permit and Project Decision, 6-9 reserved, 10. Toleration duties, 11. reserved, 12. Land development, 13. Financial provisions, 14. reserved, 15. Damage, 16. Procedures, 17. Advisory Bodies and Advisors, 18. Enforcement and execution, 19. Powers in special circumstances, 20. Monitoring and information, 21. reserved, 22. Provisions on transition and 23. Final provisions.

and measuring methods. Lastly, implementing regulations by governmental decree will allow for proper and timely implementation of European and international obligations.

Although the legislative proposal of the EPA was submitted to Parliament in June 2014, little is yet known about the secondary legislation that will be implemented on the basis of the EPA. Only the structure of the governmental decrees was outlined in a note by the Minister in July 2013. The three decrees will be: the *Environment and Planning Decree* (general and procedural provisions), the *Physical Environment Quality Standards Decree* (practical rules, standards and administrative instructions) and the *Physical Environment Activities Decree* (general binding rules with direct effect concerning activities in the environment). Furthermore the content of the EPA gives some guidance on the characteristics of the secondary legislation. For example the provisions that provide the basis for the delegation of rules indicate which binding rules shall or are able to be implemented to shape the assessment framework for applications for environmental permits (such as 'for the purpose of the safety and protection of the environment'). Currently the government is still working on the structure and content of the governmental decrees. One of the main points of critique in the literature concerns the fact that little is known about the substantive norms that will be implemented in the decrees. For this reason it is at this stage impossible to assess the effects of the EPA on the existing level of protection of the environment. Also relevant in this respect is the criticism that there is no general codification of substantive principles (of environmental law) in the proposal. The proposal does however state the goal of the EPA in art. 1.3: 'This Act focuses, for the purpose of sustainable development, on the mutual coherence between a) achieving and maintaining a safe and healthy physical environment and a good quality of the environment, and b) managing, using and developing the physical environment to fulfil social functions effectively'. Of course the general principles of environmental law enshrined in international law are recognized and accepted but they will not be codified explicitly in the EPA.[9] With respect to the general principles that are at the core of European environmental law (see art. 3(3) TEU and art. 191 TFEU) the explanatory memorandum of the EPA states that the substantive scope of the EPA is actually broader than the principles of environmental law and that those principles are therefore not applicable to all subjects regulated by the legislative proposal for the EPA.

[9] The Dutch Constitution also does not identify any guiding principle of environmental law.

Main Reasons for Drafting the EPA

Flexibility

One of the reasons to draft the EPA was to introduce more discretion and flexibility in order to be able to tailor solutions to specific situations. The government holds the view that instruments that allow for flexibility should be built into the legal framework itself. The EPA therefore includes general provisions on a so-called 'programmatic approach' which enables competent authorities to pursue environmental objectives through specific programs without impeding the realisation or progress of individual projects. According to the government once the rules including the arrangements that allow for the flexible application are set, the possibilities to deviate from those environmental standards should be limited. To allow for more flexibility the EPA includes for example a generic provision on the principle of equivalence when applying generally binding rules (art. 4.7 EPA); this means that any mandatory measure that is intended to serve the public interests protected by the EPA can – after approval by the competent authority – be substituted by any measure that will protect that interest to an equivalent level. Also a provision that allows for experimental projects is incorporated in the proposal (art. 23.3 EPA).

In response to the draft proposal of the EPA the Advisory Division of the Dutch Council of State critically pointed out the risks that accompany a legal framework that allows for more discretion and flexibility. Such a framework may be less transparent and predictable and might consequently adversely affect the legal certainty of citizens and businesses.[10] In its reaction the government stated that these disadvantages of flexibility do not have to occur.[11] The government is of the opinion that the proposed EPA includes sufficient procedural and substantive provisions to safeguard careful application of discretion and flexibility by the competent administrative authorities. Comprehensibility and predictability are aspects that will receive explicit attention in shaping the implementation of the legislation and as was mentioned before the government is currently still working on the secondary legislation that will have to clarify how much flexibility is provided. It is therefore to a large extent impossible to assess at this stage in the legislative process the flexibility that will actually be offered in the future system of environmental law.

[10] Parliamentary Papers 2013/14, 33962, No. 4, 28-29.

[11] Parliamentary Papers 2013/14, 33962, No. 4, 46.

In Line with EU Legislation

Another point of departure in drafting the EPA is that the new system is more closely in line with EU legislation in terms of aims, terminology and instruments. The EPA has to ensure that environmental law is tailored for the implementation of EU legislation. An analysis of EU Directives revealed a number of building blocks that are now also part of the policy process (and is pictured as a continuous cycle) that underlies the structure of the proposal for an EPA. This cyclical process starts with a comprehensive strategy that describes the policy objectives and quality standards for the physical environment, which can be achieved through programmes, permits and general binding rules. These instruments will be monitored and enforced and as a result they may be tightened to ensure the achievement of the objectives.

Legal Instruments

Variety of Instruments

In the explanatory memorandum to the EPA the government presents six key instruments: the Environmental Planning Strategies, Plans and Programmes, Integrated Environmental Permits, Project decisions and General Binding Rules at national level (discussed in the country report for the IUCN AEL e-Journal of 2013).[12] These six main instruments are introduced as the successors to dozens of current environmental and planning instruments and should render the new system of environmental law as simpler and better. However, if we take a closer look at the legislative proposal for the EPA certain concerns become apparent. The Advisory Division of the Dutch Council of State also noticed a wide variety in legal instruments.[13] First, there exists variety within one type of instrument. For example the instrument known as Programmes, which contain concrete measures and describe how standards or area-based objectives will be pursued. In some cases the Programme is legally binding only for the administrative authority that adopted it and in other cases other administrative authorities are bound by it. In some cases administrative authorities are obliged to adopt a Programme (e.g. in order to satisfy EU requirements) and sometimes adopting a Programme is optional. The so-called programmatic approach is a special type of Programme. Furthermore, the legislative proposal of the EPA contains a wide variety of instruments, which are also determinative for the future structure of environmental law. For example the legislative act provides for competent authorities to adopt general binding rules

[12] Parliamentary Papers 2013/14, 33962, No. 3, 51-54.

[13] Parliamentary Papers 2013/14, 33962, No. 4, 19.

that stipulate the possibilities to elaborate on or deviate from those provisions. It also provides for national and provincial authorities to adopt general binding rules that apply to the power to adopt general binding rules at the local level. Lastly it allows for competent authorities to adopt general binding rules that will allow administrative authorities to set extra conditions that elaborate or deviate from the general rules. In our view the government paints a particularly rosy picture by presuming that by selecting six key legal instruments the future system of environmental law will be simpler and better.

Single or Separate Environmental Permits

The single environmental permit is currently regulated in *the General Act on Environmental Permitting* (hereafter GAEP).[14] Before the introduction of the GAEP in 2010 a wide variety of sectoral laws and regulations demanded sectoral permits for activities that could adversely affect the different aspects of the environment. Citizens and businesses seeking a permit were confronted with a range of procedures entailing a variety of different time limits, assessment criteria and legal remedies. The GAEP intended to address these problems through the procedural integration of permits: a one-stop-shop makes applications easier for citizens and businesses. An applicant is *obliged* to submit a single application when the activity itself falls within the scope of more than one requirement for a permit.[15] An often used example is the construction and operation of a large pig farm; both the construction itself and the operation of the farm would require an environmental permit. Besides this obligation, the applicant retains the *option* to apply for separate permits in cases where the project could possibly be split into separate parts. The first empirical data about the permitting system of the GAEP remarkably reveals that citizens and business seeking a permit prefer to apply for separate permits instead of one single permit. An application for a single permit for multiple activities is rare.[16]

In the legislative proposal for the EPA the applicant is allowed more leeway to apply for separate permits. The obligation to submit a single application when the activity itself falls within the scope of more than one requirement for a permit is not incorporated into the EPA. The government reasons that more freedom to apply for separate permits simplifies the

[14] In Dutch: Wet algemene bepalingen omgevingsrecht.

[15] Art. 2.7 GAEP.

[16] R. Uylenburg, 'De omgevingsvergunning in een nieuwe habitat', in: *Naar een nieuw omgevingsrecht* (Preadviezen Vereniging voor Bouwrecht nr. 40), p. 53-73.

procedure for the applicant.[17] However, it is questionable if the protection of the environment is secured in terms of this trend that allows for the application of separate permits. One of the advantages of a single permit application and assessment is that the various impacts of the activities on the environment can be assessed simultaneously and in close connection to another. Such an assessment could result in a better outcome for the environment as a whole. From this perspective it could be argued that the EPA should not provide more flexibility for applicants to apply for separate permits but rather encourage applicants to use the one-stop-shop strategy.

Final Considerations

The structure of environmental law in the Netherlands is changing rapidly. A proposal for an *Environment and Planning Act (EPA)* will restructure most regulations concerned with the use and the protection of the physical environment. The goals of this act, for the purpose of sustainable development, are both to achieve and maintain a safe and healthy physical environment and a good quality of the environment, and to effectively manage, use and develop the physical environment to fulfil social functions. It is indeed not a small task. It is estimated that Country Reports for the Netherlands in the coming years will have to address the developments of the future *Environment and Planning Act*.

[17] Parliamentary Papers 2013/14, 33962, No. 3, 161-162.

COUNTRY REPORT: NEW ZEALAND

The Role of Sustainable Management in the Coastal Environment: *King Salmon* in the Supreme Court

Trevor Daya-Winterbottom*

Introduction

This Country Report focuses on the developing jurisprudence regarding the role of sustainable management in relation to the New Zealand coastal environment in light of the Supreme Court decision in *Environmental Defence Society Inc v The New Zealand King Salmon Company Ltd*.[1]

The case concerned applications made by King Salmon under *the Resource Management Act 1991 (RMA)* for changes to the Marlborough Sounds Resource Management Plan (MSRMP)[2] to classify salmon farming as a discretionary activity at eight locations in the coastal marine area, and for the grant of coastal permits to expressly allow salmon farming at these locations for a term of 35 years. The applications were referred by the Minister of Conservation to a Board of Inquiry for determination.

The Board granted the applications regarding four of the proposed locations, including Papatua at Port Gore. The Board found that Papatua was an area of outstanding natural character and outstanding natural landscape, and that establishing the proposed salmon farm in that location would give rise to significant adverse effects on both natural character and landscape. Notwithstanding these findings, the Board adopted an "overall broad judgment" approach to balancing the positive and adverse effects of the proposed activity on the environment. In approaching matters in this way, the Board accepted that Policies 13(1)(a) and 15(a) of the New Zealand Coastal Policy Statement (NZCPS) would not be

* Faculty of Law, University of Waikato, New Zealand. Email: trevordw@waikato.ac.nz.

[1] [2014] NZSC 38.

[2] Marlborough District Council Marlborough Sounds Resource Management Plan (2003).

complied with, but it considered that these policies were not "determinative" despite the "considerable" weight that should be given to them.[3]

The Environmental Defence Society appealed the Board's decision to the High Court on questions of law regarding the proposed salmon farm at Papatua. The Society contended that the Board's analyis was wrong and that it had "erred in law". The appeal was dismissed,[4] and the Society was given leave to appeal directly to the Supreme Court,[5] leapfrogging the Court of Appeal.

Absent the plan change, salmon farming was classified as a prohibited activity under the operative MSRMP and no application could be made for salmon farming at Papatua, and the consent authority was precluded from granting consent for the activity.[6] The issue was therefore whether the plan change could be approved to allow the concurrent application to be granted.[7]

Previous Approach by the Courts and Background Context

The statutory purpose of the RMA is to promote the sustainable management of natural and physical resources.[8] The extended meaning of "sustainable management" in s 5(2) of the RMA includes a number of competing considerations. First, it seeks to enable people and communities to provide for their own wellbeing. Second, it seeks to provide for inter-generational equity, safeguard the "life-supporting capacity" of environmental media,[9] and address adverse environmental effects. These two broad themes, the liberal enabling

---

[3] [2014] NZSC 38 at [5].

[4] *Environmental Defence Society Inc v The New Zealand King Salmon Company Ltd* [2013] NZHC 1992, [2013] NZRMA 371. For commentary on the Board of Inquiry and High Court decisions see: Warren Bangma "The Board of Inquiry decision on the New Zealand King Salmon application" Resource Management Bulletin (March 2013) 2; and Vernon Rive "Salmon run: the final hurdle for aquaculture plan change and consents" Resource Management Bulletin (November 2013) 73.

[5] Environmental Defence Society Inc v The New Zealand King Salmon Company Ltd [2013] NZSC 101.

[6] RMA, s 87A(6).

[7] RMA, s 87A(7); and Part 7A, subpart 4.

[8] RMA, s 5(1).

[9] Air, water, soil, and ecosystems.

theme, and the three "environmental bottom lines", are separated by the word "while". The semantic difficulty arising from whether "while" should be interpreted conjunctively or disjunctively generated an intense philosophical debate during the period 1995-1997. Commentators put forward competing interpretations of the statutory purpose advocating for a fixed, non-negotiable, bottom line approach, on the one hand; and a balanced approach on the other hand that recognises the need for "trade-offs" between competing values.[10]

This debate was resolved by the courts who applied an "overall broad judgment"[11] or "balanced judgment"[12] approach to the weighing of competing values in resource consent decision-making. For example, in *North Shore City Council v Auckland Regional Council*, the Environment Court held in the context of district plan zoning that the:

> *Application of s 5 … involves consideration of both main elements of s 5. The method calls for consideration of the aspects in which a proposal would represent management of natural and physical resources in a way or at a rate which enables people and communities to provide for their social, economic and cultural wellbeing, health and safety. It also requires consideration of the respects in which it would or would not meet the goals described in paras (a), (b) and (c).*
>
> *The method of applying s 5 then involves an overall broad judgment of whether a proposal would promote the sustainable management of natural and physical resources. That recognises that the Act has a single purpose … Such a judgment allows for comparison of conflicting considerations and the scale or degree of them, and their relative significance or proportion in the final outcome.[13] (Emphasis added)*
>
> *This conclusion was based on a marine farming decision for mussell and sponge farming in the Marlborough Sounds, where the Court had found that the general scheme of the RMA*

---

[10] See: The Rt. Hon. Simon Upton "The meaning and role of Section 5 of the Resource Management Act 1991" in T Daya-Winterbottom (ed) *Frontiers of Resource Management Law* (2012), 29-39; Malcolm Grant, "Sustainable management: A sustainable ethic?", in T Daya-Winterbottom, (ed) *Frontiers of Resource Management Law* (2012), 40-60; K J Grundy, "In search of logic: s 5 of the Resource Management Act", *New Zealand Law Journal*, February 1995, 40-44; The Rt. Hon. Simon Upton, *Purpose and principle in the Resource Management Act*, The Stace Hammond Grace Lecture 1995, University of Waikato, 26 May 1995, 1-21; The Rt. Hon. Simon Upton "In search of the truth", *Planning Quarterly*, March 1996, 2-3; Bruce Pardy, "Planning for serfdom: Resource management and the rule of law", [1997] *New Zealand Law Journal*, 69-72.

[11] North Shore City Council v Auckland Regional Council [1997] NZRMA 59.

[12] *Watercare Services Ltd v Minhinnick* [1998] NZRMA 113 at 124-125 per Tipping J.

[13] [1997] NZRMA 59 at 94.

> *"contemplates that some adverse effects from developments … may be considered acceptable, no matter what attributes the site may have".*[14]

Section 5 of the RMA is supported by a series "accessory" principles in ss 6-8 that are "subordinate" to the statutory purpose and provide non-exclusive examples of how sustainable development can be achieved.[15] In the context of the coastal environment they include preserving the natural character of the coastal environment, and protecting outstanding natural landscapes, from inappropriate use and development.[16] The provisions in Part 2 of the RMA are central to the working of the statute and underpin the preparation of policy statements and plans, and the determination of resource consent applications. The RMA provides for an elaborate hierarchy of policy statements and plans including the preparation of national policy statements by the responsible ministers, and the preparation of policy statements and plans by local authorities. The RMA also provides functionaries with a policy choice as to how adverse environmental effects should be addressed, and requires that they should be avoided, remedied, or mitigated.[17] Thus policy statements and plans can direct which approach should be adopted to addressing adverse environemtal effects, or they can leave the choice open to consent authorities when deciding resource consent applications (e.g. coastal permits). The overall broad judgment, or balanced judgment, approach has been applied consistently by the courts until challehged by the *King Salmon* appeals.

King Salmon

The Supreme Court returned to the debate between "bottom lines" and "trade-offs" in *King Salmon*.[18] In particular, the Society challenged the decisions on the basis that Policies 13 and 15 of the NZCPS require outstanding natural landscapes to be "avoided", and that this policy directive established a clear environmental bottom line. Two questions of law were put before the Court regarding Papatua, namely:

---

[14] Trio Holdings Ltd v Marlborough District Council [1997] NZRMA 97.

[15] New Zealand Rail Ltd v Marlborough District Council [1994] NZRMA 70 at 85 per Greig J.

[16] RMA, s 6(a) and (b).

[17] RMA, s 5(2)(c).

[18] [2014] NZSC 38.

- The interpretation of s 67(3)(b) of the RMA and NZCPS Policies 13 and 15, namely:
    - Whether the NZCPS contains standards that must be complied with regarding outstanding natural landscapes; and
    - Whether the Board of Inquiry properly applied these provisions in coming to a balanced judgment; and
    - Whether the Board of Inquiry was obliged to consider alternatives in cases where the subject site is located in, or gives rise to, adverse effects on, an outstanding natural landscape in the coastal environment.

The Supreme Court noted the overall purpose of Policies 13 and 15 is directed to preserving the natural character of the coastal environment and protecting it from inappropriate subdivision, use, and development,[19] and protecting natural features and landscapes in particular. It also noted the differing levels of statutory protection offered by the NZCPS depending upon the site-specific considerations of the "nature of the areas at issue" and the interplay of relevant NZCPS policies. It found that:[20]

> *… the local authority's obligations vary depending on the nature of the area at issue. Areas which are "outstanding" receive the greatest protection: the requirement is to "avoid adverse effects". Areas that are not "outstanding" receive less protection: the requirement is to avoid significant adverse effects and avoid, remedy or mitigate other adverse effects. In this context, "avoid" appears to means "not allow" or "prevent the occurrence of" …*

Turning to the relationship between NZCPS policies and Part 2 of the RMA, the Court observed that:[21]

> *The … NZCPS was intended to give substance to the principles in pt 2 in respect of the coastal environment by stating objectives and policies which apply those principles to that environment: the NZCPS translates the general principles to more specific or focused objectives and policies. … To illustrate, s 5(2)(c) of the RMA talks about "avoiding, remedying or mitigating any adverse effects of activities on the environment" and s 6(a) identifies "the preservation of the natural character of the coastal environment (including the coastal marine area) ... and the protection of [it] from inappropriate subdivision, use and development" as a matter of national importance to be recognised and provided for. The NZCPS builds on those*

---

[19] RMA, s 67(3)(b) provides that a regional plan **must** give effect to any NZCPS (emphasis added).

[20] [2014] NZSC 38 at [62].

[21] Ibid at [90].

> *principles, particularly in policies 13 and 15. Those two policies provide a graduated scheme of protection and preservation based on the features of particular coastal localities, requiring avoidance of adverse effects in outstanding areas but allowing for avoidance, mitigation or remedying in others.*

However, the Supreme Court noted the danger inherent in an overall judgment approach when reconciling the competing considerations of promoting salmon farming and protecting outstanding landscapes in the coastal environment, and the obvious point that only some areas will be "outstanding". The Court therefore stated that:[22]

> *A danger of the "overall judgment" approach is that decision-makers may conclude too readily that there is a conflict between particular policies and prefer one over another, rather than making a thoroughgoing attempt to find a way to reconcile them.*

In the context of the NZCPS the Court was able to reconcile Policies 13 and 15, which are aimed at protecting "outstanding" natural features and landscape, with Policy 8, which recognizes the need to make provision for salmon farming in suitable areas. The Court observed that salmon farming "cannot occur in one of the outstanding areas if it will have an adverse effect on the outstanding qualities of the area", and if interpreted in this way the Policies were not in conflict.[23]

The Court considered the framework of s 5 of the RMA in the context of its interpretation and application by the statutory planning instruments in the policy statement and plan hierarchy, and the increasingly specific scrutiny that proposed activities are subject to as they are examined through the lens of the RMA decision-making microscope. It observed that s 5 of the RMA, "was not intended to be an operative provision" but "rather … sets out the RMA's overall objective".[24] The hierarchy of policy and planning documents "flesh out the principles in s 5" and the ancillary ss 6-8 of the RMA, in an increasingly detailed manner.[25] Such documents give practical effect to s 5 as they form the basis for decision-making. Some of

---

[22] Ibid at [131].

[23] Ibid.

[24] Ibid at [151].

[25] Ibid.

the documents may contain elements that are quite specific and not open-textured, and thus will not be subject to a "balanced judgment" re-interpretation under s 5.[26]

As a result, the Court concluded (regarding question 1) that a balanced judgement approach was not appropriate in relation to Papatua when viewed against the backdrop of site-specific facts and the relevant NZCPS policies. It found that:[27]

> *The Board accepted that the proposed plan change … would have significant adverse effects on an area of outstanding natural character and landscape … We accept the submission on behalf of EDS that, given the Board's findings in relation to policies 13(1)(a) and 15(a), the plan change should not have been granted. These are strongly worded directives in policies that have been carefully crafted and which have undergone an intensive process of evaluation and public consultation. The NZCPS requires a "whole of region" approach and recognises that, because the proportion of the coastal marine area under formal protection is small, management under the RMA is an important means by which the natural resources of the coastal marine area can be protected. The policies give effect to the protective element of sustainable management.*

Separately, regarding the question of alternatives sites and methods (question 2) the Court found that:[28]

> *This brings us back to the question when consideration of alternative sites may be necessary. This will be determined by the nature and circumstances of the particular site-specific plan change application. For example, … if the applicant claims that a particular site has features that make it uniquely, or even especially, suitable for the activity, the decision-maker will be obliged to test that claim; that may well involve consideration of alternative sites, particularly where the decision-maker considers that the activity will have significant adverse effects on the natural attributes of the proposed site. In short, the need to consider alternatives will be determined by the nature and circumstances of the particular application relating to the coastal environment, and the justifications advanced in support of it …*

Subsequently, there has been a range of commentary about the judgment. For example, the

---

[26] Ibid.

[27] Ibid at [153].

[28] Ibid at [170].

likely effect of the landmark judgment was neatly summarised by Peart who observed:[29]

> *This is arguably the most important decision on the Resource Management Act (RMA) that has been given by our courts to date and it establishes new jurisprudence in this area. EDS has always believed that the overall broad judgment approach was wrong and that the RMA contains environmental bottom lines.*

Williams on the other hand expressed a more conservative view of the judgment and considered that it may be limited only to cases regarding the NZCPS. He drew attention to the Court's reliance on the statutory provisions in the RMA that underpin the NZCPS and the pragmatic nature of the "overall judgment" approach and its utility in resource consent decision-making. For example, he observed that:[30]

> *… Any development proposal with material benefits is likely to have some effect on the environment. Absolutes of any kind cannot be reconciled. Complete avoidance is obviously not required, as the words "remedied or mitigated" in s 5(2)(c) themselves confirm.*

However, Williams accepted that while the RMA does not establish a "mandatory 'bottom line' approach … across the board", the scheme of the statute does allow local authorities to set "environmental bottom lines through planning instruments".[31] Additionally, the editorial note to Williams' opinion piece observes that the policy statement and plan hierarchy under the RMA will be "material" to statutory interpretation, and that a proposed activity seeking to achieve something that the NZCPS seeks to avoid "is going to face 'something approaching an environmental bottom line'".[32]

Conclusion

This decision has again brought to the fore what is an interesting and ongoing debate regarding the meaning and effect of Part 2 of the RMA. While Williams' analysis is acknowledged, the potential effect of the *King Salmon* judgment is likely to occur in cases

---

[29] Raewyn Peart, Environmental Defence Society, Media Release (17 April 2014).

[30] Martin Williams, *Supreme Court's decision in Environmental Defence Society v King Salmon* Obiter (Resourc Management Law Association 9 June 2014): www.rmla.org.nz: accessed 9 June 2014.

[31] Ibid.

[32] Ibid.

where a proposed activity (based on an effects assessment) conflicts with a relevant policy statement or plan provision that is found to have set one or more environmental bottom lines. This may be limited to cases regarding the matters of national importance under s 6 of the RMA, or may include the other principles in ss 7 and 8 of the RMA. It could, however, have a wider ambit as these provisions are given as non-exclusive examples of what may constitute sustainable management and it remains open to decision-makers to identify other examples of what may be considered to be matters of national importance under the RMA.[33] As a result, the impact of the judgment is potentially wider than contended by Williams, but probably narrower than that anticipated by Peart. Finally, the judgment confirms the strong potential regulatory effect of policy statements under the RMA.[34]

[33] Auckland Volcanic Cones Society Inc v Transit New Zealand (A203/2002) NZEnvC.

[34] [2014] NZSC 38 at [112]-[116] citing *Auckland Regional Council v North Shore City Council* [1995] 3 NZLR 18 (CA) at 23 per Cooke P with approval.

COUNTRY REPORT: NIGERIA
The Cart before the Horse?: Biosafety Regulations and Modern Biotechnology Activities in Nigeria

Uzuazo Etemire*

Introduction: The Need for Biosafety Regulations

'Modern biotechnology' is revolutionising the way we produce, perceive and decide on the food we consume as humans. To be clear, modern biotechnology is 'the application of: (a) In vitro nucleic acid techniques, including recombinant deoxyribonucleic acid (DNA) and direct injection of nucleic acid into cells or organelles, or (b) Fusion of cells beyond the taxonomic family, that overcome natural physiological reproductive or recombination barriers and that are not techniques used in traditional breeding and selection'.[1] In other words, modern biotechnology produces what is generally termed as 'Living (or Genetically) Modified Organisms' (LMOs or GMOs), i.e., 'any living organism [e.g. plants and animals] that possesses a novel combination of genetic material obtained through the use of modern biotechnology'.[2] And foods produced from or using GMOs are usually referred to as 'GM foods' which the World Health Organisation (WHO) has defined as 'foods derived from organisms whose genetic material (DNA) has been modified in a way that does not occur naturally, e.g. through the introduction of a gene from a different organism'.[3]

The advent of modern biotechnology has been associated with its potential for providing solutions to major agricultural problems – like low crop yields and stress related issues arising from pests, diseases, drought etc. – that could aggravate world hunger and poverty.[4] Essentially, modern biotechnology is said to be aimed at improving crop protection,

* LL.B (Benin), BL (Nigeria), LL.M (Nottingham), Ph.D. (Glasgow); Lecturer-in-Law (University of Port Harcourt, Nigeria) and Barrister and Solicitor of the Supreme Court of Nigeria; Email: uzuazoe@yahoo.com.

[1] Cartagena Protocol on Biosafety to the Convention on Biological Diversity, adopted 29 January 2000, art 3(i).

[2] Ibid, art 3(g).

[3] Available at: http://www.who.int/topics/food_genetically_modified/en/.

[4] F Nang'ayo, The Status of Regulations for Genetically Modified Crops in Countries of Sub-Saharan Africa (African Agricultural Technology Foundation, 2006) 4.

productivity, durability and nutritional value. Amongst other perceived benefits it is touted to be capable of delivering to its producers, farmers, consumers and the environment.[5] While the deployment of biotechnology has been hailed as a success in some quarters, apart from serious concerns about the ethical and trade-related aspects of the application of the technology, there is the persistent evidence-based fear that GMOs could in fact be counterproductive, incapable of delivering some of their touted benefits and harmful to the health of consumers and the environment.[6] To compound issues, only very limited testing has been done to properly evaluate the harm GMOs may have on humans and the environment.[7]

Given the above legitimate concerns and the need to properly harness whatever potential benefits it embodies, the need to regulate the application of modern biotechnology and its output immediately becomes apparent. This need has since been clearly recognised and firmly established in the *1992 UN Framework Convention on Biological Diversity*[8] (CBD) which, whilst recognising the potential benefits biotechnology hold for human wellbeing, stresses the need for states to put in place measures aimed at addressing the risks to human health and the environmental associated with the use and release of GMOs.[9] In furtherance of this position – and in accordance with Article 19(3) of the CBD – *the 2000 Protocol on Biosafety to the CBD* [10] (Biosafety Protocol) was adopted and, focusing especially on transboundary movements, Article 2(2) of the regime obliges parties to 'ensure that the development, handling, transport, use, transfer and release of any living modified organisms are undertaken in a manner that prevents or reduces the risks to biological diversity, taking also into account risks to human health'. Both the *CBD* and the *Biosafety Protocol* are currently in force.

---

[5] WHO, *Frequently Asked Questions on Genetically Modified Food* (WHO, May 2014), available at: http://www.who.int/foodsafety/areas_work/food-technology/faq-genetically-modified-food/en/.

[6] See Nang'ayo (n 4) 5; and E Turow, 'You Need to Know: The Facts and Debate about GMOs', *The Huffington Post,* 9 August, 2014, available at: http://www.huffingtonpost.com/eve-turow/you-need-to-know-the-fact_b_5570951.html.

[7] Turow (n 6).

[8] Rio de Janeiro (Brazil), 5 June 1992, in force 29 December, 1993, available at: http://www.cbd.int/convention/text. Ratified by Nigeria on 29 Aug. 1994.

[9] See Arts 8(g) and 19.

[10] Montreal (Canada), 29 January, 2000, in force 11 Sept. 2003, available at: http://www.cbd.int/doc/legal/cartagena-protocol-en.pdf. Ratified by Nigeria on 15 July 2003.

Whilst the biotechnology/GMO debate – as to its pros, cons, concerns, acceptability and appropriate regulation – has been a major one internationally, it is only just becoming a major issue in Nigeria – a party to both the *CBD* and the *Biosafety Protocol*. In Nigeria, 2014 witnessed an increase in this debate by diverse stakeholders through the media; biotechnology and biosafety issues received the prime attention of the 2014 Nigerian National Conference, and in 2014 a Bill for an act establishing the National Biotechnology Development Agency was approved by the Nigerian Federal Executive Council to be sent to the National Assembly for passage into law. It is in the light of such recent developments (further discussed below), and earlier ones, that it was thought relevant to write this report which, hereinafter, examines the current status of biosafety regulation in Nigeria in relation to the extent of its modern biotechnology (permitted-) activities, and questions whether the country is 'placing the cart before the horse' in a manner potentially detrimental to human wellbeing and the environment.

The Status of Biosafety Regulation in Nigeria

With a view to harnessing the potential benefits of modern biotechnology whilst safeguarding against its potential risks, Nigeria, amongst other countries, has ratified the CBD and Biosafety Protocol. Consequently, under those treaties and in view of their detailed provisions, Nigeria is generally obliged to take appropriate legal, administrative and other measures. This includes putting in place adequate biosafety regulations to ensure that the development, handling, release and use of LMOs or GMOs is undertaken in a manner that prevents or reduces the risks to biological diversity and human health.[11] Moreover, section 12 of *the Constitution of the Federal Republic of Nigeria*, 1999 (as amended) (Nigerian Constitution) provides that '[n]o treaty between the Federation and any other country shall have the force of law except to the extent to which any such treaty has been enacted into law by the National Assembly.' Hence, considering the aforementioned stipulations, the relevant question here is: has Nigeria taken adequate domestic legal steps to comply with its abovementioned international obligation? The answer is largely in the negative.

Currently, Nigeria has no binding biosafety legislation regulating any aspect of the development and deployment of modern biotechnology or its output. In this respect, the major regime in existence is the *National Biotechnology Policy*[12] that was approved by the Federal Executive Council on 23 April, 2001, with its 'overall objective' being 'to provide a

[11] See CBD, Arts 8(g) and 19(3); and Biosafety Protocol, Art 2(1).

[12] On file with author.

regulatory regime and guidance for the sustainable development of the science of modern biotechnology, its application and safe use of its products without prejudice and risk to public health, environmental health, national sovereignty, human dignity and fundamental human rights'.[13] However, given its scope and nature as a non-binding instrument, the policy is largely inadequate to effectively regulate issues relating to biotechnology in Nigeria and in a manner that appropriately domesticates and implements the country's international obligations. This is a fact that is clear to, and accepted by, the relevant government authorities - who now clamour for a legally binding instrument that more properly and adequately regulates issues relating to biotechnology and GMOs in Nigeria.[14]

It was in that light that a *Nigerian National Biosafety Bill*[15] was developed, with the aim of ensuring adequate protection of humans and the environment in the development, handling, transfer and use of GMOs, in a manner that conforms to international obligations. The Bill also seeks to establish a National Biosafety Authority (NBA) generally charged with the responsibility of implementing the Biosafety Bill and addressing all matters connected thereto. In fact, this is in line with the 'mission' of the National Biotechnology Policy, which is to 'facilitate the development, enactment and implementation of a regulatory regime (legislation) that ensures the safe application and use of the products of Modern Biotechnology.'[16] However, *the National Biosafety Bill* has suffered many setbacks: it was first placed before the National Assembly in 2006 for passage into law and was eventually passed by the house in 2010; however, it failed to get presidential assent before the expiration of the last administration, so had to be returned to the current National Assembly for further legislative action.[17]

The quality of the Bill has also been called into question, and there are significant calls for it to be improved before its passage into law so that it can fully achieve its aim and be more effective. For example, the Nigerian government recently organised a National Conference which was held from 17 March – 14 August, 2014, with the aim that the Conference –

---

[13] Para 4.

[14] See generally, M Kandi, 'Revisiting Bio-safety Regulations for Agricultural Development in Nigeria', *Peoples Daily,* 26 December, 2014, available at: http://www.peoplesdailyng.com/revisiting-bio-safety-regulations-for-agricultural-development-in-nigeria/.

[15] On file with author.

[16] Para 3.

[17] DH Samson, 'What Nigerians should know about Biosafety Bill', *Punch,* 27 November, 2014, available at: http://www.punchng.com/opinion/what-nigerians-should-know-about-biosafety-bill/.

comprised of 492 delegates that were considered broadly representative of the diverse political, social, cultural, religious and economic interests in Nigeria – proffers solutions to the diverse challenges facing the country.[18] Part of the resolutions from the Conference includes the review of the *Biosafety Bill* to:

- make it 'obligatory to ensure public participation when applications to introduce GMOs are being considered';
- 'specify clearly how large-scale filed [sic - field] trials would be contained and regulated to avoid contamination of surroundings or farm[s]';
- include environmental NGOs and farmers organisations in the Governing Board of the Agency created under the Bill to oversee the regulation of modern biotechnology and GMOs in Nigeria;
- 'state [the] criteria for risk assessment and [that] such assessments must be carried out in Nigeria and not offshore';
- 'include the implementation of the precautionary principle that entitles our government to decide against approval or for restriction in cases of incomplete or controversial knowledge';
- include 'strict liability' provisions; and
- 'ensure the independence of the Biosafety Agency to guarantee its efficacy'.[19]

The above recommendations from the Conference are yet to be acted on or reflected in the Bill.

Moreover, there are also serious concerns that the Nigerian public has not been given adequate opportunity to meaningfully participate in the process of making or (re)shaping the highly significant Biosafety Bill which, amongst other objectives, seeks to potentially legitimise the application of modern biotechnology and the use of GMOs in Nigeria – a

---

[18] See 2014 National Conference Report, 2-4 and 23 (on file with author); Daily Independent, 'Text of President Goodluck Jonathan's Address at the Inauguration of National Conference', *Daily Independent,* 17 March, 2014, available at: www.dailyindependentnig.com/2014/03/text-of-president-goodluck-jonathans-address-at-the-inauguration-of-national-conference/; and F Olokor, 'Confab Report: FG set up Implementation Committee', *Punch,* 6 September, 2014, available at: www.punchng.com/news/confab-report-fg-set-up-implementation-committee/.

