

Challenges and Countermeasures for China's Participation in International Cooperation on Climate Change under the Framework of the Paris Agreement—Take Paragraph 2 of Article 6 of the Paris Agreement as an Example

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Keywords: Article 6, paragraph 2 of the Paris Agreement; mitigation results; international transfer; international cooperation; carbon trading

Abstract: The Paris Agreement was adopted at the COP 21 conference held in Paris, France, on December 12, 2015, and officially came into force on November 4, 2016. China is a contracting party to the Paris Agreement. As one of the world's largest emitters of greenhouse gases, China's active participation in the Paris Agreement is of great significance to global climate governance. This article focuses on the international transfer mechanism under Article 6 of the Paris Agreement and explores the challenges and corresponding countermeasures faced by China in participating in the voluntary cooperation mechanism. It also discusses the sustainable development mechanism mentioned in the fourth paragraph of the Paris Agreement's support provisions, as part of the international cooperation mechanism.

1. Introduction

The Paris Agreement is an important international Paris agreement on the global response to climate change. It aims to limit global temperature increases, prevents global temperatures from rising to 2 degrees Celsius above pre-industrial levels, and strives to limit the temperature rise to 1.5 degrees Celsius. Paragraph 2 of article 6 of the Paris agreement: " if the parties on the basis of voluntary cooperation method, they use the international transfer of slow results to achieve national independent contribution, should promote sustainable development, ensure environmental integrity and transparency, including in governance, and should be as the convention of the conference of the parties of the convention using steady accounting, among other things, to avoid double accounting." The core of this clause is a voluntary cooperation mechanism based on the market, which is an international mechanism for slowing down the transfer of results. Specifically, based on the voluntary participation of the parties, a country can purchase emissions reductions from another country (including carbon emissions, renewable energy credits, financing for adapting to climate change, and other types of emissions reductions) and include these emissions reductions in their

nationally determined contributions (NDC). The transferred emissions are known as "Internationally Transferred Mitigation Outcomes" (ITMOs), and the international mechanism for transferring these outcomes is designed to help countries fulfill their commitments more economically efficiently.

2. Specific contents of the international transfer mechanism for the mitigation of outcomes

2.1 The connotation of the slowdown results

The mitigation results were first proposed in the 2014 SBSTA technical document on "various guidelines". The document states that "a market-based approach is used to mitigate the transfer of outcomes, as seen in carbon trading systems and certification projects, where mitigation results are produced by one entity and used by another".^[1] Under the International Mechanism for the transfer of mitigation outcomes within the Paris Agreement, mitigation outcomes serve as a proxy for transferable emission reductions.

2.2 Connotation of international transfer

International transfer aims to slow down the transfer of results in order to generate revenue or achieve low-cost emission reduction. The mitigation results arising from a country's internal mitigation activities or inter-state cooperation in mitigation projects may be used by the host country to fulfill its nationally determined contribution, or by the investor or third country. Additionally, the transferee country may also transfer or fulfill its nationally determined contribution with the obtained mitigation results. Therefore, international transfer is a cooperative method aimed at achieving low-cost emission reduction mitigation results. Its essence lies in the cooperation of market methods to assist countries in fulfilling their independent commitments. As a method of international cooperation, the transfer is not mandated by the acceptance of the Paris Agreement by the Parties. Any Party has the option of voluntary participation, referred to as "voluntary transfer," which is also the emphasis of paragraph 2 of Article 6 of the Paris Agreement, highlighting the international transfer of "cooperation on a voluntary basis."

Article 6, paragraph 2 of the Paris Agreement does not specify the specific forms of the market cooperation mechanism. From current practice, such cooperation includes both bilateral and multilateral cooperation. For example, forming a carbon trading club voluntarily; establishing an emission trading market that connects countries and regions around the world; transferring the Joint Crediting Mechanisms (JCM) for joint emission quotas^[2]; expanding the scope of cooperation to include the improvement of energy efficiency and the production of renewable energy, among other areas. Of course, the current provisions of this article are relatively general; not only are the form and content of cooperation relatively vague, but the role of the Conference of the Parties in the cooperation mechanism is also not very clear.

