

Policy and legislation of China's low-carbon development

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Abstract. China has formulated many policies of low-carbon development and enacted a number of related laws and regulations, and using policies and legislations to promote the low-carbon development. China brings forward more policy instruments, including macro-policy, energy policy and renewable energy policy, as well as carbon sequestration policies. Currently the only related specialized legal instrument in China, Decision on Active Response to Climate Change, only has nominal provisions without specific operation system. The newly reviewed Environmental Protection Act firstly used the word "low-carbon", but failed to make any clear stipulations on low-carbon development. In terms of legislation, there are some provisions of carbon emission reduction in the energy law. Meanwhile, there are some articles of carbon sequestration in the ecological law. These two legislations constitute the basic legal environment of low-carbon development in China.

Introduction

For decades China's applying of the extensive economic growth model, which is characterized by "high input, high energy consumption, high emission and high pollution", had contributed to the rapid economic growth, meanwhile it had brought tremendous pressure to the economic and social development. China is now the world's largest emitter of greenhouse gasses, but the per capita share of resources is relatively low and is in the middle and late stage of industrialization with huge energy consumption and high carbon dioxide emissions. Low-carbon development is the only way for China. China has formulated many policies of low-carbon development and enacted a number of related laws and regulations, and using policies and legislations to promote the low-carbon development.

China's policies to promote low-carbon development

When dealing with climate change and promoting low-carbon development, china, like most other countries in the world, brings forward more policy instruments, including macro-policy, energy policy and renewable energy policy, as well as carbon sequestration policies, before enacting the relevant law and policies are in a relatively leading position.

China's micro— policies on promoting low-carbon development.

Low carbon development policies are largely part of the environmental policy. Environmental policy is binding on the low carbon development policy and its system design. In 1973 at the first national environmental protection conference, the Chinese government formally established the general policy of environmental protection, namely, overall planning, reasonable layout, comprehensive utilization, turn harm into good, rely on the masses, everyone co-operating, protect the environment, benefit the people. After the second national environmental protection conference in 1984, china had gradually established the basic policies of environmental protection, which are "prevention first and combining prevention with treatment", "those who created pollution are responsible for suppressing" and "strengthen environment management". The basic concepts of scientific outlook on development were first made clear on the Third Plenary Session of the 16th Communist Party of China Central Committee. After the putting forward of scientific outlook on development, China's environmental policy has been promoted to the height of the ecological

civilization. In 2002, the 18th National Congress of the Communist Party of China was convened. In the 18th CPC National Congress Report, they fully expounded the concept of ecological civilization, meanwhile expounded China's basic environmental policy; they also mentioned that "We should remain committed to the basic state policy of conserving resources and protecting the environment as well as the principle of giving high priority to conserving resources, protecting the environment and promoting natural restoration, and strive for green, circular and low-carbon development. We should preserve our geographical space and improve our industrial structure, way of production and way of life in the interest of conserving resources and protecting the environment. We should address the root cause of deterioration of the ecological environment so as to reverse this trend, create a sound working and living environment for the people, and contribute our share to global ecological security." The "priority principle" established by the 18th CPC National Congress embodies the most advanced environment protection policy. Erenow, the key of china's environment protection policy is "harmonization principle" instead of "priority principle". [1]The turning of the basic environmental policy of China has blazed the way for the development of low-carbon development.

China signed the United Nations Framework Convention on Climate Change in 1992 and became the first country in the world to formulate its own 21st Century Agenda according to the global action plan for the 21st Century Agenda the following year. And afterward, China formulated some policies relating to low-carbon development in succession.

China's National Climate Change Program

China was the first developing country to formulate and implement a National Climate Change Program. According to the requirements of United Nations Framework Convention on Climate Change and Kyoto Protocol, China drafted, enacted and implemented the China's National Climate Change Program in 2007, on the basis of China's National Strategy of Addressing Climate Change. China's National Climate Change Program is mainly a declaration of china's stand on climate change, meanwhile it outlines objectives, basic principles, key areas of actions, as well as policies and measures to address climate change. The strategic goal of China to respond to climate change is to make significant achievements in controlling greenhouse gas emissions, to enhance the capability of continuous adaptation to climate change, to promote climate change-related science, technology and R&D to a new level, to remarkably raise public awareness on climate change, and to further strengthen the institutions and mechanisms on climate change.

