

# ***Study on the Evolution of the World Economy and International Cooperation in the Context of Carbon Neutrality***

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**Abstract:** With the passage of time and the promotion of global eco-environmental protection concepts, the issue of the climate crisis has attracted the attention of all countries in the world and has become a hot topic characterized by ties. In recent years, major economies have announced their participation in carbon neutral activities one after another, actively implemented the carbon neutral targets, promoted international exchanges based on the concept of green and low carbon, deepened the degree of greening cooperation among countries, and met the needs of carbon neutral policy implementation from a strategic perspective. In the process of popularizing the concept of carbon neutrality, global economies have been able to participate in ecological and environmental protection activities together. Nowadays, there are certain changes in the global development pattern, and a scientific and technological revolution oriented to the goal of carbon neutrality has quietly arrived, and the world energy governance order has also changed. This paper analyzes the trend of the world economy in the context of carbon neutrality and the challenges of cooperation brought about by it, and puts forward the idea of participation in international cooperation from China's standpoint.

**Keywords:** carbon neutrality, world economy, international cooperation

## **1. Introduction**

In its bilateral exchanges and cooperation with the European Union and other regions, China has focused on cooperation in the energy and ecological fields, emphasizing how to make joint efforts to improve climate change response mechanisms. The coverage of the world's climate change action has been increasing, and target-oriented emission reduction arrangements have been implemented. 1972, the Stockholm Environment Conference began to coordinate the participation of major economies in climate change analysis and response, and at the 2015 Paris Climate Conference, many countries, including China, participated in the promotion of carbon-neutral policies and updated their own emission reduction targets in light of their own actual situation, providing a boost to global ecological development, with 59 countries and regions updating their NDC targets by the beginning of 2021. By the beginning of 2021, 59 countries and regions will have updated their NDC targets, covering 48% of the world's total emissions. By the beginning of 2021, 59 countries and regions will

have updated their NDC targets, covering 48% of the world's total emissions[1-2]. This has led to the situation we see today, in which countries are competing to announce their carbon neutral targets.

## **2. Trends in the evolution of the world economy in the context of carbon neutrality**

### **2.1. Misalignment of objectives in the context of composite governance**

Although countries have been able to reach a consensus on ecological protection and carbon neutrality, the degree of commitment to carbon neutrality is not the same among many countries due to differences in their own stages of development and their ability to coordinate resources. Overall, developed countries generally reached their carbon peaks by the end of the last century and are less involved in the low-carbon transition, so the pressure to reduce carbon emissions is relatively low. This has led many developed countries to focus more on how to promote overall ecological and environmental protection on a global scale, requiring developing countries to actively promote the energy transition. However, most of the developing countries are facing problems such as energy scarcity and low utilization rate of energy development, so as to promote their own modernization and development and improve the level of energy delivery. Most developing countries emphasize the importance of environmental protection and introduce the concept of composite governance, but they also need to ensure energy security in the context of globalization to lay a solid foundation for their own development. The misalignment of goals is likely to lead to differences in the concepts of ecological and environmental governance at the global level, resulting in the phenomenon of "each seeking its own interests", which leads to a decline in the motivation of all parties to act collectively, and the effect of collaboration and sharing is lower than expected.

### **2.2. Fragmentation of governance in the context of cross-border integration trends**

Multidisciplinary cross-border integration can enrich the main bodies of governance and comprehensively enhance the dynamics of energy governance, but it is prone to prolonged fragmentation. At the overall level, fragmentation is a governance phenomenon with certain negative characteristics; despite the large number of governance subjects, there is a lack of effective coordination among them, and the corresponding resources are weakly integrated and coordinated, resulting in difficulties in collective action. The phenomenon of fragmentation in the context of cross-border integration is mainly manifested in the following aspects: firstly, there are fewer cross-industry contacts or horizontal exchanges are just a formality, resulting in poor linkage effects. For example, many infrastructures need to be involved in the implementation of emerging issues, the energy and financial sectors, despite the comprehensive promotion of green financing, do not cooperate much with each other and seldom carry out targeted international dialogues, and international organizations in the field of energy usually do not communicate with financial institutions or seek support for corresponding governance activities, which makes it more difficult to finance. This phenomenon not only results in a lack of cross-border integration capacity and lagging awareness, but also makes it difficult to meet the actual needs of governance, and fails to show the synergy of multi-body linkage. Second, some actors (especially national actors) emphasize maintaining a good degree of freedom of action in globalized energy governance activities, and are not willing to participate in formal communication and negotiation, or are not willing to form relevant policy commitments. Third, with the passage of time and the increasing popularity of cross-border trends, international organizations and NGOs have inevitably fallen into a homogenized situation in their own development, with poor functioning and white-hot competition, which has led different actors to focus more on how to achieve the competition for resources and increase their own exposure, rather than seeking ways to respond to the actual problems[3]. There are many energy governance organizations in developing countries that focus on which areas of governance are supported and sponsored by developed countries, and