3. Challenges facing China's participation in the international transfer mechanism for the mitigation of the Paris Agreement

3.1 Institutional defects of the market cooperation mechanism of the Paris Agreement

Article 6, paragraph 2 of the Paris Agreement provides for the Cooperation mechanism (Cooperative Approaches), which mainly involves the transfer of international mitigation outcomes. According to the provisions of the second paragraph of Article 6 of the Paris Agreement, countries that exceed their nationally determined contribution targets can, through cooperative methods, sell

their excess emissions to countries that have not met their national contribution goals. This transfer of carbon emissions under the market mechanism is collectively referred to as "international emissions reduction transfer," and it is not limited to carbon emissions; it also includes renewable energy credits, financing for adapting to climate change, and other types of emissions. The Paris Agreement designates the mitigation outcome of international transfer as the transaction object (referred to as International transferred mitigation outcomes, ITMOs). However, the provisions of this clause regarding the international transfer mechanism of mitigation results have not been precise, and there are institutional defects.

3.1.1 Lack of detailed accounting rules for the state-determined contributions and mitigation results.

The Paris Agreement stipulates the need for parties to calculate their national contributions, but only provides a principled framework for the details and operational mode of accounting. The Paris Agreement requires that priority should be given to environmental integrity in the accounting process, while ensuring a high degree of transparency, accuracy, The Paris Agreement emphasizes the principle of consistency and comparison, and highlights the importance of avoiding double accounting. However, the agreement itself does not elaborate on the specific operational details for monitoring and review. The absence of specific operational guidelines may lead to inconsistency and opacity in the accounting of nationally determined contributions, as countries may adopt different methods and standards for these tasks. Therefore, it is necessary to further develop and negotiate detailed guidelines for the accounting of nationally determined contributions at the international level to ensure the consistency, credibility, and comparability of global carbon emission data. This will help increase the international community's trust in national commitments to reduce emissions.

3.1.2 The ambiguity and limitations of the qualifications for international transfer in the Paris Agreement.

Secondly, there is ambiguity regarding the post-access conditions of international transfer. These conditions have special requirements for the transfer in terms of environmental effectiveness, human rights, and sustainable development. On the one hand, the second paragraph of Article 6 of the Paris Agreement clearly states that "to achieve nationally determined contributions through international transfer, sustainable development should be promoted, and environmental integrity and transparency should be ensured. This includes the use of sound accounting practices based on guidelines established by the conference of parties under the Paris Agreement to ensure the avoidance of double accounting." In summary, this encompasses environmental integrity, transparent governance, sound accounting, and sustainable development. On the other hand, the existing specifications in the draft 6.2 include the need for participating parties to develop procedures for baseline delineation, systems to address the risk of carbon leakage, and norms to ensure genuine and permanent mitigation.^[3] At the same time, the applicable conditions aim to prevent environmental damage and human rights violations from being included in the international carbon trading mechanism for the first time.^[2] There is significant ambiguity in the actual implementation of the post-access conditions. The Paris Agreement and the "6.2 draft" do not provide specific operational guidelines for assessing the post-access conditions in practice, leaving unclear how to judge the specific situation of the post-access conditions. This ambiguity may lead to the post-access conditions becoming a tool for political gaming, as parties may interpret them according to their own interests. Secondly, there is ambiguity regarding the post-access conditions of international transfer. The post-access conditions of the international transfer impose specific

requirements for the transfer in terms of environmental effectiveness, human rights, and sustainable development. On one hand, the second paragraph of Article 6 of the Paris Agreement clearly states that "to achieve nationally determined contributions through international transfer, sustainable development should be promoted, and environmental integrity and transparency should be ensured. This includes the use of sound accounting practices based on guidelines established by the conference of parties under the Paris Agreement to avoid double accounting." In summary, this encompasses environmental integrity, transparent governance, sound accounting, and sustainable development. On the other hand, the existing specifications in draft 6.2 include the need for participating parties to develop procedures for baseline delineation, systems to address the risk of carbon leakage, and norms to ensure genuine and permanent mitigation.^[2] At the same time, the applicable conditions aim to prevent environmental damage and human rights violations from being included in the international carbon trading mechanism for the first time.^[3] There is significant ambiguity in the actual implementation of the post-access conditions. The Paris Agreement and the "6.2 draft" do not provide specific operational guidelines for judging the later access conditions in reality, leaving it unclear how to assess the specific situation of the post-access conditions. This ambiguity may lead to post-access conditions becoming a tool for political gaming, as parties may interpret them according to their own interests.

3.1.3 The carbon trading market established based on the national independent contribution lacks the implementation guarantee and implementation rules.

