



China's New Renewable Energy Law

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Introduction

Never before has the world's attention been intently focused on the rapidly increasing potential and need for renewable energy.¹ Renewable energy is believed to be a useful tool to meet growing energy demand and mitigate climate change. The European Union plans to increase the amount of renewable energy in total energy consumption to at least 20 per cent by 2020. Recent legislation and other efforts in the United States aim to boost renewable energy in order to reduce greenhouse gas emissions.² China has also paid much attention to renewable energy. In 2009, China produced 40 per cent of the world's solar Photo Voltaic (PV) supply, 30 per cent of the world's wind turbines (up from 10 per cent in 2007), and 77 per cent of the world's solar hot water collectors.³

China's *National Climate Change Program* has identified the use of renewable energy to be one of most important measures for the reduction of greenhouse gas (GHG) emissions.⁴ A key factor in the development of China's renewable energy

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¹ Editorial, (2010) 1 *Renewable Energy Law and Policy Review*, at 1.

² Ibid.

³ REN21, *Global Status Report* (2010) available at http://www.ren21.net/Portals/97/documents/GSR/REN21_GSR_2010_full_revised%20Sept2010.pdf, at 9.

⁴ National Development and Reform Commission of People's Republic of China, *National Climate Change Programme*, June 2007.

sector has been the enactment of a comprehensive legal framework to support the deployment of non-fossil energy technologies. In addition, China has harnessed international regimes capable of supporting renewable energy such as the *Kyoto Protocol's* Clean Development Mechanism.⁵

The *Renewable Energy Law of China (RELC 2006)* was first adopted in 2005 and entered into force on 1 January 2006. However, only 4 years later, the *RELC* was amended on 26 December 2009. The amended legislation (*RELC 2010*) entered into force on 1 April 2010. The amendments occurred a few days after the United Nations Climate Change Conference in Copenhagen. It can be seen as the latest domestic effort of China to combat climate change. This report describes this new development and reveals reasons behind the amended *RELC*. Following this the implications of legal developments are discussed.

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The *RELC 2010* contains 8 chapters with 33 clauses. The Chapters come under the following headings: (1) General principles; (2) Resources survey and development planning; (3) Industry guidance and technology support; (4) Promotion and application; (5) Price management and compensation; (6) Economic incentives and supervisions; (7) Liabilities; and (8) Miscellaneous.

Major changes have occurred in these areas. These changes specifically relate to: an improved development and utilization plan of renewable energy; a more detailed full purchasing scheme for power generated by renewable energy; and the establishment of the National Renewable Energy Development Fund. Each of these issues are considered in turn below.

Improved Development and Utilization Plan of Renewable Energy

Article 8 states that:

'(1) energy authorities and other relevant authorities of the State Council shall, on the

⁵ P. Curnow, L. Tait and I. Millar, 'Financing Renewable Energy Projects in Asia: Barriers and Solutions', (2010) 1 *Renewable Energy Law and Policy Review*, at 107.

basis of the national energy development strategy, the middle and long-term total volume target of renewable energy throughout the country and available technology of renewable energy, prepare the national renewable energy development and utilization plan, which is to be implemented after being approved by the State Council;

(2) relevant authorities of the State Council shall adopt relevant plan in order to achieve the middle and long-term total volume target of renewable energy throughout the country;

(3) energy authorities and other relevant departments of the provincial governments shall, on the basis of the national renewable energy development and utilization plan and the middle and long-term target for the development and utilization of renewable energy in the region, prepare renewable energy development and utilization plan for their own administrative regions. This shall be implemented after being approved by the provincial governments and recorded by the energy authority of the State Council as well as the State power regulatory organ;

(4) The approved plan shall be released to the public, with the exception of confidential content as stipulated by the government.

(5) In the case that the approved plan needs to be modified, approval of the original approving authorities shall be obtained.'

The revision strengthens the coordination between the *National Energy Development Strategy* and the *National Renewable Energy Development and Utilization Plan*. It is also emphasized that the provincial plan must be in compliance with the national plan.

Moreover, article 9 provides that the development and utilization of different types of renewable energy (including wind power, solar power, hydropower, biomass, geothermal power and ocean power) must be planned in an integrated way. Several issues must be considered in the plan, including targets, main tasks, regional arrangement, key projects, implementation progress, supplementary construction of power grid facilities, service system and safeguards measures.

Chinese legislators have recognized that renewable energy development must be in accordance with power grid construction. For example, wind power is rich in the west and northeast of China. These areas are far from the more developed eastern part of

the country that has a more intensive grid. Therefore, the promotion of renewable energy in those areas (the west and northeast) without a careful plan may result in a great waste of resources.

More Detailed Full Purchasing Scheme for Power Generated by Renewable Energy

Article 14 is amended to prescribe more detailed obligations for the government, renewable power companies and grid enterprises in the scheme for purchasing power produced by renewable energy. The energy authority of the State Council, in combination with the State Power Regulatory Authority and Financing Department of the State Council, shall, based on the *National Renewable Energy Development and Utilization Plan*, determine the quota of power produced by renewable energy in the entire amount of power generated during the period under the plan. They shall also adopt specific rules for grid enterprises to prioritize and completely purchase power produced by renewable energy.