subsequently receive assistance through research or publicity, but the resulting reports on low-carbon development, ecological rectification and so on do not meet the actual needs of the locality, resulting in a mismatch between governance activities and regional needs.

### **2.3. The persistence of the logic of power politics in Western countries**

First, in the process of long-term energy governance, Western countries have maintained the logic of power politics, and have not emphasized the equality of the subjects of energy governance in the paradigm shift. In promoting carbon-neutral policies, the United States and Europe have used energy governance as a way to safeguard their international status, advocating the "China threat" through politicized means, and interfering with normal competition in the technological and industrial fields. Some European countries have also pointed out the need to actively respond to China's elevated status in the field of energy governance, to resist the phenomenon of its building economic dominance, through some malicious propaganda, that China through the way of green investment in the Central and Eastern European countries to a certain degree of pulling, which will lead to the division of Europe[4]. Secondly, the U.S. and European countries emphasize the political camp distinction and rely on political suppression to strengthen their control over the energy governance industry when carrying out the energy governance pattern building. The EU is willing to maintain long-term climate governance cooperation with the United States and jointly conduct energy development[5]. The U.S. and European countries lack sufficient enthusiasm for China's willingness to show energy cooperation, the existence of exclusionary multilateralism ideas, despite the fact that they believe that cooperation with China in the field of low-carbon energy development and utilization is of great significance, but do not prioritize cooperation with China, and try to interfere with China's influence in the world's energy transition, to avoid China's gradual development into a world leader in the field of energy governance. Third, Western countries use political means to intervene in the development of energy governance industries in other countries, and adopt double standards to urge developing countries to venture into transformation, leading to tensions in global cooperation on energy governance. The European Union, out of its own interests, defends how its member States grasp energy policy, improves the autonomous decision-making capacity of member States, and prevents third countries from interfering in this regard.

## **3. Ideas for international cooperation in accelerating "carbon neutrality"**

In the carbon-neutral era, there is a paradigm shift and issue innovation in global energy governance. Countries should not only promote the expansion of energy governance issues and mechanisms, but also pay more attention to the power and value dimensions to realize fairness, justice and universality. In the field of global energy governance, China is undergoing a transformation from a peripheral observer and passive recipient to a deep participant and active shaper. China is committed to becoming an important force in leading the world's low-carbon transition, and needs to take more initiative.

### **3.1. Promoting a composite concept of governance based on national conditions, respect for differences and consensus-building**

With the development of the times, the concept of compound energy governance has been promoted globally, and it is necessary to follow the trend of the times, grasp the characteristics of the national situation, and highlight the importance of eco-development and low-carbon development on the basis of "respecting the differences and forging a consensus", so as to enable our country to better cope with the "dual-carbon" target and improve the efficiency of resource linkage development with reference to the direction of global cooperation with other countries. This will enable China to better cope with the "dual-carbon" goal, and when cooperating with other countries, it will be able to refer

to the direction of global energy governance to improve the efficiency of resource linkage development and prevent the emergence of the mentality of rushing to achieve results. To build a global energy governance system, effectively rely on the United Nations Framework Convention on Climate Change in all energy governance activities, and constantly popularize the concept of carbon neutrality, avoid the phenomenon of misalignment of goals, and jointly resist developed countries' use of political and economic means to intervene in the implementation of green emission reduction policies in developing countries, and effectively safeguard the rights and interests of developing countries, so as to optimize the pattern of production of energy-carrying products, and to ensure the orderly implementation of the energy transition plan. We need to speak out more for the developing countries[6]. We need to speak up more for developing countries and ask developed countries to fulfill their previous commitments and ensure that they can provide developing countries with \$100 billion a year to finance energy management through assistance and interest-free loans, so as to support the industrial transformation and ecological management work of developing countries.