Carbon trading based on nationally determined contributions faces a series of obstacles in its actual implementation. First of all, the carbon trading model under the Paris Agreement is voluntary, and the nationally determined contribution targets submitted by countries vary in type, commitment intensity, and coverage. For example, some countries' nationally determined contribution targets cover all economic sectors, while others only include specific sectors. Additionally, some countries do not specify a target for controlling their nationally determined contributions, but instead provide a broad framework for emissions reduction plans. Additionally, some countries have proposed additional emission reduction targets, with some contingent on the funding from developed countries, while others are not supported by relevant conditions. Due to the differences in independent contribution commitments among countries, this may lead to countries with similar emission reduction levels engaging in carbon trading within a certain range, while countries with low carbon regulation or immature carbon trading mechanisms may be excluded. This situation may not be conducive to the coordinated development of global carbon trading. Finally, international carbon trading involves the calculation of emissions data between different countries, so ensuring the transparency, fairness, and reliability of trading is a major challenge. These inconsistent and complex factors need to be properly addressed in international climate policies to ensure the effective operation of carbon markets and promote the coordinated development of global emission reduction efforts.

3.1.4 Political game pressure of the Parties to the Paris Agreement

China's participation in the voluntary cooperation mechanism under the Paris Agreement faces national conflicts of interest. The Paris Agreement does not stipulate the responsibility of countries to reduce emissions. The voluntary cooperation mechanism under paragraph 2 of Article 6 seems to break the technical and financial barriers between developed and developing countries, but at the same time, it faces the challenge of technology and capital transfer from developed to developing countries.

First, there is a contradiction between developed countries and developing countries regarding

technology and capital transfer. On one hand, developed countries face high marginal costs of reducing emissions, making it difficult for them to achieve large-scale emissions reductions. While advances in low-carbon, zero- and even negative-carbon technologies provide viable solutions in the long term, buying additional emission reductions from other countries is an economically effective way for developed countries to increase their nationally determined contributions and achieve their emission reduction targets in the short to medium term.

On the other hand, while developing countries have huge potential to reduce emissions at relatively low costs, they generally face technical and financial bottlenecks, making it difficult for them to achieve a larger scale (Sun Yongping, Zhang Xinyu, Shi Xunpeng, "Voluntary Cooperation Mechanism and Chinese Participation Strategy for Global Climate Governance—Take Article 6 of the Paris Agreement as an example," Tianjin Social Sciences, No.4, 2022). The voluntary cooperation mechanism under the Paris Agreement can act as a link between the emission reduction efforts of developed and developing countries. A common concern for developing countries is whether developed countries can provide adequate technology transfer and financial support to help them achieve their emission reduction targets. However, developed countries often have reservations about the needs of developing countries in the context of their own interests, and this contradiction poses an important challenge in international climate cooperation.

Second, there are differences among developing countries, especially between China and other developing countries. China is the world's largest developing country, and its economy is expanding rapidly. In the context of the global climate issue becoming more urgent, China's challenges are no longer limited to disputes with developed countries in Europe and the United States, but also include differing views on China's role within developing countries, leading to differentiation among developing countries. Although China has no legal obligation in the Paris Agreement to provide financial and technical support to other developing countries, as the world's second-largest economy, the majority of developing countries expect China to provide more financial and technical support. Some developing countries have even called for China to give up its special status, rights, and interests as a developing country. If such differences and divisions continue to intensify, it may weaken the overall position of developing countries in global climate governance, leading to damage to the common rights and interests of developing countries. At the same time, China may also find itself caught in a stalemate between developed and developing countries.

International cooperation on climate change is often accompanied by the game of international political forces. In general, international cooperation needs to comprehensively consider the interests and positions of different countries in order to achieve the common goal of global climate action.

3.1.5 China's domestic carbon trading mechanism is imperfect

The premise of China's active participation in international carbon trading cooperation is to improve the domestic carbon trading mechanism. This also brings about a series of institutional and capability challenges. China's national carbon trading mechanism is still in the establishment stage, and institutions and capacity building are relatively scarce. Domestic regional carbon trading trials have reflected that China's carbon trading mechanism is plagued by inaccurate data, opaque information, abuse of power, inadequate supervision, and weak regulation. Therefore, the institutional improvement and legal guarantee of the national carbon trading mechanism have become one of the biggest challenges facing China's participation in the international carbon trading mechanism. These challenges require China to actively promote the construction and improvement of carbon trading mechanisms at home to ensure that it can fulfill its commitments in international carbon trading, and to seek support and cooperation from the international community to jointly address the global challenges of climate change.^[2]

4. China's coping strategy

China has been the world's largest carbon producer since it surpassed the United States in 2007. China's global share of carbon emissions determines its pivotal position in the global control of greenhouse gas emissions, and, of course, it also means that China is under huge pressure to reduce emissions. China has always regarded climate change as a development issue. In the face of various challenges posed by the international transfer mechanism of mitigation results under the Paris Agreement, China should formulate corresponding countermeasures.

