Legal Paths for Synergetic Governance of Pollution Reduction and Carbon Emission Reduction

Guo Zimo

Beijing Wuzi University, Beijing, China

ABSTRACT

With the introduction of China's policy requirements such as the reform of the institutional mechanism for ecological civilization construction, the "dual-carbon" strategic goals, and the compilation of the environmental code, "synergetic governance of pollution reduction and carbon emission reduction" has become a key issue in the field of national ecological civilization. At present, China's synergetic governance of pollution reduction and carbon emission reduction has shortcomings such as the lack of special legislation on climate change response, the failure to include greenhouse gas emissions such as carbon dioxide in the adjustment objects, and the persistence of reductionist legal thinking. It is necessary to further formulate special legislation on climate change response, clarify the legal positioning of greenhouse gases, and implement the holistic legal concept by taking the opportunity of compiling the environmental code, so as to ensure the synergetic efficiency of pollution reduction and carbon emission reduction through legal paths.

KEYWORDS: pollution reduction and carbon emission reduction; synergetic governance; legal path; environmental code and

Development

Since the 18th National Congress of the Communist Party of China in 2012, China has placed ecological civilization construction in a prominent position, paying more and more attention to the protection of the ecological environment and the balanced development between it and economic construction. It has successively put forward the new development concepts of innovation, coordination, green, openness, and sharing, Xi Jinping Thought on Ecological Civilization, the "dual-carbon" strategic goals, "synergetic governance of pollution reduction and carbon emission reduction", and the compilation of the environmental code to implement and connect these. However, for the synergetic governance of pollution reduction and carbon emission reduction, China still has shortcomings such as the lack of special legislation on climate change response, the failure to include greenhouse gas emissions such as carbon dioxide in the adjustment objects, and the adherence to reductionist legal thinking. Therefore, this paper, taking the opportunity of compiling the environmental code and based on legal principle interpretation, puts forward targeted legal measures to improve the current situation and deficiencies of

How to cite this paper: Guo Zimo "Legal Paths for Synergetic Governance of Pollution Reduction and Carbon Emission Reduction" Published in

International
Journal of Trend in
Scientific Research
and Development
(ijtsrd), ISSN:
2456-6470,
Volume-9 | Issue-4,
August 2025,

pp.512-517, URL: www.ijtsrd.com/papers/ijtsrd97252.pdf

Copyright © 2025 by author (s) and International Journal of Trend in Scientific Research and Development

Journal. This is an Open Access article distributed under the



IJTSRD97252

terms of the Creative Commons Attribution License (CC BY 4.0) (http://creativecommons.org/licenses/by/4.0)

China's synergetic governance of pollution reduction and carbon emission reduction.

I. Current Situation and Deficiencies of Legal Norms for Pollution Reduction and Carbon Emission Reduction

A. Current Legal Framework for Pollution Reduction and Carbon Emission Reduction

At present, China has a considerable number of separate laws and regulations on ecological and environmental protection, with a relatively mature legal system for ecological environment and relatively rich practices in environmental rule of law. Currently, China's "pollution reduction and carbon emission reduction" has initially formed a legal guarantee system with the Constitution as the guide, the environmental protection law system as the mainstay, and energy law and other relevant laws as supplements.

1. Constitutional Basis

At present, environmental protection at the constitutional level in China is undergoing a transformation from "environmental constitution" to "ecological constitution". The preamble of the

Constitution mentions "building an ecological civilization", which provides conceptual guidance and goal orientation for "pollution reduction and carbon emission reduction" at the constitutional level; Article 9 clarifies the state's ownership of natural resources and stipulates the state's responsibilities in ensuring the rational use of resources and protecting the ecological environment; Article 26 clearly defines the state's responsibilities in environmental protection, including protecting and improving the living and ecological environment, and preventing and controlling pollution and other public hazards; Article 89 stipulates the State Council's functions and powers to "lead and manage ecological civilization construction". In addition, some scholars have proposed that "environmental rights" are the third generation of human rights after political rights, economic, social and cultural rights, and suggested explicitly writing "environmental rights" into the Constitution. Although environmental rights have not yet been formally written into the Constitution, discussions on incorporating environmental rights into the Constitution in academic and practical circles continue... These together constitute the constitutional basis for China's pollution reduction and carbon emission reduction, providing fundamental legal basis and guiding principles for specific synergetic governance of pollution reduction and carbon emission reduction.

