

## BUILDING SUSTAINABLE FUTURES IN THE LEGAL CLASSROOM

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### Introduction

The stable functioning of Earth's life support systems is a prerequisite for a thriving global society.<sup>1</sup> There is however growing evidence that human impact is putting such functioning at risk. The likely impacts of global environmental change include diminishing food production, water scarcity, extreme weather, ocean acidification, deteriorating ecosystems and sea-level rise. These impacts will further undermine human well-being and long-term prosperity.<sup>2</sup> Present and future generations are therefore faced with unprecedented challenges and the quest to achieve sustainable futures is fraught with uncertainty.

There is consequently an emerging need for law and policy which is integrated, adaptive and forward looking. Long-term sustainability relies on legal practitioners and scholars, judges and policy makers being able to make optimal decisions in the present and for the future while faced with significant uncertainty. At the same time, rules and institutions can play an important role in shaping desirable and sustainable futures. The role of law in sustainability is however often overlooked. Further, despite increasing shifts within higher education to develop sustainability competencies<sup>3</sup>, these shifts have focused on the environmental and life sciences.

The law students of today, a.k.a. the lawyers, policy makers and societal and academic leaders of tomorrow, have a vested interest in the state of the planet of our future. The current generation is not only the key stakeholder in the issue of planetary sustainability but also brings unique perspectives, methods and tools to addressing these challenges.

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\* Law Futures Centre, Griffith Law School, Griffith University, Australia. This insight article draws on more detailed discussion and an example of the approach in Michelle Lim & Andrew Allan The use of scenarios in legal education to develop futures thinking and sustainability competencies (forthcoming 2016) *The Law Teacher*.

<sup>1</sup> David Griggs, Mark Stafford-Smith, Owen Gaffney, Johan Rockström, Marcus Öhman, Priya Shyamsundar, Will Steffen, Gisbert Glaser, Norichika Kanie, and Ian Noble, 'Sustainable development goals for people and planet'. (2013) *Nature* 495 (7441), 305.

<sup>2</sup> David Griggs, Mark Stafford-Smith, Johan Rockström, Marcus Öhman, Owen Gaffney, Gisbert Glaser, Norichika Kanie, Ian Noble, Will Steffen, Priya Shyamsundar, 'An integrated framework for Sustainable Development Goals (2014) *Ecology and Society* 19 (4), 49.

<sup>3</sup> M. Rieckmann, 'Future-oriented higher education: which key competencies should be fostered through university teaching and learning?' (2012) 44 *Futures* 127, 128.

Managing the future is however a 'wicked' problem. This means that the complex interdependencies and contradictory and shifting nature of the problem makes it difficult to solve. This suggests that innovative ways to envision law's and humanity's futures are needed.

Scenarios are the classic device of futures studies and provide an important way to deal with the uncertainty inherent in attempting to build sustainable futures in the present. The use of the plural form of the word 'futures' is deliberate as it emphasises the need to contemplate different visions of the future. It is the visioning of multiple plausible futures that facilitates out of the box thinking across multiple realities. This enables creative problem solving and contingency planning in the face of unpredictable futures.<sup>4</sup>

As determinations of sustainability can only be made after the fact, definitions of sustainability are therefore often only predictions of actions today that one hopes will result in a sustainable future.<sup>5</sup> An expansive tool-kit is therefore needed to plan for the range of futures that could eventuate. Enabling law students to engage in futures thinking is crucial for developing the broad problem-solving skills required in the context of uncertainty.

### **Envisioning Sustainable Futures Through the Use of Scenarios**

There are a range of different understandings of scenarios.<sup>6</sup> Scenarios can be quantitative or qualitative. Quantitative scenarios are usually based on computer models and include numbers and graphs. Qualitative scenarios consist of storylines which describe plausible futures. The discussion of scenarios in this paper refers to qualitative scenarios, i.e. narratives of a range of different plausible futures. Quantitative scenarios could also be useful for law students. However, given the additional challenges of introducing computer models and even graphs into the law classroom, the focus in this paper is therefore on qualitative scenarios.

An example of a narrative of the future would be a 'business as usual' scenario where one back-casts to a defined period in the past (e.g. 30 years) and then considers the changes that have occurred from that time in the past to the present. To develop a 'business as usual' scenario you would then envisage a future in 30 years time with the same rate of

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<sup>4</sup> Peter Bishop, Andy Hines and Terry Collins, 'The current state of scenario development: an overview of techniques' (2007) 9 *Foresight* 5, 5.