4.1 Full participation in the formulation of international climate rules

As mentioned above, the accounting and monitoring system for the international transfer of mitigation results under the Paris Agreement is not sound, and no clear international trading rules have been formulated to address double counting. In general, the provisions of the Paris Agreement are relatively abstract, making it difficult to fully present the concrete measures to mitigate the results of international transfer or even to summarize its basic structure. It is difficult to make accurate judgments solely by relying on the provisions of the Paris Agreement.

China should actively participate in the discussion on market rules and decision-making coordination, work with other countries to regulate transnational laws in climate governance, carry out top-level institutional design in view of possible legal risks, and participate in the institutional voice system to lead the construction of international climate rules. Currently, China has put forward the target plan of "carbon peak and carbon neutrality" and proposed the "1 + N" policy system to demonstrate the successful achievements of carbon emission control to the international community during its participation in global climate negotiations. In the future, China should participate in relevant international discussions and negotiations, actively put forward constructive suggestions and proposals, and promote the establishment of a fair, transparent market mechanism that is beneficial to developing countries.

4.2 Strengthen communication with all contracting parties and coordinate the interests of all parties

The international community lacks global government agencies with enforcement force, and there is a tendency of zero-sum game among countries. Countries often prioritize their own interests and participate in international cooperation based on realistic interests, so climate cooperation between countries is often constrained by their own national interests. Against this background, China is facing common pressure from both developed and developing countries.

In order to avoid China being in a passive situation, it is necessary to strengthen dialogue and communication with the contracting parties. On one hand, it is necessary to coordinate the interests of all parties and enhance political mutual trust. To this end, we can learn from the experience of the past Durban climate conference and coordinate the demands of all parties through informal dialogue. On the other hand, there is a need to focus on strengthening communication and coordination with the EU and the United States. The European Union and the United States are models of mandatory carbon trading mechanism and voluntary carbon trading mechanism, respectively, in the world. With their early advantages in creating and implementing carbon trading, they have established their position as the rule exporter of the carbon trading mechanism at the international level. China should strengthen its study of the carbon trading system of the United States and the EU, seek cooperation with their carbon trading capacity building, and improve the design and implementation of China's carbon trading market mechanism through dialogue and consultation.^[3]

4.3 Accelerate the construction of the domestic carbon trading mechanism and improve the domestic carbon trading mechanism

When participating in international cooperation in the carbon trading mechanism, one must carefully assess the potential advantages and disadvantages.

The carbon trading mechanism mainly involves the connection of the international carbon trading mechanism under the Paris Agreement, and also includes the bilateral connection between carbon trading mechanisms. This encompasses a number of complex issues, including the conditions of the connection, partners, and potential risks. For China, the prerequisite for connecting to the carbon trading mechanism is the improvement of the domestic carbon trading mechanism. China is in the critical stage of developing its domestic carbon trading mechanism, so it needs to actively seek cooperation opportunities in capacity building and absorb the knowledge and experience of developed countries in carbon trading mechanisms. International carbon trading mechanism cooperation includes capacity-building cooperation and connectivity cooperation. The former involves cooperation in infrastructure, institutional capacity, personnel training, and other aspects, aiming to promote the scientific and professional development of carbon trading mechanisms. The latter emphasizes institutional cohesion and rule coordination to achieve the cross-regional transfer of quotas and emission reduction credits between different carbon trading mechanisms. China should prioritize capacity-building cooperation in carbon trading mechanisms, especially for the national carbon trading mechanisms currently in preparation. This will help ensure that China's carbon market is more scientific, professional, and efficient, and will also promote coordination and cooperation in the global carbon market (Leng Luosheng: "Current Status, Problems and Countermeasures of China's Voluntary Emission Reduction Trading," *Journal of China University of Political Science and Law*, no. 3, 2012).

5. Conclusion

The core of Article 6, Paragraph 2 of the Paris Agreement is a voluntary cooperation mechanism to facilitate the international transfer of achievements in emissions reduction. China's participation in this mechanism is bound to face a series of challenges, such as institutional defects, game pressure, and the pressure of its own imperfect carbon trading mechanism. China should strive to improve its voice in the international climate governance system, promote the transformation of its domestic economy and energy structure in combination with the target strategy of "carbon peak and carbon neutrality," and advance the development of global climate governance through active participation in the construction of multilateral carbon market rules and multilateral cooperation on climate change.

References

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