2. Environmental Protection Legal System

Article 1 of the Environmental Protection Law clearly defines the legislative purpose, which is to protect and improve the environment, prevent and control pollution and other public hazards, safeguard public health, promote ecological civilization construction, and promote sustainable economic and social development, providing a basic legal basis for pollution reduction and carbon emission reduction; in the legal system for pollution prevention and control, the Air Pollution Prevention and Control Law is most closely related to the synergetic governance of pollution reduction and carbon emission reduction. Its Article 2 clearly stipulates the requirements for the synergetic control of air pollutants and greenhouse gases, which is an important update of the legislative concept, indicating that the holistic legal thinking is gradually being implemented in the process of synergetic governance of pollution reduction and carbon emission reduction. However, because the subsequent provisions do not specify specific institutional measures, this article only plays a declarative role and is difficult to form substantive binding force; the Forest Law, Grassland Law, Marine Environment Protection Law and other laws in the natural resources legal system objectively

reduce the total amount and concentration of greenhouse gases in the atmosphere and improve the carbon sequestration capacity of the ecosystem through the governance of pollution and damage to specific environmental and resource elements, thus indirectly providing legal support for the realization of the "dual-carbon" goals and the synergetic efficiency of pollution reduction and carbon emission reduction; China's Environmental Impact Assessment Law stipulates that environmental impact assessment includes planning environmental impact assessment and construction project environmental impact assessment, but it does not clearly specify whether to include the environmental impact caused by greenhouse gas emissions in the assessment objects, and in practice, this has not been included in the assessment objects.

3. Energy Law Basis

Previously, the legislative purposes and institutional designs of China's Cleaner Production Promotion Law, Circular Economy Promotion Law, Renewable Energy Law and other laws have played an indirect regulatory role in the realization of pollution reduction and carbon emission reduction. On November 8, 2024, the 12th Session of the Standing Committee of the 14th National People's Congress voted to adopt the Energy Law of the People's Republic of China, which came into force on January 1, 2025. The introduction of the Energy Law has filled the gap of the basic energy law in China's legal framework for ecological and environmental protection, and has an all-round impact on China's energy sector. It will not only promote the optimization of energy structure and market-oriented reform, strengthen energy security, provide legal guarantee for the sustainable development of China's energy industry, but also integrate "promoting green and low-carbon transformation and sustainable development of the economy and society, and actively and steadily advancing carbon peak and carbon neutrality" into the legislative purpose and specific legal provisions, providing an important legal basis for reducing greenhouse gas emissions and realizing green and low-carbon development.

4. Other Provisions and Policies on Pollution Reduction and Carbon Emission Reduction

In addition to the above legal provisions, China has also formulated other relevant policy documents for the synergetic efficiency of pollution reduction and carbon emission reduction. The Interim Regulations on the Administration of Carbon Emission Rights Trading have promoted the inclusion of synergetic control of greenhouse gas emissions into relevant ecological and environmental laws and regulations;

the Implementation Opinions on Promoting Synergetic Efficiency of Pollution Reduction and Carbon Emission Reduction in Sewage Treatment have put forward measures such as reducing greenhouse gas emissions, increasing the application of renewable energy, and promoting the utilization of reclaimed water, providing theoretical guidance for realizing the synergetic efficiency of pollution reduction and carbon emission reduction in the sewage treatment process; the 2024 Annual Report on China's Policies and Actions on Climate Change: The report also mentions that China has made significant breakthroughs in the construction of carbon emission management-related systems, including the official entry into force of the Interim Regulations on the Administration of Carbon Emission Rights Trading and the implementation of the Measures for the Administration of Pollutant Discharge Permits, etc.