### **3.2. Innovative paths of external cooperation to achieve active cross-border governance**

Cross-border governance emphasizes the need to focus on the convergence of fossil energy and clean energy development in overall ecological governance, improve the scientific nature of the transition, create an inclusive and synergistic governance programme, and effectively enhance the normative nature of governance. China needs to improve energy diplomacy planning capacity, optimize the use of cross-border governance resources, break the traditional governance barriers predicament, stimulate the enthusiasm of all functional departments to participate in, such as development and reform, finance, environmental protection and other departments need to participate in cross-border governance strategic planning, will be a single point of communication of energy international cooperation model upgraded to a "one-to-many" synergistic model. The model of international cooperation in energy has been upgraded from single-point communication to "one-to-many" synergy, which specifically covers the transformation and upgrading of the energy industry, improvement of infrastructure, and promotion of green finance. In the discussion of emerging issues in international energy governance, we have made deep efforts in new energy production capacity and equipment production cooperation, enriched the global energy upstream and downstream industrial chain, actively integrated into the international energy supply chain, and actively participated in the updating of energy technology indexes, so as to avoid isolation of our country by the developed countries through technological means and industrial barriers. Under the background of fragmentation of energy governance at this stage, China needs to grasp the direction of energy governance activities, rely on industrial demands to cope with related problems, urge developed countries to implement energy governance mechanisms, improve the openness of energy governance, and gradually enrich the path of industrial investment, so as to expand the scope of technology sharing.

### **3.3. Facing up to the pressure of Western countries and building up the image of a great power in energy governance**

China has to meet the carbon peak target in less than a decade, and the pressure of transition is very great. Some developed countries are biased against China in the ideological field, unilaterally believing that China influences the international emission reduction and carbon reduction process, or there are strategic level gaming demands, saying that China should not have a transition period, and needs to immediately look to the West to implement absolute emission reduction. In response to the pressure of Western countries, first of all, China needs to actively carry out international exchanges, show its own determination to reduce emissions, and launch an emission reduction and carbon reduction program that meets the needs of the times. General Secretary Xi pointed out in his speech

that reaching the "dual-carbon" goal is not a matter of what others tell us to do, but rather a matter of what China itself needs to do as it enters a new period of development, and that the implementation of the "dual-carbon" policy can match the actual needs of the people in the community, and can create a beautiful China, effectively improving the good relationship between human beings and nature. Implementing the "dual-carbon" policy can meet the actual needs of society and the public, create a beautiful China, effectively improve the good relationship between human beings and nature, and is a manifestation of China's fulfillment of its responsibility as a great nation and its international responsibility. Secondly, China needs to actively participate in the ecological governance of the international community at risk, expand the influence of low-carbon emission reduction programs, strong coordination of the competition and game phenomenon between different countries, to prevent the spread of unilateralism, the use of energy trade to improve the energy away from medical exchanges between countries, so that China and other economies can maintain good energy cooperation, such as building the framework for cooperation between China and the European Union grid, and to create a new energy linkage development method. Innovative energy linkage development methods. China does not avoid from the global energy governance framework optimization, actively participate in the construction of the order, and gradually enhance their own discourse in the field of international energy governance, showing the international rule-making ability. In recent years, China has been promoting the construction of the green "Belt and Road" throughout the year, taking regional energy governance as the basis, introducing large-scale projects and large-scale industries, and promoting the optimization of industrial structure on the basis of connectivity and cooperation to realize the overall transformation and upgrading of industries. Relying on energy system planning programs, China has invested in improving infrastructure, improving the direction of policy exchanges and cooperation, and cooperating with Western countries in energy governance to create a "Chinese brand" in the world.

#### 4. Conclusion

In the process of popularizing the concept of carbon neutrality, it has promoted changes in international relations, enabling global economies to participate in ecological and environmental protection activities. Under these circumstances, the global development pattern has changed to a certain extent, and a scientific and technological revolution oriented towards the goal of carbon neutrality has quietly arrived, and the world energy governance order has also changed. China, the United States, the European Union and other countries are actively implementing the concept of carbon neutrality, demonstrating their own energy governance capabilities in the strategic competition, and creating conditions for the realization of benign competition on a global scale, which not only builds a global community of life, but also brings a positive impact on the future development of mankind.

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