[19] 2014 National Conference Report, 92-93 and 482.

change with enormous implications for the public and the environment.[20] Indeed, the dearth of meaningful public participation in law-making in Nigeria is a perennial problem that is yet to be solved; the Nigerian public, it has been argued, has 'little or no opportunity to meaningfully partake in the design or formulation of regulatory law'.[21] Corroborating this point and stressing the need for improvement, the current Deputy Senate President of Nigeria recently conceded that:

> *If we must get better laws, then we must first endeavour to get the lawmaking processes right and in tandem with global best practices. If we must also get our law making processes right, then, we must necessarily…enrich interface between it [the legislature] and other critical stakeholders such as the…civil society, etc… If we must tag our laws as people's laws, it is only reasonable and moral for the process to be a [sic] truly people-driven… [There is] the need to integrate the larger population of Nigerians residing in the rural areas into the law reform and lawmaking process… [and] unless we find a way of properly integrating our rural populations [many of whom are faced with challenges of illiteracy, poverty and mobility] as active participants in the process of making laws under which they are compelled to live, we would have short-changed the greater majority of Nigerians'.*[22]

Furthermore, there has since been in existence in Nigeria the National Biotechnology Development Agency (NABDA) which was established (under the auspices of the Federal Ministry of Science and Technology) by the Federal Executive Council in November 2001 to implement the National Biotechnology Policy.[23] Specifically, the mandate of NABDA is the 'promotion, coordination and deployment of cutting-edge biotechnology research & development, processes and products for the socio-economic well-being of the nation'.[24] However, it has been reasonably argued that 'the idea of setting up the Nigeria

---

[20] Health of Mother Earth Foundation, 'Genetic Engineering as Threat to Nigeria's Food Security', available at: http://www.homef.org/article/genetic-engineering-threat-nigerias-food-security.

[21] Oshionebo E, 'Transnational Corporations, Civil Society Organisations and Social Accountability in Nigeria's Oil and Gas Industry' (2007) 15 (1) *African Journal of International and Comparative Law* 107, 123.

[22] I Ekweremadu, 'Opening Address', delivered at the International Conference on Law Reform and Law-making Process in Nigeria, held in Abuja, Nigeria, on 16 July 2012, available at: http://www.nassnig.org/nass/news.php?id=366.

[23] Available at: www.nabdagov.ng/about.

[24] Ibid.

Biotechnology Development Agency was hasty as it was set up in a situation where Nigeria did not have and still does not have an adequate regulatory framework such as a Biosafety Law'.[25] Accordingly, the Director-General of NABDA has protested that the absence of a biosafety law has made it difficult for the agency to perform its designated assignment.[26] Also, NABDA has faced further challenges given that it has been operating since 2001 without legislation governing its existence. Thus, according to the Nigeria's Minister for Science and Technology, 'in realisation of this and the challenges posed by lack of enabling law' and the inadequacy of subsisting regimes, the Federal Executive Council in 2014 approved a draft Bill for an act establishing NABDA to be sent to the National Assembly for passage into law.[27]

In summary, considering the above discussion and the country reports submitted by the relevant Nigerian authorities to the CBD Biosafety Clearing-House,[28] it is quite clear that for a country (whose officials are) actively seeking to harness the potential benefits of modern biotechnology, the legal, administrative and scientific structures in place on the subject-matter are too weak and inadequate to ensure any reasonable level of protection to humans and the environment, with respect to the application of biotechnology and the use of its output.

Unfolding Biotechnology Activities in Nigeria: Jumping the Gun?

One would ordinarily think that considering the dearth of effective legal and administrative biosafety structure in Nigeria, the government would put on hold modern biotechnology activities and deployments that could adversely affect human health and the environment, until the necessary biosafety measures are in place. But, quite sadly, this does not seem to

---

[25] Health of Mother Earth Foundation (n 20).

[26] O Alawode, 'Bio-safety Law Holds Many Possibilities for Nigeria Agribusiness', *Business Day,* October 22, 2014, available at: http://businessdayonline.com/2014/10/bio-safety-law-holds-many-possibilities-for-nigerias-agribusinesses/#.VMHR-SvF_Hs.

[27] J Andrew, 'FEC Approves NABDA Bill, to Transmit it to National Assembly', *ThisDay,* 30 October, 2014, available at: http://www.thisdaylive.com/articles/fec-approves-nabda-bill-to-transmit-it-to-national-assembly/192674/.

[28] Nigeria, 'Second Regular National Report on the Implementation of the Cartagena Protocol on Biosafety' (2011), available at: https://bch.cbd.int/database/reports/; and Nigeria, 'First Regular National Report on the Implementation of the Cartagena Protocol on Biosafety' (2008), available at: https://bch.cbd.int/database/reports/.

be the case as there is evidence suggesting and indicating the advancement of such modern biotechnology activities in the country with the backing of the government.

First, in that regard, there have long been credible allegations about the introduction of GMO products into the Nigerian market, to which the majority of the Nigerian public are ignorant of. Nnimmon Bassey, Nigerian environmentalist and Chair of Friends of the Earth International 2008-2012 – in an article titled '*Do not Force-Feed Nigerians with GMOs*', recalled that:

> *in 2006/7 when an unauthorised (Liberty Link Rice 601) GMO rice was known to have been introduced into the market, Friends of the Earth Africa in efforts coordinated by Nigeria's Environmental Rights Action conducted tests on rice samples obtained from markets in…Nigeria... [and] the illegal rice was found in Nigeria… Reports [about this development] forwarded to Nigerian authorities and agencies including NAFDAC where [sic] neither acknowledged nor acted upon.*[29]

Also, without appropriate legal, administrative or even technical structures to adequately regulate and monitor their activities, the Nigerian government has activity sought and allowed major global GMO producers like Monsanto, Syngenta and DuPont to establish bases in Nigeria.[30] The Chairman, Senate Committee on Science and Technology, Prof. Robert Boroffice was noted to have said: 'I can speak authoritatively that Mr. President will be anxious to enact a bio-safety law, when he gets the passed bill… for the interest of the country… So, [sic] that Monsanto and other countries [sic] can come to Nigeria to assist us in boosting agricultural production not only in food but also in area of cotton, cowpea, maize, tomatoes'.[31] However, apart from the fact Monsanto and the likes are already on the ground before the passage of the Biosafety Bill, it appears from that statement that the major focus is to use the Bill as 'a gateway to guarantee Monsanto's [and the likes] entry into Nigeria',[32]

---

[29] See N Bassey, 'Do not Force-Feed Nigerians with GMOs', *Sahara Reporters,* 27 June 2013, available at: http://saharareporters.com/2013/06/27/do-not-force-feed-nigerians-gmos-nnimmo-bassey. See also, Health of Mother Earth Foundation (n 20).

[30] A Adesina, 'Score Card: Federal Ministry of Agriculture and Rural Development Mid-Term Report – January 1, 2013 – December 31, 2013' (Federal Ministry of Agriculture and Rural Development, 14 January, 2014) 9, available at: http://www.fmard.gov.ng/library.

[31] The Guardian, 'Minister, Stakeholders Disagree over Genetically Modified Foods', *The Guardian Mobile,* 29 June, 2014, available at: http://www.theguardianmobile.com/readNewsItem1.php?nid=29127.

[32] Ibid.

rather than as a measure to strictly regulate and monitor such enterprises and ensure biosafety. This is worrisome.

In addition, confined field trials of several GM crops are being carried out in several locations in Nigeria without adequate public consultation and information or adequate biosafety mechanisms in place.[33] For example, there is the BT Cowpeas – developed with BT genes supplied by Monsanto and its transformation research complete by CSIRO in Australia – that is undergoing field trials in Nigeria under the Institute for Agricultural Research (IAR) in Zaria, Nigeria.[34] Other confirmed GM crops undergoing such trials in Nigeria include 'the African bio-fortified sorghum also in Zaria and the cassava plus at the National Root Crops Institute at Umudike, Abia State'.[35] Worried, a writer comments: 'the scientist[s] at (IAR) Zaria [and others institutes] without Bio-safety laws or public discourse, are carrying out field trials with technology they don't have the ability to create, test or assess the effects on the humans that will consume them'.[36] Others are concerned about the lack of adequate information about these activities and question: 'Have these test crops already been smuggled into the farms? Are we eating them already?'.[37]

Conclusion

This report has established that the development and application of modern biotechnology and its output, though bearing in mind its potential benefits, could adversely affect humans and the environment, and thus needs to be adequately regulated with the aim of protecting humans and the environment. With respect to Nigeria, adequate structures and mechanisms needed to protect humans and the environment from the possible adverse effects of modern biotechnology and its output have not yet been put in place. However, the Nigerian government is already taking what may be considered major steps in the advancement of the practice of modern biotechnology in the country, accompanied with a 'body language'

---

[33] Ibid.

[34] OC Ezezika and AS Daar, 'Overcoming Barriers to Trust in Agricultural Biotechnology Projects: A Case Study of Bt Cowpea in Nigeria' (2012) 1 (1) *Agriculture & Food Security*, 1-8

[35] The Guardian (n 31). See also, Ezezika and AS Daar (n 34).

[36] G Rhodes-Vivour, 'Why We Must Reject Monsanto's Trojan Horse – A Response to Monsanto'**,** *African Health Magazine,* 20 June, 2014, available at: http://africanhealthmagazine.com/2014/06/20/why-we-must-reject-monsantos-trojan-horse-a-response-to-monsanto/.

[37] Health of Mother Earth Foundation (n 20).

that suggests that the government is indifferent about ensuring that adequate biosafety measures are first in place before any deployment of the technology or its output, if at all. This is placing the cart before the horse, and the government should reconsider its approach to this important issue. Before dabbling in modern biotechnology activities that could have adverse effects on humans and the environment, the relevant international laws (applicable to Nigeria) and common-sense all warrant that adequate biosafety measure should *first* be established.

COUNTRY REPORT: PAPUA NEW GUINEA
Papua New Guinea's Action Plan for Climate Change

Hitelai Polume-Kiele*

Introduction

Papua New Guinea is an island nation facing an enormous challenge – the threat of global warming. With a 17,000 km coastline and about 600 low-lying islands which are home to an estimated population of about 500,000, the threat of global warming and associated changing climatic patterns are real, as seen in the case of the inhabitants of the low-lying island of Carterets who became the first people in the world to be forced to relocate due to rising sea levels. The people of Carterets Islands are the world's first climate change 'refugees'. The Carterets' Islands people and other coastal and low-lying island communities within and around PNG are vulnerable to sea level rise and other climate-related impacts, such as coastal flooding, inland flooding and landslides, and the spread of malaria. In addition, the gradual changes in changing climate conditions and patterns also impact on food production and cause damage to its coral reefs and marine resources which are a threat to the livelihood of its people, and the economy.

Papua New Guinea signed *the United Nations Framework Convention on Climate Change (UNFCCC)* in June 1992. In April 1993; PNG ratified *the UNFCCC* and confirmed its commitment to fulfilling its obligations under the Convention. Seven years later (in November 2000), PNG submitted its National Communication as required under Articles 4 and 12 of the *UNFCCC* and provided details of its key action plans, policies and strategies on its major sources of GHG emissions and sinks, and vulnerability.[1] In addition, this National Communication also included proposals that PNG intended to implement in its efforts to address to climate change impacts including its contribution in reducing GHG emissions.

* PhD Student, Centre for Agriculture and Law, University of New England, NSW Australia.

[1] Government Papua New Guinea, 'Papua New Guinea Initial National Communication Under the United Nations Framework Convention on Climate Change' (November, 2000), Ministry of the Environment and Conservation; [MEC] (2000); Papua New Guinea Initial National Communication under the United Nations Framework Convention on Climate Change. Retrieved from http://unfccc.int/resource/docs/natc/papnc1.pdf (Accessed 24/11/2014).

The office of Climate Change is the implementing agency of the PNG government, tasked with responsibilities for the development of appropriate policies and regulation (when introduced) that will enable PNG to deal with issues relating to climate change.

This report is focused on the fact that whilst PNG is committed to mitigating climate change, and has presented details of its key action plans, policies and strategies on its major sources of GHG emissions and sinks, and vulnerability in its 2002 Report to *the UNFCC*; 14 years later it appears these priorities, key plans, policies and targets are yet to materialise. The reason for this failure is particularly due to the lack of government providing leadership, support and direction in ensuring that the PNG Parliament enact legislation which addresses climate change risks and ensuring that all stakeholders participate in decision-making and governance in addressing the risks and benefits of climate change. This report will highlight some key plans, policies and strategies that have been undertaken to date in promoting environmentally sound adaptation activities which are targeted towards supporting a sustainable livelihood and economic prosperity, and adaptation and disaster risk reduction[2] for all its vulnerable communities.

[2] World Bank and Government of Papua New Guinea, 'Climate Change in Papua New Guinea: Framework for the National Climate Change Strategy and Action Plan' (World Bank, Government of Papua New Guinea, June 2010) viii, http://documents.worldbank.org/curated/en/2010/06/16400674/climate-change-papua-new-guinea-framework-national-climate-change-strategy-action-plan (Accessed 09/02/2015).

Figure 2 - Map of Papua New Guinea Source: <http://www.pacificclimatechangescience.org/wp-content/uploads/2013/06/14_PCCSP_PNG_8pp.pdf>

Currently the only legislation that relates to climate change is based on environmental planning measures. There are no codes of practice that are used as an integral part of project planning for developments that involve significant environmental risk. The Office of the Department of Environment and Conservation has responsibilities for the regulation and administration in terms of policy advice and technical advisory support for the sustainable development of key sectors, such as coastal and marine ecosystems, water resources, agriculture and forestry; health and fisheries. Although the formulation and implementation of policy measures has been devolved to the provinces, there is an increased need to continue to fund and strengthen the capacities of local institutions and communities in dealing with climate change impacts. Government funding of environmental planning measures continues to be a major concern for remote local communities.[3]

This paper outlines the action plan that PNG proposes to take in identifying the most relevant event-driven hazards, areas vulnerable to these hazards and the types of measures

[3] Papua New Guinea, above n 1, 4.

that would be adopted to either adapt to or mitigate these event-driven climatic changes. It will highlight a selection of event-driven climatic hazards that communities in PNG are adapting to and how they are dealing with issues of climate change.

Action Plan for Climate Change

Firstly, PNG is yet to enact any law on Climate Change. However, the PNG Government has been consulting closely with the Australian Government's International Climate Change Adaptation Initiatives (ICCAI*), the United Nations Framework Convention on Climate Change (UNFCCC)*, civil society and its development partners. It has begun the process of putting together a credible and transparent system, equipped with the appropriate policies and mechanisms to assist PNG address climate change and carbon trading concerns. The Government, with assistance from its development partners and non-government Agencies has carried out a number of consultations and training programs with communities that have been identified as likely to be most affected. The government is also consulting with the local customary landowners (resource owners) and coastal communities so that they take ownership of these issues and take initiatives to adjust, adapt or take remedial actions in their specific areas or location. Whilst Government agencies such as the Office of Climate Change Development, PNG Forestry Authority, the Department of Environment and Conservation, including its development partners and the global community are involved, it is the local inhabitants who are taking strategic steps and action to adapt or mitigate climate change or take remedial action to prevent drastic outcomes as shown by a number of programs that are being funded as outlined in this presentation. Currently, the steps taken by both the Government of PNG and the local communities consulted have been directed towards preparing a policy strategy of adaptation and mitigation measures to address the impacts of climate change. PNG however needs funding and technical assistance to strengthen its capacity to address the impacts of climate change.

Identification of Hazards

According to the Copenhagen Accord there are six serious climate-induced hazards. These are identified as coastal flooding and sea level rise, inland flooding driven by irregular rainfalls, landslides triggered by increased rainfall intensity, the spread of Malaria amidst raising temperatures, as well as the variability in agricultural yields and sea temperature with

adverse effects on coral reef systems.[4] These hazards manifest themselves in PNG and being prone to such serious climate-induced hazards, PNG has undertaken action which will be discussed in this paper to illustrate PNG's progress in dealing with these climate-induced hazards.

Coastal Flooding

Coastal flooding is an event that affects most PNG coastal communities, infrastructure and industry.[5] As a strategy for addressing this issue, PNG has mapped populated coastal areas along the north coast of PNG stretching from Vanimo to Lae. The high-resolution elevation data produced by this mapping effort improves the accuracy of inundation modelling which will enable PNG to understand current and future risk to infrastructure and communities.[6] For coastal risk assessment this elevation data is critical to calculating inundation projections, drainage, catchment boundaries, water flow and water sinks. It is also valuable for many other uses including infrastructure planning, evacuation planning and natural resource management. In addition, the Topographic LiDAR can also be used in conjunction with aerial imagery to produce maps of roads, structures and watercourses. For disaster planning the data can be used to model storm surge and tsunami inundation. Furthermore, industry can use the elevation data to plan construction sites, monitor land subsidence, determine pipeline routes and detect changes in vegetation growth and assessing attributes such as vegetation volume.[7] PNG stands to gain greatly from using these data to plan, develop and adopt appropriate measures aimed at addressing these impacts including management activities to address coastal flooding, capacity building and training of relevant officials.[8]

---

[4] Key National Policies, Plans and Actions, Adaptation Fund Proposal for Papua New Guinea, June 2011:http://www.pacificclimatechange.net/index.php/png-key-national-policies-plans-and-actions (Accessed Thursday, 20 November 2014).

[5] Ibid, 11.

[6] Australian Agency for International Development (AusAid), 'Papua New Guinea LiDAR Factsheet; Pacific-Australia Climate Change Science and Adaptation Planning' (September 2010) 1.

[7] Ibid.

[8] AusAid, above n6; World Bank and Government of Papua New Guinea above n 2, 1-2; Key National Policies, Plans and Actions above n 4.

Rising Sea Levels

Again, most PNG communities reside in coastal areas and on low-lying islands. As such, they are exposed to the threat of rising sea levels. The impacts of this threat are beginning to be felt already through storm surges and high tides which invade inhabitants' land, homes and food gardens. One of the communities affected by the problem of rising sea levels is the community living the Carteret Islands, in the Autonomous Region of Bougainville, PNG. It is estimated that about 2,000 of its inhabitants are listed among the first people in the world forced to relocate because of rising sea levels due to global warming.[9] Saltwater has already caused damage to almost all of their freshwater sources and has destroyed food gardens. Negotiations with the Autonomous Bougainville Government (ABG) had begun in relation to an approved relocation plan, however it is yet to be finalised.[10] Thus these 'climate change refugees' face an uncertain future. Furthermore, there is also another group of 3,000 people on the Mortlock, Fead and Tasman atolls who are also facing the same effects of climate change. Although these communities have been taking action to adapt to their situation, such as building sea walls and planting mangroves, storm surges and high tides continue to wash away homes and food gardens.[11] These communities face an uncertain future and soon these atolls will disappear from the horizon.

Deforestation

PNG has a significant area of largely-intact tropical forest which is now facing an acute and imminent threat. Forests are a vital resource for the local population, particularly in remote rural areas of PNG where the local communities rely on their forest for food, fibre and building materials. The forest also provides support to a variety of wildlife and ecosystems. Although it is estimated by the Papua New Guinea Forest Authority (PNGFA) that approximately 60% of the total area of the country is covered by natural forests; about 52% of these natural forests are considered production forests (which can be harvested for timber and other products), and the remaining 48% are set aside for conservation (restricted from

---

[9] IRIN Humanitarian News And Analysis, 'Papua New Guinea: The World's First Climate Change "Refugees"' http://www.irinnews.org/report/78630/papua-new-guinea-the-world-s-first-climate-change-refugees (accessed 24/11/2014); The Sydney Morning Herald, 'Rising sea levels threaten PNG islanders', March 12, 2007 http://www.smh.com.au/news/World/Rising-sea-levels-threaten-PNG-islanders/2007/03/12/1173548094288.html (accessed 24/11/14).

[10] Ibid.

[11] Ibid.

logging).[12] PNG is a leading proponent of REDD+, and one of the original UN-REDD 'pilot' countries. Whilst there are attempts to develop guidelines for free, prior and informed Consent (FPIC) and on developing technical elements of the country's national forest monitoring system in collaboration with the PNG Forest Authority; as well as building support for the operationalization of PNG's satellite forest monitoring system with the Office for Climate Change and Development,[13] these services are nonetheless dependent on funding assistance from bilateral government sources (e.g. JICA, EU, and Australia). Unless such funding continues, the continuity of these programs is uncertain. However, potential for private sector funding for REDD+ activities in PNG[14] is there. Most importantly, measures also have to be established as to how to ensure sustainable harvesting so that communities are able to benefit from these commercial activities.

Papua New Guinea's Responses to the Challenges of Climate Change

Climate change is affecting the lives of most Papua New Guineans. In order to mitigate the impacts of event-driven climate change conditions and patterns, PNG is committed to taking proactive steps to adapt and mitigate the impacts of climate change. The Office of Climate Change has commenced consultation with its coastal and low-lying island communities and has provided assistance through funding and training on the impacts of event-driven climate conditions. Through these programs some coastal and low-lying island communities such as Mbuke, Whal[15] and Ahus[16] Islands of Manus Province (discussed in the later part of this paper) are already implementing some programs to adapt or mitigate the event-driven climate change conditions, such as building sea walls or implementing a marine protection area to replenish their fisheries stock or plant a more resilient food crop.

---

[12] The United Nations Collaborative Programme on Reducing Emissions from Deforestation and Forest Degradation in Developing Countries; Key results and achievements of the UN-REDD National Programme in Papua New Guinea; <http://www.unredd.org/UNREDDProgramme/CountryActions/PapuaNewGuinea/tabid/1026/language/en-US/Default.aspx> 1 (Accessed 24/11/2014).

[13] Ibid.

[14] The REDD Desk, a collaborative resource for REDD readiness, http://theredddesk.org/countries/papua-new-guinea/financing (Accessed 24/11/2014) 1.

[15] Community Climate Change Adaptation in Manus Province, Papua New Guinea, https://www.youtube.com/watch?v=kql7tImYkso; Published on Oct 14, 2012.

[16] Participatory Video by the people of Ahus Island, Manus, PNG "Living with Changes" https://www.youtube.com/watch?v=xsjppJX8Vic.

At the national government level, PNG has set itself very high aspirations, economically and environmentally to transform PNG into a reference case for adaptation and mitigation action. PNG has set the following targets: [17]

- to achieve GDP per capita of USD 3,000 by 2030 as set out in our Vision 2050;
- reduce emissions of green-house gases, by at least 50% by 2030 driven mainly by abatement measures in land use, land-use change and forestry,
- become carbon neutral by 2050 and invest in low-carbon infrastructure today
- Reduce vulnerability to climate change associated risks such as gradual hazards (e.g., vector-borne disease) and event-driven hazards (e.g., landslides and flooding).

PNG has also committed itself to contributing to the ambitious agenda towards improvement of climate conditions by sequestering carbon in their forests, including placing effective control on the logging of its forest and implementing a forest adaptation program to prevent forest degradation. The current rate at which logging is being carried out in PNG is not a good sign of the effectiveness of these measures. With regard to impacts of coastal flooding, the mapping of low-lying coastal areas was made possible with the assistance of the Australian Government, the Department of Industry, Innovation, Climate Change, Science, Research and Tertiary Education, (DIICCSRTE) and Geoscience Australia which carried out the work to map and compile data on these areas.[18] This effort will greatly assist PNG in preparing for tsunamis and sea level rise. PNG has gained valuable data that has contributed greatly to assist PNG to plan, develop and adopt appropriate measures aimed at addressing the impacts of climate change, including how to manage activities that are directed towards addressing coastal flooding, capacity building and training of relevant officials. PNG now has information on the most relevant hazards and areas at most risk and thus with this information, PNG should be able to take appropriate action to adapt or mitigate these events should they occur. However, given that knowledge, funding such programs depends mostly on development assistance and non-government organisations.

---

[17] Office of Climate Change and Development Papua New Guinea, 'Updates on the Draft National Climate Change Policy' (Paper presented at the INA and IGES Workshop on A way forward – Needs challenges and opportunities for PNG on Climate Change, Land Use and Forest Resource Management and Payment for Environmental Services/REDD+, Kokoda Trail Motel, 7-8 January 2013), 3.

[18] (AusAid), above n 6.

Adaptation

Since signing the UNFCCC PNG has commenced its plans to adopt a number of strategies or apply measures to alleviate the impacts of climate change on its economy, people and country. Consequently, PNG firstly carried out a number of consultative programs with members of the public. The first such program was held in Manus Province from 20-21 September 2010. During the consultative phase of the programs, a number of event-driven climate change hazards were identified for action and were listed as: [19]

- Adaptation measures to climate change including building of sea walls;
- Community-based projects to protect coral reefs and coastal areas including legislation and establishment of support structures to guide and support communities in protecting their source of livelihood;
- Continuous supply of treated bed nets and anti-malarial prophylaxis and treatment and drugs to counter the spread of malaria to be supported by both the health and education sector; and
- Sourcing alternative measures of fresh water storage.

Manus island communities such as the Mbuke, Whal[20] and Ahus Islands[21] have begun their own community projects [22] with assistance from government and non-government organisation such as the WWF and The Nature Conservancy. These communities of Mbuke and Whal Islands have begun to adapt to their current climate change impacts and have taken steps to strengthen their food security by adopting new agricultural techniques and planting new varieties of food crops. For example, these communities have switched to planting yam instead of relying on sago which is normally planted on mainland Manus Island. They also now plant mangroves and have introduced and implemented protected marine areas to replenish their fish stock and have begun to build seawalls around their shorelines. Similarly, the people of Ahus Island, who live in a very low-lying sand island off the north coast of Manus Island, are also experiencing difficult times. Erosion, overpopulation and overfishing affect their livelihoods. The communities have responded by

---

[19] *Office of Climate Change & Development,* Provincial Consultation Feedback Report 2011, *Manus Provincial Consultation Report 2010, http://www.occd.gov.pg/images/stories/documents/Manus-Provincial-Consultation-Report.pdf (Accessed 24/11/2014); 14-21.*

[20] Community Climate Change Adaptation in Manus Province, Papua New Guinea above n 15.

[21] Participatory Video by the people of Ahus Island, Manus, PNG "Living With Changes" above n 16.

[22] Community Climate Change Adaptation in Manus Province, Papua New Guinea above n 15.

establishing marine protected areas to manage their supply of fish and other marine resources.[23] As highlighted in the Mbuke and Whal Islanders, taking early preparation to protect their food security is vital for their future. On the other hand, the Ahus Islanders need more urgent assistance which could involve relocation. However, both these two communities also do require improvement in terms of water storage which are a major concern for the outer islands and atolls in Manus Province.[24]

Conclusion

As highlighted by the various programs that have been pursued by the Mbuke, Whal and Ahus Islanders of Manus Province, some of the impacts of climate change are inescapable. The events which are occurring already will continue and will invariably increase over time irrespective of the types of emission control or trading, remedial measures or adaptation programs that PNG adopts. Time is not on PNG's side. Although PNG is currently not a major contributor to global warming, if PNG continues to increase the rate of its deforestation and degradation, over time, PNG will become another country that contributed to global GHG emissions. Overall, PNG is an active participant in the global community under the auspices of the United Nations in contributing to address climate change and wider environment issues[25] as shown by the initiatives being undertaken by the coastal and low lying island communities aimed at adapting to their current environment.

---

[23] Participatory Video by the people of Ahus Island, Manus, PNG "Living With Changes" above n 16.

[24] *Office of Climate Change & Development,* Provincial Consultation Feedback Report 2011 above n 20.

[25] Papua New Guinea Overview, Pacific Climate Change Portal, http://www.pacificclimatechange.net/index.php/country-profiles/papua-new-guinea, (Accessed 24/11/2014).

COUNTRY REPORT: PERU
Políticas y Legislación Climáticas: A Propósito de la Cumbre Mundial del Clima (COP 20, Lima)

Erick Pajares Garay*

Contexto Global y Políticas Climáticas

El presente documento constituye un reporte analítico sobre los alcances de las propuestas de política pública climática y el marco regulatorio que debe acompañar su adecuada implementación –a nivel nacional y subnacional– sin obviar la innegable influencia que ejercen los procesos globales de negociación en la reinvención de la institucionalidad necesaria para encarar la velocidad e imprevisibilidad del cambio climático antropogénico.

Partiendo de esa premisa, cabe subrayar que el Perú preside la Vigésima Conferencia de las Partes (COP 20) de la CONVENCIÓN MARCO DE LAS NACIONES UNIDAS SOBRE CAMBIO CLIMÁTICO (CMNUCC)[1], en la que se espera lograr un «documento borrador» que siente las bases y facilite la posterior adopción de un nuevo acuerdo climático global en la COP 21 (París)[2]. Diversos analistas coinciden en señalar que aun cuando nada está garantizado, en el pasado reciente se han presentado algunos hitos que incidirían positivamente en la posibilidad de alcanzar un renovado consenso mundial por el clima: 1. El Quinto Informe de Evaluación (AR5) del Panel Intergubernamental sobre el Cambio Climático (IPCC, por sus siglas en inglés), el cual sostiene que la certeza sobre la influencia humana en el sistema climático es clara y va en aumento[3]; 2. LA CUMBRE SOBRE EL CLIMA 2014: UNA ACCIÓN CATALIZADORA[4], que fue antecedida por una marcha histórica, la más grande hasta hoy

* Abogado internacionalista, juicio experto en derecho internacional ambiental y políticas globales. CEO del Grupo Biosfera – Think Tank en Investigación de Futuros Sustentables. Miembro asociado de la Academia de Derecho Ambiental (UICN - Universidad de Ottawa, Canadá).

[1] Lima, 1 - 12 de diciembre de 2014.

[2] Las opiniones y propuestas de los Estados Parte al borrador del texto de negociación se encuentran disponibles en: http://unfccc.int/resource/docs/2014/adp2/eng/6nonpap.pdf

[3] Véase: Panel Intergubernamental sobre el Cambio Climático (IPCC). *La influencia humana en el clima es clara, según el IPCC* (Comunicado de prensa). Estocolmo: IPCC, 2013.

[4] New York, 23 de septiembre de 2014. Ver: http://www.un.org/climatechange/summit/

registrada a nivel mundial, y que evidencia cómo la sociedad sí puede movilizarse ante problemas que comprometen la propia existencia de la humanidad[5]; 3. El histórico acuerdo –anunciado conjuntamente en Pekín por los presidentes Barack Obama y Xi Jinping– sobre los nuevos objetivos para la reducción de emisiones de carbono por parte de los Estados Unidos y por primera vez un compromiso de China para detener el crecimiento de sus emisiones a partir de 2030. Este ambicioso plan conjunto es una forma de estimular a las naciones de todo el mundo para que hagan sus propios recortes de emisiones de Gases de Efecto Invernadero (GEI)[6].

De esta forma se busca no superar los 2 °C (según lo convenido en la COP 16, Cancún) y producir la inflexión en la curva de emisiones. Al respecto, es pertinente señalar que, a partir de los Diálogos Estructurados de Expertos 2 y 3 (Structured Experts Dialogs – SED) del IPCC, se ha concluido que los efectos relacionados con el clima ya están ocurriendo en el grado actual de calentamiento de 0,85 °C por encima del nivel pre-industrial, con efectos adversos significativos[7].

Mientras tanto, América Latina busca consensuar una posición regional sobre vulnerabilidad y adaptación climática, considerando los impactos que ya enfrenta y los riesgos potenciales de que estos se agudicen en el futuro[8].

Un aspecto que deberá considerarse al momento de revisar el presente análisis es que el trastorno climático es un fenómeno no lineal, altamente complejo, que exije respuestas igualmente complejas y un sólido nivel de planeamiento transversal y transectorial, sustentado en enfoques centralmente «preventivos». Los efectos del cambio climático se

---

[5] Foderaro, Lisa. «Taking a Call for Climate Change to the Streets». *The New York Times,* New York, September 21, 2014.

[6] Véase: Landler, Mark. «U.S. and China reach Climate Accord after months of talks». *The New York Times,* New York, November 11, 2014.

[7] Según el IPCC lo adecuado sería estabilizar la elevación de la temperatura del planeta en 1.85 °C.

[8] Según el Banco Mundial, América Latina es responsable de sólo una fracción (12,5%) de las emisiones mundiales totales de GEI, pero sería una de las regiones más castigadas si la temperatura aumentara a 4 °C al 2100, siendo las zonas tropicales las más afectadas, y las poblaciones pobres las más vulnerables. Véase: BANCO MUNDIAL (BM). «Cambio climático: ¿Está preparada América Latina para un aumento de 4 grados en la temperatura mundial?». *Banco Mundial* (19 de noviembre de 2012). Disponible en http://www.bancomundial.org/es/news/feature/2012/11/19/climate-change-4-degrees-latin-america-preparation.

manifiestan e interaccionan a nivel multiescalar (global, continental, nacional, subnacional); siendo por ello fundamental establecer una adecuada complementariedad entre las políticas climáticas globales, con los procesos subregionales, nacionales y locales de toma de decisiones. Entonces, no se podrán dimensionar los impactos del fenómeno, a nivel nacional y local, sin una visión comprehensiva de las dinámicas globales del mismo.

Así pues, los diseñadores de política y tomadores de decisión deberán internalizar que el *régimen regulatorio global* origina diversos vínculos verticales y horizontales. Los regímenes basados en tratados formales y redes globales reguladoras operan a través de vínculos bidireccionales verticales entre el nivel subnacional, nacional e internacional. Esto es particularmente tangible en los acuerdos multilaterales sobre el clima.

La Gestión Pública del Cambio Climático en América Latina

A pesar de la magnitud de la crisis ecológica planetaria, el Sistema Internacional –caracterizado por relaciones de poder asimétricas– mantiene apreciaciones diversas, confrontadas y difíciles de conciliar, respecto del cambio global[9] y el cambio climático, por lo menos desde que el problema se incorporó a la agenda pública mundial hace ya más de cuatro décadas.

De modo tal que la dimensión global del trastorno del clima propicia comportamientos distantes, si acaso indiferencia, respecto de la necesidad de actuar con urgencia para contener los impactos que se están evidenciando en los territorios locales, en tanto se le percibe como una cuestión ficticia, que sucede en algún otro lugar o que tal vez podría acontecer en el futuro.

En lo que respecta a América Latina, esta región del planeta ha entrado ya a una «etapa de consecuencias» debido al fenómeno antropogénico, que exacerba las fallas institucionales de los países –y pone a prueba la arquitectura institucional (gobernanza) de cada Estado para enfrentar el problema– agudizando los niveles de vulnerabilidad ambiental y social frente a los eventos climáticos extremos. No obstante las tendencias constatadas por la «ciencia del clima», lo cierto es que en Latinoamérica el cambio climático se encuentra todavía sub-representado en las estructuras de gobernanza y en las políticas públicas.

[9] El cambio global se muestra en la alteración de los ciclos naturales de materia (carbono, oxígeno, nitrógeno, fósforo, azufre, agua) y energía del planeta.

Un Clima de Cambios en América Latina

El reporte *El Cambio Climático y el Agua* (IPCC, 2008)[10] informa que en las tres últimas décadas la región ha estado sometida a los siguientes impactos (algunos de ellos vinculados con el fenómeno El Niño):

- Aumento de la frecuencia de eventos climáticos extremos tales como crecidas de los ríos, sequías o deslizamientos de tierra; por ejemplo, las intensas precipitaciones de Venezuela (1999 y 2005), la inundación de la Pampa argentina (2000 y 2002), la sequía del Amazonas (2005), las granizadas destructivas en Bolivia (2002) y Buenos Aires (2006), el ciclón Catarina en el Atlántico Sur (2004), o la estación de huracanes de 2005, sin precedentes en la región del Caribe[11].
- Estrés hídrico: diversas sequías relacionadas con La Niña restringieron gravemente el abastecimiento y la demanda de agua de riego en la parte central y occidental de Argentina y en el centro de Chile. Sequías relacionadas con El Niño hicieron disminuir el caudal del río Cauca, en Colombia. [GTII 13.2.2]
- Aumentos de la precipitación en el sur de Brasil, Paraguay, Uruguay, nordeste de Argentina (Pampas), y partes de Bolivia, noroeste de Perú, Ecuador y noroeste de México. Esto incrementó en un 10% la frecuencia de crecida en el río Amazonas a la altura de Obidos, y en un 50% el caudal de los ríos de Uruguay, del Paraná y del Paraguay, así como las crecidas en la cuenca del Mamore, en la Amazonia boliviana. Se ha constatado también un incremento en los episodios de precipitación intensa y días secos. Además se ha observado la disminución progresiva de la precipitación en Chile, suroeste de Argentina, nordeste de Brasil, sur de Perú y oeste de América Central (por ejemplo, en Nicaragua). [GTII 13.2.4.1]

---

[10] Bates, B.C.; Kundzewicz, Z.W.; Wu, S. and Palutikof, J.P. (eds). *El Cambio Climático y el Agua.* Documento técnico del Grupo Intergubernamental de Expertos sobre el Cambio Climático. Ginebra: Secretaría del IPCC, 2008, p. 107.