B. Review of the Current Legal Norm System for Pollution Reduction and Carbon Emission Reduction

1. Lack of Special Legislation on Climate Change Response

At present, China's normative basis for climate change response still remains at the national policy level, and the main measures to promote carbon peak and carbon neutrality are mainly carried out by relying on national policies and some local legislative norms, and have not yet completed the transformation from national policy basis and local legislative norms to national legal basis and central special legislation. Countries or regions such as the United Kingdom, France, and Germany have formulated special legislation on climate change response such as the Climate Change Act (2050 Target Amendment), Energy and Climate Law, and Federal Climate Protection Act, which indicates that climate change is an international issue of global concern and urgent governance, and the realization of carbon peak and carbon neutrality has gradually become a consensus of the international community.

China's provisions and actions on climate change response mainly include the 2024 Annual Report on China's Policies and Actions on Climate Change, the National Strategy for Adapting to Climate Change 2035, the Resolution of the Standing Committee of the National People's Congress on Actively Responding to Climate Change, the Implementation Plan for Establishing a Carbon Footprint Management System, the National Standard for Quantification Requirements and Guidelines for Carbon Footprint of Greenhouse Gas Products, continuously strengthening South-South cooperation on climate change response, and actively participating in global governance on

climate change, etc., but has not yet formulated special legislation on climate change response. Efforts made for "synergetic governance of pollution reduction and carbon emission reduction" include formulating legislation such as the Interim Regulations on the Administration of Carbon Emission Rights Trading and the Measures for the Administration of Voluntary Greenhouse Gas Emission Reduction Trading to regulate carbon emission rights trading and control greenhouse gas emissions, taking the blue sky defense war and diesel truck governance as breakthroughs, actively exploring low-carbon development models, encouraging localities, industries, and enterprises to explore lowcarbon development paths according to local conditions, carrying out green and low-carbon-related pilot demonstrations in energy, industry, construction, transportation and other fields, and building a green and low-carbon transportation system, promoting non-carbon dioxide greenhouse gas emission reduction... However, due to the low rank of relevant legislation, it has failed to provide strong legal guidance, support and guarantee for the synergetic governance of pollution reduction and carbon emission reduction in practice.

2. Failure to List Greenhouse Gas Emissions as Adjustment Objects

In China, the identification standards for air pollutants and greenhouse gases are not unified. China's Air Pollution Prevention and Control Law does not include carbon dioxide in the category of air pollutants, and comprehensive legislation such as the Environmental Protection Law and the Environmental Impact Assessment Law have not included carbon emission behaviors in the adjustment objects. Naturally, the relevant legal provisions regulating air pollutants cannot be fully applied to adjust issues such as carbon dioxide emissions. At present, the international identification of greenhouse gases is mostly based on the Kyoto Protocol, including carbon dioxide, methane, etc. Therefore, in the context of "synergetic governance of pollution reduction and carbon emission reduction", academic circles have carried out discussions on whether it is necessary to include greenhouse gases in the adjustment objects of air pollutant prevention and control. Scholars who hold the affirmative view believe that listing greenhouse gases as adjustment objects can efficiently solve the problems of climate change and synergetic governance of pollution reduction and carbon emission reduction; scholars who hold the negative view believe that defining carbon dioxide as a pollutant is not conducive to the construction of China's legal system and the development of the national economy.

3. Failure to Establish Holistic Legal Concepts

The separate law system for pollution prevention and control in the ecological and environmental legal system is most closely related to the regulatory requirements of "pollution reduction and carbon emission reduction". China's current separate law system for pollution prevention and control is designed under the guidance of the reductionist method, and has carried out separate legislation for environmental elements such as air, water, soil, and biology, and key pollutants such as noise and solid waste. As mentioned earlier, the reductionist methodology emphasizes explaining the whole from parts, explaining the environment from elements, and decomposing complex problems into multiple relatively small and easy-to-handle parts to solve them one by one in a targeted manner. However, this also leads to different environmental elements being regulated by different government departments and legal systems, resulting in rule conflicts, duplicate provisions, and legislative gaps. Paying too much attention to one aspect of environmental problems is sometimes not conducive to improving the overall effect of ecological and environmental governance, nor to the rational allocation of legal resources. At present, in the field of "pollution reduction and carbon emission reduction", China has not yet established a holistic legal thinking, has not carried out institutional construction from the perspective of the overall effect of the ecosystem, and the separate law for air pollution prevention and control, which is positioned to "reduce pollution" and control air pollutant emissions, has not included "carbon reduction" in the legislative purpose, and there is a lack of relevant provisions on their synergetic governance.

