

A Comparative Study on the Role of Sino-US Participation in Climate Governance in the Post-pandemic Era

Haoyu Gong^a, Yanyi Yang^b and Jieyu Zang^c

School of Northeast Asia Studies, Shandong University, Wenhuxi Street, Weihai, China

Keywords: Climate Governance, Post-pandemic Era, China and the United States, Role Theory, The Biden Administration.

Abstract: COVID-19 has profoundly affected the development process of global climate governance. Under the Biden administration, the United States announced its return to the multilateral cooperation framework on climate governance with an ambitious policy, which brought an opportunity for the interaction and cooperation with China. From the perspective of role theory, the roles of China and the United States on climate issues mainly depend on their interest cognition, identity perception and external expectations. Under the interest cognition of "realizing sustainable development" and the identity of "a responsible major country", China holds the expectation of seeking cooperation with the United States, while the United States regards participation in climate governance as a key action to achieve national recovery and effectively compete with China. Based on the governance roles, China and the United States have certain positive prospects for cooperation in promoting low-carbon transformation and implementing climate assistance, but there are also potential options for competition and confrontation. The role of the two states in climate governance will have a great impact on the framework of the Paris Agreement and their future interaction.

1 INTRODUCTION


The COVID-19 pandemic, which broke out in early 2020 and has spread around the world till this day, has profoundly affected the international order. Uncertainty and instability have significantly increased in the international community, posing a great obstacle to the practice of global governance. The trends of global governance in the post-pandemic era and China's role have become the focus of academic discussion. The urgency of climate change and the serious consequences of disasters make climate a huge crisis threatening human civilization in the post-pandemic era, and no country can be immune from the impact of climate change.


As major carbon emitters and major players in the international community, what roles will China and the US play in global climate governance in the post-pandemic era? Given the respective roles of China and the US, what are the prospects for China-US cooperation on climate governance?


2 LITERATURE REVIEW

2.1 Role Theory in International Relations Studies

The concept of national role is a country's recognition of its status in the international system, determined by its role concept and the cognition of other countries in the system (Holsti 1970). The role also involves a collectively constructed conceptual structure whose external meaning is given by interaction (Wendt 1992). The combination of national self expectation and others' expectations forms the role orientation of the state, and the state achieves the role performance driven by its orientation foundation under a specific structure (Harnisch 2011).

^a  <https://orcid.org/0000-0002-8415-9398>

^b  <https://orcid.org/0000-0001-5684-8818>

^c  <https://orcid.org/0000-0002-2448-1027>

2.2 Framework of the Role's Internal Expectation and External Expectation

Roles come from both the internal expectation and external expectation of actors (Thies and Breuning

2012). Two variables-interest cognition and identity perception-could be used as the measurements of internal expectation (Klose 2018).

2.3 Analysis Framework

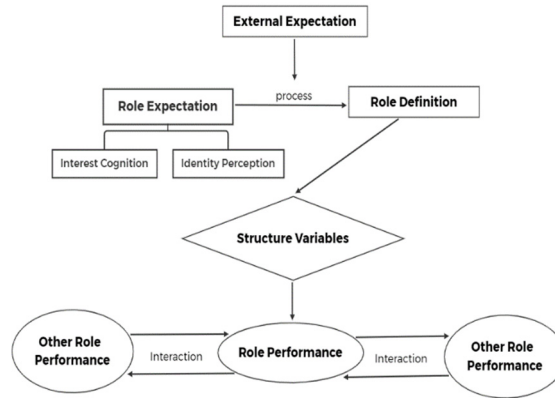


Figure 1: Theoretical Analysis Framework.

3 THE ROLES OF CHINA AND THE UNITED STATES IN GLOBAL CLIMATE GOVERNANCE

Since the end of the last century, the climate issue has gradually drawn the attention of mankind, and the role definition of China and the United States on the climate issue has changed to different degrees. As climate change has become a hot topic in the international community, both China and the United States will increasingly regard participation in the governance on climate issue as an important way to realize national ambitions.