[11] La frecuencia de desastres relacionados con el clima aumentó en un factor de 2,4 entre 1970-1999 y 2000-2005, continuando así la tendencia observada durante los años 90. Sólo se ha cuantificado económicamente un 19% de los fenómenos acaecidos entre 2000 y 2005, que representan unas pérdidas de casi 20.000 millones de dólares [GTII 13.2.2]. Véase: Nagy, G. J.; Cafferata, R.M; Aparicio, M.; Barrenechea, P.; Bidegain, M.; Jiménez, J.C.; Lentini, E.; Magrin, G. and Co-authors, *Understanding the Potential Impact of Climate Change and Variability in Latin America and the Caribbean.* Report prepared for the Stern Review on the Economics of Climate Change, 2006, pp. 1-34.

- Un aumento del nivel del mar de 2-3 mm/año durante los últimos 10-20 años en el sureste de América del Sur. [GTII 13.2.4.1]
- En el área tropical andina de Bolivia, Perú, Ecuador y Colombia la superficie de los glaciares ha disminuido en magnitud similar a la del cambio mundial experimentado desde el final de la denominada *pequeña era glacial.* Los glaciares más pequeños han sido los más afectados. La razón de estos cambios, a diferencia de los experimentados en latitudes medias y altas, está vinculada a una combinación compleja y espacialmente variable de altas temperaturas y de cambios en el contenido de humedad de la atmósfera. [GTI 4.5.3]

Resulta pues paradójico que los países latinoamericanos –enfrentando tal escenario– muestren un escaso nivel de planeamiento estratégico para la gestión anticipada de los efectos del cambio climático –aun cuando representan un tercio de la tierra cultivable y de los recursos del planeta– lo que pone en riesgo su potencial natural. Las medidas que se implementan están aun fuertemente dominadas por los «enfoques de mitigación», debido a los condicionamientos de las agendas establecidas por las fuentes de cooperación y financiamiento internacional, mientras que las «medidas de adaptación» se incorporan de forma secundaria en la toma de decisiones[12]. Mientras tanto, los eventos climáticos extremos se expresan de manera cada vez más pronunciada (desglaciación, inundaciones, sequías, heladas); lo que termina fragilizando los sistemas agrícolas tradicionales, que son vitales para la suficiencia alimentaria a nivel local, nacional y global[13].

En América Latina, los glaciares tropicales están ubicados mayoritariamente en la Cordillera de los Andes: 72% en Perú, 20% en Bolivia, 4% en Ecuador y 4% en Colombia, y presentan un retroceso acelerado desde mediados de los años 70.

---

[12] Véase: Pajares G., Erick. «Hacia la construcción de un Programa Subregional Andino para el Mantenimiento de los Ecosistemas de Montañas y la Adaptación al Cambio Climático Global». En: Llosa L., Jaime; Pajares G., Erick y Toro Q., Oscar (eds). *Cambio climático, crisis del agua y adaptación en las montañas andinas.* Lima: desco, Red Ambiental Peruana, 2009, pp. 133-163.

[13] Según el Banco Mundial, América Latina es responsable de sólo una fracción (12,5%) de las emisiones mundiales totales de GEI, pero sería una de las regiones más castigadas si la temperatura aumentara a 4°C al 2100, siendo las zonas tropicales las más afectadas, y las poblaciones pobres las más vulnerables. Véase Banco Mundial, «Cambio climático: ¿Está preparada América Latina para un aumento de 4 grados en la temperatura mundial?», *Banco Mundial* (19 noviembre de 2012). Disponible en: Banco Mundial <http://www.bancomundial.org/>.

Precisamente, el Banco Mundial (BM), en su *Informe Desarrollo con Menos Carbono: Respuestas Latinoamericanas al Desafío del Cambio Climático,* señala que: «[…] Los ecosistemas en zonas de alta montaña, incluyendo ecosistemas únicos como los asociados a áreas pantanosas en altitudes elevadas (´páramos´), son de los entornos más sensibles al cambio climático. Estos ecosistemas brindan numerosos y valiosos bienes y servicios ambientales. En los últimos años ya se han observado reducciones drásticas en la flora y fauna montañosa»[14]. Subraya además que, como consecuencia de la menor producción agrícola «[…] los pequeños agricultores que viven cerca del límite de subsistencia sufrirán mayores penurias que los grandes productores agropecuarios»[15].

Tales cambios, que particularmente amenazan los ecosistemas de montaña de los países andinos, exigen una revisión de las «políticas de gestión del conocimiento» y de los «sistemas de gobernanza» que han venido implementándose, en tanto resultan esencialmente reactivos, sujetos a enfoques parciales y/o sectorializados, sin una noción clara de cómo lograr una «gestión pública transversalizada» capaz de encarar las consecuencias del trastorno global del clima[16].

Políticas y Legislación Climáticas en Los Andes Amazónicos del Perú

El Contexto Nacional

En el Perú la diversidad natural se implica con la diversidad cultural, emergiendo una bioculturalidad que es el resultado de 10,000 años de interacción intensa entre las sociedades andino amazónicas, el territorio y el clima; dando paso a la creación de sofisticados conocimientos, innovaciones, prácticas y tecnologías tradicionales (estrategias de resiliencia socioecológica) para dispersar los riesgos de la variabilidad climática en espacios marcadamente heterogéneos, en los que el cambio es constante.

---

[14] DE LA TORRE, Augusto; FAJNZYLBAR, Pablo y NASH, John. Informe Desarrollo con Menos Carbono. Respuestas Latinoamericanas al Desafío del Cambio Climático. Washington, DC: Banco Mundial, 2009, p. 4.

[15] Ibid, p. 10.

[16] La gobernanza, como concepto aislado, se entiende como «el proceso de toma de decisiones y el proceso por el que las decisiones son implementadas, o no». Véase: Comisión Económica y Social de las Naciones Unidas para Asia y el Pacífico – UNESCAP. *¿Qué es gobernanza?.* Bangkok: UNESCAP, 2009.

En ese contexto, a nivel de las políticas climáticas, el Ministerio del Ambiente (MINAM) ha puesto a consideración de la opinión pública la propuesta de Estrategia Nacional de Cambio Climático (ENCC),[17] así como los Lineamientos para incorporar el Cambio Climático en la Universidad Peruana.[18] En lo que respecta al marco normativo, el Congreso de la República viene debatiendo sobre los alcances del proyecto de la Ley Marco para la Gestión Pública del Cambio Climático.[19] Tales políticas y legislación climáticas se desarrollan en momentos en que el Perú preside la COP 20.[20]

Sin embargo, a pesar de estos avances, al mismo tiempo la crisis financiera internacional exacerba las tensiones internas, pues como consecuencia de la caída de los precios internacionales de los *commodities*, los países cuyas economías dependen fuertemente de la extracción y exportación de materias primas –como es el caso del Perú y algunos otros países de la región latinoamericana– están flexibilizando sus marcos institucionales, de política y regulación ambientales, mediante la adopción de medidas internas para «reactivar» sus economías y atraer las inversiones facilitando (desregulando), cada vez más, las operaciones de las actividades extractivas[21]. Así se van configurando circuitos e incentivos perversos que socavan la sustentabilidad ecológica, ambiental y social; y que acentúan la conflictividad socioambiental –como expresión de la crisis de gobernabilidad– en zonas donde las poblaciones locales (particularmente rurales) compiten con las empresas extractivas (minería, petróleo, energía, forestales) por el acceso y control de recursos vitales, y cada vez más escasos, como el agua y la tierra.

Para el caso del Perú, tales tensiones se ven expuestas en la promulgación de la Ley n.° 30230, «Ley que establece medidas tributarias, simplificación de procedimientos y permisos

---

[17] Mediante Resolución Ministerial n.º 227-2014-MINAM, registrada el 24 de julio de 2014 en el Diario Oficial El Peruano, se dispuso la publicación de la propuesta de ENCC, en el portal web del MINAM.

[18] Publicada el 3 de noviembre de 2014 en el portal web del MINAM.

[19] Dictamen recaído en los proyectos de ley 3118/2013-CR, 3339/2013-CR, 3342/2013-CR, 3356/2013-CR, 3487/2013-CR, con un Texto Sustitutorio que propone la Ley Marco de Cambio Climático, del 18 de junio de 2014.

[20] El Frente Público COP20/CMP10 (MINAM) ha desarrollado un destacable trabajo de convocatoria y participación ciudadana, facilitando la convergencia de posiciones de los distintos sectores concernidos con la gestión climática. Véase: http://www.cop20.pe/11781/representantes-de-organizaciones-civiles-se-reunieron-con-sus-pares-globales-con-miras-a-la-cop20/

[21] Véase: ECONOMÍA. «MEF: Hay que diversificar la economía porque el ciclo de commodities está acabando». *Gestión,* Lima, 13 de julio de 2013.

para la promoción y dinamización de la inversión en el país»[22]. La citada norma reduce las competencias del MINAM al debilitar el rol de fiscalización y sanción del Organismo de Evaluación y Fiscalización Ambiental (OEFA), pues supuestamente esto estaría obstruyendo las grandes inversiones[23]; del mismo modo tampoco puede declarar ya la creación de Zonas Reservadas[24], para lo cual se requerirá en adelante de la expedición de un Decreto Supremo aprobado por el Consejo de Ministros (antes sólo se requería una Resolución Ministerial de la autoridad ambiental)[25]. En lo que respecta a las opiniones vinculantes y no vinculantes necesarias para la aprobación de un Estudio de Impacto Ambiental (EIA), ahora se contará con un plazo máximo de 45 días hábiles[26]. Además, la cuestionada norma incorpora criterios económicos, y no técnicos, para establecer Límites Máximos Permisibles y Estándares de Calidad Ambiental (ECA´s), en consenso con los sectores involucrados, afectando potencialmente la salud pública.

Para diversos analistas, este tipo de medidas operan en detrimento de las competencias de la autoridad nacional ambiental: El MINAM.[27]

---

[22] Publicada en el Diario Oficial El Peruano el 12 de julio de 2014.

[23] Véase: ECONOMÍA. «El plan del Gobierno para impulsar el crecimiento económico». *El Comercio,* Lima, 20 de junio de 2014.

[24] Categoría que se otorga a un área para ser protegida temporalmente mientras se evalúa sí debe o no considerarse como un área natural protegida.

[25] Mediante el Proyecto de Ley n.° 3940 /2014-PE para la implementación de acuerdos binacionales entre los países de Perú y Ecuador y ejecución del Proyecto Especial Binacional Puyango - Tumbes (elaborado por el Servicio Nacional de Áreas Naturales Protegidas por el Estado - SERNANP, con el visado del propio MINAM), se pretende recortar la extensión del Parque Nacional Cerros de Amotape (Región Piura). Del mismo modo, el Area de Conservación Regional Cordillera Escalera (Región San Martín) se encuentra bajo la presión de las inversiones petroleras, a pesar de existir una sentencia del Tribunal Constitucional (TC) que paraliza las actividades extractivas hasta que se concluya con la actualización y aprobación del Plan de Manejo de la referida área protegida.

[26] Consideramos que emitir opiniones técnicas vinculantes sobre EIA´s de gran complejidad, en un máximo de 45 días, puede propiciar decisiones erradas.

[27] La Organización de las Naciones Unidas (ONU), en carta dirigida al Canciller, Embajador Gonzalo Gutiérrez, reconoce los avances logrados por el Perú en materia ambiental, no obstante, subrayan que «[…] a la luz de los compromisos internacionales adquiridos por el Estado peruano en referencia a la protección del ambiente, la conservación y revaloración de su biodiversidad y el uso racional de sus recursos naturales, creemos necesario manifestar nuestra legítima preocupación de parte del Sistema de Naciones Unidas por el impacto que las nuevas medidas económicas pudieran acarrear». Véase: ECONOMÍA. «ONU expresa preocupación por política ambiental». *Expreso,* Lima, 2 de julio de 2014.

La ENCC

La versión disponible de la ENCC[28] plantea dos grandes objetivos:

1. La población, los agentes económicos y el Estado incrementan conciencia y capacidad adaptativa para la acción frente a los efectos adversos y oportunidades del cambio climático.[29]
2. La población, los agentes económicos y el Estado conservan las reservas de carbono y contribuyen a la reducción de las emisiones de GEI.

Así mismo, para cada objetivo general se proponen Líneas de Acción para transversalizar la gestión del cambio climático, tales como:

a. El planeamiento para la gestión climática desde las políticas públicas.
b. Interculturalidad y género en las políticas adaptativas.
c. La articulación de los sistemas de conocimiento tradicional con la ciencia objetiva, particularmente en la recuperación de zonas degradadas, cultivos (agrobiodiversidad) y agua.
d. El desarrollo y aplicación de tecnologías que incorporen los conocimientos tradicionales para la gestión de recursos naturales, la seguridad alimentaria y la adaptación al cambio climático.
e. Mecanismos de coordinación intersectorial e intergubernamental, con la participación de los pueblos indígenas, para la incidencia regional y local en la adaptación al cambio climático.

Cabe precisar al respecto que el Perú lidera, a nivel de América Latina, la investigación sobre sistemas de conocimiento tradicional para la adaptación climática y la gestión de los paisajes agrícolas, particularmente en las zonas de alta montaña. Desde esta perspectiva, viene progresivamente madurando el debate público entre la «ciencia objetiva» y los «saberes relacionales andino amazónicos», a fin de construir alternativas de solución frente al fenómeno global (por ejemplo: Mesa de Diálogo de Saberes, INTERCLIMA 2012). Esta es

[28] En proceso de actualización (segunda versión).

[29] A julio de 2014, doce regiones del Perú cuentan con una Estrategia Regional de Cambio Climático (ERCC), y veintitrés cuentan con Grupos Técnicos Regionales en Cambio Climático (GTRCC). Véase: Ministerio del Ambiente (MINAM). *Propuesta de Estrategia Nacional ante el Cambio Climático.* Lima: MINAM, 2014, p. 32.

una ventaja comparativa que deberá ser considerada en la fase de implementación de la ENCC[30].

Los Lineamientos Para Incorporar el Cambio Climático en la Universidad Peruana

La versión disponible de estos Lineamientos propone acciones para cada una de las cuatro funciones sustantivas de la universidad: gestión, formación, investigación y extensión:

a. Gestión: Fortalecer la gestión institucional de la universidad en adaptación al cambio climático a través de la incorporación e implementación de políticas, normas, planes, programas y financiamiento.
b. Formación: Formar profesionales y personas con habilidades, capacidades y actitudes que incorporen la adaptación al cambio climático en su desempeño profesional y ciudadano
c. Investigación: Promover y realizar investigaciones en adaptación al cambio climático para la generación de conocimiento y la toma de decisiones desde una perspectiva interdisciplinar.
d. Extensión: Fortalecer la interacción entre la universidad y los diversos actores de la sociedad para incidir en la adaptación al cambio climático.

Los Lineamientos se orientan a la institucionalización de la adaptación al cambio climático en la Universidad Peruana, siendo importante compatibilizar estos planteamientos con el Plan Nacional de Capacitación en Cambio Climático 2013-2017 (PNCCC, MINAM 2013), que constituye uno de los medios de implementación con que cuenta la ENCC.

Considerando que la propuesta de ENCC destaca la importancia de los sistemas de conocimiento tradicional para la gestión adaptativa del clima, estimamos constituiría un gran avance crear –en complemento al Grupo de Trabajo Comité de Investigaciones Científicas en Cambio Climático[31]– un «Grupo de Trabajo para el Diálogo de Saberes Climáticos»[32], a

---

[30] Pajares G., Erick y Loret de Mola, Carlos. «Otras políticas climáticas. Ruptura de episteme y diálogo de saberes». En: desco, ed, *Perú Hoy. Más a la derecha Comandante.* Lima: desco, 2014, p. 293.

[31] Resolución Ministerial n.° 264 - 2014 – MINAM, publicada en el Diario Oficial El Peruano el 26 de agosto de 2014.

[32] Durante el Simposio Internacional «Articulación del conocimiento tradicional en las políticas públicas de Ciencia, Tecnología e Innovación en América Latina» (México, DF. 3 - 4 de diciembre de 2013), se subrayó la importancia de incorporar los saberes ancestrales y tradicionales en las políticas de ciencia, tecnología e innovación. Al respecto Véase: MINISTERIO DEL AMBIENTE (MINAM). *El*

fin de fortalecer los alcances de las políticas públicas climáticas, así como la Agenda de Investigación Científica de Cambio Climático (AICCC) 2010 – 2021[33].

Y es que aproximarse a la complejidad del cambio global exige que la Universidad Peruana transite hacia la implementación de «políticas de conocimiento transdisciplinar».

El Proyecto de Ley Marco Para la Gestión Pública del Cambio Climático

En el Congreso de la República del Perú se debate el dictamen del referido proyecto de ley, que busca establecer el marco legal para la implementación de políticas de Estado que permitan enfrentar de manera planificada los efectos del cambio climático. En lo primordial, la propuesta legislativa peruana ha seguido las orientaciones de la Ley General de Cambio Climático de México[34] y el desarrollo de políticas climáticas en Colombia. Dentro de los aspectos relevantes del proyecto se encuentran:

a. La creación del Sistema Nacional de Cambio Climático.
b. La determinación de las funciones de la Comisión Nacional de Cambio Climático.
c. El Reporte Anual sobre la implementación de la Política Nacional de Cambio Climático, bajo la responsabilidad de la Presidencia del Consejo de Ministros (PCM) y el Ministro del Ambiente.
d. La creación del Centro Nacional de Monitoreo de Cambio Climático, al interior del Servicio Nacional de Meteorología e Hidrología del Perú (SENAMHI) y el Instituto Geofísico del Perú (IGP).
e. La conformación del Panel Nacional de Expertos en Cambio Climático.
f. La articulación de las políticas educativas con las políticas climáticas.
g. La incorporación de los sistemas de conocimiento tradicional en la implementación de las medidas de adaptación climática[35].

---

hombre que cosecha agua (Nota de prensa). MINAM, Lima 20 de noviembre de 2014). Disponible en: http://www.minam.gob.pe/notas-de-prensa/un-hombre-que-cosecha-agua/

[33] Resolución Ministerial n.° 175-2013-MINAM, aprobada el 17 de junio del 2013 y publicada en el Diario Oficial El Peruano el 18 de junio de 2013.

[34] Publicada en el Diario Oficial de la Federación el 6 de junio de 2012 y vigente desde el 10 de octubre de 2012.

[35] La Asociación Bartolomé Aripaylla (ABA-Ayacucho) ha obtenido el Premio Nacional Ambiental 2014, en la categoría de Buenas Prácticas Ambientales, a partir de su trabajo institucional en la recuperación y diseminación de las tecnologías tradicionales de siembra y cosecha del agua.

Debemos anotar que un aspecto central en el diseño de políticas climáticas, pero ausente en el proyecto legislativo peruano, es el de la participación pública en la toma de decisiones nacionales y subnacionales.

Mientras tanto, América Latina, conjuntamente con África, son las regiones del mundo que más han avanzado en materia de legislación climática, según THE GLOBE CLIMATE LEGISLATION STUDY, *A Review of Climate Change Legislation in 66 Countries*[36] (Ver Cuadro 1).

[36] Véase: http://www.globeinternational.org/pdfviewer

CUADRO 1

PAÍSES DE AMÉRICA LATINA CON LEYES DE CAMBIO CLIMÁTICO

País	Región	Norma	Fecha
Colombia	Sudamérica	Sistema Nacional de Cambio Climático[37]	Julio 2011
Bolivia	Sudamérica	Ley de la Madre Tierra[38]	Octubre 2012
México	Norteamérica	Ley Marco de Cambio Climático	Junio 2012
Guatemala	Centroamérica	Ley Marco para regular la reducción de la Vulnerabilidad, la Adaptación obligatoria ante los efectos del Cambio Climático y la Mitigación de GEI	Septiembre 2013
Honduras	Centroamérica	Ley de Cambio Climático	Enero 2014
Costa Rica	Centroamérica	Ley Marco de Cambio Climático[39]	Enero 2014

ELABORACIÓN PROPIA.

[37] En julio de 2011, el Consejo Nacional de Política Económica y Social (CONPES) aprobó la «Estrategia institucional para la articulación de políticas y acciones en materia de cambio climático en Colombia» (CONPES 3700), que recomienda la creación del Sistema Nacional de Cambio Climático (SISCLIMA).

[38] Ley que incorpora el concepto de *justicia climática.*

[39] La norma garantiza que las cuestiones relativas al cambio climático se impartan obligatoriamente a nivel de educación primaria y secundaria.

A Modo de Conclusiones

A la luz de las consideraciones expuestas en el presente análisis, alcanzamos las siguientes conclusiones, para contribuir a la adecuada toma de decisiones, frente al reto que implica la gestión del cambio climático:

a. Los sistemas jurídicos y políticos contemporáneos están siendo rebasados por la gravedad de la problemática ambiental, a múltiples escalas (global, regional, nacional, local); debido a la translimitación de la biosfera del planeta. La capacidad de las actuales instituciones jurídicas, políticas y económicas no es acorde con la naturaleza compleja y dinámica de la mayor crisis ecológica en la historia del *homo sapiens,* lo que plantea un reto sin precedentes para las ciencias sociales y las humanidades. Es así que emerge una nueva rama del Derecho Ambiental denominada *Klimaschutzrecht* o *Derecho Climático;* definida como el conjunto de normas jurídicas que conforman el sistema legal de prevención y mitigación de los impactos antropogénicos en el sistema climático (Schmidt & Kahl, 2010[40]).

b. En el Perú –como en otros países de la región– los problemas no resueltos que obstruyen la intersectorialidad y la transectorialidad en la gestión pública climática se presentan en todos los niveles, por lo que no resulta equivocado decir que América Latina cuenta con «administraciones por programas» más que por políticas, lo que ocasiona que los programas sectoriales no logren ser coherentes, complementarios e integrativos. Tal situación fundamenta el por qué resulta indispensable establecer la conectividad entre distintos sectores y diferentes áreas del conocimiento. El resultado de este proceso de diferenciación e integración es la unidad de análisis que conocemos como «políticas de transversalidad para el cambio climático» (PTCC).

c. Las políticas y la legislación climáticas post COP 20 debieran desarrollar enfoques integrados de mitigación y adaptación; sin embargo –para el caso del Perú– resulta prioritario equilibrar la preponderancia de las medidas de mitigación mediante el diseño e implementación de una «política nacional para la adaptación», a fin de empoderar las estrategias de resiliencia socioecológica (adaptación transformativa) que emprenden las comunidades andino amazónicas frente al riesgo climático. Cabe enfatizar que el Perú, en tanto preside la COP 20, tiene como expectativa elevar el nivel institucional del

[40] Schmidt, Reiner & Kahl, Wolfgang. *Umweltrecht.* Munich: C.H. Beck, 2010.

enfoque de adaptación, en base a las experiencias de los países y al reciente informe del IPCC[41].

d. La toma de decisiones enteradas frente al cambio climático exige, qué duda cabe, una «ciencia políticamente relevante» y una «política científicamente sustentada», pero esa parece ser –a la luz de la crisis del episteme científico que está a la base de la crisis global del clima– tan sólo una verdad a medias. Requerimos, sobre todo, construir «nuevas políticas de conocimiento», que se sustenten en la convergencia de epistemes distintos, en el «diálogo de saberes» para religar cosmovisiones. En medio de este escenario complejo, y complejizado por la incertidumbre, el Perú –desde su milenaria raíz cultural andina– tiene una «narrativa propia» que aportarle a la humanidad.

[41] Véase: Ministerio de Relaciones Exteriores (MINREX). (24 de noviembre de 2014*). Perú hacia la COP 20. Caminando hacia un acuerdo climático* [diapositivas de Power point].

COUNTRY REPORT: POLAND

Robert Rybski*

Current Regulation of Shale Gas

Poland has become the most developed country within the European Union in terms of shale gas exploration. Apart from shale gas development, quite a lot is currently occurring in the energy sector, which is still heavily dependent on coal.[1] Unfortunately, this development is not being followed by changes in the regulatory framework that would increase environmental standards, as the transposition and proper implementation of almost all climate and energy directives of the European Union have been beset with major problems.[2] There is no specific regulation that to deal with the issue of hydraulic fracturing. Currently, the general hydrocarbon regime applies to shale gas. The existing legal framework is not inappropriate. The framework for it is *the Geological and Mining Law*.[3] It covers the exploration and extraction phase for all hydrocarbons as well as other fossil fuels.[4] It is therefore naturally relevant for exploration of shale gas, as well as to the derivation of hydrocarbons from any other unconventional sources.

---

* PhD Candidate, Constitutional Law Department, Faculty of Law and Administration, University of Warsaw, Poland. Email: Robert.rybski@wpia.uw.edu.pl

[1] For a general overview of Polish power sector see: E. Bayer *Report on the Polish power system. Version 1.0. Country profile*, Berlin 2014; available under: http://www.agora-energiewende.de/fileadmin/downloads/publikationen/CountryProfiles/Agora_CountryProfile_Poland_022014_web.pdf.

[2] See M. Stoczkiewicz (edit.) *Black Paper. Implementation of EU Climate and Energy Law in Poland*, Warsaw 2013; the publication is available under: http://www.clientearth.org/reports/061113-climate-and-energy-black-paper.pdf.

[3] Geological and Mining Law from the 9th June 2011, published in the Journal of Laws of the Republic of Poland, No. 163, position 981 with further changes.

[4] For energy purposes it's mostly coal, as Poland is appropriately 2nd producer in the EU of hard coal and 4th of lignite. See *Energy 2013. Central Statistical Office,* Warsaw 2013, p. 4; available under: http://stat.gov.pl/cps/rde/xbcr/gus/ENERGIA_2013.pdf.

This brings us to the question of the quality of the implementation of environmental directives. This will demonstrate that there is a great need to take a modified legislative approach in the matter of shale gas regulation, most pertinently to resolve flaws in the national regulatory frameworks implementing EU acts.

New Shale Gas Regulation

Development of shale gas in Poland comes along with changes in national legislative framework. Those changes – according to the Government – shall make exploration and extraction of unconventional hydrocarbons much easier for investors. The case of Poland may be seen as peculiar, considering that legislative actions at the EU level are aimed at additional regulation, and the ones undertaken in Poland aim at deregulation. The other factor that lies at the root of the legislative changes in Poland is the lack of full implementation of directive 94/22/EC on the conditions for granting and using authorisations for the prospection, exploration and production of hydrocarbons.[5]

Work on a national regulation to introduce a new regulatory framework, more favourable for investors, started in 2012. Firstly, guidelines on the extraction of hydrocarbons, including those from conventional sources were adopted on the 16th of 2012 by the Council of Ministers.[6] In February 2013, the first version of the Bill was presented,[7] and shortly after this, sent out for public consultation. It then transpired that the Bill would just amend existing regulations. After a long public debate, with lots of stakeholders involved, including ministries representing different interests, a final version of the Bill was sent to the Parliament on the 23rd of April 2014. It was adopted on the 11th of July 2014.[8]

---

[5] Published in: OJ L 164, 30/06/1994, p. 3-8. Commission took an action against Poland for a failed transposition which ended up with a judgement of the European Court of Justice from the 27th June 2013 (C-569/10) stating that tenders were not free of all discrimination as required by the directive 94/22/EC. Judgment is available under: http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=CELEX:62010CJ0569:EN:HTML. Naturally, vital question concerns impacts of this judgement, but it does not lead to revocation of granted permissions.

[6] Available under: http://www.mos.gov.pl/g2/big/2012_10/a63b0d95d3420a6e1ece57ca65285170.pdf

[7] Version of the Bill from the 15th February 2013 is available under:

[8] Published in the Journal of Laws of the Republic of Poland from 2014, position 1133, available under: http://isap.sejm.gov.pl/DetailsServlet?id=WDU20140001133.

The scope of this Bill is much broader then just shale gas (or more broadly hydrocarbons from unconventional sources), as it covers exploration of hydrocarbons of all types, i.e. inter alia: heavy oil, oil shale, shale oil, shale gas, coal bed methane, methane hydrates. This is interesting in terms of fostering public acceptance of a specific energy source. Because of the high dependency of the natural gas market on imports from only one direction (Russia), there has been a very high public acceptance for any activities that could change this geopolitical situation. Apart from this, a gold-rush vision has also been created in public debate.[9] But the legislative changes covered all hydrocarbons, so this will also cover gas from conventional sources, and oil from both conventional and unconventional sources.

A key incentive for investors is the lack of an Environmental Impact Assessment (EIA) requirement for exploratory drillings.[10] An EIA will only be obligatory for extraction drillings, no matter what volume of extraction is expected from a particular well. Such a regulation does not make much sense, as quite often prospective exploratory drillings are being converted into extraction drillings. Thus, any environmental impacts have already occurred. Environmental impacts are also caused by hydraulic fracturing, as this too is quite often being carried out at the exploratory phase. Because of the nature of unconventional sources, that are much more widespread than conventional sources, there are also more extraction wells. After one successful exploratory drilling exercise, in locations not far from the exploratory drilling, more extraction drillings will take place. If intrusion into the environment happens within exploratory drilling, on almost the same scale as by extraction wells, then a later obligatory EIA is not able to change much – e.g. by a negative result of an EIA - as the exploratory drilling which has already been conducted and cannot be revoked. Another controversial element around changes in EIA concerns the scope of an EIA for shale gas drillings. It is only necessary to analyze the area within a 500m radius from the drilling pad. Not only is this requirement unclear, because it has not been specified whether the area should be counted on the basis of vertical drillings or horizontal drillings (that might go few kilometers away from the drilling pad); but also, when it comes to effectiveness of such a

[9] One of the examples is plan of creating a state-owned fund that receives tax incomes from new shale gas taxes *(Międzypokoleniowy Fundusz Węglowodorowy)* – the model regulation for this was The Government Pension Fund of Norway. Although no taxes have been collected yet, discussions on how to spend those incomes are highly developed.

[10] This is coherent with the EIA directive as Art. 4 section 1 refers to Annex I and Annex II of the directive to decide on whether such an investment shall undergo an obligatory EIA or only facilitative. EIA for hydrocarbons extraction is only then obligatory when daily extraction is to exceed 500.000m3 of natural gas or 500 tones of crude oil.

study, it is highly questionable whether such a low radius of impact assessment as planned in the refreshed national legislation allows for proper consideration of the environmental impacts of the operation.

Another example of a decrease in environmental standards include changes to participatory rights within EIA procedures, changes which have already gained the nickname of 'Paragraph 44'[11] amongst pressure groups. These changes to the national regulations concerning all EIA proceedings limit the right to participate in such proceedings for environmental organizations. For proceedings that require public participation, only those entities that have existed for a minimum of 12 months before the beginning of a procedure are entitled to participate. This measure to protect big infrastructure projects is a failed one, as it disables local communities in their participatory rights, foreseen inter alia by Art. 2 section 5, Art. 6 section 4 and Art. 6 section 7 of the Convention on Access to Information, Public Participation in Decision-making and Access to Justice in Environmental Matters, known as the 'Aarhus Convention'. In this regard, the national regulatory framework is not consistent with the Convention. Local communities are not always organized in forms of ecological organizations, and quite often do tend to form such groups only as a reaction to a specific project or decision of political stakeholders. Only then also will other pressure groups come on board – such a national regulation therefore undermines also the development of civil society. From a constitutional perspective it also represents an unequal treatment, as there is no justification for distinguishing between environmental organizations older than 12 months in terms of differentiating their legal status.

There are also some positive developments however within this refreshed regulatory framework. Most important, it is now obligatory to disclose which chemicals are used in fracking fluid. In addition, the new framework not only concerns providing information to

---

[11] This nickname stems from the fact that it is based on the following paradox: the Government wanted to prevent infrastructural projects being blocked by eg. competitors of the investor, but in the end created a provision that only undercuts genuine groups representing local society. It thus undermines civil society as a whole. Regarding policy issues see: M. Olszewski *Paragraf 44: knebel zamiast debaty*, "Gazeta Wyborcza" from 19th April 2013, available under: http://wyborcza.pl/magazyn/1,132059,13773491,Paragraf_44__knebel_zamiast_debaty.html?order=najnowsze; regarding legal issues see: B. Matuszewski, R. Rybski *Lokalni ekolodzy zostaną wyrzuceni za burtę*, "Rzeczpospolita" from 5th April 2013, available under: http://prawo.rp.pl/artykul/757643,996706-Ograniczenia-dla-nowych-organizacji-ekologicznych-sa-niekonstytucyjnego.html

mining authorities, but new statutory regulation will clearly state that it would not withhold information protected by trade secrets of a drilling company. This means that anybody exercising his/her right to public information will be able to gain such information. Another element that vastly increases transparency is an obligation for operators to launch Internet websites with a map, and all relevant documents, for a particular concession. Operators will be also obliged to operate with insurance coverage against civil liability. This however does not cover environmental damages. Finally, a further positive development includes the deprivation of licenses for infringement of license terms, eg. by infringement of provisions securing environmental protection.

COUNTRY REPORT: SCOTLAND
Reform of Environmental Regulation in Scotland

Sarah Hendry*

Introduction

Regulatory reform can be a slow process, but worth the effort. In Scotland, the Government has been working on environmental regulation for a number of years and the new scheme is now taking effect. Scotland has had a devolved Parliament since 1999, with responsibility for the environment;[1] but has always had a separate legal system with some major differences especially regarding water management, and a separate regulator (Scottish Environment Protection Agency, SEPA). SEPA is responsible for industrial and air pollution, water pollution and water resource management including water allocation, and waste management.[2]

In the early part of 2011, SEPA began a new consultation process on environmental regulation,[3] and a second stage consultation was issued by SEPA with the Scottish Government in 2012.[4] A major focus was a better use of regulatory effort, with a more proportionate and risk based approach. As well as financial necessity, ongoing shifts in environmental priorities around climate change, resources and waste, biodiversity and ecosystems services, are driving policy; and rationalisation of many different regimes is always welcome, as long as substance is not lost. Four outcomes were sought from the new framework – a 'single, proportionate and risk-based' permitting structure, a single consistent

* Centre for Water Law, Policy and Science, University of Dundee s.m.hendry@dundee.ac.uk

[1] Scotland Act 1998, 2012.

[2] See http://www.sepa.org.uk/.

[3] SEPA 2010 *Better Environmental Regulation: SEPA's Change Proposals* http://www.sepa.org.uk/about_us/consultations.aspx. See also, for an analysis of the good and bad in the prior law, Scottish Environment LINK *Scotland's Environmental Laws since Devolution – from Rhetoric to Reality* http://www.scotlink.org/files/policy/PositionPapers/LINK_ScotEnvLawsDec2010.pdf

[4] SEPA / Scottish Government 2012 *Consultation on Proposals for an Integrated Framework of Environmental Regulation* available at http://www.scotland.gov.uk/Resource/0039/00392549.pdf

regulatory procedure, a flexible approach to permitting, and a 'flexible and proportionate' approach to enforcement. The focus is on the four main regimes – water, pollution prevention and control (PPC), waste, and radioactive substances.

A Tiered and Proportionate Approach

In 2012 it was proposed to have three tiers of consents, to allow proportionality, using General Binding Rules (GBRs), registration and full permits as the terminology. This is closest to the current regime for water, which is also the most recently introduced and probably the most coherent of the existing four.[5] GBRs would set basic conditions for certain environmental activities, which will be published and available to operators. Registration would enable the regulator to track the location and impacts of activities. Full permits would be site specific and it there would be generic, standardised permits for less risky activities.