II. Legal Measures to Improve Synergetic Governance of Pollution Reduction and Carbon Emission Reduction

A. Formulate Special Legislation on Climate Change Response

From an international and domestic perspective, formulating special legislation on climate change response is not only the implementation of China's strategic goals such as "dual-carbon" and "synergetic governance of pollution reduction and carbon emission reduction", but also a vivid embodiment of actively practicing the United Nations Framework Convention on Climate Change and the Paris Agreement and courageously assuming international responsibilities as a major country.

The climate change response law should include general provisions, government responsibilities, rights and obligations of enterprises and citizens, measures to mitigate climate change, adaptation measures, safeguard measures, supervision and management, international cooperation, legal liabilities, etc. Firstly, in the general provisions, the legislative purposes such as mitigating and adapting to climate change, promoting low-carbon development, achieving carbon peak and carbon neutrality goals, promoting synergetic governance of pollution reduction and carbon emission reduction, and advancing ecological civilization construction should be established; basic principles such as equal emphasis on adaptation and mitigation, sustainable development, risk prevention, and overall governance should be established to provide basic legal guidance for addressing climate change issues.

Referring to international experience in climate change legislation and combining with China's actual situation, the key systems of China's climate change response law should at least include: carbon emission standard system, carbon emission planning system, carbon emission evaluation system, carbon emission monitoring system, carbon accounting system, carbon emission rights trading system, target assessment system for carbon reduction, incentive system for carbon emission reduction, etc. Clarify the government's management functions in setting emission reduction targets, formulating climate policies, organizing and carrying out climate change publicity and education, focus on researching and designing core systems such as greenhouse gas emission responsibilities and assessment, information reporting and disclosure, and carbon emission rights trading, incorporate China's international obligations as a party to the Paris Agreement into domestic legislation, ensure the performance of international obligations by law, actively carry out international technical exchanges and cooperation, and pay attention to linked governance and win-win cooperation with the international community.

B. Clarify the Legal Positioning of Greenhouse Gases

I believe that legal regulation of greenhouse gas emissions should be carried out as soon as possible, but greenhouse gases should not be blindly included in the scope of air pollutants. In the context of China's legal system, greenhouse gases such as carbon dioxide are not in the category of air pollutants. If we do not respect China's national conditions and directly list carbon dioxide and other greenhouse gases as air pollutants by referring to the US approach and regulate them through the Air Pollution Prevention and Control Law, it will violate China's legislative rules and institutional logic, not only fail to effectively solve the problem of synergetic

governance of pollution reduction and carbon emission reduction in theory and practice, but also have the opposite effect, damage China's existing and environmental legal system ecological framework, and to a certain extent hinder the development of China's industry, science and technology industry, which is not conducive to the improvement of comprehensive national strength and international competitiveness. At the same time, China's multiple policy documents on the "dualcarbon" strategy clearly state "synergetic efficiency of pollution reduction and carbon emission reduction" rather than "identity". At present, most academic circles in China also agree with the view of separate legislation.

Therefore, in the current policy context, China should clearly define the scope of "air pollutants", fully improve the rules for air pollution prevention and control and carbon emission rules related to climate change, and accurately find the legal positioning of greenhouse gases. At present, the Interim Regulations on the Administration of Carbon Emission Rights Trading, formulated by the State Council and coming into force on May 1, 2024, is China's first special regulation in the field of climate change response, which clarifies the carbon emission rights market trading system, marking that China has included greenhouse gas emissions into the track of the rule of law. In addition, China can respond to the synergetic governance of pollution reduction and carbon emission reduction in the compilation of the code by taking the opportunity of compiling the ecological and environmental code.