3.1 Interest Cognition of China

China's national interest in climate governance has undergone a transition from denial to positive acceptance. For China, participation in climate governance has always been closely related to the country's development interests. The idea "development is the absolute principle" has profoundly influenced the construction of national interests since the beginning of reform and opening-up more than 40 years ago. In the early stage of reform and opening up, China pursued rapid development to resume production, even at the cost of environmental pollution in the process, holding passive attitude to climate problems and global

climate governance cooperation, and argued environmental responsibility would overburden the national economic interests. However, since the 18th CPC National Congress, as the economy development has entered the new normal stage of medium-high speed growth, China has begun to take social and ecological benefits into comprehensive consideration in the process of economic development. Although participation in climate governance will restrain certain development, economic transformation and upgrading, reducing the reliance on natural resources and participating in the global green low carbon development have become the urgent requirements of sustainable development of China's national interests. In addition, with China's increasing emphasis on soft power in recent years, building a good national image has become an important part of China's national interests. Over the last decade, China actively promoted the Paris Agreement, firmly maintained the climate of the multilateral system, submitted China's Intended Nationally Determined Contributions, etc. As the big emitter in the international community, China tries to build a more responsible image of the country. Meanwhile, China is actively putting the green sustainable economic growth pattern into practice, providing the Chinese governance plan and development experience for the world and calling upon all states to take climate governance into account.

3.2 Identity Perception of China

The initial identity of China's participation in the global climate governance process was shaped in terms of a developing country. Before the signing of the Kyoto Protocol, the global climate negotiations highlighted the stark North-South confrontation. As a developing country, China is relatively cautious in its cooperation on climate governance, arguing that the emissions of developing countries are "survival emissions", while the emissions of developed countries are "luxury emissions", and developed countries should bear their own responsibilities. With China rapidly developing, the environmental threat theory about China emerged in the international climate community. Some western media reported Chinese pollution and western think-tanks also repeatedly issued reports on the research of Chinese pollution threat. The serious pollution and scientific research have gradually deepened Chinese understanding of the climate problem. In addition, with the continuous rise of comprehensive national capability, China increasingly expects to play a more active role in global climate governance and gradually change its identity as a "latecomer" in climate governance. Especially since the 18th CPC National Congress, China's diplomatic style has gradually shifted to comprehensively and actively participating in global affairs. China's identity perception in global climate governance has gradually become a responsible major country that "plays a constructive role".

Therefore, China has actively made responsible commitments to the international community in addressing climate change. Meanwhile, China also actively provides capital, technology and equipment support through the Belt and Road Initiative, China+G77, engaging in South-South climate cooperation in order to improve the ability of developing countries to cope with climate change.

3.3 Interest Cognition of US

Since the climate policy of the Biden administration was implemented, the US national interest mainly consists of three aspects. The first is the economic benefits of climate policy. During his campaign, Biden proposed the "Green New Deal" to stimulate economic recovery by combining climate change policies with the economic agenda of developing a green economy, promoting clean energy transformation, realizing new energy utilization and transforming the economic structure. Biden advocated the clean energy revolution, planning to accelerate the construction of the sustainable

economic system and green infrastructure. He hopes that these policies can create a large number of high-quality jobs in the process.

Second, the Biden administration is trying to build the possibility for climate policy to promote social issues with the political narrative of "climate justice". The Biden administration attaches great importance to environmental justice. It is hoped that efforts on climate governance can provide justice access for ethnic minorities and vulnerable groups such as low-income groups, and deliver assistance to traditional energy communities such as coal, oil and gas industries affected by climate policies, so as to alleviate social conflicts.

Third, the Biden administration hopes to revamp its damaged national image and restore global leadership through its climate policy. Biden announced the return of the US to the Paris Agreement on his inauguration and held a global summit on the Earth Day. In his presidency, Biden showcased his climate ambitions with a series of domestic and foreign climate policies.