The paper also suggested more consistent procedures, including for enforcement tools and statutory notices, and a common set of timescales and standard rules on advertising. The proposal to rationalise the existing provision for statutory notices seems sensible. In the water regime, there are general enforcement notices with several functions, but in other regimes there are a series of separately named notices. Similarly, consolidation of appeal provisions and powers of entry etc. seems unobjectionable – 'clearing up the legislative landscape' is undoubtedly to be recommended. There were also proposals around rationalising permitting for multiple activities on one site, and for operators working across multiple sites via corporate permits.

Perhaps the most interesting reforms are around enforcement. In Scotland, although SEPA has power over licensing and can amend, suspend and revoke permits, and issue statutory notices of various types, fines can only be issued by the criminal courts. This requires firstly a report from SEPA to the public prosecutor; then, a decision that prosecution is in the public interest; then, proof beyond reasonable doubt in a criminal court; and then, if convicted, a judge (usually a sheriff) to levy an appropriate penalty. This may mean alleged offenders not reaching court, or penalties that do not sufficiently deter offenders. The introduction of specialist prosecutors has helped at the early stages, but compared to countries where regulators can levy penalties themselves, the powers are limited. So the proposal was to increase the tools and sanctions at SEPA's disposal, including financial penalties, whilst also

[5] Under the Water Environment (Controlled Activities) (Scotland) Regulations 2011/208.

basing enforcement on the record of the operator (to achieve proportionality and a risk-based approach) under a 'compliance and engagement spectrum' ranging from 'criminal' to 'environmental champion'. Whilst there are risks with this too, some tailoring of sanctions to the known behaviours of established operators does seem a good idea, and is something all regulators do anyway.

There was also a proposal for enforcement undertakings, and for publicity orders, which might provide a deterrent for some operators, including those for whom fines are not a significant problem. SEPA would be required to publish a revised enforcement policy setting out the measures and their use in some detail, which would certainly be necessary before such a scheme came into force. Offences would be consolidated, with a new general offence of knowingly causing significant environmental harm would be introduced.

Meantime, the Scottish Government was also considering a broader proposal for a Better Regulation Bill, including proposals for reform in areas, including food safety; performance related fees in planning; faster payments for invoices in the public sector; and statutory review for infrastructure projects.[6] Subsequently, it was decided to roll up these two legislative proposals into one Regulatory Reform Bill, containing only high level enabling powers and leaving all that devilish detail to emerge in regulations and guidance at a later stage. Despite some concerns, the Government proceeded on this basis.

The Regulatory Reform (Scotland) Act

The Bill was introduced to the Parliament in spring 2013 and was scrutinised by three committees.[7] Academics and NGOs were amongst those giving evidence, and there were various concerns especially around the new enforcement powers, the very broad enabling powers and framework nature of the Bill, and a controversial duty on regulators across the spectrum to work towards the Scottish Government's overarching policy goal of 'sustainable economic growth'. This caused much debate, with many suggesting that a duty to work towards sustainable development would be more appropriate, at least for the environmental regulators (as well as SEPA, Scottish Natural Heritage, responsible for nature conservation legislation and policy, is covered by these rules). Indeed the debate over this clause rather

[6] Scottish Government 2012 Consultation on Proposals for a Better Regulation Bill http://www.scotland.gov.uk/Resource/0039/00398287.pdf.

[7] Regulatory Reform (Scotland) Bill 2013 SP Bill 26. For the Bill and links to all accompanying documentation see http://www.scottish.parliament.uk/parliamentarybusiness/Bills/61582.aspx.

overshadowed the lead committee's debate, which was perhaps a pity as it took time away from discussing other important points.

The breadth of enabling powers is always a concern in areas such as the environment. It is expected that detailed rules will be made by regulation or some other form of executive rule, however, if the enabling power is too broad it is difficult to have clarity as to what the final product is likely to be. In Scotland many regulations have little Parliamentary scrutiny and there was some debate as to which regulations would be subject to a fuller 'affirmative' procedure. Section 18 and schedule 2 enabled wholesale reform of the four control regimes with little detail as to how that would be carried out, though the Government had listened to earlier consultation responses insofar as the new rules will be made by regulation and not, for example, by a direction to the regulators, which would be much less transparent.

On enforcement, a fourth category of authorisation was introduced, a notification, sitting between general rules and registration. It is still not entirely clear what this category will add to the general regime or exactly how it will be distinguished from registrations. There was extensive debate over the new penalty powers, and their relationship to criminal prosecutions, given the variable burden of proof. It was agreed in essence that these powers should be subject to the civil burden of proof, i.e., on the balance of probabilities; that operators should be able to decline the penalty and thereby expect a trial on a criminal charge, with the higher standard of proof; but that once the regulator chose to issue penalties, the regulator would not be able to depart from that and seek prosecution for the same offence. There was also extensive discussion of appropriate routes of appeal; and the necessity for guidance to SEPA from the Lord Advocate regarding the use of the enforcement powers and their relation to the criminal law. A new general offence of causing or permitting 'significant environmental harm' was created; it is a strict liability offence, with specified defences.[8] The Bill was enacted at the start of 2014, with the Government committed politically to wide consultation on the detail.

[8] Regulatory Reform (Scotland) Act 2014 asp.3 s.40.

Sustainability Guidance and Codes of Practice

The first stage of that detail came in a consultation on new guidance to SEPA.[9] The Government already had a duty to issue guidance to SEPA on sustainable development;[10] and now, a requirement to issue guidance on how SEPA will achieve its new statutory purpose. That purpose includes firstly, protecting and improving the environment, but then also contributing to improving health and well-being, and to achieving sustainable economic growth.[11] The draft guidance began with the Government's overall purpose: '*To focus government and public services on creating a more successful country, with opportunities for all of Scotland to flourish, through increasing sustainable economic growth.'* SEPA is to develop its corporate plan, and work programme, to support delivery of this goal.

The Government then gave definitions of sustainable economic growth and of sustainable development, which it had not done when the Bill was introduced. The former is defined as '*building a dynamic and growing economy that will provide prosperity and opportunities for all, while ensuring that future generations can enjoy a better quality of life too.'* The latter has a definition similar to the Brundtland definition: '*to enable all people throughout the world to satisfy their basic needs and enjoy a better quality of life without compromising the quality of life of future generations'.* There was a section on achievement of sustainable development, mentioning climate change, natural capital and ecosystem services – these concepts are likely therefore to frame SEPA's wider agenda, within which both its corporate planning and its operational activities will sit. Clause 3.4 states: *"The Scottish Government expects SEPA to measure success and augment the National Performance Framework by recognising the value of ecosystem services, and the contribution these provide to human wellbeing and sustainable development."* It is not clear exactly what that might mean, but potentially it could be very significant – the valuation of ecosystem services is likely to be a major driver of policy implementation in the future.

The paper ends with three high-level outcomes taken directly from the general purpose – *'Scotland's environment is protected and improving'; SEPA contributes to the achievement of sustainable economic growth; and Health and well-being of people in Scotland is*

---

[9] Scottish Government (2014) Consultation on the Statutory Guidance on the General Purpose for the Scottish Environment Protection Agency and its contribution towards Sustainable Development http://www.scotland.gov.uk/Resource/0044/00449901.pdf.

[10] Environment Act 1995 c. s.31.

[11] Regulatory Reform (Scotland) Act 2014 s.51; Environment Act 1995 s.20A.

improving' – with specific 'Ministerial expectations' beneath each. Under the first, these include a low carbon agenda and tackling climate change, and understanding natural capital and ecosystem services; under the second, managing the impact of regulation on business but also tackling crime and understanding the economic value of the environment; and under the third, taking account of health and well-being, tackling the highest risks and responding to communities.

This was followed by a consultation on a high level Code of Practice, applying to all the regulators covered by the Act.[12] The Code is intended to work with detailed codes and other relevant policies issued by the various bodies, some of which may need revised when the Code is finalised; here a strong focus on sustainable economic growth meant little emphasis on social or environmental issues. For SEPA, this emphasis may be misplaced. The final version is not yet published, but there has been an analysis of the responses.[13]

Next Steps on Regulation and Enforcement

Most recently, the Government has consulted on the new enforcement tools, and specifying the offences to which different tools will apply (Annex A).[14] The tools include Fixed Monetary Penalties (FMPs), Variable Monetary Penalties (VMPs), and Enforcement Undertakings (EUs). The paper also addresses the new Court powers and provisions for vicarious liability. All of these will operate within guidance from the Lord Advocate's office as to the relationship between these powers, and prosecutions for more serious offences. 'Significant, persistent and deliberate acts' will continue to be referred for potential prosecution. The paper builds on evidence to the Parliamentary committee and responses to the various earlier consultations that have already taken place.

---

[12] Regulatory Reform (Scotland) Act 2014 s.5,6; Scottish Government 2014 *Consultation on Scottish Regulators' Strategic Code of Practice*
http://www.scotland.gov.uk/Resource/0044/00442858.pdf.

[13] Scottish Government (2014) Regulatory Reform (Scotland) Act – Scottish Regulators' Strategic Code of Practice – Consultation Responses Analysis
http://www.scotland.gov.uk/Resource/0046/00462110.pdf.

[14] SEPA / Scottish Government (2014) New Environmental Enforcement Framework Consultation on New Enforcement Measures for the Scottish Environment Protection Agency and the Relevant Offences Order
http://www.scotland.gov.uk/Resource/0045/00455143.pdf.

'Key aims' for the new regime are given as follows: to 'change the behaviour of the offender; deter future non-compliance; eliminate any financial gain or benefit from non-compliance; be proportionate to the nature of the offence and the harm caused; and restore the harm caused by regulatory non-compliance, where appropriate.' If there is significant financial gain, that would make it likely that there will be a report for prosecution. Repeat offending would be treated similarly.

FMPs will apply to low level, usually administrative offences, such as failures of notification, and will only apply if there is 'little or no actual environmental impact'; the suggestion is for three tiers, £300, £600 and £1000, and there will not be different amounts for individuals and companies. The VMPs will apply to somewhat more serious offences and will be calculated taking account of any financial benefit, the gravity of the offence, and aggravating or mitigating factors. There will be further provision for non-compliance e.g. failure to pay.

Many offences could be subject to either an FMP or a VMP, which means there is little differentiation in the table. The decision would depend on the circumstances, including the effect of the breach, the behaviour of the offender, and the existence of any financial benefit. The removal of that financial incentive to breach is a core driver of these proposals, and could indeed provide a differentiating factor. The 'compliance categorisation' of operators, based on their previous history, will be highly relevant here.

It is suggested that VMPs would be appropriate for breaches of some licence conditions and for failure to obtain some licences, and there is some discussion on how these would be calculated. The intention is to have broad categories of 'gravity' (e.g., no scope for actual harm, risk of harm, actual harm). Then, the aggravating / mitigating component will be operator- and incident-specific and will allow for, e.g., culpability, awareness, incident response and track record. The proposal is that these factors could increase or decrease the gravity factor by up to 50%, and the operator must make the case for mitigating factors. Presumably SEPA will in turn need to make a case for aggravation and this will need to be carefully documented.

In addition, operators will be able to offer an undertaking to make relevant restorations, and this may be accepted in lieu of a VPM or for a lower penalty. These will involve similar rationales to the EU's, but are separate. If there is then non-compliance, SEPA will be able to impose the original VMP along with a 40% uplift as a Non-Compliance Penalty.

EUs will involve a voluntary offer from operators. These may be proactive, or reactive to an investigation, but must be offered before an enforcement decision. They are intended for '*operators who are usually broadly compliant with regulatory requirements'*; which might raise opportunities for some interesting debates around the categorisation process. It is proposed that these should be available for 'a fuller suite' of offences (although looking at Annex A, there seem relatively few offences where EUs are ticked but other penalties are not). It is suggested that operators might be required to consult interested parties (and / or 'the community') as evidence of goodwill and acceptability.

New Court powers include compensation orders (s.34); fines for relevant offences to include financial benefit (s.35) and publicity orders (s.36). Vicarious liability is enabled under s.38 and s.39. It is proposed that all of these could apply where '*the offence carries a risk of significant environmental harm, actual environmental harm or may involve serious wrongdoing'*; and for vicarious liability, where they are capable of being committed by an employee, agent or contractor.

All monies recovered will be paid to SEPA, but then into the Consolidated Fund. In addition SEPA should be able to recover enforcement costs for VMPs and for EUs, and there are questions around whether these should be full cost recovery (typically, between £10,000 - £20,000), or depend on the amount of the VPN to which the investigation relates. In addition, there are proposals for discounts for early payment, and penalties for late payment. Once the period has expired SEPA can recover as a civil debt. So there is a degree of complexity around the detail for the VMP's. It is proposed (rightly) that SEPA be required to publish data on the use of these measures, in addition to the Court's powers to make publicity orders following a conviction (s.36). It is suggested here that the Order will allow appeals on errors of fact and of law, for VMPs that the amount was unreasonable, or that the decision was unreasonable on any other grounds; appeals should go to the Scottish Land Court. A draft Order will be published for further consultation.

Conclusions

These are challenging times for environmental regulation in many countries, with multiple pressures to reduce the 'red tape' burden, cut costs and achieve multiple policy outcomes, not all consistent. SEPA has been under much pressure and the decision to use a single vehicle for multiple reforms was controversial. The use of a single Bill to make so many high level changes to so many different regulators, including the 'sustainable economic growth'

duty, was barely consistent with the intention to radically overhaul and rationalise environmental law. Now we are in a complex period of consultation, in which the detailed rules will be laid before Parliament but are unlikely to be widely scrutinised by any Committee there. Academics, NGOs and professional bodies will respond to each new phase, but there are still concerns over the breadth of the enabling rules as well as the level of scrutiny. As a water person, I am pleased that the new water rules in Scotland are seen as being successful and therefore a model for other areas of environmental law; but again, it is to be hoped that the final regime does not dilute the good work in protecting the water environment in the last decade. As the new regime develops, much will depend on budgets – if SEPA's monitoring budgets are protected, then enforcement becomes more realistic. If they are not, then any regime with a high use of general rules will struggle to maintain good conditions.

COUNTRY REPORT: SINGAPORE

LYE-Lin Heng *****

This report focuses on Singapore's new law, *the Transboundary Haze Pollution Act*,[1] which seeks to address the issue of air pollution in Singapore caused by forest fires in neighbouring states, particularly Indonesia. This new law was passed to try to stop, or at least discourage, companies in Indonesia from burning vast tracts of forests, particularly to make way for oil palm plantations as well as for the pulp and paper industry. This new law allows the prosecution of errant companies, partnerships or individuals in Singapore that have links to plantations in Indonesia by holding them responsible for a particular haze episode in Singapore if satellite and other images show that there is burning from their property in Indonesia. This is facilitated by a series of presumptions that help establish a causal link to enable the entity to be charged.

It is clear that this law is novel and, in many ways, challenges traditional concepts of liability. This is acknowledged by the Minister of Environment and Water Resources, Dr Vivian Balakrishna, who, in introducing the Bill, said "...I want to be upfront. This Bill will be challenging to implement...Many have told me that this Bill is novel, and introduces new legal concepts to our Singapore law which we may not have prior experience to guide us. Therefore I do not anticipate that we will, immediately or in the near future, have an overwhelming number of prosecutions against companies once the Act comes into force. In fact, I expect NEA[2] to be thorough and to exercise careful judgment when implementing the legislation and, when it is time to identify the company that should be subjected to the full consequences of the law. At this point, I would also like to reassure responsible businesses that adopt environmentally sustainable practices that they have nothing to fear."[3]

---

* LYE-Lin Heng, Director, Asia-Pacific Centre for Environmental Law (APCEL), Law Faculty, National University of Singapore.

[1] Singapore's laws can be accessed at this site - http://statutes.agc.gov.sg/aol/home.w3p.

[2] Singapore's National Environment Agency - see http://www.nea.gov.sg/.

[3] Second Reading of the Bill, Parliament No 12, Session 2, Vol 92, sitting no. 10, 04 August 2014. http://www.parliament.gov.sg/publications-singapore-parliament-reports.

The public was consulted on the Bill, and many views, particularly from NGOs and academics were collated and carefully considered. As background to this problem, the use of fire for the clearing of forests for agriculture has been practised by farmers in Southeast Asia for generations. However, the scale of destruction has been unprecedented in recent years with the advent of massive plantations for the palm oil industry. Indeed, it has been found that Indonesia is destroying its tropical rainforests faster than Brazil, and in 2012, some 840,000 hectares of forests were cleared.[4] In the words of Singapore's Minister Balakrishnan, "In the period from 2000-2012 - in a period of 12 years - the area in Indonesia which has been deforested, in 12 years, is larger than the entire land area of England. That gives you an idea of the scale of deforestation. So it is not the small farmer engaged in traditional slash-and-burn cultivation that is the culprit. It is the industrial scale deforestation in pursuit of profits from plantations, and in particular, palm oil plantations."[5]

These fires have caused grave environmental damage to the native forests and ecosystems in Indonesia, and have also caused severe air pollution in Indonesia itself, as well as in neighbouring states including Singapore and Malaysia. The fires on peat lands are particularly difficult to extinguish. In 1997, Singapore's Pollutant Standards Index (PSI)[6] reached an unhealthy 226. Malaysia, Thailand and even the Philippines were also adversely affected by the haze. On 10th June, 2002, the Governments of the ten ASEAN Member Countries signed *the ASEAN Agreement on Transboundary Haze Pollution*[7] in Kuala Lumpur, Malaysia. This Agreement is the first regional arrangement in the world that binds a group of contiguous states to tackle transboundary haze pollution resulting from land and forest fires. It has also been considered as a global role model for the tackling of transboundary issues. Parties to the Agreement are required to:

> (i) cooperate in developing and implementing measures to prevent, monitor, and mitigate transboundary haze pollution by controlling sources of land and/or forest fires, development of monitoring, assessment and early warning systems, exchange of information and technology, and the provision of mutual assistance;

---

[4] "World's worst illegal logging in Indonesia", Sydney Morning Herald, June 30, 2014. See http://www.smh.com.au/victoria/worlds-worst-illegal-logging-in-indonesia-20140630-zsq5j.html.

[5] See Sydney Morning Herald above n. 4.

[6] http://www.haze.gov.sg/docs/default-source/faq/computation-of-the-pollutant-standards-index-(psi).pdf.

[7] http://haze.asean.org/?wpfb_dl=32.

(ii) respond promptly to a request for relevant information sought by a State or States that are or may be affected by such transboundary haze pollution, with a view to minimising the consequence of the transboundary haze pollution; and

(iii) take legal, administrative and/ or other measures to implement their obligations under the Agreement.

The Agreement established an ASEAN Coordinating Centre for Transboundary Haze Pollution Control to facilitate cooperation and coordination in managing the impact of land and forest fires in particular haze pollution arising from such fires. The Agreement was signed by all ten states, ratified by nine (with the exception of Indonesia), and entered into force on 25 November 2003. Singapore[8] and Malaysia[9] established collaborative efforts with Indonesia. The burning of forests in Indonesia, however, continued despite these efforts. In June 2013, Singapore's PSI was an extremely hazardous 401, causing considerable economic loss and national distress. This prompted the passing of the *Transboundary Haze Pollution Act* which takes effect from 25th September 2014, after extensive public consultation and debate.

This Report will focus on this new law, which seeks to impose criminal and civil liability on any sole proprietorship, partnership, corporation or other body of persons ("entity") whose conduct causes or contributes to haze pollution in Singapore. The Act is intended to have extra-territorial application, as it expressly extends to "any conduct or thing outside Singapore which causes or contributes to any haze pollution in Singapore (s. 4)."

The Act makes it an offence for an entity to engage in conduct (whether inside or outside Singapore), or to condone the conduct of another entity, which causes or contributes to haze pollution in Singapore.(s.5(1)) It is also an offence if an entity participates in the management of another entity which owns or occupies land overseas, and that other entity engages in conduct, or condones the conduct of another, which causes or contributes to haze pollution in Singapore (s. 5(3)). The offence is established if "at or about the time" of such conduct, there is haze pollution in Singapore (s.5(1)(b); s5(3)(d)). Section 3 defines the meaning of participation of an entity in the management of another entity.

---

[8] See Indonesia-Singapore collaboration in Jambi Province - Haze Action Online - http://haze.asean.org/?page_id=234.

[9] See Indonesia-Malaysia collaboration in Riau Province, Indonesia - http://haze.asean.org/?page_id=238.

Haze pollution in Singapore is defined in S.2 to mean "...any poor air quality episode involving smoke from any land or forest fire wholly outside Singapore". *The Transboundary Haze Pollution (Air Quality) Regulations* defines "poor air quality episode" as a situation in which the air quality in any part of Singapore reaches a Pollutant Standards Index (PSI) of 101 or higher; and this has lasted for a continuous period of 24 hours or longer.

In the words of the Minister for Environment and Water Resources, this new law was "designed to catch entities that are directly or indirectly involved in slash-and-burn activities overseas that result in haze pollution in Singapore. In short, a party does not need to have started the fire itself in order to be held liable for the act. A party would be liable if it participates in the management of the actual offending party ...the second entity." [10]

Section 3 sets out the three circumstances in which an entity is regarded as having participated in the management of another entity:

(a) where the first entity actually participates in the management or operational affairs of the second entity,
(b) the first entity exercises decision-making control over any business decision by the second entity, or
(c) the first entity exercises control at a level comparable to that exercised by a manager of the second entity encompassing day to day decision-making.

The penalty is a daily fine not exceeding SGD$100,000 (USD$80,000) for every day or part thereof that there is haze pollution in Singapore occurring at or about the time of such conduct. The maximum fine that can be imposed is $2 million. An entity can be served with a Preventive Measures Notice and be required to take certain action or refrain from certain action in relation to haze pollution in Singapore. Failure to comply with this Notice entails an additional fine not exceeding $50,000 for every day or part thereof that the entity failed to comply with the Notice (s.5).

Where offences are committed by a body corporate, an unincorporated association or a partnership, section 16 extends liability to officers of the entity unless the individual can prove that the offence was committed without his consent, connivance or privity and that he

[10] See Parliamentary Debates, 4 August 2014 (Parliament No. 12, Volume 92, Session 2) at Second Reading of Bill.

had exercised all due diligence to prevent the offence as he ought to have exercised, having regard to the nature of his functions in that capacity and to all the circumstances.

Section 6 provides for civil liability for causing haze pollution in Singapore. It first establishes a duty on an entity not to engage in conduct that contributes to haze pollution in Singapore, including condoning the act of another entity. Breach of this duty enables an action to be brought in Singapore by any person who is injured or dies, or whose property is damaged or who sustains any economic loss in Singapore. The Court will determine the amount of damages. It was emphasized in the Parliamentary debate on the Bill that the civil liability provided for in this Act will only take effect in relation to haze episodes occurring after the date of coming into force of this law.[11] In other words, this law will not operate retrospectively.

Section 7 allows for defences "on a balance of probabilities" for prosecutions under section 5 as well as for civil claims under section 6. First, it shall be a defence if the accused can prove, on a balance of probabilities, that the haze pollution in Singapore was caused solely by "a grave natural disaster or phenomenon; or an act of war" (s.7(1)). Next, it is a defence if he can prove on a balance of probabilities, that the pollution was caused by the conduct of another person acting without the defendant's knowledge or consent, or contrary to the defendant's wishes or instructions (s.7(2)). However, this other person cannot be an employee or agent of the defendant; or a person engaged by the defendant or his employee to carry out any work on the land owned or occupied by the defendant; or a person who "has a customary right under the law of a foreign state or territory outside Singapore as regards the land in that foreign state or territory and with whom the defendant has an agreement or arrangement" relating to any farming or forestry operations to be carried out in that land (s.7(2)(d). It is also a defence if the defendant took all reasonable measures to prevent such conduct by the other entity (s. 7(3)).

The Minister noted that the law needs to take into account "the complex land ownership structure in overseas countries and commercial relationships" and "[t]herefore, the defences stipulated under clause 7(2) and 7(4) cannot be used by the accused or defendant if the haze pollution was caused or contributed by his/her employee or agent, or any person and the person's employees that have been engaged, directly or indirectly, by the accused to carry out work on the land that the accused owns or occupies.

---

[11] See Indonesia-Singapore collaboration in Jambi Province - Haze Action Online, above n. 8 and also the Debate on 5 August 2014.

The real challenge, of course, is establishing a clear nexus between the transboundary haze in Singapore and the party/parties that are responsible. Thus, section 8 provides a series of presumptions to allow the establishment of a causal link through the use of reasonably probative circumstantial evidence with the help of technology, such as high-resolution satellite images and meteorological information at or near the time that the transboundary haze pollution occurs in Singapore. Further presumptions are also provided under section 8 to facilitate identification of an entity responsible for the haze pollution in Singapore; the establishment of the causal link between an entity that participates in the management of another entity and where the other entity is responsible for the haze pollution in Singapore; and for the identification of the owner or occupier of land through maps from recognised sources. All these presumptions are assumed to be true until the contrary is proved.

Thus, section 8 reads:

8. Presumptions

(1) For the purposes of this Act, where it is proved that —

(*a*) there is haze pollution in Singapore;

(*b*) at or about the time of the haze pollution in Singapore, there is a land or forest fire on any land situated outside Singapore; and

(*c*) based on satellite information, wind velocity and direction and other meteorological information at or about the time of the haze pollution in Singapore, the smoke resulting from that fire is moving in the direction of Singapore,

it shall be presumed, until the contrary is proved, that there is haze pollution in Singapore involving smoke resulting from that land or forest fire, notwithstanding that there may be, at or about the same time, any land or forest fire or other fire on any other land situated outside Singapore (whether or not adjacent to the land referred to in paragraph (*b*)) or in any part of Singapore.

(2) For the purposes of this Act, where —

(*a*) it is proved, or presumed by the operation of subsection (4), that an entity owns or occupies any land situated outside Singapore; and

(*b*) it is further proved, or presumed by operation of subsection (1), that any haze pollution in Singapore involves smoke resulting from any fire on that land outside Singapore,

it shall be presumed, until the contrary is proved, that the entity which is the owner or occupier of the land engaged in conduct, or engaged in conduct that condones any conduct by another, which caused or contributed to that haze pollution in Singapore.

(3) For the purposes of this Act, where —

(*a*) it is proved that an entity (referred to in this subsection as the first entity) participates in the management of another entity (referred to in this subsection as the second entity); and

(*b*) it is further proved, or presumed by operation of subsection (2), that the second entity engaged in conduct, or engaged in conduct that condones any conduct by another, which caused or contributed to any haze pollution in Singapore,

it shall be presumed, until the contrary is proved, that the first entity also did engage in conduct, or did engage in conduct that condones any conduct by another, which caused or contributed to that haze pollution in Singapore.

(4) For the purposes of this Act, it shall be presumed, until the contrary is proved, that the entity owns or occupies any land situated outside Singapore if any of the following maps show the land as owned or occupied by that entity:

(*a*) any map furnished by, or obtained from, any person pursuant to a notice issued under section 10;

(*b*) any map furnished by, or obtained from, any government of a foreign State or territory outside Singapore;

(*c*) any map furnished by, or obtained from, any department of the government of a foreign State or territory outside Singapore, or any instrumentality of the government of a foreign State or territory outside Singapore even if separate and distinct from that government;

(*d*) any map furnished by any prescribed person through any prescribed means.

Part III of the Act relates to its Administration. Section 9 empowers the Director-General of Environmental Protection to issue an entity with a Prevention Measures Notice. This Notice can require the entity to deploy fire fighting personnel or use other means to extinguish or prevent the spread of any fires on land owned or occupied by the entity or by another entity which is managed by the first entity. The Director-General is also given wide investigative powers to obtain information (s. 10). Penalties are created under section 10(6) and section 10(7) for failure to comply with the notice to furnish documents and information required for investigation, or for wilfully altering, suppressing, destroying or providing false information. The penalties for both offences include a fine not exceeding $5,000, imprisonment or both.

It should be noted that section 10(3)(d) allows the service of a notice on an entity which does not have any place of business in Singapore, to assist the government in its investigations under section 10(3). The Minister in the Debate on the Bill, elaborated on this provision, stating

> *"The notice will be served personally on an officer of the entity when the officer or the partner of that entity is within Singapore. The National Environment Agency (NEA) will work closely with the Immigration and Checkpoints Authority (ICA), so that we will know when such a person is in Singapore. We will serve the notice to him or her when he or she enters Singapore. Where necessary, the Public Prosecutor could apply for a court order to require the person to remain in Singapore to assist in investigations. Failure of the entity or of the officers of that entity to furnish information and the documents which we require for investigations – if they fail to furnish information and documents without a reasonable excuse – would be an offence, and the officers of such companies who come into Singapore may be charged in court and be liable on conviction to a fine or imprisonment, or both...I would like to reiterate that this Bill is not meant to replace the enforcement actions that should be taken by other countries, but rather to complement their investigative and enforcement efforts."*[12]

Various questions were raised by Members of Parliament during the debate on the Bill. In particular, it was felt that there should not be a cap on the amount of damages. The Minister concluded

> *"while this legislation is a step in the right direction, it is not a silver bullet. It is only one of a slate of measures that we must put in place in order to tackle the transboundary haze that has plagued our region for many years. I strongly believe that regional cooperation within ASEAN is still a critical pillar of the ultimate solution. Enacting this legislation is just one step to re-align commercial interest. We still need the support and cooperation of many other stakeholders – the foreign governments, the companies, the NGOs and fellow Singaporeans – in order to make this region and Singapore safe from haze pollution."*[13]

It should be emphasised that just before this new law came into effect, the Indonesian Parliament agreed to ratify the Haze Agreement.[14] Greenpeace Indonesia believes that although this is a positive step forward, without aggressive action to combat the root causes of the issue, ratification is simply political lip service.[15]

---

[12] See Sydney Morning Herald above n. 4.

[13] Second Reading of the Bill, Parliament No 12, Session 2, Vol 92, Sitting No. 11, 05 August 2014. http://www.parliament.gov.sg/publications-singapore-parliament-reports

[14] http://www.straitstimes.com/news/asia/south-east-asia/story/indonesias-parliament-agrees-ratify-asean-haze-pact-20140916; http://news.mongabay.com/2014/0920-lbell-indonesia-haze-transboundary-agreement.html

[15] http://news.mongabay.com/2014/0920-lbell-indonesia-haze-transboundary-agreement.html

> *"Although delayed for 12 years, this ratification is a step forward that deserves appreciation," said Yuyun Indradi, a campaigner for Greenpeace Indonesia, "However, very few government policies appear to be in support of this step. Such as our government regulations to protect peat lands that actually do very little to protect peat lands. 70% of the fires creating smoke pollution burn in peat. As long as there is only minimal protection of peat lands, this ratification is only a political show."*

It is noted that pressure from the world community is compelling large producers of palm oil to practice sustainable agriculture, and join the Round Table on Sustainable Palm Oil.[16] Even smallholders and native farmers must be aware, by now, of the devastating effects of slash and burn methods of land clearing. A new Sustainable Palm Oil Manifesto[17] has also been developed but this has been met with criticisms of 'greenwash' by NGOs including Green Peace.[18]

Singapore's new law to address transboundary haze pollution contains innovative provisions. Its attempt at extra-territorial reach, the defences and presumptions - all these make for an extremely interesting piece of legislation that is hitherto unprecedented. It remains to be seen whether it can be effectively implemented in practice, when the next haze episode occurs.

---

[16] http://www.rspo.org/

[17] http://www.carbonstockstudy.com/Documents/Sustainable-Palm-Oil-Manifesto.aspx

[18] http://www.foodservicefootprint.com/news/new-sustainable-palm-oil-manifesto-met-criticism

COUNTRY REPORT: SOUTH AFRICA
Developments in Environmental Law during 2014: Alien and Invasive Species

Michael Kidd*

Introduction

Two interesting environmental legal developments during 2014 were the promulgation of alien and invasive species regulations and lists, and a judgment, the *Kloof Conservancy* case,[1] dealing with an application for an order that the government produce these lists and regulations, which happened to be reported after the lists were published.

Legal Framework

Chapter 5 of *the National Environmental Management: Biodiversity Act*[2] is headed 'Species and organisms posing potential threats to biodiversity'. It was originally headed 'Alien and Invasive Species' in the Bill, and this is largely its focus (it also focuses on genetically modified organisms). The combating of alien and invasive species is raised as a state responsibility in terms of the Convention on Biological Diversity.[3] The purpose of this Chapter is to prevent the introduction of alien species and to manage and control those that have already been introduced into the country. The Act addresses this by means of providing for restricted activities, which may only be carried out subject to a permit[4] or, as far as certain species are concerned, not at all.[5] Restricted activities in respect of alien and invasive species are:[6]

---

* Professor of Law, University of KwaZulu-Natal, South Africa. Email: kidd@ukzn.ac.za.

[1] Kloof Conservancy v Government of the RSA and Others unreported judgment, 12667/2012 (KZD).

[2] Act 10 of 2004.

[3] Article 8*(h)* of the CBD.

[4] Section 65 of the Act.

[5] Section 67.

[6] Defined in s 1 of the Act.

- Importing into the Republic, including introducing from the sea, any specimen of an alien or listed invasive species
- Having in possession or exercising physical control over any specimen of an alien or listed invasive species
- Growing, breeding or in any other way propagating any specimen of an alien or listed invasive species, or causing it to multiply
- Conveying, moving or otherwise translocating any specimen of an alien or listed invasive species
- Selling or otherwise trading in, buying, receiving, giving, donating or accepting as a gift, or in any way acquiring or disposing of any specimen of an alien or listed invasive species
- Any other prescribed activity which involves a specimen of an alien or listed invasive species

An alien species is a species that is not an indigenous species; or an indigenous species translocated or intended to be translocated to a place outside its natural distribution range in nature, but not an indigenous species that has extended its natural distribution range by natural means of migration or dispersal without human intervention, whereas an invasive species is any species whose establishment and spread outside of its natural distribution range threaten ecosystems, habitats or other species or have demonstrable potential to threaten ecosystems, habitats or other species; and may result in economic or environmental harm or harm to human health.[7]

The Minister may exempt from the ambit of restricted activities either specified alien species or alien species of a specified category.[8] This exemption process is critical to the operation of these control provisions, since every alien species is subject to the prohibition of restricted activities until such time as the exemptions are declared. This part of the Act came into effect on 1 April 2005,[9] and since that date, any of the restricted activities listed above have been unlawful in respect of any alien species, whether they are potentially troublesome or not. Technically, this means that all nurseries selling any exotic plants required permits, as did all landowners possessing alien species of plants or animals (most livestock is non-indigenous). This was clearly a situation that potentially brought the law

[7] Section 1.

[8] Section 66.

[9] Proc R47 in *GG* 26887 of 8 October 2004.

into disrepute, and meant that this part of the Act was not being enforced. There was a draft list in September 2007[10] and a very different draft list in April 2009,[11] followed by one in 2013.[12] The final list, which will enable the Act to be enforced logically in respect of alien species, was published and came into effect only in 2014, as discussed below.

Section 69 imposes a duty of care on a person to carry out permitted activities in respect of alien species in such a way as harm to biodiversity is prevented or minimised. This section allows a competent authority to direct the individual to take steps, to take steps itself if the individual is in default and to recover costs.

Part 2 of the Chapter is similar except the focus is on invasive species (which may include indigenous species that may be invasive in areas outside of their natural range). This part also includes provision for restricted activities in respect of listed invasive species,[13] and the duty of care (including provision for the power of any person to request competent authorities to issue directives),[14] but also includes a section that provides for the control and eradication of listed invasive species by 'appropriate' means and methods.[15] Moreover, the Act requires invasive species control plans and status reports to be prepared by protected areas management authorities and all organs of state for land under their control.[16] A draft list of invasive species appeared in 2009,[17] and then, in 2013, the Minister published alien and invasive species regulations[18] and a national list of invasive species.[19] The regulations were 'final' regulations (not draft), but were to come into effect on a date to be proclaimed, and this date was never proclaimed prior to the final regulations of 2014 being made (discussed below). The 2013 regulations and lists were characterised as 'interim' notices in the *Kloof Conservancy* judgment.[20]

---

[10] GN 1147 in *GG* 30293 of 17 September 2007.

