

# The Significance of Climate Cooperation Between China and the United States

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**Abstract.** The global climate issue is becoming increasingly severe, and cooperation between China and the United States in climate management is urgent. This article first analyzes the three stages of the climate relationship of China and the United States, from the first stage when the two sides are not willing to cooperate actively to the second stage when the two sides begin to cooperate frequently in climate management, and then to the current stage when cooperation and competition coexist in the climate relationship. Then, it analyzes the differences in climate governance concepts and methods between China and the U.S. due to differences in political systems, which has led to obstacles in consociation between the two countries. Next, this article explains the importance and key significance climate cooperation from three perspectives: China, the United States, and the international community. Finally, some constructive suggestions on climate consociation between China and the United States are put forward, as well as prospects for further deepening climate relations of China and the United States in the future.

## 1 Introduction

Climate change has emerged as a problem that have received widespread attention from the international community. Therefore, climate issues are gradually receiving attention from society. Although many scholars have been involved in the issue of climate cooperation of China and the United States in recent years and proposed feasible suggestions, which makes this topic become mature and complete. However, there are still unstable factors in climate co-operation between China and the U.S., and it has a promoting effect on the development of both countries. Therefore, research on such issues still has practical significance. In addition to being an environmental concern, the climate challenge also poses a security risk to humankind's continued existence and advancement. It is one of the major challenges that all mankind needs to address together. Climate change affects not just the components that humans depend on for living, such as air, water, and soil, but also global politics, the economy, energy, security, and other areas. Managing the global climate is hence vital. Every nation on the earth will inevitably be affected by climate difficulties, and it is impossible to handle this issue separately due to the general nature of climate, the nature of public goods, and the symmetry of interests [1]. It is critical to collaborate and take meaningful steps toward global climate governance. As the world's two countries with the highest energy consumption and greenhouse gas emissions, China and the United States bear unequivocal blame for global warming, and climate change has a significant influence on both countries. Furthermore,

with the deepening process of globalization, interdependence between the countries of the world in economic terms, culture, ecology, and other aspects is constantly deepening, and their affairs are increasingly closely linked. There is interdependence in both domestic and foreign affairs. It can be said that every move of the two countries in climate governance will have a far-reaching impact. The interests of the two countries in global climate governance are intertwined, and bridging differences and strengthening cooperation will have a positive impact on the sound development of their bilateral relations, international multilateral relations, and global climate governance. Therefore, the following article focuses on the differences in climate policies between China and the U.S. to analyze their climate relationship, thus leading to the necessity of climate cooperation.

## 2 Three stages of climate relations of China and the United States

The development process of the climate relationship of China and the U.S. has roughly gone through three stages. The first stage is before the Copenhagen Agreement. Both countries need to improve their participation in international climate governance, and there have been significant differences in the principles of climate governance, which has affected the willingness of both sides to cooperate, and the performance of climate consociation between China and the United States is relatively negative [2]. In the second stage, the climate relationship of the two sides began to thaw, and their climate governance capabilities were developed and improved. The two heads of state issued joint statements

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on several occasions, and the two sides demonstrated that active policy will cooperate to promote the Paris Agreement, gradually demonstrating positive cooperation [3]. Currently, it is in the third stage, where cooperation and competition coexist, that is, to avoid mutual blame and prevarication as much as possible, continue to share responsibilities and benefits, but also expand the potential areas of competition between the two sides. For example, the risk of increasing green trade barriers in economic and trade cooperation and the competition for raw materials for producing clean energy equipment.

When the climate issue just entered the international relations agenda, China and the U.S. did not paid much attention to it. Therefore, most of their cooperation on climate issues was symbolic. In the 1990s, China and the United States successively signed the Kyoto Protocol, but they did not take much action to address climate change. For the United States, due to the policy preferences of domestic political parties and the opposition of some members of society, they were not willing to spend a lot of resources on combating climate change. For China, it was at a critical stage of economic development, with all issues centered on economic development. At that time, China's carbon emissions level was lower than the world average, so China was also unwilling to pay much on undertaking emission reduction obligations. This led to deeper contradictions between developed and developing countries on climate issues. The United States government uses climate issues to exert political influence on developing countries to pursue so-called environmental hegemony, with the ultimate goal of maintaining its hegemonic position and competitiveness in the international community curb the economic development of developing countries. For developing countries, developing their economies and eradicating poverty are their main tasks at present. If developing countries reduce greenhouse gas emissions, it is equivalent to reduce their economic development space.