3.4 Identity Perception of US

During his election campaign, Biden put climate policy at the core of domestic and foreign affairs, emphasized the government duty to mobilize enthusiasm in an all-round way, and tried to regain the leadership in the multilateral climate governance system. At the same time, the Biden administration attached importance to leading multilateral climate cooperation efforts with the establishment of a strong and professional climate team. To re-establish leadership among allies, the US frequently engaged with traditional allies such as the EU, trying to create cooperation in global governance through international multilateral cooperation mechanisms.

3.5 The Mutual Expectation between China and US

China's expectation of the US's role in climate governance under the Biden administration is based on cooperation principle. In April 2021, Xie Zhenhua, China's Special Envoy for Climate Change, and John Kerry, the US President's Special Envoy for Climate Change, exchanged views on bilateral climate cooperation and issued the China-US Joint Statement on Addressing the Climate Crisis, which reflects China's openness to cooperate with the US on climate issues. However, political relations and strategic mutual trust between the two countries have been severely damaged during the COVID-19 pandemic.

Whether China and the US can effectively manage differences, focus on cooperation, and maintain the overall stability of basic political relations is the premise of climate cooperation between the two countries. For its part, the US has no choice but to cooperate with China because of its emphasis on the climate issue. John Kerry visited China shortly after Biden took office, and President Xi Jinping was invited to attend the Global Climate Leaders' Summit

hosted by the US. However, several important government officials in Biden's climate team claimed that China should take on more responsibilities. The Biden government tried to curb Chinese influence on climate governance through a series of propaganda and agenda setting efforts, putting pressure to force China to accept more responsibility and limit the development of the Belt and Road Initiative.

Table 1: Table of the roles of Sino-US on climate governance.

	Role expectation		External expectation
	Interests cognitive	Identity cognition	
China	<ol style="list-style-type: none"> 1. Transform the mode of development to achieve sustainable 2. Safeguard citizen's healthy life 3. Improve the national, enhance the soft power 	<ol style="list-style-type: none"> 1. Gradually closer to the center of the global stage 2. Constructive role in global governance as a responsible major state 	<ol style="list-style-type: none"> 1. Against the Belt and Road Initiative to curb Chinese global influence in the areas of green trade, finance and technology 2. Improve relations with China, holding certain contact and cooperation in the field of climate
U.S.	<ol style="list-style-type: none"> 1. Participate in climate governance to maintain its leadership 2. Revive the economy and solve social problems 	<ol style="list-style-type: none"> 1. Pay attention to cooperating with traditional alliances 2. Reshape the identity of global leader by handling problems 	<ol style="list-style-type: none"> 1. China hopes for a wide range of cooperation on the climate with the United States 2. The Chinese willing for cooperation is based on certain political premises, managing differences and problems

4 THE INTERACTION ON CLIMATE ROLES BETWEEN CHINA AND THE US IN THE POST-EPIDEMIC ERA

The Biden administration actively deals with climate issues and seeks to reshape the US leadership on climate issues in the post-pandemic era. With its effective measures, material assistance and experience sharing, China has further established a positive image of participating in global affairs, and its role in global governance has gradually shifted from participants to the leader. In the post-pandemic era, the interactions between the two key players in global climate governance will become more frequent and have a profound influence on the process of governance.

4.1 China-US Interactions Have a Profound Impact on the Governance System

The Paris Agreement is the core institutional arrangement for current global climate governance and provides a legally binding framework for global cooperation on climate governance. At present, the effectiveness of global climate governance mainly depends on the implementation of the Intended Nationally Determined Contributions. As the top two carbon emitters in the world, national policies of China and the United States on climate change will play a decisive role in the process of the Paris Agreement. The two countries have proposed ambitious climate policy options and determined to drive the global low carbon energy transformation and development of the green economy, increase capital scale in response to climate change and provide technical assistance for a long time, which is

conducive to the implementation of Paris Agreement and its detailed clauses.