[11] GN 348 in *GG* 32090 of 3 April 2009.

[12] GN R508 in *GG* 36683 of 19 July 2013. A list of exempted alien species was also published: GN R509 in *GG* 36683 of 19 July 2013.

[13] Section 71. Species are listed in terms of s 70.

[14] Section 73.

[15] Section 75.

[16] Sections 76 and 77.

[17] GN 350 in *GG* 32090 of 3 April 2009.

[18] GN R506 in *GG* 36683 of 19 July 2013.

[19] GN R507 in *GG* 36683 of 19 July 2013.

[20] Paras 83 and 84.

Section 70, which is a principal focus of the *Kloof Conservancy* case, reads:

(1) *(a)* The Minister must within 24 months of the date on which this section takes effect, by notice in the *Gazette*, publish a national list of invasive species in respect of which this Chapter must be applied nationally.

(b) The MEC for environmental affairs in a province may, by notice in the *Gazette*, publish a provincial list of invasive species in respect of which this Chapter must be applied in the province.

(2) The Minister or the MEC for environmental affairs in a relevant province must regularly review the national list or any provincial list published in terms of subsection (1), as may be appropriate.

(3) An MEC for Environmental Affairs may only publish or amend a provincial list in terms of subsection (1) or (2) with the concurrence of the Minister.

(4) A notice in terms of subsection (1) may-

(a) apply generally-

(i) throughout the Republic or a province, as the case may be, or only in a specified area or a specified category of areas;

(ii) to all persons or only to a specified category of persons;

(iii) to all species or only to a specified species or a specified category of species; or

(b) differentiate between-

(i) areas or categories of areas;

(ii) persons or categories of persons; or

(iii) species or categories of species.

This section took effect on 1 September 2004 (the date that most of the Act took effect), which means that the Minister was required to publish he national list of invasive species by 1 September 2006. Note that subsection (4) was added by amendment in 2013.[21]

The 2014 Lists and Regulations

Following publication of draft regulations and lists in February 2014,[22] the final Alien and Invasive Species Regulations were published on 1 August 2014.[23] They repealed the July

[21] Section 16 of Act 14 of 2013.

[22] GenN 78 and 79 in *GG* 37320 of 12 February 2014.

[23] GN R598 in *GG* 37885 of 1 August 2014.

2013 regulations and came into effect 'from a date within 60 days of publication' (sic). The regulations were accompanied by Alien and Invasive Species Lists.[24]

The body of the regulations starts in Chapter 2 with the different categories of listed invasive species. Category 1a are those that require the owner of land on which they occur to comply with the duties prescribed in s 73(2) of the Act of notification, control and eradication, and minimisation of harm to the environment. The landowner is required to take immediate steps to control and eradicate the invasive species subject to the requirements of s 75 of the Act (which provides essentially for prudent control and eradication). Category 1b comprise those that do not trigger the duties in s 73(2) but are nevertheless subject to control and eradication, also subject to s 75. Category 2 species are those that require a permit with which to carry out activities with the listed species in a specified area. Spread of such species outside of the specified areas is restricted and, if it occurs, the species in question is to be regarded as a Category 1b species. Category 3 species are essentially exempted from prohibitions but do require control in terms of any management programme. Also, if such a species is a plant, it is to be regarded as a Category 1b species if occurring in a riparian area (within 32 metres of the edge of a river, lake, dam, wetland or estuary, or within the 1:100 year floodline, whichever is the greater).

The regulations in Chapter 3 set out restricted activities additional to those set out in the Act (including, spreading or allowing the spread of, any specimen of a listed invasive species; and releasing any specimen of a listed invasive species) and make provision for veterinary health or phytosanitary certificates for alien species imported under permit.

Chapter 4 deals with 'National Framework Documents', including duties relating to and contents of Invasive Species Monitoring, Control and Eradication Plans; a national Register of alien and listed invasive species; research and biological control; and national status reports. Chapter 5 is headed 'Registers and Notification', requiring a register to be kept of all permits, refused permits and risk assessments and a register of notifications and directives.

Risk assessment is covered by Chapter 6. Reg 14 sets out the mandatory requirements of risk assessments in some detail. Such an assessment must be carried out by an environmental assessment practitioner with the necessary specialist expertise. The contents of the risk assessment report are set out in reg 17.

---

[24] GN R599 in *GG* 37886 of 1 August 2014.

Chapter 7 regulates the issuing, amendment and cancellation of permits. It stipulates what a permit can address; the procedure for making application for a permit, including form and content; consideration of the application and the decision; permit conditions; special provisions for research, biological control, display purposes, and inter-basin transfer; the form and content of permits; the period of validity of permits; amendment of permits; the return of cancelled permits; and the renewal of permits. It also addresses the question of the sale or transfer of alien and listed invasive species (including the land on which they are found). An interesting provision that could potentially affect nearly every landowner is reg 29(3), which provides that the seller of any immovable property must, prior to the conclusion of the relevant sale agreement, notify the purchaser of that property in writing of the presence of listed invasive species on that property. This is difficult enough in a small suburban property when one considers the average person's knowledge of invasive species, let alone large rural properties.

Chapter 8 deals with the emergency suspension of permits and chapter 9 with compliance and enforcement: regulations relating to directives (in terms of s 69(2) or 73(3) of the Act); limitations if liability and offences and penalties.

The regulations themselves are probably not that controversial but the lists are possibly the cause of greater potential consternation. Notice 1 in GN R599 sets out in tabular format which restricted activities, both in terms of the Act and those set out in the regulations, are applicable (and how) to the various categories: either (for the most part) prohibited, exempted or permit required. Notice 2 is the list of alien species that are exempted from the provisions of the Act (which operates on a reverse-listing basis). As could reasonably be expected, this is a broad and general list, essentially (to put it simply) exempting any alien species already in the country unless it has been listed as an invasive species.

Notice 3 contains the list of invasive species, providing the relevant category, which, in some cases, differ in different parts of the country for the same species. There are 379 terrestrial and freshwater plant species, which is quite an imposing list for any average person to know. Given the duties set out in the regulations and the Act, one could foresee a role for alien species experts to inform property owners which plants they have on their land and which ones are covered in these lists.

Section 65 of the Act provides that no person may carry out a restricted activity in respect of an alien species without a permit (unless exempted in terms of s 66). Section 67, however, provides that the Minister may list alien species for which a permit envisaged in s 65 may *not* be issued. In other words if a species appears on this list, no restricted activity may be carried out with that species. Notice 4 in GN R599 is that list: the list of prohibited alien species. Note that a restricted activity in this regard includes having in possession or exercising physical control over any specimen of that species (s 1 of the Act). There are 238 plants falling into this category! Two different trout/salmon species appear on this list, but they explicitly exclude rainbow and brown trout, which form the staple of South Africa's trout-fishing industry. The trout fishing community was displeased with the draft of these lists because of the potential impact on trout fishing in the country, but seemingly trout have been let off the hook.

The *Kloof Conservancy* Judgment

The primary objective of *Kloof Conservancy v Government of the RSA and Others*,[25] for which proceedings were launched at the end of 2012, was an application for a mandatory interdict requiring the publication of a list of invasive species in terms of s 70 *of the National Environmental Management: Biodiversity Act*.[26] As observed above, this list was required to be published by no later than 31 August 2006 and had not been published at the time the proceedings were launched. Moreover, there was an additional review application of 'proposed interim' lists published under the Act in 2013 (seeking to set these aside). The case was argued on 25 April 2014 (this date is important because of the parallel legislative developments described above).

In addition to the main mandatory interdict application, several other prayers sought action from the government (primarily the Minister of Environmental Affairs but also other government departments, both national and provincial, who have enforcement capabilities in respect of alien and invasive species) relating to implementation and enforcement. During the period for which the court in KwaZulu-Natal (Vahed J) had reserved judgment, the Minister published invasive species lists and regulations on 1 August 2014, these repealing the 2013 'interim' notices mentioned above. This had the effect, as the court observed, that 'the nub of the relief sought has apparently been rendered moot'.[27]

---

[25] Unreported judgment, 12667/2012 (KZD).

[26] Act 10 of 2004.

[27] Para 4 of the judgment.

The court, having observed that the applicant's standing was not in dispute, set out a chronological timeframe of the government's legislative and related efforts in relation to invasive species,[28] which indicate, inter alia, that the legislative deadline of 31 July 2006 for publication of the lists passed without publication and that draft lists published in both 2006 and 2009 came to nought (at least as far as promulgation was concerned). The court then considered the respondents' (particularly the Minister of Environmental Affairs') explanation of its 'response' to the statutory duties pertaining to the publication of the list and regulations.[29] This explanation indicates that the process involved considerable complexity and involved the recognition of several legal and other obstacles along the way, including the necessity of amending the Act (as pointed out above) in order to provide more flexibility in respect of regulating invasive species. This is well-worth reading in order to appreciate the difficulties facing the government in relation to combating invasive species.

The court, however, was not impressed by this response, characterizing the government's response to the problem as one not 'infected... by any sense of urgency'.[30] The court observed that the Minister's failure to promulgate the necessary regulations and lists within the time contemplated by the Act could not be regarded as reasonable. There was not much, if any, explanation given for this conclusion, but the reasoning of the court appears to be that the failure to meet the statutorily-imposed deadline would be unreasonable whatever the explanation of the government might be. This conclusion was undoubtedly strongly influenced by the fact that the deadline was missed by almost 8 years. This failure to meet the deadline was also offered by the court as justification (without further explanation) for deciding that the applicant was entitled to the order that the relevant respondents take the necessary steps to comply with their duties in relation to invasive species in terms of the Act and that sufficient numbers of environmental management inspectors be appointed for purposes of invasive control.

Other than the application for publication of the lists and regulations (unnecessary because of the 2014 promulgation of these), the court issued all the orders requested by the applicants and awarded costs on an attorney-and-client scale because of the 'wholly

---

[28] Paras 7 to 35 inclusive.

[29] Paras 36 to 109 inclusive.

[30] Para 110.

unreasonable' delay in meeting the statutory duty in question coupled with the respondents' conduct in the application.[31]

There appears to have been little, if anything, that the respondents could have done to avoid this outcome, other than amending the Act to remove the two-year deadline imposed by section 70 prior to the elapsing of that deadline. As for the order overall, it will be interesting to see how enforceable the orders will be that order the government to require all organs of state to meet their statutory responsibilities in relation to invasive species and to appoint the relevant environmental management inspectors. It may be that the latter order involves an unacceptable intrusion by the court into matters that are proper for the executive to decide. As for the former, it may be that it is too general to be of any effect in practice. The respondents are apparently, at the time of writing, applying for leave to appeal.

Conclusion

South Africa finally has a fleshed-out statutory framework for alien and invasive species control, at least on paper. There has been legislation outlawing various species for many years: there have been regulations under the *Conservation of Agricultural Resources Act*[32] which address 'weeds and invader plants'[33] since 1984. It is clear from the extent of infestation by alien and invasive plants (in particular) in many parts of the country that these regulations have been spectacularly ineffective. It is not likely that the enforcement infrastructure will be much better in respect of the new regulations under the Biodiversity Act, but the proof of the pudding will be in the eating. It may be that the 'victory' in the *Kloof Conservancy* judgment, if it survives appeal, may turn out to be a hollow one. It need be hardly said, in conclusion, that it would be good to be proved wrong.

---

[31] Para 138.

[32] Act 43 of 1983.

[33] GN R1048 in *GG* 10029 of 25 May 1984, as amended.

COUNTRY REPORT: SPAIN

Lucía Casado Casado*

Introducción

La actividad normativa desarrollada en España por el Estado durante el período objeto de análisis (noviembre de 2013 a octubre de 2014) ha sido amplia y han visto la luz un buen número de normas en materia ambiental, tanto de rango legal como reglamentario. Entre las normas de rango legal, destacamos especialmente la aprobación de la Ley 21/2013, de 9 de diciembre, de evaluación ambiental, contra la que varias comunidades autónomas ya han presentado recurso de inconstitucionalidad ante el Tribunal Constitucional por entender que se vulneran sus competencias; y la Ley 11/2014, de 3 de julio, por la que se modifica la Ley 26/2007, de 23 de octubre, de responsabilidad medioambiental.

Como viene siendo habitual, también se han aprobado en estos meses varias normas reglamentarias en ámbitos sectoriales diversos (energía nuclear, protección de animales, cambio climático, patrimonio natural y biodiversidad, protección del medio marino, aguas, protección de la atmósfera…), en algunos casos para cumplir exigencias derivadas del derecho de la Unión Europea. Entre estas normas reglamentarias, destacamos especialmente el Real Decreto 413/2014, de 6 de junio, que regula el nuevo régimen jurídico y económico de la actividad de producción de energía eléctrica a partir de fuentes de energía renovables, cogeneración y residuos y que ha suscitado una gran polémica en el sector al establecer un nuevo sistema de retribución para las instalaciones productoras de energía eléctrica a partir de fuentes renovables, de cogeneración y de residuos, que sustituye al anterior sistema de primas; y el Real Decreto 876/2014, de 10 de octubre, por el que se aprueba el Reglamento general de costas, cuyo objeto no es otro que el desarrollo y la ejecución de la Ley 22/1988, de 28 de julio, de costas, y la Ley 2/2013, de 29 de mayo, de protección y uso sostenible del litoral. Asimismo, debe destacarse que el Gobierno, aunque con un enorme retraso, ha concluido la planificación hidrológica de competencia del Estado –que debería haber estado aprobada a finales de 2009–, para dar cumplimiento a la Directiva marco de aguas.

* Profesora Titular de Derecho Administrativo de la Universitat Rovira i Virgili e Investigadora del Centre d'Estudis de Dret Ambiental de Tarragona (CEDAT). Email: lucia.casado@urv.cat.

En el plano internacional, merecen especial mención la adhesión de España a la Convención sobre el derecho de los usos de los cursos de agua internacionales para fines distintos de la navegación, hecho en Nueva York el 21 de mayo de 1997; y la ratificación por parte de España del Protocolo de Nagoya sobre acceso a los recursos genéticos y participación justa y equitativa en los beneficios que se deriven de su utilización al Convenio sobre la diversidad biológica, hecho en Nagoya el 29 de octubre de 2010.

Por último, a nivel jurisprudencial cabe destacar la problemática desatada por la aprobación de determinadas leyes autonómicas que han prohibido de forma absoluta la utilización de la técnica de la fractura hidráulica (fracking) para la extracción de hidrocarburos no convencionales y que, recientemente, han sido declaradas inconstitucionales.

La Actividad Normativa Desarrollada Por El Estado En Materia Ambiental

La Nueva Ley de Evaluación Ambiental

La Ley 21/2013, de 9 de diciembre, de evaluación ambiental, ha introducido un nuevo régimen jurídico para la evaluación ambiental en España. Se trata de una Ley que integra en un único texto normativo la legislación de evaluación ambiental estratégica y de evaluación ambiental de proyectos y que supone la derogación de la Ley 9/2006, de 28 de abril, sobre evaluación de los efectos de determinados planes y programas en el medio ambiente; del Texto Refundido de la Ley de evaluación de impacto ambiental de proyectos, aprobado por Real Decreto Legislativo 1/2008, de 11 de enero; y del Real Decreto 1131/1988, de 30 de septiembre, por el que se aprueba el Reglamento para la ejecución del Real Decreto Legislativo 1302/1986, de 28 de junio, de evaluación de impacto ambiental.

El objetivo de la reforma, además de aunar en un único cuerpo legal, el régimen de jurídico de la evaluación de planes, programas y proyectos, es simplificar y racionalizar los procedimientos de evaluación, dotándolos de mayor agilidad, con el fin de que constituyan un instrumento eficaz para la protección del medio ambiente. También pretende establecer un marco jurídico común para la evaluación ambiental y lograr la concertación de la normativa sobre evaluación ambiental en todo el territorio nacional. Ahora bien, no puede ocultarse la motivación económica que justifica su aprobación, motivación que, por otra parte, acompaña a muchas de las recientes reformas normativas en materia ambiental, tanto de ámbito estatal como autonómico, que más allá de lo ambiental, también se justifican como medidas para paliar la crisis. El propio Ministerio de Agricultura,

Alimentación y Medio Ambiente ha afirmado que con esta norma, además de un nuevo impulso al desarrollo sostenible, se prevé generar unos 80.000 empleos y supondrá un impacto sobre la actividad económica de 1.000 millones de euros aproximadamente.

La Ley de evaluación ambiental, incluidos sus anexos, se dicta al amparo del artículo 149.1º.23 CE y, salvo algunas excepciones determinadas por la disposición final octava, tiene el carácter de legislación básica de protección del medio ambiente, sin perjuicio de las facultades de las comunidades autónomas de establecer normas adicionales de protección. En principio, esto ya era así en la anterior normativa reguladora de la evaluación ambiental estratégica y de la evaluación de impacto ambiental. La novedad radica ahora tanto en el mayor grado de detalle de la legislación básica estatal a la hora de regular determinadas cuestiones –por ejemplo, la evaluación de impacto ambiental de proyectos– como en la clara voluntad subyacente de homogeneizar la normativa en esta materia en todo el territorio nacional, de armonizar los procedimientos administrativos autonómicos actualmente en vigor y evitar diferencias injustificadas en los niveles de exigencia medioambiental de las comunidades autónomas. Si hasta ahora las diferencias entre las regulaciones autonómicas de la evaluación ambiental han sido grandes, la pretensión –y así se hace constar en la Exposición de Motivos, que incluso apela a la necesidad de una coordinación vertical efectiva entre los diferentes niveles de gobierno– es que en el futuro haya un marco jurídico común y una legislación homogénea en todo el territorio nacional, con las especificidades estrictamente necesarias en cada comunidad autónoma, evitando así procesos de deslocalización.

En este contexto cabe situar los principios de “racionalización, simplificación y concertación de los procedimientos de evaluación ambiental” y de “cooperación y coordinación entre la Administración General del Estado y las Comunidades Autónomas”, recogidos en la Ley, y el papel encomendado a la Conferencia Sectorial de Medio Ambiente. A ella corresponderá analizar y proponer las modificaciones normativas necesarias para cumplir con los principios recogidos en esta norma y establecer un procedimiento de evaluación ambiental homogéneo en todo el territorio nacional. Por lo tanto, el margen de actuación de las comunidades autónomas para regular esta materia va a ser menor.

La Ley de evaluación ambiental se estructura en tres títulos (I –“Principios y disposiciones generales” –, II –“Evaluación ambiental” – y III –“Seguimiento y régimen sancionador” –), integrados por 64 artículos; 15 disposiciones adicionales, dos disposiciones transitorias, una disposición derogatoria única y 10 disposiciones finales; y 6 anexos (dedicados

respectivamente a los proyectos sometidos a evaluación ambiental ordinaria, los proyectos sometidos a evaluación ambiental simplificada, los criterios para determinar si un proyecto del anexo II debe someterse a evaluación de impacto ambiental ordinaria, el contenido del estudio ambiental estratégico, los criterios para determinar si un plan o programa debe someterse a evaluación ambiental estratégica ordinaria y el estudio de impacto ambiental y criterios técnicos).

Su finalidad principal es establecer “las bases que debe regir la evaluación ambiental de los planes, programas y proyectos que puedan tener efectos significativos sobre el medio ambiente, garantizando en todo el territorio del Estado un elevado nivel de protección ambiental, con el fin de promover un desarrollo sostenible”. Asimismo, recoge los principios que informarán el procedimiento de evaluación ambiental de los planes, programas y proyectos que puedan tener efectos significativos sobre el medio ambiente y el régimen de cooperación entre la Administración estatal y las comunidades autónomas a través de la Conferencia Sectorial de Medio Ambiente (art. 1).

En relación con su contenido, lo más destacable es, por una parte, como ya hemos avanzado, la regulación en el mismo texto normativo de la evaluación ambiental estratégica y la evaluación de impacto ambiental de proyectos; y, por otra, la introducción de importantes novedades procedimentales, destinadas a lograr una mayor simplificación y agilización de la tramitación de los procedimientos de evaluación, sin olvidar la incorporación de nuevas tipologías de proyectos. Asimismo, incorpora una novedad muy controvertida como es la creación de los bancos de conservación de la naturaleza, que constituyen un instrumento de carácter voluntario que permite compensar, reparar o restaurar la pérdida de valores naturales que se produce como consecuencia de la ejecución de proyectos con impactos ambientales. Este mecanismo, utilizados en otros países, ha suscitado, sin embargo, la reacción y las críticas de las asociaciones ecologistas.

La Modificación de la Ley de Responsabilidad Medioambiental

Mediante la Ley 11/2014, de 3 de julio, se ha modificado la Ley 26/2007, de responsabilidad medioambiental. Esta modificación se realiza con el objetivo de “reforzar los aspectos preventivos de la misma, simplificar y mejorar ciertos aspectos de su aplicación”. Mediante ella se incorpora al ordenamiento jurídico español el artículo 38 de la Directiva 2013/30/UE, del Parlamento Europeo y del Consejo, de 12 de junio de 2013, sobre la seguridad de las

operaciones relativas al petróleo y al gas mar adentro, y que modifica la Directiva 2004/35/CE.

Esta Ley ha introducido diversas modificaciones en la Ley de responsabilidad medioambiental. En primer lugar, amplía la definición de los daños a las aguas, que pasan a incorporar los daños en el estado ecológico de las aguas marinas, tal y como se define en la Ley 41/2010, de 29 de diciembre, de Protección de Medio Marino, en la medida en que diversos aspectos del estado ecológico del medio marino no estén ya cubiertos por el Real Decreto Legislativo 1/2001, de 20 de julio, por el que se aprueba el texto refundido de la ley de aguas. En segundo lugar, introduce algunas modificaciones en la aplicación de la Ley de responsabilidad medioambiental a las obras públicas de interés general de la Administración General del Estado. En tercer lugar, con el fin de reforzar los aspectos preventivos, se prevé que las autoridades competentes adoptarán medidas para impulsar la realización voluntaria de análisis de riesgos medioambientales, entre los operadores de cualquier actividad susceptible de ocasionar daños medioambientales, con la finalidad de lograr una adecuada gestión del riesgo medioambiental de la actividad. En cuarto lugar, se simplifican ciertos aspectos de la aplicación del régimen de responsabilidad medioambiental, tanto para los operadores económicos como para las administraciones públicas, con el fin de dar cumplimiento a las medidas previstas en el Informe de la Comisión para la Reforma de las Administraciones Públicas que, en materia de responsabilidad medioambiental, alude a la simplificación y reducción de cargas administrativas. En aras de dicha simplificación, se modifican algunos aspectos relativos a las garantías financieras. En quinto lugar, se modifica el Fondo de compensación de daños medioambientales del Consorcio de Compensación de Seguros, para adaptar su regulación a la situación actual de la normativa nacional bajo la que está constituido. Finalmente, se modifican algunos aspectos relativos a los procedimientos de exigencia de responsabilidad medioambiental, con el objetivo de mejorar su tramitación.

La Regulación del Fracking a Nivel Estatal

La aprobación por parte de algunas comunidades autónomas de leyes que han prohibido la utilización del fracking como técnica para la exploración y obtención de gas no convencional en sus territorios ha motivado la aprobación de algunas normas que, aunque no regulan de forma específica y completa esta técnica, inciden de forma significativa en su régimen jurídico. Por una parte, cabe destacar la Ley 17/2013, de 29 de octubre, para la garantía del suministro e incremento de la competencia en los sistemas eléctricos insulares y

extrapeninsulares. Esta Ley modifica la Ley 34/1998, de 7 de octubre, del sector de hidrocarburos, y, como pone de manifiesto su Preámbulo, "hace explícita la inclusión en el ámbito objetivo de esta Ley de determinadas técnicas habituales en la industria extractiva reconociéndose su carácter básico, en concreto, las técnicas de fracturación hidráulica". Asimismo, modifica el entonces vigente Texto Refundido de la Ley de evaluación de impacto ambiental de proyectos, aprobado mediante el Real Decreto Legislativo 1/2008, de 11 de enero, para exigir una previa declaración de impacto ambiental favorable para la autorización de este tipo de proyectos.

Por otra, la nueva Ley 21/2013, de 9 de diciembre, de evaluación ambiental, a la que ya nos hemos referido, sujeta a evaluación de impacto ambiental ordinaria "los proyectos consistentes en la realización de perforaciones para la exploración, investigación o explotación de hidrocarburos, almacenamiento de CO2, almacenamiento de gas y geotermia de media y alta entalpía, que requieran la utilización de técnicas de fracturación hidráulica", precisando que no se incluyen en este apartado "las perforaciones de sondeos de investigación que tengan por objeto la toma de testigo previos a proyectos de perforación que requieran la utilización de técnicas de facturación hidráulica".

Otras Normas de Interés

Además, de las normas a las que hemos hecho especial referencia, destacamos la aprobación de otras normas de rango legal que, aunque no tienen como objeto la protección del medio ambiente, inciden significativamente en esta materia. En primer lugar, la Ley 27/2013, de 27 de diciembre, de racionalización y sostenibilidad de la Administración local, que modifica la Ley 7/1985, de 2 de abril, reguladora de las bases de régimen local, y que tiene implicaciones importantes sobre las competencias ambientales locales, ya que modifica las competencias de los municipios y las provincias en este ámbito.

En segundo lugar, la Ley 19/2013, de 9 de diciembre, de transparencia, acceso a la información pública y buen gobierno, que incide sobre la regulación del acceso a la información ambiental, ya que, aunque en esta materia resulta de aplicación preferente la legislación específica –la Ley 27/2006, de 18 de julio, por la que se regulan los derechos de acceso a la información, la participación pública y el acceso a la justicia en materia de medio ambiente–, en todo lo previsto en ella será de aplicación, con carácter supletorio, la Ley 19/2013.

En tercer lugar, la Ley 20/2013, de garantía de la unidad de mercado, dictada con la finalidad de establecer las disposiciones necesarias para hacer efectiva la unidad de mercado en todo el territorio nacional. Esta Ley, cuyo objetivo general es introducir un marco regulatorio eficiente para las actividades económicas, se apoya en el principio de unidad de mercado para imponer una nueva regulación de las condiciones de acceso a las actividades económicas y a su ejercicio. Con esta finalidad, introduce una serie de medidas de supresión de restricciones, barreras o trabas administrativas a la circulación de productos y la prestación de servicios que dificulta la unidad de mercado en el territorio nacional. Entre ellas, destacamos especialmente la ampliación de los supuestos en que no podrán aplicarse controles previos para el acceso a las actividades económicas y su ejercicio y la extensión de la eficacia a todo el territorio nacional de todos los medios de intervención de las autoridades competentes que permitan el acceso a una actividad económica o su ejercicio, o acrediten el cumplimiento de ciertas calidades, cualificaciones o circunstancias. A los efectos que aquí nos interesan, la protección del medio ambiente se contempla en esta Ley como excepción que permite la exigencia de una autorización, siempre que concurran los principios de necesidad y proporcionalidad, que habrán de motivarse suficientemente en la Ley que establezca dicho régimen.

La Jurisprudencia Ambiental: La Prohibición Del Fracking Ante El Tribunal Constitucional

A nivel jurisprudencial, el último año ha sido especialmente prolífico en cuanto a sentencias del Tribunal Constitucional en materia de protección del medio ambiente. Se han dictado numerosas Sentencias que han contribuido a delimitar el alcance de las competencias estatales y autonómicas en materia de protección del medio ambiente en ámbitos sectoriales diversos, como las instalaciones de generación eléctrica en el mar territorial (Sentencias 3/2014, de 16 de enero, 25/2014, de 13 de febrero y 121/2014, de 17 de julio), las obras públicas de interés general (Sentencia 202/2013, de 5 de diciembre), el ruido (Sentencia 161/2014, de 7 de octubre) o las subvenciones en materia ambiental (Sentencia 144/2014, de 22 de septiembre), entre otros. Sin embargo, destacamos entre todas ellas dos Sentencias recientes en las que el Tribunal Constitucional ha abordado la problemática del fracking, a raíz del examen de constitucionalidad de dos leyes autonómicas que prohibían el uso de esta técnica. Nos referimos a las Sentencias 106/2014, de 24 de junio y 134/2014, de 22 de julio, que resuelven, respectivamente, los recursos de inconstitucionalidad interpuestos por el Presidente del Gobierno contra la Ley del Parlamento de Cantabria 1/2013, de 15 de abril, por la que se regula la prohibición en el

territorio de esta Comunidad Autónoma de la fractura hidráulica como técnica de investigación y extracción de gas no convencional y contra la Ley del Parlamento de La Rioja 7/2013, de 21 de junio, por la que se regula la prohibición en el territorio de esta Comunidad Autónoma de la fractura hidráulica.

En estas Sentencias, el Tribunal Constitucional resuelve estimando los recursos de inconstitucionalidad y declarando la inconstitucionalidad y consiguiente nulidad de ambas leyes autonómicas. Veamos los argumentos que utiliza a tal efecto. En la Sentencia 106/2014, el Alto Tribunal comienza precisando el concepto de fractura hidráulica, con el fin de enmarcar adecuadamente el problema constitucional planteado. A continuación, destaca el amplio debate, no sólo técnico, sino también social, desatado a nivel nacional e internacional ante la utilización de esta técnica, si bien señala que no le corresponde tomar postura sobre un tema de tan debatido alcance y recuerda que su misión consiste únicamente en dictaminar si las leyes impugnadas han incurrido o no en inconstitucionalidad, por extralimitación de sus competencias en la materia. Asimismo, menciona las actuaciones de la Unión Europea en este ámbito, con especial referencia a la Recomendación de la Comisión de 22 de enero de 2014 relativa a unos principios mínimos para la exploración y producción de hidrocarburos (como el gas de esquisto) utilizando la fracturación hidráulica de alto volumen (2014/70/UE), y destaca la prerrogativa exclusiva de los Estados miembros de explotar sus recursos energéticos, sin perjuicio de que deban garantizarse unas condiciones justas y equitativas en toda la Unión Europea (FJ 2ª).

Realizadas estas consideraciones previas, entra a examinar la constitucionalidad de la Ley de Cantabria, prohibitoria del fracking. Para ello, opta por centrar este examen exclusivamente en el ámbito competencial, otorgando a las menciones que se realizan a una posible vulneración de los artículos 128.1 y 130.1 CE “un carácter accesorio y de refuerzo de la alegación de invasión competencial” (FJ 3º). En consecuencia, encuadra la controversia en el ámbito material de la energía –a pesar de la incidencia en esta materia de otros títulos competenciales, como el de la protección del medio ambiente–, sitúa como título competencial prevalente el relativo a la energía y entra a analizar las competencias estatales y autonómicas para regular el uso de la técnica de la fractura hidráulica. En primer lugar, señala que “corresponde al Estado la competencia para regular la ordenación del sector energético, y dentro de éste el subsector gasístico, mediante la aprobación de la legislación básica; y a las Comunidades Autónomas corresponden las competencias de desarrollo normativo y ejecutiva, respetando las bases establecidas por el Estado” (FJ 4º). En segundo lugar, considera que la regulación de la técnica de la fractura hidráulica para la

exploración, investigación y explotación de hidrocarburos no convencionales, que lleva a cabo el Estado mediante la Ley 17/2013, de 29 de octubre, para la garantía del suministro e incremento de la competencia en los sistemas eléctricos insulares y extrapeninsulares, tiene carácter, formal y materialmente, básico (FJ 6º). En tercer lugar, afirma también la competencia del Estado para exigir la previa evaluación de impacto ambiental para autorizar los proyectos consistentes en la realización de perforaciones para la exploración, investigación o explotación de hidrocarburos que requieran la utilización de técnicas de fracturación hidráulica y el carácter básico de la normativa de evaluación ambiental que incorpora esta exigencia (FJ 6º). Una vez dilucidado el carácter básico de la legislación estatal en esta materia, el Tribunal Constitucional entra a examinar si la Ley de Cantabria impugnada incurre o no en inconstitucionalidad mediata por contradecir de manera insalvable esa normativa estatal. En su opinión, "La prohibición absoluta e incondicionada de una determinada técnica de investigación y explotación de hidrocarburos no puede decidirse por una Comunidad Autónoma. De la doctrina constitucional se infiere sin dificultad que, con la finalidad de protección del medio ambiente, la Comunidad Autónoma puede imponer requisitos y cargas para el otorgamiento de autorizaciones y concesiones no previstos por la legislación estatal, pero sin alterar el ordenamiento básico en materia de régimen minero y energético. La prohibición de la técnica del fracking que establece el art. 1 de la Ley autonómica impugnada vulnera la competencia estatal ex art. 149.1.13 y 25 CE, al excluir la eficacia en el territorio de Cantabria de la legislación básica que se dicta al amparo de los referidos títulos competenciales" (FJ 8º). Para el Tribunal Constitucional tampoco puede considerase como una norma adicional de protección en materia medioambiental, dictada por la Comunidad Autónoma de Cantabria al amparo de su competencia de desarrollo y ejecución de la legislación básica del Estado (FJ 8º). Además, tampoco puede fundamentarse la prohibición del fracking en las competencias asumidas estatutariamente por las Comunidades Autónomas afectadas en materia de sanidad, ordenación del territorio y urbanismo. En consecuencia, ante la insalvable contradicción existente entre la normativa básica estatal y la ley autonómica impugnada, concluye que esta Ley resulta incompatible con la legislación básica estatal sobrevenida, lo que determina su inconstitucionalidad y consiguiente nulidad a partir de la entrada en vigor de la legislación básica (FJ 8ª).

Esta argumentación del Tribunal Constitucional vuelve a reproducirse posteriormente en la Sentencia 134/2014, en la que se declara la inconstitucionalidad y consiguiente nulidad de la Ley de la Rioja 7/2013, de 21 de junio, por la que se regula la prohibición en el territorio de la Comunidad Autónoma de La Rioja de la técnica de fractura hidráulica como técnica de investigación y extracción de gas no convencional.

Ambas Sentencias cuentan con un voto particular formulado por varios magistrados. Este voto particular, aunque concurrente con el fallo adoptado, disiente parcialmente de la fundamentación jurídica de la Sentencia. Por una parte, señala que debiera haberse aplicado con mayor rigor técnico el principio de precaución. Por otra, apunta que hubiera sido necesario realizar una aproximación diferente a la controversia competencial suscitada, adoptando un enfoque que, en lugar de analizar de forma lineal y por separado los distintos títulos competenciales en presencia, hubiera procedido a un juicio de ponderación de estos títulos competenciales, asegurando la debida ponderación de los intereses eventualmente afectados sin preterir unos en beneficio de otros.

COUNTRY REPORT: SWEDEN
New Policy Initiatives, Rules and Case Law

Annika Nilsson

Ambient Noise and Housing

Policy Initiatives and Legislation

Swedish law is currently under revision with regards to the protection of health against ambient noise. The revision concerns the *Planning and Building Act*[1] and the *Environmental Code.*[2] The aim is to allow for the densification of buildings in urban areas, as the shortage of housing is regarded as a burden to economic growth in expansive areas. One of the barriers to new housing, especially in urban areas, is the uncertainty on which impact densified housing will have on the requirements in accordance with the *Environmental Code* and the EU Directive 2002/49 on environmental noise[3] to reduce ambient noise from (for example) traffic and industry.

According to the *Environmental Code*, any enterprise that causes nuisance to health and the environment is obliged to take preventive measures, as far as is technically and economically feasible and environmentally justified. The requirements may be updated when the technical, economical or environmental conditions change for the specific enterprise. If, for example, new residential buildings are constructed within the surroundings of the industry, it may be subject to further obligations, e.g. with regard to noise control, as more stringent requirements could be environmentally justified on grounds of the increased amount of people being affected by the nuisance. The situation is similar with regard to noise from traffic. As municipalities sometimes plan for and construct new housing without due consideration of ambient noise levels, enterprises and businesses become subject to further requirements to reduce noise on these grounds. To remedy this problem, the

[1] Swedish Code of Statutes 2010:900.

[2] Swedish Code of Statutes 1998:808.

[3] Directive 2002/49/EC of the European Parliament and of the Council of 25 June 2002 relating to the assessment and management of environmental noise.