In the case of power companies, the *2010 RELC* provides that full purchasing must be set up in accordance with the *National Renewable Energy Development and Utilization Plan*. Moreover, power companies must obtain an administrative permit and assist grid enterprises in ensuring the safety of the grid.

Furthermore, the *RELC 2010* requires the grid enterprise to: (1) reach interconnection agreements with renewable power companies; (2) purchase all power generated by renewable energy within its grid in accordance with relevant interconnection technology standard (full purchasing scheme); and (3) enhance grid construction, expand the coverage of grid facilities for renewable energy, develop and utilize smart grid technology and energy storage technology, perfect grid operation and management, and improve capacity to receive power generated by renewable energy.

Although the *RELC 2006* also mentions the full purchasing scheme, it only provides that grid enterprises shall enter into a grid connection agreement with renewable power generation enterprises. This says nothing about detailed obligations and rights for the two parties. Furthermore, the *RELC 2006* did not address grid facilities construction or grid planning. This is an obstacle for the development of renewable

energy. For this reason, the amendments in *RELC 2010* aim to achieve better implementation of the scheme in practice.

Establishment of the National Renewable Energy Development Fund

The National Renewable Energy Development Fund (the Fund) is established under article 24. This provision states that the Fund will consist of the renewable energy tariff surplus imposed on the electricity sold throughout the country and special State annual funding. This marks a substantial change from the *RELC 2006*, which only provided a fixed amount of funding for the promotion of renewable energy. The establishment of the Fund in *RELC 2010* sets a new mechanism for the management and operation of the funding for promoting renewable energy in China.

The resources in the Fund may be used for different activities, including: (1) scientific research, standard setting and model project of development and utilization of renewable energy; (2) renewable energy projects in countryside and pasturing areas; (3) construction of independent renewable power systems in remote areas and islands; (4) surveys, assessments of renewable energy resources, and the construction of relevant information systems; and (5) Localized production of the equipment for the development and utilization of renewable energy.

Moreover, the Fund will compensate the difference in cost for the purchase of power generated by renewable energy and the cost of that generated by conventional energy. Furthermore, interconnections between grid and power generated by renewable energy or other costs of grid enterprises result from purchasing power produced by renewable energy may also be subsidized by the Fund.

Legal Implications

Chinese legislators anticipate that the *RELC 2010* will play a better role in the promotion of renewable energy. The amendments aim to address the difficulties and obstacles of implementing the *RELC 2006* during the past three years. Nevertheless, potential problems for implementation still exist.

First, though the full purchasing scheme is detailed in the *RELC 2010*, the scheme is still implemented by the Interconnection Agreement between grid enterprises and power companies. As a consequence, when the quota of power generated by renewable energy exceeds the capacity of the grid enterprise, the full purchasing scheme will no longer be feasible. Therefore, the quota must be carefully fixed by the energy authority of the State Council in collaboration with the State Power Regulatory Authority and Financing Department of the State Council. However, to date no legal binding quota has been determined. This issue shall be solved in the near future.

Moreover, the Fund has been established in order to better manage the funding for promoting renewable energy. It is foreseeable that the total amount of the money held by the Fund will increase rapidly as the renewable energy industry in China is now undergoing huge development. Based on the current renewable energy tariff surplus, every year 12 billion Chinese currency (Renminbi) will be added to the Fund. It is still unclear, however, which Authority will manage the Fund. The Ministry of Finance is currently working on the *Rules for the Management of the National Renewable Energy Development Fund*.⁶ Nevertheless, it is still not clear which authorities will be involved with the Fund. If too many authorities are involved, the management cost and efficiency of the Fund may be affected.

Proposed Research Agenda for IUCN Academy of Environmental Law (IUCNAEL)

China's legal practice on renewable energy is an important example of state practice in the area of combating climate change. The conduct of comparative studies between China and other jurisdictions (e.g. between China and US, China and EU, China and Brazil) could therefore be of interest to scholars around the world.

Conclusions

The revision of China's *Renewable Energy Law* is an important legal contribution to the mitigation of climate change and the improvement of national energy security.

⁶ See further: http://caihuanet.com/zhuanlan/meiti/21cbh/201004/t20100419_1678984.shtml.

The renewable energy sector in China is developing rapidly. It therefore needs to be supported and regulated by a comprehensive legal regime.

Major changes to renewable energy planning, the full purchasing scheme and the Renewable Energy Fund have significantly enhanced the domestic legal regime. However, problems of implementation still exist. The quota of power generated by renewable energy has yet to be determined and the management of the Fund needs to be clarified. For this reason the development of rules for the implementation and enforcement of the *Renewable Energy Law* is an urgent necessity.