China's Policies and Actions for Addressing Climate Change

In October 2008, China's State Council Information Office published the White Paper on China's Policies and Actions for Addressing Climate Change, first systematically elaborated China's national conditions about climate change, strategy and goal, pointed out the principle standpoint and all kinds of positive measures of some important issues concerning about climate change. This White Paper consists of ten parts and is the synthesizer of addressing of China's climate change. In 2010, the National Development and Reform Commission issued the Notice on Carrying out Experiment Work of Low-carbon in Provinces and Cities, deciding to carry out experiment work of low-carbon in five provinces (Guangdong, Liaoning, Hubei, Shanxi, and Yunnan) and eight cities (Tianjin, Chongqing, Shenzhen, Xiamen, Hangzhou, Nanchang, Guiyang, Baoding).

The Twelfth Five-Year Plan for National Economic and Social Development (2011-2015)

The Outline of the Tenth Five-Year Plan for National Economic and Social Development released in 2011 further clarified the emission reduction goals and specific measures to promote low-carbon development from 2011 to 2015, and put forward definitely to realize the goal of energy consumption of per unit of GDP decreased 16%, carbon dioxide of the unit GDP value emissions by 17% and the proportion of non-oil energy increased to 11.4%. Moreover, in the sixth part of the outline, Green development, construct energy conservation and environment friendly society, the twenty-first chapter, actively cope with global climate change, is all about instruments and measures to promote low-carbon development, pointing out that "We will accelerate research, development and application of low carbon technologies and regulate GHG emitting sectors such as industry, construction, transportation and agriculture. We will look into creating low carbon product

standardization, labeling and authentication systems, establish an effective system for calculating GHG emission statistics and gradually create a carbon emissions trading system.”

China’s energy policy and renewable energy policy to promote low-carbon development

In August 2004, the National Development and Reform Commission, the State Administration of Quality Supervision jointly issued Energy Efficiency Label Management Method, in order to strengthen the management of product energy efficiency labeling and create a good market environment for low carbon development. In November 2004, the Medium and Long-Term Development Plan for Energy Conservation was released by the national development and Reform Commission, authorized by the State Council, in which energy conservation was regarded as a long-term strategic policy and some specific guidance suggestions were put forward. In the Twelfth Five Year Comprehensive Reform of Energy Conservation and Emission Reduction, released by the State Council in 2011, 50 policy measures aiming at strengthening the ability of energy conservation and emission reduction were put forward.

In the interest of implementing Renewable Energy Law, China has formulated a large number of policies relating to the development of renewable energy. In November 2005, the National Development and Reform Commission drafted the Regenerable Energy Industry Development Guidance Catalogue, in which 88 items, from six areas: wind energy, solar energy, biomass energy, geothermal energy, marine energy and hydro energy, concerning exploitation and utilization of renewable energy and system equipment manufacturing. In term of promoting development and utilization of renewable energy, the National Development and Reform Commission drafted the Pilot Measures for the Management of the Price and Cost of Renewable Energy Power Generation, in which they came out with two kinds of prices for renewable energy power generation: government pricing and government guided pricing. And in the Renewable Energy Generation Related Management Regulations, issued by the National Development and Reform Commission in February 2006, they made clear approving and management regulations about renewable energy power generation projects.

Carbon sequestration policies on promoting low-carbon development

"Forest", the largest terrestrial ecosystem in the environment of human existence, is a component of carbon global cycle and plays a very important role in balancing the quantity of carbon in the atmosphere by absorbing and storing greenhouse gas like carbon dioxide. Forest carbon sequestration is considered as the most effective way of carbon sequestration. In the field of carbon sequestration, China has already released some regulation to encourage carbon sequestration programs under the clean development mechanism. The regulations about carbon sequestration are mainly embodied in two notices publicized by State Forestry Administration: one is Notice of some Guidance on the Development of Forestry Carbon Sequestration, issued in December 2006, in which the normative guidance for planning trees under the clean development mechanism provided guarantee for the local government work on develop carbon sequestration; the other one is Notice on Strengthening the Work of Forestry to Cope With Climate Change and Carbon Sequestration Management, issued in August 2008, in which requirements for local governments to clear responsibility of implementing carbon sequestration were stipulated. Specifically, local governments should “strengthen publicity and guidance, improve the sense of responsibility”, “Accurately understand the situation, and strengthen project management” and “utilize the advantage of industry, try best to improve carbon sequestration”.