Government has implemented legislative measures, and made further proposals on the matter.

According to the *Planning and Building Act* a municipality may, in a detailed development plan, prescribe maximum levels of interference from e.g. ambient noise. This provision has, hitherto, been regarded as a means for the municipalities to prescribe a local "environmental quality standard" for the area covered by the plan.[4] However, a Governmental Bill was recently put forward, with a proposal for the revision of the provision. Municipalities may still issue maximum levels for ambient noise in a detailed development plan and, as proposed, also in a building permit.[5] The main concern is that these noise levels will prejudice the application of the *Environmental Code*, as is further elaborated below.

Simultaneously, the Government proposed a new ordinance on noise resulting from traffic,[6] with less stringent levels for ambient noise from traffic than are currently applied.[7]

Also the *Environmental Code* is modified with regard to the matter. Generally, the supervisory authority may issue the injunctions and prohibitions required for compliance with the *Code* and regulations issued thereunder (although an injunction may not restrict conditions prescribed in a license). A new provision was adopted that limits the authority's competence in this respect.[8] If the municipality has issued limit values for ambient noise, injunctions grounded on the *Environmental Code* must not prescribe more stringent measures for noise reduction than needed to keep within the municipal limits, not even if this would be possible within the framework of the *Code*. Similar provisions are proposed with regard to the granting and reviewing of licenses.[9] A new or reviewed license condition concerning noise emissions must not, according to the proposal, be more stringent than required to uphold an ambient noise limit issued for a detailed development plan or a

---

[4] Michanek & Zetterberg: Den svenska miljörätten p. 462, 3 ed. Iustus Publishing, 2012.

[5] Governmental Bill 2013/14:128.

[6] Förslag till förordning om riktvärden för trafikbuller, Ministry of Health and Social Affairs S2014/5195/PBB.

[7] The Swedish EPA, among others, critiziced the proposal inter alia on grounds of too high noise levels, 2014-09-25, NV-05012-14.

[8] Swedish Code of Statutes 2014:901, the Governments Bill 2014:128, the Environmental Code chapter 26 section 9 a), entering into force 2 Jan. 2015.

[9] Ministry Publication Series 2014:31, proposed additional provision in chapter 16, section 2 b) and chapter 24, section 5 a) of the Environmental Code.

building permit, based solely on the fact that the residential building(s) has been built in accordance to the plan or permit.

Critical Considerations

One would think that the rational way to handle noise problems with regards to housing in a modern society would be to plan the development of new housing in areas with less noise, and to systematically work towards the reduction of noise in existing residential areas. Also if such strategies are put forward as the first-line options in the amendments and proposals, the fact is that the revision of the Planning and Building Act and the Environmental Code presented above will result in less stringent requirements for noise reduction in residential areas and, thus, more residents affected by higher noise levels. The most startling aspect of this development is perhaps that a municipality, by issuing local noise limits, is empowered to restrict application of the *Environmental Code*. If the above is condoned it might merely be a matter of time before environmental protection is further undermined.

Hunting/Species Protection – Wolves

Policy, Legislation and Cases

The wolf is regarded as a controversial species, in Sweden as in many other countries where it is found. Lobbying groups argue that the wolf population should be strictly limited, while others argue for extensive protection. The issue has been subject to perpetual legal consideration in recent years. In October 2014, the Swedish Environmental Protection Agency decided to allow license hunt on wolves for the 2015 winter.[10] In November 2014, the Administrative Court of Appeal concluded that the license hunt decided in 2013 was illegal.[11] Below, I briefly consider the legal controversy surrounding the wolf species.

The wolf was placed under strict protection in Sweden in 1966; at that time the species was extinct in the country. Thereafter a sparse migration from Finland and Russia occurred, and the population has slowly grown. Today the population consists of about 350 wolves, however severely in-bred – the whole population evolved from seven migrated wolves.[12] The

[10] Further referred at note 26.

[11] Further referred at note 27.

[12] Governmental Bill 2012/13:191 p. 16.

large part of the population is located to the central part of Sweden.[13] Especially in these areas there is a very strong opposition against the increasing wolf population.

The Scandinavian wolf is protected under the Annex IV of the EU habitat directive.[14] The main rule, stipulated in Article 12, is that protected species may not be deliberately captured, killed or otherwise disturbed. However, the Member States may, provided that the conditions in Article 16 are met, allow the taking or keeping of certain specimens of the species listed in Annex IV in limited numbers specified by the competent national authorities.

In 2009, the Swedish Government issued a new provision in the *Ordinance of Hunting*, stipulating conditions on which a "license hunt" of e.g. wolves may be decided.[15] The conditions, incorporated from Article 16 in the EU habitat directive, are that there may not be any satisfactory alternative, the hunt may not be detrimental to the maintenance of the wolf population and the population shall be at a favorable conservation status in its natural range. Furthermore, the hunt must be suitable with respect to the population's size and composition and occur selectively and under strictly controlled conditions.

"License hunt" is a term used for a general permission to hunt a certain amount of wolves (or other animals) during a certain time period. The forms and proceedings of the hunt are specified in the decision. The term should not be mixed up with the individual "hunting license" which is granted after passing the hunt exam and a necessary prerequisite for hunting. Generally, it is also necessary to be member of a hunting team which holds the right to hunt in a specific area.

The Environmental Protection Agency decided on license hunt for 27 wolves in January-February 2010.[16] The aim was to reduce inbreeding. At that time, the population was estimated to 200 wolves. 28 wolves were killed. A similar decision was taken for 2011, this time allowing the killing of 20 wolves.[17] Any wolf up to the stipulated number could be killed, and anyone who was holding a hunting license and was member of a hunting team in an area where license hunt was allowed could take part in the hunt. A hunt leader was responsible for ensuring that the hunt complied with the requisite conditions.

---

[13] http://www.naturvardsverket.se/Sa-mar-miljon/Vaxter-och-djur/Rovdjur/Fakta-om-varg/, 2014-12-08.

[14] Council Directive 92/43/EEC on the conservation of natural habitats and of wild fauna and flora.

[15] The ordinance of hunting (1987:905), Section 23 c). Swedish Code of Statutes 2009:1265.

[16] Swedish Environmental Protection Agency Beslut 2009-12-17, Dnr 411-7484-09 NV.

[17] Swedish Environmental Protection Agency Beslut 2010-12-17, Ärendenr NV 03454-10.

The hunt was not only criticised by Swedish environmentalists. The EU Commission sent a Letter of Formal Notice to the Swedish Government, raising questions on grounds of *inter alia* the unfavorable conservation status of the Scandinavian wolf, the permission to hunt a strictly protected species without the narrow conditions for derogations set out by EU law being met and the absence of a management plan for this endangered species.[18] This resulted in a time-out for the hunting of Swedish wolves, and the Government assigned the Environmental Protection Agency to develop and adopt a management plan for wolves.[19]

The management plan entrenched that favorable protection status for the wolves in Sweden was maintained by a population of 270 species. As the total number was 320 individuals, favorable protection status was considered established.

On the 30th of January 2013, the Swedish Environmental Protection Agency decided on license hunt of sixteen wolves in total, in specific territories.[20] Two wolves could be killed in each territory; preferably one of the alpha animals but not both. Thus, there would be room for another alpha animal to fill the gap. The hunt was regarded as selective as it was directed towards the territories with the highest inbreed. It was claimed to be the only measure that, with regards to the time constraint, could decrease inbreeding and promote a more favorable genetic status in the wolf population. The decision was appealed by some ENGOs which requested an injunctive relief and that the issue should be submitted to the EU Court of Justice for a preliminary ruling. The injunctive relief was admitted but the courts found no need for a preliminary ruling. The judgment from the Administrative Court, in June 2013, overturned the Environmental Protection Agency's decision.[21] The Court found that there were other, more suitable alternatives to decrease inbreeding and that the specific hunt did not fulfill the criteria of a strictly controlled and selective hunt of a limited number of wolves. The Environmental Protection Agency appealed to the Administrative Court of Appeal, which is the judgment referred to below in note 27.

---

[18] EU Commission Press Release 27 January 2011.

[19] National Management Plan for Wolves 2012-2017, adopted 31 May 2012.

[20] Swedish Environmental Protection Agency Beslut 2013-01-30, Ärendenr NV 01007-13.

[21] Administrative Court in Stockholm, Judgment 2013-05-02, Mål nr 2428-13.

At the end of 2013, the Environmental Protection Agency once again decided on the issue of license hunt for wolves, for the winter of 2014.[22] However, once again the decision was appealed and an injunctive relief admitted, and no hunt was performed in 2014.[23]

Meanwhile, the Swedish Government reversed a procedural provision in the *Hunting Ordinance*.[24] So far, it had been possible to appeal the decisions on license hunt. The Environmental Protection Agency may delegate to the County Administrative Boards to decide on license hunt, e.g. of wolves. From 1 June 2014, it is not possible to appeal such a delegation decision. The County Administrative Board's decision on license hunt may be appealed to the Environmental Protection Agency – but not further.

In October 2014, the Environmental Protection Agency decided to delegate the competence to decide on license hunt in 2015 with regards to wolves to eight County Administration Boards in the central parts of Sweden.[25] The number of wolves allowed to be killed was not specified; it is the County Administrative Boards responsibility to ensure that the favorable conservation status is upheld in the wolf population.

In November 2014 the Administrative Court of Appeal held in the case referred to in note 22 above.[26] The Court concluded that Article 16 in the Habitat Directive allowed for wolves to be hunted, as an exception to the main rule and under certain strict conditions. As it is an exception it has to be interpreted restrictively. According to the principle of proportionality, exceptions must be proportional to the needs which motivate the exception. The deciding authority has to prove that the necessary conditions are in place for any exception, and any such decision must be thoroughly motivated with regards to the reasons, conditions and requirements established by Article 16. The court found the aim to promote genetic variation in the wolf population by reducing inbreeding as acceptable under Article 16 and Swedish law. However, the evidence presented was far from sufficient for a conclusion that the chosen method would be efficient in the long term, and the court found no need for temporary measures to reduce inbreeding in the wolf population. Moreover, considering that

---

[22] Swedish Environmental Protection Agency, Beslut 2013-12-19, Ärendenr NV-08512-13.

[23] Administrative Court in Stockholm, Judgment 2014-01-15, Mål nr 30966-13 och 598-14.

[24] Swedish Code of Statutes 2014:297.

[25] EPA Beslut 2014-10-30, Ärendenr NV-06561-14.

[26] Administrative Court of Appeal, Judgment 2014-11-14, Mål nr 3273-13. – The Court would normally have dismissed the case as the hunting period had run out. However, as there was no previous guiding practice concerning the issue, the case was tried.

the number of wolves (16 wolves in the challenged decision) was rather extensive in relation to the total population, the Administrative Court of Appeal concluded, just as the Administrative Court had done as first instance, that the exception could not be accepted.

Three County Administrative Boards have decided on license hunts for a total of 44 wolves for the winter of 2015.[27] The decisions may be appealed to the Environmental Protection Agency but, in accordance with the revised provisions in the *Hunting Ordinance*, no further.

Critical Considerations

Sweden is member of the European Union, and Union law prevails over national law. The Swedish courts obviously do not regard license hunts with regards to wolves, in the current forms that it has been designed, to be acceptable under the habitats directive. If there was any hesitation the courts would not have overruled the decisions but simply submitted them to the European Court of Justice for a preliminary ruling. The EU Commission has previously questioned a more limited license hunt. Still, the Swedish Government not only maintains the license hunt but also expands it.[28] Further, the decisions are, practically, not appellable. Will the EU Commission react on this recent development?

Botniabanan – Effective Access to Justice

Case from the European Court of Human Rights

A recent case from the European Court of Human Rights elucidates some weakness in the Swedish *Act (1995:1649) on Construction of Railways*.[29] (The legislation is similar for the construction of public roads.)

The Government may, in accordance with chapter 17 in the *Environmental Code (1998:808)*, reserve the right to consider the permissibility of certain operations, e.g. of a proposed

---

[27] Värmland County Administrative Board 2014-11-28, 218-8140-2014, Dalarna County Administrative Board 2014-12-05, Dnr 218-13034-2014 and Dnr 218-13034-2014 and Örebro County Administrative Board, Decision 2014-11-28, Dnr 218-6634-2014.

[28] The new Government after the elections in autumn 2014 has not shown any signs to alter the policy.

[29] European Court of Human Rights, Case of Karin Andersson and Others v. Sweden, 25 September 2014.

railway. An Environmental Impact Assessment and other information needed for the decision shall be attached to the application. The EIA shall present the reasonable alternatives for the stretch and design of the railway that is being considered. The Government's decision concerning the project's permissibility is binding for the subsequent proceedings. The decision is a general statement of the permissibility of the project and its location, not a detailed decision. A detailed railway plan has to be developed and adopted before the commencement of the construction work. The railway plan is comparable to a license under the *Environmental Code*.

The railway called Botniabanan is a new railway line along the east coast in northern Sweden. The most controversial issue is that it was planned to run through a Natura 2000 area; a nature conservation area established by and strictly protected under the EU birds and habitats directives.[30] However, these matters were not the focus in this case. The applicants claimed that the Swedish courts had failed to ensure them a fair trial in respect of their civil rights.

In October 1999, the National Rail Administration applied to the Government for permission under chapter 17 in the Environmental Code to construct a 10 km long railway section, constituting the final section of the Botniabanan (totally 190 km). The Rail Administration presented some alternative railway stretches, all located within a specified "corridor" through the landscape. In June 2003 the Government, after having heard the EU Commission, granted permission for the construction of the railway, somewhere within the proposed corridor.

Several persons, owning property within the corridor in which the construction of the railway was permitted or living there, petitioned to the Supreme Administrative Court for a judicial review. The petitioners claimed that the location of the railway had a direct and clear bearing on their civil rights.

In December 2004 the Supreme Administrative Court dismissed the petitions, on grounds that it was not possible to determine who would be affected and thus entitled to bring an action until the exact route of the railway was established in the railway plan. The Court

---

[30] Directive 2009/147/EC of the European Parliament and of the Council on the conservation of wild birds and the Council Directive 92/43/EEC on the conservation of natural habitats and of wild fauna and flora.

stated that the parties concerned would be able to obtain a judicial review of the later decision to adopt the railway plan. [31]

The railway plan was adopted by the Rail Administration in June 2005. Twelve persons living in the area appealed to the Government, invoking that the specific stretch of the railway would cause nuisance such as noise and vibrations affecting the enjoyment of their property. Through a decision in June 2007, the Government rejected the appeals, with the argument that the specific stretch chosen in the railway plan was situated within the corridor that had already been accepted in the decision of permissibility.

The applicants then petitioned to the Supreme Administrative Court for judicial review, arguing that their civil rights were affected by the Government's decision and that they had not had these rights considered and determined by a court, in violation of the European Convention on Human Rights. In December 2008 the Supreme Administrative Court rejected the petition, finding that the railway plan was in line with the Government's permissibility decision from 2003 and that the proceedings for the adoption of the plan did not demonstrate any failings.[32] The Supreme Administrative Court concluded that the question of permissibility was within the power of the Government, and that the decision was binding for subsequent proceedings. If private interests were affected by the location of a railway project, judicial review could be instituted through proceedings against the Government's permissibility decision. The Supreme Administrative Court further stated that the fact that it, in its judgment in December 2004, had concluded that no individual petitioner could be considered to have *locus standi* in relation to the permissibility decision did not compel it to now include the issues of permissibility of the project or its general location in the current examination of the adaption of the railway plan.

The applicants in the European Court of Human Rights claimed that the Swedish courts had failed to ensure them a fair trial in respect of their civil rights. Once the Government's permissibility decision in June 2003 had taken effect it was binding for the courts and authorities, and the subsequent examinations could only decide on issues relating to the construction and design of the railway. The only effective way to determine their civil rights would have been a judicial review before the Supreme Administrative Court. However, that possibility had been denied, first by the court's dismissal of the petition for judicial review in

---

[31] RÅ 2004 ref. 108.

[32] RÅ 2008 ref. 89.

December 2004 and then by its judgment in December 2008 not to examine issues of location in the proceedings concerning the railway plan.

Not surprisingly, the European Court of Human Rights concurred with the above, and concluded that there had been a violation of article 6 § 1 of the convention.

Critical Considerations

It shall be added that the Supreme Administrative Court must have realised that it had created a catch 22 situation by dismissing the petition for judicial review of the Government's permissibility decision. In a later case a petition for judicial review of the Government's decision concerning the permissibility of a road, under similar circumstances, was accepted.[33] However, it is obvious, from this case and others that the right to a fair trial needs to be guarded not only by national courts but also by an external examiner such as the European Court of Human Rights.

[33] RÅ 2011 not 26.

COUNTRY REPORT: TAIWAN
The Development of Organisational Reform and Environmental Law in Taiwan

YingShih Hsieh*

Foreword

The Basic Environment Act ('the act') has been in force in Taiwan for over a decade, since 2002. Although its outcomes have yet to be reviewed, the creation of this act affirmed that the government values environmental protection and sustainable development. Article III of the Act stipulates that "Economic, technological and social development shall equally emphasize environmental protection based on long-term national interests. However, in the event that economic, technological or social development has a seriously negative impact on the environment or endangers the environment, the protection of the environment shall prevail." However, there remains a gap between the establishment and implementation of environmental priority targets. Starting from organizational adjustment, the Taiwanese government is moving in the direction of sustainability.

History and Current Status of Environmental Organization in Taiwan

It is predicted that between the end of 2014 and middle 2015, the Environmental Protection Administration will be elevated to the Ministry of Environment and Natural Resources. This will involve integrating the management of all related environmental resources, such as water, land, forests and air.[1]

The elevation of the Ministry of Environment and Natural Resources is not simply a reform of an environmental organization, but rather is part of a transformation of the entire country. The government organizational reform represents a major undertaking. After 23 years of

* Chairman of Environmental Quality Protection Foundation. Email: yshsieh@gmail.com.

[1]Jiunn-Rong Yeh, The Status-quo and the Expectation of Government Reform, 29 Yan Kao Shuang Yue Kan 6, (2005).

planning, the organizational reform regulations were finally enacted in 2010. The purpose of re-engineering the government organizations was to respond to structural inefficiencies. Throughout the planning period, the government established organizations as a way to solve problems when facing new issues.[2] The entire organizational structure expanded which has resulted in time consuming parallel section coordination and inefficiencies in decision-making. In addition, there are too many sections under each ministry which has made inner communication difficult. In short, due to the organizations' excessive expansion, many sections have incurred problems either in the vertical or horizontal division of labor. Organizational reform can divide the scope of authority under each ministry, integrate overlapping or similar units and remodel the operational structure of the organization, so that the budget can be distributed effectively, with resources increasing administrative efficiency.

Establishing the new Ministry of Environment and Natural Resources is one of the most difficult tasks for the government to accomplish. This integration includes the Environmental Protection Administration (Environmental Professionals Training Institute, Environmental Analysis Laboratory), the Construction and Planning Office of the Ministry of the Interior (National Parks Division, Sewage Systems Office), the Ministry of Economic Affairs (Mines Department, Bureau of Mines, Central Geological Survey), the Ministry of Transportation and Communication (Central Weather Bureau), the Council of Agriculture (Forestry Bureau, Soil and Water Conservation Bureau, Taiwan Forestry Research Institute, Endemic Species Research Institute), and the Veterans Affairs Council (Forest Conservation and Management Administration).[3]

After the administrative adjustment, the number of total integrated personnel will be approximately 2681. Including personnel from the fourth-level agencies and the Taiwan Water Corporation, the total will be over 14,500 employees. Among them, approximately 5700 will be working at the Taiwan Water Corporation. This represents a significant increase from the original 551 employees (including contracted personnel nearly 1000). The official budget was raised from 6.5 billion to 50 billion NT$; including the underlying funding and the special budget, the total budget is 150 billion NT$.[4]

---

[2] Wen-Sheng Hsiao, The Organization Reform for the Executive Yuan (Cabinet) —Historical Retrospect and Comments, 37 *National Chung Cheng University Law Journal 51* (2012).

[3] Legislative Gazette, Volume 101, Commission records No. 38, at 269-358.

[4] Ibid.

The underlying fund for the Environmental Protection Administration is used for air pollution prevention, rubbish reduction, resource recycling, soil remediation, groundwater/water pollution prevention, promotion of environmental education, establishing a system of pollutant fees, etc. *Based on the regulations of the Air Pollution Control Act, Waste Disposal Act, Soil Pollution and Groundwater Remediation Act, Water Pollution Control Act, and Environmental Education Act*, funds were set up such as the Air Pollution Control Fund, Recycling Management Fund, Soil and Groundwater Pollution Remediation Fund Management Board, Water Pollution Control Fund and Environmental Education Fund. The newly integrated funds include the Forestry Development and Afforestation Fund, Water Resources Operation Fund and National Park Fund.

Consideration and Dispute of Organizational Reinvention

In the process of organizational restructuring, i.e. from Environmental Protection Administration to the Ministry of Environment and Natural Resources, challenges and criticisms have been faced in various phases. In the early stages, deciding which organizational sections should be included was discussed extensively; the issue of energy resources was among the key points.

Critics believe that the issue of energy resources should be handled by the Ministry of Environment and Natural Resources. Their arguments are based on the perspectives of other countries, such as the Bundesministerium für Umwelt, Naturschutz und Reaktorsicherheit, BMU, Germany, in charge of the nuclear energy management of Sicherheit kerntechnischer Einrichtungen, Strahlenschutz, nukleare Ver- und Entsorgung, RS, as well as the Klimaschutz, Umwelt und Energie, Erneuerbare Energien, Internationale Zusammenarbeit, KI. Other countries, such as the United States and countries of the European Commission all have sections responsible for issues of energy resources.[5] As it relates to complicated matters, it is necessary to be authorized by higher levels which only deal with these issues. [6]

However, these governments do not place energy resources under the management of the Ministry of Environment and Natural Resources mainly because the countries have

[5] Comparison of national environmental governance institutions. http://www.eqpf.org/MOENR/5-1.php (last visit date 2014/07/18).

[6]Shin-yi Peng, Recommend report on orientation of Energy Agency after organizational reform, at 20-21.

dedicated organizations in charge of these issues, as they possess domestic energy sources. In Taiwan 98% of energy resources are imported from abroad. Taiwan deals more with issues of trade, economy and industry. Thus, if the issues of energy resources can be managed by the Ministry of Economic and Energy Affairs, the desired results can be achieved.[7]

Beyond the issues of energy resources, the authority over forestry management is also a topic of discussion. Should it be under the management of the Ministry of Environment and Natural Resources? Originally, the Forestry Bureau, Taiwan Forestry Research Institute and the Endemic Species Research Institute Conservation Education Center were under the control of the Council of Agriculture, Executive Yuan.

In the early period, forestry was mainly devoted to developing forests; however, in recent years, due to the emphasis on environmental protection, the government has focused on conservation. Hence, the purpose of the Ministry of Environment and Natural Resources is to integrate resources of water, land and forests; logically, forestry should be under the management of the Ministry of Environment and Natural Resources. The problem is that if all forestry units are managed by the Ministry of Environment and Natural Resources, related operations might be neglected. Due to the focus of the Ministry of Environment and Natural Resources being conservation, as well as the division of labor within the organization, forestry development should be under the original agricultural section.[8]

After several discussions, it was decided that forestry includes forest products, and growers should be managed by the Agricultural Bureau in the future. According to the original plan, national forestry and conservation should be authorized by the Bureau of Forestry and Conservation.[9] Furthermore, the Forestry Agency will be established under the Agricultural Bureau for managing the public/private forestry and aboriginal preservation lands. The key responsibility is to consult on the economics of silviculture and forest products. It is hoped

---

[7] Facing the challenges of climate change and sustainable development to maintain Taiwan. http://archive.rdec.gov.tw/ct.asp?xItem=4529888&ctNode=11577&mp=14 (last visit date 2014/07/18).

[8] http://www.newtaiwannet.com.tw/page1.aspx?no=100080925142807811&step=1&newsno=100130106154639608 (last visit date 2014/07/18).

[9] Governmental reform: state-owned forest conservation goes to the MINISTRY OF ENVIRONMENT AND NATURAL RESOURCES and Forest industry goes to the Ministry of Agriculture Forest. http://e-info.org.tw/node/83164 (last visit date 2014/07/18).

that production and conservation can be simultaneously managed, with an eye to developing forest resources and achieving economic efficiency.

The Integration of Environmental Laws and the Critical Point of Green Transformation

In addition to the organizational re-engineering and integration, it is likely that the Ministry of Environment and Natural Resources will face conflicts and negotiations among various operational cultures, such as differing viewpoints in regard to water, land and forests. Determining how to achieve an agreeable green transformation which reflects contemporary views will require cooperation from all related sections. Enacting and integrating environmental law is a significant challenge in this respect. In the process of realizing a transformation between old and new authorities, the old rules need to be amended, adjusted and integrated in order to meet the requirements of organizational culture, climate change and sustainable development. It is a great challenge to create the infrastructure for environmental management effectively and improve policy strategies in the new era.

In order to respond to the issues of climate change in recent years, while affirming the ideals of development for contemporary and future generations in Taiwan, national environmental protection, economic development and social justice policy must be balanced and promoted. To achieve these goals, the Draft of the Basic Sustainable Development Act was set into action in Taiwan. By creating this act, the facets of environment, economy, society, the responsibility and duty of government and citizens, as well as the promotion of sustainable development carried out by central and local governments, are all emphasized.[10] The current scope of guidance and strategy of sustainable development described in the Act contains some overlap with *the Basic Sustainable Development Act*. In order to improve coordination, the economic development, social justice and health care maintenance mentioned in the Sustainable Development sections of the Act will be amended. It is still unclear as to whether this arrangement will lead to effective implementation.

[10] EPA conduct public hearing on "the draft of Basic Sustainable Development Law" and "the draft of the Basic Environment Law amendments ", to serve the national interest in the effective implementation of sustainable development.
http://ivy5.epa.gov.tw/enews/fact_Newsdetail.asp?inputtime=0990629151456 (last visit date 2014/07/18).

The aforementioned Basic Environment Act should be swiftly revised to cater to the new requirements. For instance, the planned merger of *the Resource Recycling Act* and *Waste Disposal Act* has been long postponed. *The Tap-water Ac*t and *Drinking-water Regulations*, authorized by the Water Resources Agency and Environmental Protection Administration, must be amended. Water quality and water resource conservation are regulated by each section (for tap-water and drinking-water, respectively). After the Water Resources Agency is merged into the Ministry of Environment and Natural Resources, the guidance of tap-water and drinking-water will be undertaken by this ministry. The norms of similar laws will certainly be adjusted.

It can be predicted that, for adapting to the organizational restructuring and different operational cultures, the newly established Ministry of Environment and Natural Resources should amend the out-of-date environmental laws (articles focusing on restrictions but lacking practical applications) as well as enact new laws which meet the current needs (environmental laws that strike a balance between specific yet flexible control measures and market orientation). A good policy of environmental resource management must be able to resolve conflicts between protecting the environment and developing the economy, manifest the tangible and intangible benefits of ecosystem services, promptly and effectively solve environmental issues, establish an account of “green assets” and ensure the sustainable development of Taiwan.[11] These are the reasons why the Ministry of Environment and Natural Resources is expected to shed the old ideas and patterns and move forward to realize the profound meaning and values of green transformation.

Conclusion

In the past, the environmental protection regulations in Taiwan focused on public nuisance control. However, the treatment and prevention of public nuisances are not the only things environmental management deals with. In Taiwan, the economy is the top priority of national development. This results in a subordinate position and insignificance of the environmental protection departments as environmental protection has been seen as a minor issue.[12] The establishment of the Ministry of Environment and Natural Resources reminds people of the importance of environmental protection and fulfills commitments for sustainable

[11] Environmental Protection Administration, Ministry of Environment and Natural Resources, ‘Create our common future’, http://www.eqpf.org/MOENR/1-1.php (last visit date 2014/07/18).

[12] ‘Create a win-win between economic and environmental interdepartmental integration’ http://issue.cw.com.tw/event/ad/cw/Aplus/meeting_00.htm (last visit date 2014/07/18).

development. It is hoped that the organizational restructuring will improve government operational efficiency and the integration and task allocation of environmental protection laws will help to achieve environmental sustainability in Taiwan.

COUNTRY REPORT: THAILAND

Krisdakorn Wongwuthikun*

Introduction

In this report, the focus will be on two main issues. After setting the scene for this country report by outlining the current political situation in Thailand and the administrative consequences of that situation, this contribution will firstly report on the recent Thai court's decision in relation to the issue of transboundary pollution arising from the construction of the Xayaburi Dam on the Mekong River, an international watercourse which has its origin in China and which flows through Myanmar, Thailand, Lao PDR, Cambodia and Viet Nam. This is the first time that the issue of the Xayaburi Dam has been addressed judicially, therefore it is interesting to consider what may be learnt from the judgment (although the case is still at a preliminary stage of litigation). Secondly, the current situation of the illegal elephant ivory trade in Thailand will be described. As the illegal ivory trade in Thailand has not yet been fully suppressed, this report, will elaborate the response of the Secretariat of *the Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES)* to this matter.

Political and Administrative Developments in Thailand

It is appropriate to begin by giving some information about the Thai political situation in 2014. Since 22 May 2014, Thailand has been governed by a military government as a consequence of a coup d'état in which the military regime claimed that Thailand needed to be reformed in several areas, including the utilisation of natural resources and the protection of the environment, though it described both areas as being of secondary importance.

---

* PhD Candidate, School of Law, the University of Dundee, United Kingdom, email k.wongwuthikun@dundee.ac.uk. The author would like to thank Ms Elizabeth Kirk for her invaluable comments, which were helpful in improving the quality of this report.

The administrative structure has also been reformed so that the elected constitutional Minister of Natural Resources and the Environment has been replaced by a militarily appointed officer, General Dapong Rattanasuwan who, in turn, is under the control of the Deputy Prime Minister and the Defence Minister who was also appointed by the military. Recently, the Minister has declared new policies for protecting and preserving the environment. These policies are in fact not new, but they place more emphasis on law enforcement which needs to be strengthened, in particular emphasizing the protection of Siamese rosewood that has been heavily illegally harvested.[1] The focus of these policies is the sustainable management of natural resources and the environment in accordance with the Royal Initiative of His Majesty the King Bhumibol Adulyadej. The aims are to improve and enhance economic growth and to develop the country sustainably.[2]

Current Developments in the Case concerning the Construction of the Xayaburi Dam on the Mekong River

The Xayaburi Hydroelectric Dam, which is presently being built in the Mekong Basin by a Thai engineering company (Ch.Karnchang Plc.) will be the first large dam located in northern Lao PDR.[3] This hydroelectric power project started in March 2012, and is projected to be concluded, according to the annual report of Ch.Karnchang Plc, in 2019.[4] The company has agreed to sell 95% of the electricity that will be generated to Thailand through the Electricity Generating Authority of Thailand (EGAT), the sole buyer of this electricity.[5] The EGAT signed the Power Purchase Agreement (PPA) with the Xayaburi Power Company Limited with the approval of the National Energy Policy Council and the Cabinet.[6] This event has caused serious concerns about the adverse impact on the environment that may occur as a

---

[1] Policy of the Minister of Natural Resources and the Environment (16 September 2014), 9 http://www.mnre.go.th/ewt_dl_link.php?nid=3308 <accessed 6 November 2014>.

[2] Ibid, 13.

[3] For more information see Stuart Orr, Jamie Pittock, Ashok Chapagain and David Dumaresq, 'Dams on the Mekong River: Lost Fish Protein and the Implications for Land and Water Resources' 22 Global Environmental Change 925, 925.

[4] Ch.Karnchang Plc has established a new subsidiary project company incorporated under the laws of Lao PDR, the Xayaburi Power Company Limited, in 2009 to be responsible for the project; see Ch. Karnchang, *Annual Report* (2014).

[5] The Thai government signed the power purchase agreement with Xayaburi Power Company Limited in October 2011. See http://www.internationalrivers.org/resources/thai-utility-commits-to-purchase-power-from-xayaburi-dam-3692 <6 November 2014>.

[6] Ibid.

result of the proposed dam. It is believed that if Thailand terminates the PPA, the project will eventually be discontinued. Consequently, a group of 37 villagers in 8 provinces who live alongside the Mekong River, namely Chiang Rai, Loei, Nong Khai, Nakhon Phanom, Bueng Kan, Mukdahan, Amnat Charoen and Ubon Ratchathani submitted a case before the Administrative Courts of the First Instance (the Central Administrative Court) against the five defendants, namely the Electricity Generating Authority of Thailand (EGAT), the National Energy Policy Council, the Ministry of Energy, the Ministry of Natural Resources and the Environment and the Council of Ministers.[7]

They claimed that their livelihoods, as people living in the area which the Mekong River flows into, will be affected as a consequence of the construction of the proposed dam which is being built on the Lower Mekong River's mainstream located wholly in the territory of Laos. Therefore, it may cause significant transboundary impacts on the natural flows of the water and its ecosystem in Thai territory. The plaintiffs sought an order in the following terms:[8]

1) The PPA concluded between the EGAT and the Xayaburi Power Company Limited is an unlawful project and shall be revoked;

2) The resolutions adopted by the NEPC and the Cabinet authorising the EGAT to sign the agreement should be invalidated;

3) The process of acquiring the electricity from the proposed dam is inconsistent with both domestic law and international law, viz.

a) The PPA was concluded in a way that was contrary to the Constitution of the Kingdom of Thailand, B.E. 2550 (2007) which provides a right of information and public participation to individuals and communities whose livelihoods *etc*. may be affected by a project or activity

b) The requirement to provide information was not fulfilled since the information given was incomplete and inadequate and was not such as to allow the people to apprehend those facts that may affect their livelihoods. In addition, opportunities to participate were not ensured since public hearings were only held in some areas, not in all

[7] See case concerning an Unlawful Act and Omission of an Administrative Agency or State Official and a Dispute in connection with an Administrative Contract (appeal against the order of the Administrative Courts of First Instance)(Order No. 8/2014), 17 April 2014, 3.

[8] Ibid, 8.

the eight provinces that are adjacent to the Mekong River as required by domestic and international law.[9]

Therefore, it was argued, such actions should be considered to be unlawful and the plaintiff requested the Court to order all the defendants to act in accordance with the Constitution, laws, resolutions of the cabinet concerning the proper notification and disclosure of information, public consultation and environmental/health and social impact assessment both in Thailand and in the neighbouring States prior to purchasing the electricity from the proposed dam.

The Administrative Courts of First Instance rejected all three of the plaintiffs' allegations. The plaintiffs then appealed. On 17 April 2014, the Supreme Administrative Court (hereinafter the Supreme Court) upheld the decisions of the Administrative Courts of First Instance in relation to the first two allegations.[10] However, the last allegation concerning the right to participate and the right to be informed and consulted was accepted.[11] In addition, all 37 plaintiffs were considered as persons aggrieved or injured or who may be aggrieved or injured in consequence of an act or omission by an administrative agency or State official.[12] That is to say all 37 plaintiffs were considered to have been or to be at risk of being injured as a consequence of an omission of the National Energy Policy Council, the Ministry of Energy and the Council of Ministers since those three administrative agencies did not control or suspend the construction of Xayaburi Project conducted by the EGAT. The Supreme Court also made reference to the provisions with regard to the rights of a community that are enshrined in the Constitution.[13] These provisions constitute one of the most important parts of the Constitution conferring rights of communities to, *inter alia*, participate in the management, maintenance, preservation and exploitation of natural resources, the

---

[9] The PPA was concluded in a way that was contrary to the Agreement on the 1995 Cooperation for the Sustainable Development of the Mekong River Basin and the Procedure for the Notification Prior Consultation and Agreement (PNPCA) see the text of the Agreement in http://www.mrcmekong.org/assets/Publications/policies/Procedures-Notification-Prior-Consultation-Agreement.pdf; http://www.mrcmekong.org/assets/Publications/policies/Guidelines-on-implementation-of-the-PNPCA.pdf <accessed 10 November 2014>.

[10] Order No. 8/2014 (n 7) 16-20.