4.2 The Interests Cognition Brings about the Possibility of Positive Role Interaction

China and the United States share similar national interests in promoting the transformation and upgrading of economic development and accelerating the use of clean energy. For both sides, the intention of participation in climate governance is to solve the energy crisis which is the dilemma of development prospects caused by the old high-carbon industrial-driven economic development, and to solve a series of social and public health problems. Driven by the support of China and the United States, the trend of green, clean and low-carbon global energy and economic development will usher in a bright future. There are also positive opportunities for interaction between the two countries.

4.3 The Identity Perception Brings Positive Prospects for Aid Interaction

Both countries will provide foreign climate assistance to enhance the capacity of developing countries to cope with climate problems and achieve economic development upgrading. They have determined to form institutionalized aid practice in the future. In the future, a new tripartite cooperation mode in international climate assistance may be adopted by China and the United States to realize assistance cooperation under the increasingly similar identity expectations of the two countries.

4.4 The Different External Expectations Predict the Prospect of Competitive and Conflicting Interaction

In addition to re-engaging with China on the necessary climate cooperation, the Biden administration still hopes to exert pressure on China on climate issues, force China to assume more responsibility for emission reduction and launch strategic competition with China. In the post-pandemic era, low-carbon green economic recovery will become the mainstream trend and all countries have invested a lot to upgrade clean energy technologies to gain technological advantages. There will be a long-term technological competition

between China and the United States. The United States can support the trade and investment of low-carbon clean technologies and products through financing regulatory policies and trade policies to constantly consolidate its leading position in global clean energy technology, achieving the strategic purpose of continuing to suppress China in the field of technology.

5 CONCLUSION

Under the Biden administration, the United States declared to return to the global climate governance framework, the validity of the framework is substantially increased. With the scientific understanding of the impact of climate change, China increasingly considers the upgrading of its development mode and reduction of greenhouse gas emissions as the only way for the country to achieve sustainable development. The change in the cognition of national interests makes China significantly more willing to participate in climate cooperation. This paper attempts to propose a framework for analyzing the role of states in governance practice, which takes interests and identity as variables, reflecting the dynamics and complexity of the evolution of international relations. Based on the roles of China and the United States in climate governance practices, this paper attempts to analyze the prospect of interaction between the two countries in climate governance from a theoretical perspective, so as to provide reference for future academic research on cooperation and competition between China and the United States in the field of climate.

ACKNOWLEDGMENT

This research is supported by the Shandong University Student Research Training Program, "Dissemination of Ideas and Regional Approaches: China's Participation in Global Climate Governance Based on Big Data" (B21064).

REFERENCES

- Alexandre R. Wendt. "Anarchy is what states make of it: the social construction of power politics," *International Organization*, Vol. 46, No. 2, 1992, pp. 391–425.
- C. G. Thies. and Marijke Breuning, "Integrating foreign policy analysis and international relations through role

- theory: integrating FPA and IR,” *Foreign Policy Analysis*, Vol. 8, No. 1, 2012, pp. 1–4.
- H. Yu et al., “The Biden administration's global climate change leadership policy and China's response”, *International Outlook*, No.2, 2021, pp. 40.
- K. J. Holsti, “National role conceptions in the study of foreign policy,” *International Studies Quarterly*, Vol. 14, No. 3, 1970, p.233.
- S. Harnisch, “Role theory: operationalization of key concepts,” in Sebastian Harnisch and Harmsw Maull, eds., *Role Theory in International Relations*, London: Routledge, 2011, pp. 7-16
- S. Klose, “Theorizing the EU’s actorness: towards an interactionist role theory framework,” *Journal of Common Market Studies*, Vol. 56, No. 5, 2018, pp. 144-160.
- S. L. Myers and C. Buckley, “Seeking cooperation on climate, U.S. faces friction with China,” April 15, 2021, <https://www.nytimes.com/2021/04/15/world/asia/us-china-climate-john-kerry.html>.
- Z. Hu, W Shi, “China and international climate cooperation since the reform and opening up: history, motivation and countermeasures”, *Socialist Studies*, No. 15, 2008, pp. 105-115.



SCITEPRESS
SCIENCE AND TECHNOLOGY PUBLICATIONS