Legislation on low-carbon development in China

There is very little legislation at the macro level addressing low-carbon development in China. Measures and regulatory regime, however, can be found in energy law, relative ecological law and environmental protection laws.

General legislations on low-carbon development law in China

In 1992, China has issued the Decision of the Standing Committee of the National People's Congress on the ratification of ‘United Nations Framework Convention on Climate Change’, which ratified the United Nations Framework Convention on Climate Change signed by the then incumbent

Premier of the State Council Li Peng on behalf of China in Rio de Janeiro, Brazil. At present, there is no specialized legislation on climate change law or laws promoting low-carbon development. The only relevant piece of document is the resolution on addressing climate change, issued by the Standing Committee of the National People's Congress in August 2009, which declared China's principles, stands and policies addressing climate change. It depicts climate change issue as the significant opportunity and challenge at the same time for economic and social development and stresses the need to better rules of law concerned, to promote the awareness and capability among communities, and to actively participate in the international cooperation. The resolution is nonetheless declaratory, without normative significance.

The amended Environmental Protection Law of the People's Republic of China deals with the predominant and general issues in environmental protection and renews environmental protection modes and values. The newly amended law obtains extreme importance in terms of ecological civilization construction as well as economic and socially sustainable development. In particular, Article 6 provides that all units and individuals shall have the obligation to protect the environment, which is the very first time the concept of 'low-carbon' was employed in environmental legislations while low-carbon development was not specifically regulated upon.

China's legislations on carbon emission reduction and carbon sequestration

The attention of existing low-carbon development laws is drawn to the promotion of reasonable exploitation and energy efficiency. Those documents mainly focus on energy conservation, efficiency promotion, and renewable energy development in energy laws. In general, carbon emission reduction measures are prescribed in energy law and carbon sequestration in the resources and ecological law. Those legislations consist of the current basic legal framework for low-carbon development in China.

Carbon emission reduction legislations in China

Firstly, the Law of the People's Republic of China on Energy Conservation. China has promulgated the Law of the People's Republic of China on Energy Conservation in September 1997 and later on amended it in 2007. This law aims at changing the attitude of the society, especially that of major energy consuming enterprises, saving energy, enhancing energy efficiency, encouraging reasonable exploitation of energy, as well as updating energy-related technology. In addition, the law specifically regulates on issues, such as the quota for energy consumption per unit, energy efficiency labels, voluntary agreement on energy conservation, certificate for energy conservation products so on and so forth, in order to increase energy efficiency; it also sets forth prescription in relation to energy conservation in the fields of industry, construction, transportation as well as by use of the pivotal consuming entities, for purpose of increasing energy consumption per unit GDP. Besides, the State Council issued the Regulation on Energy Conservation in Civil Buildings and the public institution regulations, providing for activities in low-carbon constructions and public agencies energy conservation. Within the framework of Energy Conservation law, regulations on the level of provincial government were introduced, serving as the legal basis for implementing energy conservation measures, binding measures in particular. [2] These laws and regulations encourage actions for energy conservation and efficiency advancement, reduce carbon emission and facilitate low-carbon development.

Secondly, Renewable Energy Law of the People's Republic of China. In February 2005, China proclaimed its Renewable Energy Law and amended it in December 2009. The law sets out the goal that renewable energy shall consist of 15% of all energy consumed in 2020, and further stipulates the regulatory regime for planning and development of renewable energy, systems of grid connection priority and guaranteeing the purchasing of electricity generated by using renewable energy, fixed price and cost sharing mechanism, government subsidies for generating projects, and tax preferences. Several departments and local governments also publicized rules and specific regulations on renewable energy in rural areas. Those laws and regulations altogether further exploitation and usage of renewable energy, enhance the proportion of non-fossil energy in economic and social development. During China's 11th Five-Year plan period, the renewable energy investment reached \$124.4billion, an average of \$24.9billion a year. China's renewable energy investment in 2011 was

\$66.1billion, ranked the first among all countries in the relevant field; in 2012, the amount of finance in China's renewable energy amounted to \$64.7billion (excluding R & D), accounting for 22% of the global amount. [3]

Thirdly, the Law of the People's Republic of China on Promoting Clean Production, and Circular Economy Promotion Law of the People's Republic of China. The Law on Promoting Clean Production was promulgated in February 2012, revised in June 2002. Circular Economy Promotion Law was passed in August 2008. Those two legislations strikes as important in terms of emission reduction, energy efficiency promotion, exploitation of new energy resources as well as the making use of renewable energy.