[11] Ibid, 20; see also Section 9 (1) the Act on Establishment of Administrative Courts and Administrative Court Procedure, B.E. 2542 (1999).

[12] Section 42 of the Constitution.

[13] Order No. 8/2014 (n7) 22.

environment and biological diversity in a balanced and sustainable fashion.[14] Furthermore, an individual also has the right to participate in the conservation, preservation and exploitation of natural resources and biological diversity and in the protection, promotion and preservation of the quality of the environment for the sake of his regular and continued livelihood in the environment in a way that is not hazardous to his or her health and sanitary condition, welfare or quality of life, and this right must be protected as appropriate.[15]

The Constitution also requires that environmental and health impact assessments must be conducted prior to the operation of a project or activity, in a case where the project or activity may seriously affect the community in the sense that it may deteriorate the quality of the environment, natural resources and health. In addition, a public hearing has to be conducted with a view to consulting the public as well as interested persons.[16] Finally, the right of a community to bring a lawsuit against a Government agency, a State agency, a State enterprise, a local government organisation or other State authority that is a juristic person for the performance of duties shall be protected.[17] It is interesting to note that Section 67 of the Constitution is akin to the obligations provided in the Aarhus Convention which takes the rights-based approach in protecting the right of individuals in environmental matter by requiring States to grant them 1) access to information, 2) public participation rights and 3) access to justice.[18] Consequently, the group of 37 plaintiffs, representing different local communities, was able to bring the case before the Administrative Court.

In this case, the Supreme Court, for the first time, accepted that the construction of the Xayaburi dam is a project that may potentially have widespread effects on the environment, the quality and quantity of waters, the volume of water flowing through the Mekong River, the equilibrium ecosystems of the Mekong Basin. Since the proposed project is being built in the northern part of Laos, the upper riparian State, it may have transboundary impacts on the lower riparian States, notably the local communities located within eight Thai provinces that are adjacent to the Mekong River. Their health, sanitation, ways of life and environment

---

[14] Section 66 of the Constitution.

[15] Section 67 (1) of the Constitution.

[16] Section 67 (2) of the Constitution.

[17] Section 67 (3) of the Constitution.

[18] See Convention on Access to Information, Public Participation in Decision-Making and Access to Justice in Environmental Matters (Aarhus Convention) (done 25 June 1998, entered into force 30 October 2001) 2161 UNTS 447.

may potentially be widely affected.[19] The implication of this pronouncement of the Supreme Court is that the Xayaburi Dam is perceived as a potentially harm-generating project. Although there has been controversy about the nature of the project among the riparian States,[20] these controversies had not been addressed judicially until this Supreme Court decision explicitly pronounced on the characteristics of the dam and the environmental effects arising from the construction of the dam. From now on, Thai administrative agencies will need to pay more attention to these issues and take this jurisprudence into account when adopting any policies in relation to this project. The rights of the local community as well as the principle of sustainable development should not be ignored. Furthermore, this case can be considered as a milestone for environmental litigation in Thailand. That is to say, even if such projects or activities are carried out beyond Thai national jurisdiction, if they may cause significant adverse impact on the environment or the livelihoods of the Thai people, the local communities can still bring a lawsuit against governmental agencies.[21]

Another interesting point that needs to be mentioned is that the Supreme Court also made a reference to two international agreements, namely *the 1995 Agreement on the Cooperation for the Sustainable Development of the Mekong River Basin*[22] and *the Procedure for the Notification and Prior Consultation and Agreement (PNPCA)*, [23] and required the Thai administrative agencies to take these agreements into account in decision making. These two agreements set out the principles concerning the utilisation and diversion of water and the protection of ecosystems. This ruling of the Supreme Court is relatively innovative and is peculiar in a dualist legal system such as Thailand's. In these systems courts rarely invoke international obligations directly unless such obligations have already been implemented

---

[19] Order No. 8/2014 (n 7) 24.

[20] This situation can be compared to the *Gabčikovo-Nagymaros* case, at the ICJ, where at the very beginning of the project that Hungary and Slovakia had a mutual interest in damming the Danube for, *inter alia*, electricity production. However, later, they had different opinions about the Project since the Hungarian Government decided to abandon the construction on its part as the project was no longer environmentally or economically viable, but Slovakia desired to continue the Project; see *Case Concerning the Gabčikovo-Nagymaros Project (Hungary v. Slovakia)* (Judgement) [1997] ICJ Rep 7.

[21] See http://www.admincourt.go.th/00%5Fweb/environment/environment-article-20140707.htm <accessed 7 November 2014>.

[22] Agreement on the Cooperation for the Sustainable Development of the Mekong River Basin, (adopted and entered into forced on 5 April 1995) 34 ILM 864 (1995).

[23] Order No. 8/2014 (n 7) 23-26.

within the domestic law, but in this case the international obligations have not yet be incorporated into domestic law.[24]

Although this case is still at a preliminary stage of litigation since the Supreme Court only accepted a lawsuit and the merits of the case have not yet been decided (i.e. whether or not the administrative agencies had breached the provisions provided in the Constitution), the Supreme Court has introduced several innovative aspects of legal interpretation into its ruling which make it worth commenting on now. The remaining question that the Court will have to answer is whether or not the defendants had actually acted in consistency with the laws which accord the local communities the right to receive information and the right to participate in those projects or activities that may have an impact on the natural resources and the environment. It remains to be seen how the Supreme Court will rule in this case.

The decision of the Court will have particular significance as this is the only opportunity for the local communities to bring a claim. Since there is no human rights court in which the local community can bring a case, this issue cannot be resolved by means of international litigation. Such rights can only be enforced by national courts. This is in contrast to other parts of the world where local communities may be able to raise an action for breach of human rights in a regional human rights court. For example, a similar dispute arose in Belize as a result of granting of oil concessions which were harmful to the natural environment upon which the Maya people depended for subsistence.[25] In this case the Mayan peoples' have had standing to enforce their human rights before the Inter-American Human Right Commission confirmed.[26]

Since this case is concerned with the rights of the local community, the National Human Rights Commission of Thailand should also play a more active and continuous role in this case, such as conducting a thorough examination of potential human rights violation and submit the report to the Government along with remedial measures. The Government should also bear in mind that, in November 2012, it has already signed the ASEAN Human Rights

---

[24] See http://enlawfoundation.org/newweb/?p=2270 <accessed 6 November 2014>.

[25] *Maya Indigenous Community of the Toledo District v Belize*, Case 12.053 IACommHR Report No 40/04 OEA/Ser.L/V/II.122 Doc. 5 rev 1 Vol 2 (2004) 727.

[26] Ibid and see also the rights of Yanomami Indians in *Yanomami Indians v Brazil*, Case No. 7615 IACommHR Report No 12/85 OEA/Ser L/V/II.66 doc.10 Rev 1 (1984–85) and the Mayagna (Sumo) Awas Tingni Community in *Mayagna (Sumo) Awas Tingni Community v Nicaragua*, IACtHR Series C No 79 (31 August 2001).

Declaration. According to the Declaration, it accepts that 'every person has the right to an adequate standard of living for himself or herself and his or her family including…(f) the right to a safe, clean and sustainable environment.'[27] Therefore, the Government should take this provision, enshrined in this international instrument, into account, although it is not legally binding.

Thailand's National Ivory Action Plan (NIAP)

Thailand, as a destination country for illegal elephant ivory, submitted the NIAP to the Secretariat of *the Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES)* in 2013.[28] At the Sixty-fifth meeting of the Standing Committee which was held in Geneva (Switzerland) between 7 and 11 July 2014, the CITES Secretariat evaluated the reports on the progress of the implementation of Thailand's NIAP.[29] This evaluation expressed serious concerns in many respects which will be considered below.[30]

The issues that have been rated as 'challenging' which means that 'there has been limited progress with implementation or progress has been impeded by delays or challenges, and achievement of the specified milestones and timeframes appears unlikely unless these issues are resolved'[31] are:

a) Revision of *the Draught Animals Act B.E. 2482 (1939)*
b) Revision of *the Wild Animals Reservation and Protection Act B.E. 2535 (1992).*

---

[27] 28 (f) of the ASEAN Human Rights Declaration available at: http://www.asean.org/news/asean-statement-communiques/item/asean-human-rights-declaration <accessed 21 November 2014>; see for more information about the Declaration in Catherine Shanahan Renshaw, 'The ASEAN Human Rights Declaration 2012' (2013) 14 Human Rights Law Review 1.

[28] See http://www.cites.org/eng/news/pr/2013/20130516_elephant_action_plan.php <accessed 6 November 2014>; For more information about the ivory trade in Thailand see Daniel Stiles, *The Elephant and Ivory Trade in Thailand* (TRAFFIC Southeast Asia, 2009). https://portals.iucn.org/library/efiles/documents/Traf-107.pdf <accessed 6 November 2014>.

[29] The CITES Secretariat, Sixty-fifth meeting of the Standing Committee (Geneva (Switzerland), 7-11 July 2014), Interpretation and Implementation of the Convention Species Trade and Conservation: Elephants: National Ivory Action Plan, SC65 Doc. 42.2 http://www.cites.org/sites/default/files/eng/com/sc/65/E-SC65-42-02_1.pdf <accessed 6 November 2014>.

[30] Ibid, 30-34.

[31] Ibid, 4.

As far as the revision of *the Draught Animals Act* is concerned, the Secretariat was not satisfied with the delay in the implementation of the proposed legislative amendments, although it accepted that the delay might arise from the political situation in Thailand. Therefore, the Secretariat has set two deadlines for amendments to be adopted dealing with:

1) the regulation concerning a new elephant identification book system which has been drafted by the Department of Provincial Administration should be adopted by March 2015,

2) The new law which aims at removing domesticated elephants from the Act should be adopted by April 2016.

As for the revision of *the Wild Animals Reservation and Protection Act*, it was also not satisfied with the legislative amendments and it has set two deadlines for two issues, namely that:

1) Thailand should add domesticated elephants as a 'protected species' under this Act and the law should take effect in May 2016.

2) The provisions which aim at controlling the possession of African elephant ivory also need to be drafted (currently the law only controls the import and export of African elephant ivory) and this should be completed in December 2017.

Thailand needs to revise its NIAP urgently, since it has been categorised as one of the Parties of "Primary Concern".[32] The Standing Committee recommends that it shall submit a revised NIAP to the Secretariat by 30 September 2014 and the enactment of appropriate legislative or regulatory provision concerning the control of illegal elephant ivory should be achieved by 31 March 2015. The inclusion of the African elephant as a "protected species" under *the Wildlife Act* should be taken into account in these amendments. The establishment of a registration system for domestic ivory and a system for the registration and licensing of ivory traders are also urgent issues that should be tackled. The Standing Committee also asked Thailand to increase its law enforcement efforts against the illegal ivory trade. The first progress report is required to be submitted to the Standing Committee by 15 January 2015 and a further progress report must be submitted by 31 March 2015.

[32] See http://www.cites.org/sites/default/files/eng/com/sc/65/com/E-SC65-Com-07.pdf <accessed 6 November 2014>.

There is a risk for Thailand if the Standing Committee is not satisfied with the revised NIAP, since the Standing Committee has the authority to apply the measures provided in paragraph 30 of the CITES compliance procedures, that is the suspension of commercial or all trade in specimens of one or more of the CITES-listed species.[33]

However, Thailand has substantially achieved its aim in revising *the Department of Livestock Development's Regulations on Moving Animals and Their Carcasses regarding the Marketing of Raw Ivory under the Animal Epidemics Act*.[34] The most recent development is that a new marking system for ivory was signed on 1 May 2014 by the Director General and is in the process of being gazetted.[35] The marking system functions by means of punching unique identification numbers on whole tusks or pieces of raw ivory.[36] In addition, Thailand carried out a nationwide survey of ivory traders and it has also achieved it aim in compiling such information.

Concluding Remarks

This country report has given a synopsis of the environmental situation in Thailand that has revealed both a crucial role played by a judicial institution in protecting the rights of local communities concerning the protection of the environment and a surge of anxiety as shown in the issue of illegal elephant ivory. While the ruling of the Supreme Court concerning the right of local communities to participate in the decision-making process of projects that may have an adverse impact on the environment and on their livelihoods gives a positive expression of the judicial role in the environmental field, the failure of legislative bodies in Thailand to amend domestic laws to control the illegal ivory trade and the scant efforts being made by the enforcement bodies is a weak point of the Thai legislative and enforcement system. Nonetheless, it remains to be seen whether there will be further developments in both these cases. For the case that is now pending in the Supreme Court, the local communities - as well as environmental activists - are full of hope in resorting to a judicial settlement in protecting the environment,[37] whereas the governmental agencies would like to sustain this large-scale and controversial project with a view to supplying sufficient electricity

[33] See http://cites.org/sites/default/files/document/E14-03.pdf <accessed 6 November 2014>.

[34] National Ivory Action Plan, SC65 Doc. 42.2, 32.

[35] Ibid, 32.

[36] Ibid, 32.

[37] See generally in http://www.internationalrivers.org/blogs/259-1 <accessed 15 November 2014>.

for Thailand.[38] This is obviously an issue of sustainable development, which the government needs to take into account when making any decision associated with the Xayaburi project or any project that may be launched in the future. With regard to the standing of the local community, although they have a standing to bring the claims before the domestic court, they cannot raise this issue before the ASEAN Human Rights Body since such Body has not come into existence as yet. In order to enforce the rights of the local community internationally, it would be desirable to establish a regional human rights court within the ASEAN.

With regard to the ivory trade issue, intense pressure is being placed on Thailand, either to accept stringent and fixed timeframes to amend its laws or to accept the complex legislative and regulatory control systems that need to be urgently established. If the problems are still unresolved and persistent, Thailand will inevitably be in a difficult position in respect of trade suspensions unless it can show that it has a strong intention to achieve compliance and put every effort into solving these problems.

[38] See the plan of the EGAT to imports electricity under the Xayaburi Project in the EGAT's Annual Report 2013 in http://www.egat.co.th/en/images/annual-report/2013/94_egat-annual-eng-2013.pdf and see also in http://www.irrawaddy.org/business/thai-power-firms-business-tactics-use-burmas-weak-laws.html <accessed 15 November 2014>.

COUNTRY REPORT: UKRAINE
Alternative Energy in Ukraine: Challenges, Prospects and Incentive Mechanisms

Svitlana Romanko*

Introduction

Concerns over the exhaustion and depletion of natural resources underpin the global policy priorities of reduced energy consumption and increased energy efficiency. These priorities are especially important for Ukraine because it is one of the biggest energy consumers in the world. Challenges to achieving the efficient use of traditional energy sources in Ukraine include outdated technology, resource depletion and the use of fixed assets with low fuel efficiency and high emission rates. Other challenges include resource losses during gas transportation and the distribution of electricity and heat, and constraints on local energy markets caused by increased dependency on energy imports. These factors make the development of alternative energy sources an urgent matter for Ukraine policy makers.

It is no secret that the Russian Federation is a major player in the Ukraine energy market. The Russian Federation uses this position to charge a high rate for its gas and impose onerous supply agreements on local energy retailers. The recent encroachment by Russia upon the territorial independence of Ukraine makes further cooperation with Russia untenable. This situation lends further support to calls for tough Ukraine policies that encourage energy efficiency and conservation, and the production and use of alternative energy sources.

Alternative Energy and Ukraine Law

The production of energy from non-traditional sources may help mitigate some of the problems with traditional energy sources, such as pollution and resource depletion. Ukraine has several potential alternative energy sources. One barrier to the exploitation of these sources is the lack of unified definition of ‘alternative energy’ in Ukraine law. Different laws

* Associate Professor of environmental law, Law Institute of Prykarparsky National University after Vasyl Stefanyk, Ukraine

contain different definitions. For example, the law *On alternative energy sources* defines alternative energy sources as renewable energy sources. Listed sources include solar, wind, geothermal, wave, tidal, hydro, biomass, organic waste gas, gas from sewage treatment plants and biogas. Listed secondary sources include blast-furnace and coking plant gas, methane gas from coal deposits and the transformation of industry waste into energy. The law *On alternative types of fuel* defines alternative energy sources as non-conventional energy sources, such as stock materials of plant origin, waste, hard combustibles and other natural and artificial sources. It also lists types of energy feedstocks, including oil, gas, oil and gas condensate, non-industrial deposits, heavy oil grades, original asphalt, gas-saturated waters and gas-hydrates. *The Ukraine Tax Code* defines renewable energy sources as solar, wind, geothermal, wave, tidal, hydro, biomass, organic waste gas, sewage treatment plant gas and biogas.

The law *on alternative types of fuel* aims to establish the legal, social, economic, ecological and organisational conditions necessary for expanding production and consumption of alternative types of liquid and gas fuel. It sets out key principles to help achieve this aim, including:

- supporting the development of a scientific and technical base for alternative fuel production;
- promoting scientific and technical achievements in alternative fuel production;
- developing international scientific and technical collaborations;
- using world science and technology to expand alternative fuel production; and
- supporting entrepreneurship and protecting business interests in alternative fuel production.

The implementation of the Ukraine legal framework for alternative energy sources has been constrained by extended political and economic crises. These have limited the government's capacity to invest in alternative energy sources, with most new alternative energy plants constructed by private companies.

The Effects of Military Occupation

Protracted military actions in east Ukraine have worsened the energy situation in Ukraine. Hostile military operations by the Russian Federation are systematically destroying energy

supply infrastructure, depleting traditional natural resources and limiting Ukraine's capacity to develop alternative energy sources.

Adding to this is the complete depletion of Ukraine gas and coal reserves as of June 2014. According to the Independent Trade Union of Miners, the fuel shortage could lead to the destruction of the whole Ukraine energy system. In August 2014, the Ukraine Government introduced a state of emergency in the energy sector. Emergency actions included the restriction of coal exports and importation of fuel from South Africa. Anticipated actions include the importation of rare coal types from Australia and Vietnam.

The energy potential of alternative energy sources in Ukraine is about 63 million tons per year.[1] At the end of 2013, the share of total energy derived from alternative sources was about 0.8%. In accordance with the objectives of the *Energy strategy of Ukraine to 2030*, this share is at best likely to increase to 5.7%. Large scale investment in renewable energy sources would help reduce energy dependence, improve environmental protection outcomes and satisfy the conditions for accession to the European Union (EU). According to our estimates, concerted effort could achieve the 20/20/20 target set by the EU. At present, Ukrainian energy law does not fully correspond to European energy Directives.[2] Increased compliance may help Ukraine increase alternative energy production and meet EU accession conditions.

---

[1] Atlas of the energy potential of renewable energy Ukraine, Institute of Renewable Energy of the National Academy of Ukraine. 2013.

[2] In particular the Law of Ukraine "On Oil and Gas" is partially complies with Directive 73/283 / EEC, the Law of Ukraine "On Pipeline Transport" partly complies with Directive 94/63 / EC. Rather high is the level of adaptation in the sphere of renewable energy (Law of Ukraine "On Amendments to Certain Legislative Acts of Ukraine on the Promotion of Wind Energy Development in Ukraine" Law of Ukraine «On Introducing Changes Into Some Acts of Legislation of Ukraine with Objective of Energy Saving Measures Incentives»complies with Directive 2001/77 / EC, the Cabinet of Ministers of Ukraine "On approval of concessional loans for investment projects realization on energy saving technologies and technologies of alternative fuel sources "is generally consistent with Directive 2003/30 / EC partially comply with the Directive 2003/30 / EC and Directive 2001/77 / EC laws of Ukraine" On alternative Energy Sources "and the" alternative Liquid and gaseous fuels. "Also, the Law of Ukraine" On Electricity "partially complies with Directive 2003/54 / EC, the Cabinet of Ministers of Ukraine" On strengthening control over the mode of heat consumption "and" On approval of the state supervision in the electricity sector "in generally consistent the Directive 2003/54 / EC and Directive 2005/89 / EC.

Increasing renewable energy use to just 50% of total capacity would enable a 30 billion cubic metre reduction in the use of natural gas. This would allow the Ukraine to completely dispense with Russian gas.[3] However, this does not take into account the Russian annexation of Ukraine territory to the Autonomous Republic of Crimea in 2013 and the subsequent cessation of relations between Ukranian energy markets and Crimean alternative energy sources in April 2014. These actions are significant because the majority of Ukraine solar energy plants are in the Crimea, and the annexation resulted in a loss of Ukraine access to natural gas in the Black and Azov Seas. This gas was the single source of fuel for Ukraine's main thermal power plant. Although the European Union may direct the reversal of these political events, this is unlikely to occur within the next few years. The Ukraine Government is trying to implement alternative energy policies to avoid total energy system collapse.

The Regulatory Framework for Alternative Energy

The Ukraine government is trying to avoid an energy crisis by implementing measures that stimulate alternative energy production. The Ukraine Government acknowledged the need to develop alternative energy sources in the *Energy Strategy of Ukraine* of 2006. This Strategy led to the adoption of numerous alternative energy laws, including *About alternative energy sources, On alternative types of fuel*, *On electricity*, *On energy saving* and *On combined generation of heat and electricity and use of waste energy potential*.[4] This complex legal mosaic arises from the absence of a single law for the energy sector. Moreover, the general language of these laws leaves the determination of regulatory norms to hundreds of different by-laws. The lack of legal unification also leads to an uncoordinated mass of agencies administering different laws and programs.

---

[3] M. Benmenni, M.P. Kuznetsov, V.A. Hilko,. Proposals to strengthen the energy security of Ukraine // Institute of Renewable Energy of the National Academy of Science of Ukraine, Kyiv, 2014. – Access mode: http://ua-energy.org/upload/files/%D0%A9%D0%BE%D0%B4%D0%BE_%D0%B7%D0%BC%D1%96%D1%86%D0%BD%D0%B5.pdf.

[4] See also Decree of CMU of February 3, 1997, No. 137 "On Comprehensive Program for Construction of Wind Power Plants"; Decree of CMU of February 5, 1997, No. 148 "On Comprehensive State Energy Saving Program of Ukraine"; Decree of CMU of December 31, 1997, No. 1505 "On the Program of State Support to Development of Alternative and Renewable Energy Sources and Small Hydro and Thermal Energy"; Decree of SR of Ukraine of May 15, 1996, No. 191/96-BPBP "On National Energy Program of Ukraine until 2010".

There is some support for alternative energy in general Ukraine environmental policy. Supported activities include:

- the identification and financing of alternative energy sources;
- permissions to connect private energy sources to the national grid;
- the creation of statistical databases on alternative energy resources;
- assessments of the conformity of energy generating facilities to the objects of alternative energy policy;
- the introduction of a goal that alternative energy supplies 20% of total energy demand by 2020;
- the introduction of green tariffs; and
- tax exemptions for enterprises generating electricity from renewable energy sources, biofuel producers, coal bed methane extractors, the sale of energy-saving equipment and the implementation of energy-saving projects.

Economic Measures to Improve Energy Outcomes

One of the main barriers to alternative energy development in Ukraine is the cost of constructing alternative energy generators. Costs arise from the need to import expensive components, such as solar equipment and sailboat engines. Private sector investment is low because of the time it takes to recover costs (3-5 years). Incentives introduced to try and redress these barriers include the termination of green tariffs, state energy subsidies, taxes and customs benefits, and a legal obligation on the state to buy the whole volume of electricity generated from alternative energy sources.

Green Tariff Regulatory Framework

In 2013, the National Electricity Regulatory Commission adopted a resolution that effectively terminated the 'green' tariff for most business entities licensed to produce electricity using alternative energy sources,[5] provided those entities complied with 'local content' prescribed by law. 'Local content' refers to the percentage of plant equipment that must be made in

[5] Resolution 14.03.2013 № 251.

Ukraine.[6] At present, this share must not be less than 50%. Although patriotic, in practice the necessary equipment is either not made in Ukraine or is much more expensive than foreign equipment. For example, although the frames for windturbines are produced in Ukraine, the engines are likely to be foreign. It may be prudent to repeal the local content rule if the genuine aim of the scheme is to incentivise alternative energy production. As long as the rule stands, non-compliant alternative energy producers must continue to pay one of the highest green tariffs in Europe.

Subsidies, Taxes and Customs Benefits

The land tax for plots used to produce electricity from alternative energy sources has been reduced to 25% of the applicable land tax. Annual lease payments for communal or state land leased for production of electricity from alternative energy sources must not exceed 3% of the normative value of the leased land. 80% of profits from the sale of renewable energy and energy efficient equipment and materials by Ukraine companies within the Ukraine are exempt from tax.[7] This credit operates for the first five years of receiving the profit. Equipment that runs on renewable energy, energy-efficient equipment and materials, equipment that contributes to the operation of renewable energy sources, and equipment and materials used in the production of renewable energy are expempt from tax, VAT, and customs duties if identical products with similar characteristics are not available in Ukraine.[8]

Grid Access and Mandatory Power Purchase

Electricity producers that produce energy from alternative energy sources have the statutory right to request connection to the national grid. Ukraine guarantees the purchase of all energy produced from alternative energy sources.

The above measures may incentivise businesses to produce and use alternative energy sources, but they do not promote the widespread use of alternative energy sources by all sectors of the population. A complement to these measures may be the implementation of an asset modernisation program to make traditional energy production more efficient. Modernisations may include:

---

[6] The definition and regulation in relation to local content was provided after the initial resolution; see Resolution of National Electricity Regulatory Commission of Ukraine On approval of determining the amount of local content for energy facilities, 27.06.2013 № 744.

[7] P. 158.1 Art. 158 of the Tax Code of Ukraine.

[8] § 197.16 of Article 197 of the Tax Code of Ukraine and p. P. 14, 16, ch. 1, Art. 282 of the Customs Code of Ukraine.

- upgrades of all thermal power plants and stations;
- extensions to the nuclear operation;
- upgrades of distribution networks and facilities; and
- replacement or reconstruction of power grids and transformer substations.

Analysis of the latest Ministry of Finance data (2012) suggests the cost of implementing the *Energy Strategy of Ukraine* is in the hundreds of billions (USD). Constant scarcity in the State budget makes full implementation unlikely in the new few years. A combination of asset modernisation and economic incentives may help Ukraine move towards full implementation of the Strategy and avoid the power deficit anticipated by 2020.

Industry Measures to Improve Alternative Energy Outcomes

We now report on measures to stimulate the development of certain types of alternative energy sources.

Wind Energy

The successful development of the Ukrainian wind energy sector continued into 2013, with a 56% increase in capacity from 2012.[9] Ukrainian legislation provides tax incentives for the development of wind energy projects. These include exemptions from import VAT and customs duties, a 75% reduction in land tax for renewable energy power plants and exemptions from corporate profit tax until 2021 for companies who only produce electricity from renewable energy sources. Legislative incentives include the ability to impose a green tariff on electricity produced at power stations using, in particular, wind energy.[10]

[9] According to a survey by the Ukrainian Wind Energy Association, 95.3MW of new wind energy capacity was commissioned between 1 January and 31 December 2013. As a result, the power capacity of the Ukrainian wind energy sector totalled 371.2MW.

[10] At the moment the only real incentive for wind energy projects in Ukraine is GT. The effective feed-in tariff or GT scheme for wind energy in Ukraine entered into force on 22 April 2009. According to Article 17-1 of the Ukrainian Power Industry Law of the 16 October 1997 (the 'Power Industry Law'), a GT is approved by the National Energy Regulatory Commission of Ukraine (the NERC).

Solar Energy

At present, Ukraine has one of the highest green tariffs for solar power in Europe.[11] The government purchases electricity derived from alternative sources at approximately $1USD per KW then sells it to consumers at a uniform rate of approximately 30 cents per KW. This current rate of government subsidisation is under attack, with legislation pending to reduce the rate by about 40%.[12] This creates a great deal of uncertainty for private investors, and is likely to negatively impact the development and production of alternative energy in Ukraine. The move compares unfavourably to the continued government support and subsidisation of outdated thermal power plants at the behest of powerful industry groups. Power imbalances like these present major obstacles to the development of alternative energy in Ukraine.

Biomass and Biofuels

Almost a third of the world's population still uses wood biomass as a primary fuel source. In some regions, including developed countries, biomass meets 90% of fuel needs. Biomass is an affordable, renewable and cheap source of energy for many rural people. Biomass is conventionally divided into three main types of biofuels: solid (wood chips, pellets, briquettes), liquid (biodiesel, ethanol) and gaseous (biogas). Biofuels are made entirely from renewable biological raw materials, such as the waste products of agriculture and industry. They can be used directly as a fuel, or as components in the production of other fuels.[13]

The main policy directions regarding biomass and biogas in Ukraine concern the production of electric and thermal energy. For example, second generation oilseed rape and biofuel plants use biomass for thermal power production. Although Ukraine currently produces less than 0.5% of its energy from biomass, estimates suggest it could produce more than 10 times the current amount.[14] This makes biomass an important energy component. However, a lack of clarity on when the 'local content' rules applies, and the imposition of the 'local content' rule, constrain growth of the biomass market. A temporary measure to incentivise

---

[11] 7, 35 UAH per kilowatt.

[12] On June 18, 2014 The Cabinet of Ministers of Ukraine issued a Decree № 589-p "On improving the payment system for electricity from alternative energy sources". This Decree removes one coefficient that was used in the calculation of the green tariff for solar power.

[13] In the proportions set out in accordance with state standards (Law of Ukraine "On the development of production and consumption of biofuels" of the 24 of May 2012).

[14] It is provided for in the Law of Ukraine "On the development of production and consumption of biofuels" of the 24 of May, 2012.

production is an income tax exemption for biofuel producers until 2020.[15] There are also moves to introduce laws to stimulate biodiesel production, specifically though a stage-by-stage increase in the obligatory use of biofuel and mixed motor fuel.[16]

Conclusions

The development of alternative energy sources comes with both advantages and disadvantages. On the one hand, renewable energy resources can help minimise pollution, conserve non-renewable resources, and promote the growth of energy infrastructure and the development of new technologies. On the other hand, the technologies involved are expensive, as is construction of alternative energy plants. Constraints on the development of new technology include network remoteness and legal obstacles. Other hurdles to the development of alternative energy sources include the high cost of producing alternative energy in comparison to traditional energy, and the immaturity of domestic markets. In this regard, certain alternative energy products are produced solely for export because they might not sell on the domestic market. These factors may partially explain the relatively low use of renewables in Ukraine.

Overall, the development of alternative energy industry in Ukraine is in its early stages. Constraints upon industry development include the inadequacy of financial incentives, inconsistency in legal requirements and legal uncertainty, bureaucratic red-tape, corrupt practices, poor funding for research and development, insufficient consumer information and inefficient and outdated technology. An independent and systematic review of the current legal framework may assist industry development. The review may also help highlight more efficient and effective practices for stimulating the production of alternative energy. The review can take into account current financial and political constraints, and ensure recommendations are practical, well-targeted, strategic and cost-effective. Recommendations may include streamlined regulatory procedures, transparent tax preferences, preferential loans, direct consumer subsidies and the collation of information on the best available technologies. Information gathering may help facilitate the cheaper and quicker implementation of alternative energy productions. Consumer education programs may help increase the use of renewable energy in Ukraine. One thing is certain; the energy crisis in Ukraine makes inaction not an option.

---

[15] In accordance to the amendments to the Tax Code of Ukraine made in 2013, as a temporary measure, until January 1, 2020.

[16] Law of Ukraine “On Amendments to Certain Laws of Ukraine as to Support of Biofuel Production and Use” № 1391-VI on 21th of May, 2009.

COUNTRY REPORT: UNITED KINGDOM

Environmental Offences: Finally Making the Polluter Pay?

Opi Outhwaite

This update focuses on developments in sentencing for environmental crimes. The imposition of appropriate penalties is crucial, not only to the use of judicial mechanisms for securing access to environmental justice, but also to respect for the polluter pays principle, a keystone of environmental law. There has been long-standing criticism in the UK of the failure of the courts to treat environmental crimes sufficiently seriously when imposing sentences. Fisher et al observed that insufficiently severe sentences, including low levels of fines, undermine the effectiveness of criminal prosecutions, reinforce an attitude of moral ambiguity towards environmental crime and do not produce a deterrent effect.[1] The issues relate to sentencing for both individuals and businesses, though the latter has arguably been the most problematic. Two important facets of this problem have both been addressed this year, through developments in sentencing guidance and in decisions of the Court of Appeal.

The Court of Appeal and Sentences for Corporate Offenders

The Court of Appeal has established something of a track record for reducing the fines imposed upon companies by the lower courts. One of the best known examples of this is the Sea Empress case.[2] A record fine of £4 million was imposed on the Milford Haven Port Authority as a result of the Sea Empress oil disaster. On appeal the fine was reduced to £750,000. This has been seen to reflect a general reluctance of the courts to impose serious penalties on corporate environmental offenders and for environmental crimes in general. The Court of Appeal, in considering the penalty, held that the judge had failed to give sufficient credit for the Port's plea of guilty, failed to consider the impact of such a large fine on the ability of the Port Authority to perform its public functions, and that it had taken too rosy a view of the Port's financial situation. These considerations are pertinent to the recent decisions, discussed below.

---

[1] Fisher, E. et al, Environmental Law: text, cases and materials, Oxford: OUP (2013).

[2] R v Milford Haven Port Authority (The Sea Empress) [2000] Env L.R. 632.

As noted by Stookes, this approach of the Court of Appeal has been observed in more recent cases. In *R* v *Anglian Water Services Ltd*[3] the defendant company pleaded guilty to discharging effluent into a watercourse and was fined £200,000 by the Crown Court. The Court of Appeal reduced the fine to £60,000. In *R* v *Cemex Ltd* a company failed to comply with an environmental permit and was fined £400,000.[4] The fine was reduced on appeal to £50,000.[5] Stookes notes that this position has resulted in some offenders being prepared to risk paying a fine rather than comply with environmental legislation.

In January 2014 three important Court of Appeal decisions dealt with the imposition of fines for corporate environmental offences and suggest a marked change in attitude as well as establishing important general principles for fines applied to corporate offenders.[6]

R v *Sellafield Ltd* and *R* v *Network Rail Infrastructure Ltd* were heard together; in both cases the issue was whether fines imposed were 'manifestly excessive'.[7] Reviewing the general principles relating to the duty of the courts in sentencing, as set out in *the Criminal Justice Act 2003*, it was noted that the purpose of sentencing included punishment of offenders, reduction of crime (including through deterrence), reform and rehabilitation of offenders, protection of the public and the making of reparation for harm caused.[8] The culpability of the offender and the harm caused or which might foreseeably be caused were to be regarded when considering the seriousness of the offence[9] and when imposing a fine, the criteria set out in s.164 should be considered, including the financial circumstances of the offender and the seriousness of the offence (which may have the effect of increasing or reducing the fine). Citing *R* v *F Howe & Son (Engineers) Ltd*[10] the court emphasised that the fine must be fixed to meet the statutory purposes with the objective of ensuring that 'the message is brought home to the directors and members of the company (usually the shareholders)'.[11]

---

[3] [2003] EWCA Crim 2243.

[4] [2007] EWCA Crim 1759.

[5] Stookes, P. Will the polluter finally pay the price? *Solicitors Journal*, 28 October 2014.

[6] Likely influenced by the then forthcoming developments in sentencing guidelines which were introduced in July 2014 and are discussed below.

[7] R v Sellafield Ltd and R v Network Rail Infrastructure Ltd [2014] EWCA Crim 49.

[8] s.142 CJA 2003. Ibid at [3].

[9] s.143 CJA 2003. Ibid at [3].

[10] [1999] 2 All ER 249.

[11] [2014] EWCA Crim 49 [6].