<sup>5</sup> Robert Costanza & Bernard C Patten, 'Defining and predicting sustainability' (1995) *Ecological Economics* 15(3), 193, 193

<sup>6</sup> See for e.g. Philip W.F. van Notten, Jan Rotmas, Marjolein B.A. van Asselt, Dale S. Rothman 'An updated scenario typology' (2003) 35 *Futures* 423, 424; Bishop, Hines and Collins, above (ns 5, 6 & 25).

change as seen over the previous 30 years. Other scenarios could consist of narratives of the future where industrialization, economic growth, environmental protection, human well-being or some other characteristic is prioritized to differing degrees. None of these narratives need to represent probable descriptions of the future. The emphasis is on these descriptions being *plausible*. Further, to facilitate meaningful thinking about a range of different futures each narrative should include negative and positive components with none of the narratives representing a 'bad' or a 'good' future. Four or five scenarios tend to be a good number to facilitate thinking about different futures. Any more and the process becomes difficult to manage. Any less and there are an insufficiently broad range of future realities to consider.

The set of scenarios used could come from existing narratives such as the Boulder Scenarios<sup>7</sup> developed in parallel with the Intergovernmental Panel on Climate Change's quantitative scenarios on greenhouse gas concentration pathways. Alternatively, the storylines could be developed by students themselves. This has the benefit of allowing future generations to articulate their own visions of the future. Scenarios could also be developed with colleagues from other disciplines.

The recommendation for law teachers is to bring scenarios into the classroom. Law teachers would do this by either facilitating the development of a range of plausible futures by students themselves or by providing students with already formulated scenarios.<sup>8</sup> Students would analyse existing laws and institutions in the context of the different futures and examine 1) the adequacy of existing laws for dealing with possible future realities; 2) the range of different laws and sectors that will need to be considered to achieve a desirable future; and ultimately 3) what changes in existing laws and governance systems could be implemented today to set current practices along a sustainable path.

## Conclusion

Sustainability is not merely a challenge for the sciences. Similarly, within law, sustainability competencies are required beyond environmental law related spheres. As the challenges for our planet are immense and interconnected, future governance actors need to be equipped with the skills to envisage sustainable futures so that they will be prepared to address multiple futures and shape a sustainable tomorrow.

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<sup>7</sup> Brian O'Neill, Timothy Carter, Kristie Ebi, Jae Edmonds, Stephane Hallegatte, Eric Kemp-Benedict, Elmar Kriegler, Linda Mearns, Richard Moss, Keywan Riahi, Bas van Ruijven, Detlef van Vuuren, Meeting Report of the Workshop on the Nature and Use of New Socioeconomic Pathways for Climate Change Research, Boulder, CO, November 2-4, 2011. <https://www2.cgd.ucar.edu/sites/default/files/iconics/Boulder-Workshop-Report.pdf>

<sup>8</sup> See Lim & Allan (forthcoming 2016) (n 1).

**TEACHING MATERIALS ON PROTECTED AREAS LAW AND GOVERNANCE**

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Area-based conservation – including protected areas and connectivity conservation -- is one of the oldest and most important means of protecting biological diversity and essential ecosystem services. Protected areas and their connected ecosystems are a primary resource for biodiversity conservation, and are recognized as essential in order to maintain the basic ecosystem services and functions that sustain human life. They provide a wide range of social, environmental and economic benefits to people and communities worldwide. There are over 200,000 designated protected areas in the world, covering about 12% of the surface of the earth.<sup>1</sup>

Today, protected areas face many challenges. Climate change, human-caused habitat destruction, and over-exploitation of resources threaten biodiversity within protected areas. Conflicts between conservation interests and interests in development or resource exploitation are impacting protected areas across the world. Protected areas also face management and governance challenges, which affect and involve communities and stakeholders living in and around the areas, and in some cases threaten their existence. Legal frameworks are critical to creating and maintaining effective and sustainable protected areas. However, the legal aspects of protected areas management and governance are often not well understood.

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<sup>1</sup> Barbara Lausche, *Guidelines for Protected Areas Legislation* (Gland, Switzerland: IUCN, 2011).