The guiding value of the Law on Promoting Clean Production ideology of "Cleaner Production Promotion Law" is to change the attitude of enterprises, local and industry managers from traditional modes of end correction to modes of pollution prevention combined with pollution control of the whole process. The amendment sets out clean production mandatory audit and voluntary audit system and specifies specific responsibility for high energy consuming enterprises, high emission enterprises and those using toxic and harmful materials or products. It also requests the eliminate out-dated capacity and productions, and continuously improves the efficiency of comprehensive utilization of resources, aiming at clean and low carbon production process.

In addition, Electricity Law of the People's Republic of China and Law of the People's Republic of China on the Coal Industry were amended in 2009 and 2013 respectively, which altogether provide the basic guarantee for carbon emission reduction. Meanwhile, Clean Development Mechanism Project Operation Management Measures was promulgated by Development and Reform Commission in October 2005, for better use of the so-called 'clean development mechanism' under the Kyoto Protocol. Other issued documents include Circular of the China Clean Development Mechanism Fund and the clean development mechanism project on the enterprise income tax policy issues passed in March 2009, China Clean Development Mechanism Fund Management Approach in September 2010, which facilitates the implementation of the Law of the People's Republic of China on Promoting Clean Production, the Clean Development Mechanism, and furthers low-carbon development as well.

China's legislations on carbon sequestration

The one major contribution of ecological system in emission reduction is carbon sequestration. As indicated so far, appropriate measures taken, the carbon sequestration capacity of China's ecological system can reach about 10% of the emissions in 2020, and thus become an important emission reduction measures. [4]Forest is the largest carbon storage and most affordable absorption device in the land and, therefore, has the unique function of carbon sequestration as the main body of the terrestrial ecosystem.

The Forest Law of the People's Republic of China was promulgated and subsequently amended in 1998 and 2009. It has established afforestation measure, cutting quotas, and set up a compensation fund system for forest ecological benefits. Overall, it functions efficiently for carbon sequestration. Moreover, the newly amended Grassland Law of the People's Republic of China proffers, In addition, in 2013 the new revised "prairie law" provides for the protection of farming and grassland ecological construction and other measures to increase agricultural and grassland carbon sequestration.

Conclusion

China, at the late stage of industrialization, is faced with the tension between the need of low carbon development and the actual 'high carbon' context. China's energy and resources structure is 'rich coal, less gas, lack of oil'; it is, therefore, more difficult for China to control greenhouse gas emissions than other major emitters. At present, China's policies and laws on low carbon development are far from enough to support the long-term, systematic and efficient development of low-carbon development. The arrangement of low carbon development has been reflected in some policy documents, but none named reflective of 'low carbon'. Also, neither do exist laws and regulations

contain the concept of 'low carbon' nor are there any specific legal arrangements or related measures provided. Legislation on low-carbon development are scant, mostly low-leveled, and scattered. Low carbon development involves myriad fields, especially in the fields of climate, environment, energy, science, and technology, etc., but the relevant legal departments such as environmental law, economic law, administrative law, civil law, criminal law have not captured low-carbon development as a subject matter in its caliber.

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References

- [1] Hu, Ye. Carbon Emission Trading System from Perspective of Jurisprudence. People's Publishing House, 2013,pp.284.
- [2] Qi, Ye. China's Low Carbon Development Report (2013) - Policy Implementation and Institutional Innovation. Social Science Literature Press, 2013, pp. 142.
- [3] Qi, Ye. China's Low Carbon Development Report (2014) - Policy Implementation and Institutional Innovation. Social Science Literature Press, 2014, pp. 177.
- [4] Liu, Weidong. China's low carbon economy development framework and scientific basis-Research on the path of reducing the 40%-50% of carbon emissions in 2020 by GDP. The Commercial Press, 2010, pp. 39.