In *Sellafield*, the company had adopted a system for separating exempt and non-exempt (radioactive) waste according to the statutory framework. Exempt waste could be disposed of as landfill whereas radioactive waste was subject to separate processes. The equipment introduced for the purpose of categorising the waste was not correctly calibrated so that the dosage always registered as zero and the waste in question was consequently set aside for disposal as exempt waste. The error was discovered by chance, during a training exercise. In the intervening period several thousand bags of waste had passed through, though it was accepted that only a small number of bags were radioactive above the level that should have been detected. The Court of Appeal accepted that Sellafield then did everything they could to ensure that no harm came to anyone.[12]

With respect to harm and culpability the court considered that there was no actual harm and the risk of harm was low. Culpability was considered to be 'medium'; the court agreed that Sellafield that the failures could easily have been avoided and should have been detected quickly, though the application of specified monitoring and checking procedures.[13]

Network Rail involved health and safety failures rather than specifically an environmental issue but the sentencing principles were applied in the same way as for Sellafield. A child was seriously injured when the car he was in was hit by a train at a level crossing. National Rail accepted that it was guilty of significant failings in the assessment of risk; if a proper assessment had been made then a telephone connected to the signal box would have been installed at the crossing (and was installed after the accident). Guidance on risk assessment had been issued in 1996 and risk assessments were undertaken in 2000, 2003, 2007 and 2009. There was a maintenance inspection in 2010. The Crown Court considered, and Court of Appeal accepted, that 'elementary mistakes' were made in the assessment.

In appealing against the fine Network Rail submitted that since a guilty plea was entered (a mitigating factor) the starting point was far too high and further, the judge had not given sufficient credit for Network Rail's commitment to safety. The Court of Appeal found that serious harm was foreseeable, in addition to the actual harm caused. As to culpability there was no evidence of specific management failures; the failures were at lower operational levels.

---

[12] [2014] EWCA Crim 49 [21].

[13] [2014] EWCA Crim 49 [31].

Having considered culpability and harm, and aggravating and mitigating factors in both cases, the Court of Appeal turned to the issue of whether the fines were excessive. Concerning Sellafield, the Court of Appeal made it very clear that significant fines could be appropriate to large companies of this type. A fine of £700,000 (reduced from a starting point of £1 million, after mitigation) reflected the case where culpability was moderate and harm low; it should achieve the purpose of sentencing by bringing home to Sellafield Ltd and its shareholders the seriousness of the offences committed and should act as an incentive to directors and shareholders to remedy the failures found, including the too lax and complacent approach of management. If it did not have that effect then in a future case the fine would have to reflect that the level imposed in this case had not achieved the statutory purpose of sentencing. The Court noted also that there was no upper ceiling on the maximum fine that could be imposed on a company.

Concerning Network Rail the Court of Appeal rejected the submission that a fine of £750000 (before mitigation) was appropriate only where there had been a fatality. But, differently to Sellafield, it was noted that a significant fine would inflict no direct punishment on anyone, and may harm the public, since the company's profits are reinvested in the rail infrastructure rather than benefiting shareholders. Nevertheless to ensure that it fulfils the other purposes of sentencing (reducing offences, reforming the offender and protecting the public) the fine must be such that it brings home to the directors and members of Network Rail those three purposes. The fine would stand and indeed 'represented a very generous discount for the mitigation'[14] – even if there had been a materially greater fine it would not have been criticised.

Finally, *R v Southern Water Services Ltd*[15] concerned failings at a sewage pumping station which led to the discharge of untreated sewage into the sea. Concerning culpability there had been a failure to notify and remedy the problems quickly, as found by the trial judge. Although there was no actual harm, there was the potential for serious harm. Again the Court noted that the company had significant resources available to them and also a record of persistent offending. In dismissing the appeal and upholding the original fine of £200,000 the Court of Appeal commented that it would not interfere with the fine and would not have done so even if the fine had been substantially higher.

[14] [2014] EWCA Crim 49 [72].

[15] [2014] EWCA Crim 120.

In all three cases the Court of Appeal gave significant weight to the considerable resources available to each company, even where the company did not owe a duty to shareholders. In particular, the impact of the fine - rather than only the ability to pay - was considered in relation to the purpose of sentencing. The Court also commented carefully on the record of persistent offending in each case.

Sentencing for Environmental Offences: The New Guideline

Also in 2014, the Sentencing Council issued its Definitive Guideline for environmental offences.[16] The position of the Court of Appeal, discussed above, became relevant when the lower courts had imposed relatively substantial fines or penalties where environmental offences had been committed. These instances were often the exception however, with low levels of fines and inconsistent sentencing considered to be a persistent problem in the lower courts.

In a detailed discussion of the data and issues pertaining to the consultation preceding the Guideline, Parpworth notes that empirical research undertaken by the Sentencing Council indicated a limited awareness among magistrates of the sentencing guidelines in relation to environmental offences.[17] Further, the limited number of environmental cases heard by individual magistrates meant that they were unlikely to have substantial experience of the application of the guidance, leading to inconsistencies including in the level of fine imposed. The view of the Environment Agency was that fines would need to increase substantially for businesses to understand the environment's true value, rather than viewing pollution as an acceptable risk. Similarly, the House of Commons Environmental Audit Committee noted that the levels of fines imposed neither reflected the gravity of the environmental crimes nor deterred or adequately punished those who commit them.[18]

---

[16] Sentencing Council, *Environmental Offences: Definitive Guideline,* [2014] available at http://sentencingcouncil.judiciary.gov.uk/docs/Final_Environmental_Offences_Definitive_Guideline_%28web%29.pdf.

[17] Parpworth, N. 'Sentencing for environmental offences: a new dawn? *Journal of Planning & Environmental Law* [2013] 9, 1093.

[18] Ibid and see further House of Commons, *Environmental Crime and the Courts, (*HC, 126, 6th report of the session 2003-04).

Although the data on sentencing was inadequate, Parpworth notes that the data analysis published alongside the consultation demonstrated that in most cases companies were sentenced by magistrates (82% of cases) and fines were the usual sentence (93% of sentences). In 2011 only 12% of corporate fines were above £10,000 and the median figure for 2001-2011 shows an overall downward trend from £2500 in 2001 to £1500 in 2011.

Similarly, in 2011 the vast majority of individuals were sentenced by magistrates (90% of cases). Fines remain the most common sanction but have decreased from 78% to 65% of cases. In the period 2001- 2011 the mean fine imposed upon individual offenders decreased from £350 to £200. In the same period there has been an increase in the number of individuals receiving a discharge and slight increase in the imposition of community orders.[19] The new Guideline came into effect in July 2014 and applies to individual offenders and to organisations, with each addressed separately. To determine the appropriate sentence the guideline specifies the range of sentences appropriate for each type of offence and divides each offence into categories according to the degree of seriousness. 'Category ranges' are then specified; the sentences appropriate for each level of seriousness. A starting point for sentences in each category is set out and then adjusted according to various factors.[20]

Two main groups of offence are addressed: those committed under s.33 of *the Environmental Protection Act 1990* and certain offences under *the Environmental Permitting (England and Wales) Regulations 2010* (summarised in the Guideline as those dealing with unauthorised deposit, treatment or disposal of waste and illegal discharges to air, land and water). The guidance makes clear however that the Guideline should be referred to in sentencing "other relevant and analogous offences".

The guideline sets out a series of steps to be applied in determining the appropriate sentence - though there are some differences in the detail applicable to individuals as compared with organisations, the guidance is comparable. An important starting point is that steps one and two respectively require the court to consider making a compensation order

---

[19] See Parpworth [n 17] and Sentencing Council, Environmental Offences Sentencing Data, Research and Analysis Bulletin available at http://sentencingcouncil.judiciary.gov.uk/docs/Environmental_bulletin__Final.pdf.

[20] It has been noted that the specification of starting points for sentences is unique to sentencing for England and Wales as compared with jurisdictions such as the USA and New Zealand, see Parpwoth [n 17].

and to consider confiscation. This requirement is separate from the determination of any fine to be imposed.

Steps three and four provide for categorisation of the offence and determination of the starting point and range for fines. In categorisation of the offence, a sliding scale of culpability and harm is used, with each including four categories. Culpability ranges are (i) deliberate (intentional breach or flagrant disregard or, for organisations, deliberate failure to put in place and enforce systems which could reasonably be expected), (ii) reckless (actual foresight, wilful blindness, reckless failure to put in place and enforce systems, (iii) negligent (failure to take reasonable steps) and (iv) low or no culpability. In determining culpability of organisations it should be noted that the 'deliberate' and 'reckless' categories apply to acts or omissions that can be properly attributed to the organisation. The categories of harm range from actual harm, such as a major adverse effect on air or water quality (category 1), through to risk of minor localised damage to air or water quality (Category 4). Risk of harm is presumed to be less serious than actual harm though it is recognised that this might not be the case where the extent of potential harm is particularly high.

The combination of culpability and harm indicates the starting point for the determining the level of fine. For organisations the starting point and range is further divided according to the size of the organisation, ranging from 'large' (turnover or equivalent of at least £50million p/a) to 'micro' (turnover or equivalent of not more than £2million p/a). This provides a clear basis for imposing fines appropriate to the particular organisation in question, particularly when read with steps 5 - 7. To support this factor, detailed information about required accounting information is also set out. The guidance also provides that for 'very large organisations' the fine may be outside of the suggested range. This category is not defined except as one whose 'turnover or equivalent vastly exceeds the threshold for large companies'. The lack of a starting point for fines in this category might be problematic but read as a whole the clear assumption in the guidance is that the starting point will be proportionately higher than for large organisations.

In steps 5 - 7 the Court is required to 'step back' and, with reference to the specific factors set out, review whether the sentence as a whole meets the objectives of punishment, deterrence, and removal of gain derived through the commission of an offence. Certain new criteria are set out in these steps which should support the more effective use of fines, particularly for offending organisations. Step five sets out new guidance to ensure 'that the combination of financial orders...removes any economic benefit derived from the offending'.

Economic benefits expressly include avoided costs, operating savings and any gains made as a direct result of the offence. For organisations (but also for individuals) this step is important in preventing economic gains derived from 'cutting corners' or failing to comply in the context of calculated financial risk.

The requirement that the fine meets the objectives of sentencing of organisations is enforced further in step six. Here the court is required to ensure that the fine based on turnover is proportionate to the means of the offender. The language of proportionality in this section errs towards environmental protection rather than the interests of the organisation. The guideline does, however, allow for a 'bespoke' approach; in assessing the financial situation of the organisation, the profit margins of the organisation should be examined and not only the overall turnover, with an upward or downward adjustment of the fine accordingly.[21] This allows for appropriate adjustment based on the circumstances of the case. The combination of financial orders must though be 'sufficiently substantial to have a real economic impact which will bring home to both management and shareholders the need to improve regulatory compliance'. In some cases, putting the offender out of business will be an acceptable consequence of the fine.

The non-exhaustive list of aggravating factors also includes addition of the offence having been committed for financial gain. Evidence of a wider impact or impact on the community is a further addition to the list of aggravating factors.[22] Aggravating and mitigating factors will be used to adjust the starting point in step 4. The requirement to remove any economic gain similarly applies to individual offenders.

Comment

The developments in sentencing for environmental offences appear to indicate a welcome change in the consistency and seriousness with which they will be dealt by courts at all levels. A low level of fines and the reduction in high fines on appeal have been a persistent issue in UK environmental law and, as noted, are considered to have contributed to a view that environmental offences are not 'serious' crimes or are morally ambiguous. The

[21] Brosnan notes that this has implications for the Environment Agency who will now need to investigate the financial circumstances of offenders in more detail in order to present supporting information to the court. Brosnan, A. *ELR*, 16, 3 (203) [2014]

[22] Brosnan [2014], Ibid.

approach of the Court of Appeal in the cases discussed appears designed to turn the tide on organisations who might otherwise treat non-compliance as an acceptable business risk. The change in emphasis in the Court of Appeal to the purpose of sentencing and the need to 'bring the message home' to corporate offenders - particularly those with access to considerable resources and a history of non-compliance - is also seen in the Sentencing Council's Definitive Guidelines for environmental offences. Since the vast majority of cases are heard in the lower courts and the usual sentence is the imposition of a fine, the Guideline also has far reaching implications. The detailed and structured approach to determining the category of offences and the overall level of fine to be imposed should provide greater consistency and it is widely thought that it will lead to an increase in the level of fine imposed on organisations.[23] In particular, the more detailed guidance on the need to negate economic gains and to consider the in detail financial situation of the organisation in question goes to the heart of the purpose of sentencing and to the criticism levelled at lower levels of fine in not acting as an adequate punishment or deterrent.

As might be expected, there are some limitations. The more vague reference to 'very large organisations' might cause difficulties. The requirement in step six for the court to examine the profit margins of a company provides an opportunity for an assessment which avoids injustice (both to the organisation and in relation to the harm or risk of harm) but might potentially be leaned on by large companies seeking to argue that they are operating with losses. Finally, the Guideline addresses some of the most common and potentially serious types of environmental offence but it is nevertheless restricted. Many other offences (for instance, those involving wildlife crime) are subject to similar problems with sentencing and are not addressed, though it remains to be seen how widely the courts will apply the principles set out in the Guideline.

[23] Brosnan considers that the level of fines imposed on individuals will remain about the same (ibid).

COUNTRY REPORT: UNITED STATES
EPA Continues Significant Regulatory Initiatives as Opponents of Environmental Regulation Prepare to Take Control of Both Houses of Congress

Robert V. Percival*

Introduction

During 2014 the U.S. Environmental Protection Administration (EPA) continued to move ahead with significant regulatory initiatives while the judiciary continued largely to uphold the EPA's regulatory actions. In April 2014 the Supreme Court granted EPA a significant victory when it reversed a lower court decision striking down the Agency's regulations to control interstate air pollution. In June 2014 the Supreme Court largely upheld the EPA's regulations on greenhouse gas (GHG) emissions from new power plants, though it invalidated a small portion of them. In November 2014 the Supreme Court announced that it will review a lower court decision upholding EPA's regulations on power plant emissions of mercury and air toxics (MATS). The Court's decision, which likely will be released by the end of June 2015, could have significant implications for environmental law.

EPA launched several new regulatory initiatives in 2014. In April 2014 EPA proposed new regulations defining the breadth of federal jurisdiction under *the Clean Water Act*. In June 2014 EPA proposed the "Clean Power Plan" to control GHG emissions from existing power plants. In November 2014 EPA proposed a revised national ambient air quality standard (NAAQS) for ozone. Each of these proposals has generated fierce opposition from industry groups, who are likely to find a sympathetic ear in the new Congress that will be controlled by Republican opponents of federal environmental regulation.

** Robert F. Stanton Professor of Law & Director, Environmental Law Program, University of Maryland Carey School of Law.

In the November 2014 midterm elections the Republican party won control of the U.S. Senate with the election of many candidates fiercely opposed to federal environmental regulation. Thus, beginning in January 2015, both houses of the U.S. Congress will be controlled by the political party opposing President Obama and considerable anti-environmental legislation may pass both houses. However, such legislation is unlikely to become law because President Obama will veto it and Republicans do not have the two-thirds super majority required in both houses to enact a law over the president's veto. Congressional Republicans likely will try to use the "power of the purse" to seek to block environmental initiatives by refusing to provide funds to implement them. Thus, the battle between the President and Congress will shift to budget matters with the prospect of a repeat of the October 2013 government shutdown within the realm of possibility.

Air Pollution and Climate Change

Supreme Court Upholds Regulation of Interstate Transport of SO_2 and NO_x

As noted in the last edition of this eJournal, on April 29, 2014, the U.S. Supreme Court upheld EPA's regulations to reduce interstate transport of sulfur dioxide (SO_2) and nitrogen oxide (NO_x).[1] By a 6-2 majority the Court ruled that *the Clean Air Act* did not mandate any particular allocation of emissions reductions to control interstate transport and that EPA's decision to require measures that can be undertaken most cost-effectively was reasonable. The Court also held that EPA did not have to wait for states to develop their own pollution control plans in response to a finding that their existing plans are inadequate to control transboundary pollution. Instead, EPA could promulgate a federal implementation plan at any time after EPA the existing plans were declared inadequate. After a long delay on remand, the panel of judges from the U.S. Court of Appeals for the D.C. Circuit who initially struck down the EPA regulations lifted the stay on the regulations and allowed them to go into effect.

EPA Regulation of GHG Emissions from Power Plants

Pursuant to the Climate Action Plan announced by President Obama in June 2013, EPA has launched several regulatory initiatives to control GHG emissions. The U.S. Supreme Court reviewed EPA's regulations requiring new or major modified sources of GHG emissions to obtain permits *under the Clean Air Act's Prevention of Significant Deterioration (PSD)*

[1] EPA v. EME Homer City Generation, L.P., 134 S.Ct. 1584 (2014).

program. In a decision released on June 23, 2014, the Court largely upheld EPA's regulations, while striking down a portion of them.[2] By a 7-2 vote the Court held that EPA properly determined that GHG emissions were among the pollutants that had to be controlled by stationary sources that already are required to obtain permits. But, by a 5-4 vote, the Court rejected the conclusion that all large stationary sources of GHC emissions automatically were subject to permitting requirements due to EPA's regulation of GHGs from motor vehicles. Because the vast majority of these sources already are required to obtain permits, the decision does not represent a major setback to EPA's efforts to control GHG emissions under *the Clean Air Act (CAA).* EPA's crucial finding that emissions of GHGs endanger public health and welfare and can be regulated under the CAA and the agency's regulation of emissions of GHGs from mobile sources were left standing by the Court. Only two Justices – Justices Alito and Thomas – stated that they continue to believe that GHGs cannot legally be regulated under the CAA, a position they articulated in dissent in the Court's landmark 2007 *Massachusetts v. EPA* decision.

Even as it continues its rulemaking to establish new source performance standards (NSPSs) for emissions of GHGs from new fossil-fueled power plants, EPA on June 2, 2014, announced its Clean Power Plan to regulate GHG emissions from existing power plants. The plan relies on §111(d) of the CAA. This section allows EPA to require states to regulate a pollutant for which it has established an NSPS if it is not already regulated as a criteria air pollutant with a national ambient air quality standard (NAAQS) or as a hazardous air pollutant subject to a national emissions standard for hazardous air pollutants (NESHAP). EPA's proposal seeks to reduce GHG emissions from power plants by 30 percent from 2005 levels by the year 2030. The plan sets state-specific goals for reductions in GHG emissions from power plants. Each state will develop its own plan concerning how to achieve these reductions or let EPA develop a plan for reductions in the state. The proposed rules emphasize four "building blocks" for state GHG reductions: improvements in the efficiency of existing coal-fired power plants, increased utilization of existing plants using natural gas, expanded use of renewable energy, and increased energy efficiency in homes and businesses to reduce demand for electricity. EPA's proposal has spawned considerable controversy (and even some lawsuits that are premature because the agency will not adopt the rules in final form until June 2015). Critics of EPA's Clean Power Plan argue that a drafting error in the 1990 CAA Amendments precludes regulation of power plants under § 111(d) and that EPA has no authority to require demand side reductions in energy use through efficiency improvements outside the grounds of power plants.

---

[2] Utility Air Regulatory Group v. EPA (2014).

EPA Proposes to Strengthen Controls on Ground-Level Ozone

On November 25, 2014, EPA proposed new regulations to lower the national ambient air quality standard (NAAQS) for ground-level ozone. The agency proposed to lower the current standard for ozone from 75 parts per billion (ppb) to a range between 65 and 70 ppb. Former EPA Administrator Lisa Jackson had sought to make a similar proposal in 2011, but it was blocked by opposition from President Obama and the Office of Management and Budget. EPA is required to review and revise, if necessary, the NAAQS every five years, a deadline that expired in 2013 for the ozone NAAQS. The agency released its ozone proposal shortly in advance of a court-ordered deadline.

Supreme Court to Review Regulations on Power Plant Emissions of Mercury and Air Toxics

On November 25, 2014, the U.S. Supreme Court announced that it would review a lower court decision upholding EPA's regulations on emissions of mercury and air toxics (MATS) from power plants. On April 15, 2014 a divided panel of the U.S. Court of Appeals for the D.C. Circuit upheld the regulations, which were issued in 2012. The regulations require power plants to reduce emissions of mercury, chromium, arsenic and other air pollutants. The question the Court will consider is whether EPA "unreasonably refused to consider costs in determining whether it is 'appropriate' to regulate hazardous air pollutants emitted by electric utilities". Oral argument is likely to be held in March or April 2015 with the Court's decision expected by the end of June 2015.

Protection of Water Quality

EPA Proposes to Clarify Reach of Federal Jurisdiction under the Clean Water Act

Eight years after a badly divided U.S. Supreme Court split 4-1-4 in deciding a case involving the breadth of federal *Clean Water Act (CWA*) jurisdiction, EPA has proposed new regulations to clear up the confusion. Because no interpretation of the Clean Water Act commanded a majority of the Justices in *Rapanos v. U.S.*, confusion has reigned concerning the meaning of "waters of the United States," the waters covered by CWA permit requirements. In April 2014 EPA issued a proposed rule to further define "waters of the United States." The proposal is based on a report issued in September 2013 by EPA's Science Advisory Board on the "Connectivity of Streams and Wetlands to Downstream Waters." A two-page summary of EPA's proposed rule is available online at: http://www2.epa.gov/sites/production/files/2014-

06/documents/proposed_regulatory_wus_text_40cfr230_0.pdf. A copy of the proposed rule is available at: http://www2.epa.gov/sites/production/files/2014-04/documents/fr-2014-07142.pdf. Farm groups are waging an aggressive campaign in opposition to the proposed rule. In response EPA has published a short document entitled "Ditch the Myth," which is online at:
http://www2.epa.gov/sites/production/files/2014-07/documents/ditch_the_myth_wotus.pdf.

International Environmental Law

U.S. and China Announce Historic Climate Agreement

On November 12, 2014, President Obama and Chinese President Xi Jinping jointly announced an historic, bilateral climate agreement. The agreement pledges that both countries will work to achieve an "ambitious" global agreement to control emissions of greenhouse gases (GHGs) at the UN Climate Conference in Paris in December 2015. For the first time, China agreed to cap its GHG emissions by 2030, if not earlier, and to increase the share of its energy generated by renewable sources to 20 percent by 2030. The U.S. pledges to reduce its GHG emissions by 26-28 percent below 2005 levels by 2025. Both countries agreed to form an international private/public consortium to develop an innovative new carbon capture and storage project at a location in China. They also pledge to develop an Enhanced Water Recovery pilot project that would use CO_2 injection into deep saline aquifers to produce fresh water. Because China and the U.S. are the two countries with the largest GHG emissions, the U.S./China agreement may enhance chances for negotiating a new global climate agreement at the Paris conference in 2015.

Robert V. Percival, Jolene Lin and William Piermattei, EDS: Global Environmental Law at a Crossroads

(IUCN Academy Environmental Law Series, Edward Elgar Publishing Ltd 2014)
336 pp, ISBN 978 1 78347 084 6, ebook ISBN 978 1 78347 085 3

Reviewed by Tiina Paloniitty *

The compilation of papers presented at the 2012 IUCN Academy of Environmental colloquium in Baltimore, MD, USA has now been published in this important new book. The book, as did the colloquium, illustrate the wholeness of contemporary environmental law. Diverse fields like water law, climate change law and agricultural and food law are taken under the umbrella of environmental law. Thus the book—reasonably so—enhances the perception of environmental law as having a broad scope. Environmental impacts are the decisive factors, instead of doctrinal divides.

The compilation is divided into three main sections, proceeding from the general level to more detailed analysis. The first section on environmental governance frameworks is followed by a 'world tour' from the Middle East via Ethiopia and Nigeria to Singapore and Australia, to name but a few. The articles in the last section take the impossible task of looking at the future—an indispensable undertaking when dealing with environmental law that is nearly wholly oriented to the future. A brief review of a few articles from different sections of the book reveals the deep issues of governance that modern environmental law and sustainable development must address.

The book's first section, Environmental Governance Frameworks, opens with Fulton and Wolfson's chapter on the rule of law, sustainability and effectiveness of environmental governance, *Strengthening National Environmental Governance to Promote Sustainable Development.* The chapter analyses the core features of effective environmental governance, with the intention of thus gaining a better understanding of the whole. The aim is appropriate in that astute analysis of regulation is one of the main services legal

* LL.M., Doctoral Candidate, University of Helsinki.

scholarship can provide to society. In their analysis, Fulton and Wolfson discuss aspects—like public engagement, accountability and integrity, and dispute resolution procedures—of the Rule of Law and effective environmental governance. To address the pre-existing problems and to elucidate the increased emphasis within international environmental law on implementation, the authors present some of the latest initiatives in the field. A whole new initiative is also suggested—a collaborative agreement or partnership that could knit the existing approaches together by addressing all the elements of environmental governance. The authors suggest a holistic, strategic planning that would draw together the myriad of parties in the field, thus enhancing the effectiveness of their actions. They also concretize their suggestion by listing the possible non- or intergovernmental entities that might be up to the task—a hoped-for step for an ambitious new initiative like this.

In the book's section on Environmental Governance Networks, Zhao's article, *Environmental NGOs and Sustainable Development in China*, continues the sustainability theme, this time focusing on the development of public participation rights in China. Ecological sustainability is strongly positioned in the Chinese Five-Year Plans, and the role of green civil society and the NGOs is the centerpiece of Zhao's enthralling piece. The chapter emphasizes the various ways participation rights are bounded by the state's social system—and how the social system determines the efficiency of the alternatives chosen. For instance, Zhao considers "a government organized NGO," a concept that seems like an oxymoron. Yet, an adjustment in thinking is required because they are quite influential *in concreto* and efficient in their task. The paper, using China's highly centralized state as its model, reveals the potential that centralization might have for efficient implementation of sustainability goals. Zhao conceptualizes the theme of the environmental NGOs as a problem of efficiency of decision-making.

The chapter raises also more fundamental questions such as the relationship between State and society. The chapter, focused on China, has an almost tangible undercurrent: the limitations of environmental principles as they are generally comprehended. Including the far-reaching objectives into legislation seems not to be adequate. What appears to be a lack of implementation of environmental regulation in China might instead be a lack of ability to make decisions at the political level—it might be that as long as the choice between fundamental objectives of economic growth and ecological sustainability remains unresolved, improving efficiency of environmental regulation does not bring the desired level of ecological sustainability. In resolving this dilemma, green NGO's might play a significant role in public participation and information sharing, as Zhao also concludes.

This atmosphere of not making the fundamental choices remains in Williams, Kennedy and Craig's *Lost in Translation: Threatened Species Protection in Australia*, an analysis of the interface between threatened species protection and mining regulation in Australia. The chapter fits well in the section of the book, Environmental Challenges – a World Tour. The more rudimentary issue the authors explore is how legal intention, that is to say the very aim the legislator wishes to pursue, may face extinction in the legislative practice. In other words, the problem that a piece of regulation should resolve remains unsolved because of the way that piece of regulation is implemented. As the authors see it, a choice between a nature-centered and development-centric approach ought to be made in order to have an efficient regulative system so that the aims of the regulation could be fulfilled. Besides this, in Australia federalism imposes challenges of its own, since the state and federal governments are so mismatched that the current state of affairs is even said to be "inoperative." The challenges experienced in an established federal-state system provide a useful illustration for others, such as, for example, those interested in the development of efficacy and effectiveness within the European Union (EU), not to mention the general discussions on federalism in Europe.

In the last part of the book, Governance Models—Looking to the Future, themes like climate change and sustainable development are strongly present. Lugaresi's chapter, *The Unbearable Tiredness of Sustainable Development (at Different Levels, Lately)*, takes a critical view on the concept of sustainable development. The different levels attended to are national, with Italy as an example, and regional, considering development in the EU. The author also discusses the theme at the international level after the Rio+20 Conference. According to the author, in Italy one root problem is the pronounced emphasis on economic growth—again illustrating the tension between growth and sustainability that is present also in other articles in this review. The author gives the EU a modest absolution: comparing with international and national levels, the approach to sustainable development the EU has chosen is practical and straightforward, focusing on concrete solutions instead of abstract declarations. The chapter concludes constructively by guiding the way to the future by introducing regional governance levels as the most effective means to implement sustainable development.

All in all, the compilation of articles in *Global Environmental Law at a Crossroads* is well worth a read—it paints a thoughtful, multi-faceted picture of the current tides of

environmental law in the various levels of it. Examples from nearly every corner of the globe give food for thought for the locally positioned work conducted on an everyday basis as well.

PRUE TAYLOR AND LUCY STROUD, COMMON HERITAGE OF MANKIND: A BIBLIOGRAPHY OF LEGAL WRITING

(Fondation de Malte, 2013) 132 pp.; ISBN-13: 978-1291577259

Reviewed by Edith Brown Weiss*

We live in a world in which we are constantly encountering "commons," whether local, regional, or increasingly global. We increasingly recognize that we are linked to the past and to the future in caring for and benefiting from our environment. One of the concepts developed in the 20th century to address our responsibility for our shared inheritance is "the common heritage of mankind." The concept gained stature in 1967 when Malta's then United Nations Ambassador declared to the United Nations General Assembly that the deep seabed and its resources constituted the "common heritage of mankind." The subsequent United Nations Convention on the Law of the Sea provides in Article 136 that "the Area and its resources are the common heritage of mankind." The concept was also invoked in the mid 1960's in relation to the treatment of outer space, though the 1967 Convention on Outer Space, the Moon and other Celestial Bodies refers to "the common interest of all mankind." The phrase "world heritage of mankind as a whole" appears in the 1972 Convention Concerning the Protection of World Cultural and Natural Heritage.

Subsequent academic writing has considered common heritage of mankind in relation to other natural resource and environmental subjects. The most recent edition of the Max Planck Encyclopedia of International Law contains a separate entry for "common heritage of mankind," drafted by Prof. Dr. Rüdiger Wolfrum, who refers to it as a principle of international law.

Against this background, Prue Taylor and Lucy Stoud have put together a valuable research tool that focuses on articles that have addressed "the common heritage of mankind." The authors dedicate the book to Father Peter Serracino Inglott for his significant contribution to the ethical foundations of the concept. The book is also an explicit tribute to those in Malta

* Francis Cabell Brown Professor of International Law, Georgetown Law, Georgetown University.

who addressed and pursued the concept in the international area, particularly Arvid Pardo, Elizabth Mann Borghese, and Salvino Busuttil.

The book represents the results of the authors' search of databases for the words "common heritage of mankind/humanity/humankind" in English and in selected other languages. The focus is primarily on academic legal writing since 1967, the year Ambassador addressed the United Nations on the subject. The authors found 600 titles addressing common heritage of mankind in 215 journals.

The book provides full reference information for all of the titles included. The authors have organized the entries into the following sections: Common Heritage of Mankind in the General Context and separately in the specific contexts of outer space, marine environment, Antarctic context, cultural and natural heritage, climate, biodiversity, human genome context, and shared water resources. They intend the volume to be a starting point for research on titles addressing "the common heritage of mankind" and invite readers to provide additional information. They also explicit note related words that they did not include in the database research, such as global commons, common patrimony, or intergenerational equity.

In a world in which it is both much easier to locate relevant materials and at the same to overlook important ones, especially when working in multiple languages, this book provides a useful starting point and is an appropriate tribute to those who have worked so hard to make "the common heritage of mankind" an important element of international law.

LYNDA COLLINS & HEATHER MCLEOD-KILMURRAY: THE CANADIAN LAW OF TOXIC TORTS

(Thomson Reuters Canada Limited, 2014): 305pp, ISBN 978-0-88804-714-4

Reviewed by Robert Kibugi*

The Canadian Law of Toxic Torts is, as pointed out by Profs. Linden and Feldthusen, in the preface, the first Canadian book to deal exclusively with this subject. Much has been researched and written about general torts, and despite years of litigation on liability arising from environmental contamination or toxic products, the subject is just now being put in proper legal context in Canada. At the outset, its helpful to note that this book will form a useful resource for law students, litigators, and government lawyers in Canada, and other jurisdictions where Canadian tort law may constitute persuasive precedent, who are looking to understand how environmental contamination, and toxicity in products fit into the matrix of tortious liability. This generally applies across various torts, such as negligence or nuisance. The book thus presents a distinct analysis of the importance of developing knowledge on how to settle questions of liability that arise in a toxic torts context, and clearly iterates the difficulties that arise in application of regular standards of causation, for instance, because toxic torts marshals scientific evidence and attempts to apply it to a legal standard.

The authors contend that a number of recurring themes permeate analysis of toxic torts law in Canadian context. The book points to the dual existence between law and science, in nearly mutually exclusive galaxies as science is often cautious in drawing conclusions on causation with certainty. Law prefers a balance of probabilities. The authors also highlight the tensions between statutory and common law standards of conduct, especially since mere statutory compliance does not preclude civil liability in torts. The book also points to the fledgling attempts to argue that economic utility may justify tortious activity – in standard of care; or character of the local – in private nuisance. However courts have shown that

* Lecturer, Centre for Advanced Studies in Environmental Law and Policy, University of Nairobi; LL.D (University of Ottawa), LL.B, (UoN) Master of Laws (LL.M), University of Nairobi.

these arguments may be unwelcome as they may pass the burden of proof onto injured plaintiffs, in absence of plaintiff contribution to injury. In any event, defendants are welcome to engage in economic activity so long as they are equally ready to pay the full cost of their activities.

The science of toxic torts is where the legal difficulties assemble, due to the challenging linkage with causation. The book notes that in order to make good law in tort cases, judges must be keenly aware of differences in scientific and legal reasoning processes. The intervening problem is rather basic, but bears tremendous impact: since science can be inherently sceptical, it tends to produce tentative conclusions which when transplanted into a legal setting may appear to a judge as inconclusive, and be rejected – although in reality, the science maybe more than enough to prove causation to a legal standard.

In order to make this point clearly, the book ventures into various science disciplines that are relevant to this discourse, for instance, epidemiology. This studies the distribution of frequencies and patterns of health events within groups in a population, and suggests causal associations between a given exposure and a given illness. Because of this approach, epidemiology does not prove causation to scientific certainty, but can establish causation on a balance of probabilities, in the absence of a counter-explanation of the plaintiff's illness. While courts have often relied on epidemiological evidence, not enough of these studies are carried out, and the authors suggest that tort rules that place the burden of scientific uncertainty on plaintiffs further reduce the likelihood of such costly studies being undertaken. The authors also examine the legal dilemma that arises in other scientific disciplines including toxicology, medicine, and pharmacology.

In a practical sense, either causation, or satisfaction of the general standard of proof will rely on the probative value of the evidence availed to the court. Where liability concerns toxic torts, that evidence is likely to be scientific, and despite the challenge foretold here and in the book, courts must find a methodology to apply this evidence. One approach highlighted by the authors revolves around the weight of evidence approach, also referred to as the "inference to the best explanation." This evaluates the totality of available evidence, including quality and quantity, which really relies on relative plausibility of explanations, application of all relevant available evidence, and application of professional judgment by a scientist to draw a conclusion on the best explanation. By pursuing the best available explanation, the search for an absolute answer is suspended. In terms of probative value, this brings the evidence closer to the "balance of probabilities" standard of proof applicable

in tortious liability claims. The sensibility of this approach becomes evident when the authors address the counter position to science, i.e. the determination on admissibility of scientific expert evidence by a Court of law.

The book relies on *R v. Mohan* (1994 CarswellOnt 66, SCC) where the Supreme Court of Canada established a four criteria test for use in toxic torts cases: (1) relevance, especially to determine if the probative value of the evidence is overborn by prejudicial effect such as where time spent understanding the evidence outweighs its actual value (2) necessity in assisting the trier of fact especially if the trier of fact (especially jury) is unlikely to understand information without expert assistance (3) absence of any exclusionary rule and (4) a properly qualified expert. Using this criteria, its clear that harmonizing legal and scientific evidence standards is key, where the science is to assist in fulfilling a legal standard – because justice depends on the ability of a court to draw a conclusion usable in law.

The authors round up their analysis by proposing an analytical framework through which tortious liability for environmental contamination and toxic products can be addressed in a contemporary context. Although this review has focused on applicability of science to draw legal standards that assist determination of liability to assist injured plaintiffs, the book goes further and examines this application across various torts claims. This includes private nuisance, and negligence. In the latter, the authors engage with challenges questions on the evolution of causation revolving around modification of conventional rules such as the but-for text and material contribution.

As pointed out earlier, this book has been written as a first on Canadian law, but being based on common law concepts and statutory standards, it will be valuable to many readers in legal jurisdictions that apply comparable rules and standards. It is therefore a book that, holistically, should be of interest to, and a companion for readers that want to enhance their conceptual and practical understanding and application tortious liability arising from environmental contamination and toxic products.