C. Implement Holistic Legal Concepts through Code Compilation

The Standing Committee of the National People's Congress released the Legislative Plan of the Standing Committee of the 14th National People's Congress in September 2023, which included the compilation of the ecological and environmental code into the first category of projects in the legislative plan. The Third Plenary Session of the 20th Central Committee held in July 2024 also clearly proposed to "compile the ecological and environmental code". The code is an important symbol and institutional epitome of human legal civilization. As the highest form of national legislation, it has the characteristics of comprehensiveness, systematization, and synergy. At present, China has sufficient policy support, solid theoretical foundation, urgent practical needs, and profound legislative accumulation. After the Civil Code, it has the conditions for compiling the ecological and environmental code. It should adhere to the holistic legal concept, unify the legislative

ideas, comprehensively use various methods such as legislation, revision, abolition, interpretation, and compilation to compile the code, integrate "synergetic governance of pollution reduction and carbon emission reduction" into the environmental protection code, and form a systematic synergy between pollution prevention and control and climate change response.

The ecological and environmental code is the second legal document named "code" since the founding of New China, shouldering the historical task of promoting green development and building a beautiful China by means of the rule of law. The compilation of this code will reverse China's current fragmented legislative pattern composed of the Environmental Protection Law and many separate laws on natural resources, pollution prevention and control, and ecological protection, significantly improve the institutionalization and standardization level of incorporating ecological and environmental protection work into the track of the rule of law, and is an important measure to build China's modern environmental governance system.

III. Conclusion

The report of the 20th National Congress of the Communist Party of China clearly put forward "synergetic governance of pollution reduction and carbon emission reduction". Ensuring the synergetic efficiency of the two through legal means is an important path for China to promote ecological civilization construction and institutional reform, implement the "dual-carbon" strategic goals, achieve the goal of building a "beautiful China", and fulfill international environmental protection obligations. Through the research on relevant policy backgrounds and legal principle interpretation, aiming at the current situation of China's synergetic governance of pollution reduction and carbon emission reduction and the deficiencies of legal guarantee, improvements can be made by formulating special legislation on climate change response, clarifying the legal positioning of greenhouse gases, adhering to the holistic legal concept, compiling the ecological and environmental code, etc., to ensure that China moves forward steadily on the road of sustainable development.

References

- [1] Xi Jinping: Speech at the General Debate of the 75th Session of the United Nations General Assembly, People's Daily, September 23, 2020, p. 3.
- [2] Liu Chao. Legislative Expression of "Synergetic Efficiency of Pollution Reduction and Carbon Emission Reduction" in the

- Ecological and Environmental Code under the "Dual-Carbon" Goal [J]. Political Science and Law Forum, 2024, (02):40-50.
- [3] Wang Jiang. On the Legal Framework for Carbon Peak and Carbon Neutrality Actions [J]. East China Law Review, 2021, (05):122-134.
- [4] Lü Zhongmei. Outline for Compiling the Environmental Code [J]. China Legal Science, 2023, (02):25-47.
- [5] Li Zujiao: Discussion on the Relationship between Resources, Environment and Ecology-Based on Relevant Expressions in the Report of the 18th National Congress, Forestry Economy, No. 2, 2013, p. 13.
- [6] Wang Yutong. Legal Path of China's Synergetic Governance of Pollution Reduction and Carbon Emission Reduction under the "Dual-Carbon" Background [J]. World Environment, 2021,

- (04):88-89.
- [7] Chen Ziming. Expression of Synergetic Governance of Pollution Reduction and Carbon Emission Reduction in the Environmental Code [J]. Journal of Nanjing Tech University (Social Science Edition), 2022, 21(05).
- [8] Liu Chao. Construction of Spatial Legal System in the Pollution Control Volume of the Environmental Code [J]. Legal Forum, 2022, 37(02):17-26.
- [9] Lü Zhongmei, Wu Yiran. Seventy Years of China's Environmental Rule of Law: From History to Future [J]. China Law Review, 2019, (05):102-123.
- [10] Shen Zhao, Qu Xiao'e. Research on the Pollution Emission Reduction Effect of China's Environmental Regulation [J]. Statistics and Decision, 2022, 38(20): 59-62.