IUCN has developed a set of educational tools for teaching and learning about protected areas law and governance.<sup>2</sup> They cover key legal aspects of management and governance of protected areas and connected landscapes, systems and processes in the terrestrial and marine contexts. The materials are primarily intended as resources for face-to-face instruction. They are designed for use in a wide variety of settings, including training sessions, workshops, university courses and practitioner seminars. The materials are freely available at [www.protectedareaslaw.org](http://www.protectedareaslaw.org).

The course consists of twelve interactive modules, which can be taught together as a complete course, or used individually or in different combinations, or together with other materials. Each module addresses a particular aspect of protected areas management or governance and explains connected legal, political and scientific concepts. The course is based on two main IUCN texts: *Guidelines for Protected Areas Legislation* (2011); and *The Legal Aspects of Connectivity Conservation* (2013).

The first six modules represent the core course and focus on generic aspects found in PA law. They cover: introductory concepts, governance, legislative drafting and institutions, planning and declaration, management, and regulation and financing. The other six modules of the course explore more specialized aspects of protected areas law: international law, connectivity, marine protected areas, and transboundary protected areas.

Each module includes an outline, a seminar presentation, interactive exercises, and short videos. These materials are generic. Educators should adapt them to their specific circumstances and audiences. This can include, *inter alia*, adding case studies and examples from the relevant country or region, or removing slides and other materials that do not apply or that duplicate other materials used. Elements from different modules can be put together in different combinations, or used in different settings. For example, an educator could use a video from Module 1 (introduction), a seminar presentation from Module 7 (international) and an exercise from Module 9 (connectivity) for a session on protected areas and connectivity in the context of a course on international law.

The module outlines contain detailed guidance on how to adapt and use each module. Module outlines also contain assessment questions and additional resources that can supplement the main texts.

The seminar presentations include a PowerPoint and notes for the educator thoroughly and comprehensively explaining the subject of the module. They emphasize engagement of learners, for example through prompts for discussion. Each presentation is

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<sup>2</sup> Alexander Paterson, Barbara Lausche, Jamie Benidickson, and Patti Moore *Building Capacity on Protected Areas Law and Governance* [Training Modules] Lydia Slobodian (ed) (Gland, Switzerland: IUCN, 2015). Available at: <[www.protectedareaslaw.org](http://www.protectedareaslaw.org)>.

designed to take approximately two hours, but could be easily adapted for longer or shorter training periods.

Each module includes two exercises, which can be used in class or as assignments. They include exercises such as role play negotiations, discussion forums, and legal drafting problems. Most exercises are based on fictional case studies, accompanied by detailed descriptions and maps. For example, one exercise challenges participants to take on the roles of a protected areas authority and a local community in negotiating a co-management agreement for a new protected area. The materials include a case study, map of the area, and negotiation mandates for each side – including revised mandates introduced part-way through to reflect concessions and shifts in the objectives of the different parties.

Each module also includes a short video, designed to provide an accessible overview of main concepts and issues through a combination of animation and video footage from different protected areas. An additional set of short videos use interviews from leading experts and case studies from around the world to provide perspectives on special types of protected areas, such as marine protected areas, or particular concepts like connectivity conservation.

The course can be used in many different circumstances and settings, including university courses, workshops, and training sessions for practitioners and legislative drafters. They are appropriate for training lawyers as well as non-lawyers who work with or are involved in protected areas. They can be used for legal graduate and undergraduate students, and students in different fields, from biology to international relations.

This project represents a collaboration between the IUCN Environmental Law Centre, the IUCN World Commission on Environmental Law, and the IUCN Academy of Environmental Law, working with the World Commission on Protected Areas, the IUCN Global Protected Areas Programme, and IUCN regional offices for Eastern and Southern Africa (ESARO), West and Central Africa (PACO), and Mexico, Central America and the Caribbean (ORMACC). It is generously supported by the Aage V. Jensen Charity Foundation.

All of the materials are provided through an online platform: [www.protectedareaslaw.org](http://www.protectedareaslaw.org). No registration is required to access the materials: they are freely available. The website also provides a place for instructors to upload additional materials, which can be used by others. This might include versions of the IUCN presentations or exercises which have been adapted for specific circumstances, or additional case studies or resources that could be used to supplement the existing materials. All users are encouraged to register and contribute. For further information, please contact the IUCN Environmental Law Centre at [ELCSecretariat@iucn.org](mailto:ELCSecretariat@iucn.org).