The convening of the Copenhagen Climate Conference in 2009 has become a turning point for the easing of climate relations between China and the United States. The political pattern of global response to climate change has gradually changed, and the focus of work has shifted from the European Union to China and the U.S.. The positive impact of participating in climate governance on politics and economy is beginning to emerge, and the two sides of China and the United States have also begun to emphasize cooperation on climate issues. During this period, the heads of state of China and the United States personally initiated and issued joint statements on several occasions. For example, the "Joint Statement on Climate Change between China and the United States" and the "Joint Statement on Climate Change between the Heads of State of China and the United States" have greatly increased the attention paid to climate issues in bilateral relations of countries. The content of cooperation between the two sides in the field of climate has been continuously expanded, the ways of cooperation have become increasingly diverse, and academic exchanges and research projects have

increased. Therefore, in 2015, with the support of major countries, especially the leading role of China and the United States, they jointly promoted the successful conclusion of the Paris Agreement and achieved remarkable results, and also pushed the climate cooperation between two countries to the peak. Although differences between China and the U.S. have always existed, most of the cooperation between the two sides at this stage is of positive significance due to the international climate change crisis and changes in their domestic policies.

After 2017, the stability of climate policy in the United States has been affected by political issues of both parties in the country. The concept of adhering to cooperation in climate relations has been shaken. However, China continues to uphold its perspective on climate issues, actively participate in and advocate international climate cooperation, and actively undertake emission reduction obligations. With the continuous deepening of international climate cooperation, the United States does not want to lose its political position on climate issues. After President Biden took office, he renewed his emphasis on climate policy, and his climate relations with China have become increasingly close and cooperation has become more frequent. However, as the competition between two countries in other fields becomes increasingly intense, the competitive relationship between the two countries has gradually become prominent in addressing climate issues, and the relationship between the two countries has become increasingly complex. The biggest characteristic of the current stage is that the relationship between the two parties involves both cooperation and competition.

### **3 Differences in climate governance models between China and the United States**

China's relatively centralized political system determines that China adopts a "top down" climate governance model when addressing climate change issues. The "top down" governance model is a process in which the government first recognizes the seriousness of climate issues, then establishes relevant departments, formulates relevant policies to address climate change issues, enhances the environmental awareness of the entire population, and ultimately achieves climate governance. That is, the government is the main body of action. For example, as the issue of climate change has received international attention, the Chinese government has first taken action. In 1989, due to the fact that climate change work involves many departments, the Environmental Protection Commission of the State Council established the "Climate Change Leading Group". Subsequently, the government established multiple coordination groups to address climate change issues to ensure that China actively participates in global climate cooperation and works with other countries in the world to address climate change issues. Subsequently, China signed and officially ratified the United Nations Framework Convention on Climate Change in 1992 and 1993,

becoming the first group of countries to participate in international climate negotiations [4]. At this point, China has emerged on the stage of addressing international climate change issues. Although China's "top down" climate governance model can effectively convey and implement the government's climate governance policies, due to China's large population, uneven local education penetration, and weak awareness of climate governance, it is more difficult for China to mobilize the entire population to jointly implement climate policies. In recent years, with the development of China's social economy and the increasingly severe climate issues, citizens have gradually realized the necessity of dealing with climate issues. Therefore, the response to climate issues requires not only the government to formulate efficient climate policies, but also the entire population to enhance their sense of responsibility for climate issues. Only through efficient policies and practical implementation can China better address climate issues [5]. However, the bipartisan politics and the "separation of powers" political system in the United States have determined that the U.S. adopts a "bottom-up" climate governance model in addressing climate issues. The "bottom up" climate governance model is that the general public first realizes the seriousness of the climate issue, and then through various ways to launch environmental protection campaigns, large and small, coupled with the lobbying and influence of relevant interest groups, ultimately promoting the United States government to establish relevant institutions and formulate policies to address climate change. However, changes in the United States government often lead to ups and downs in United States climate policy, presenting great instability, as it is accompanied by the rotation of political parties.

In summary, the different climate governance models of China and the United States have led to many differences in climate cooperation between two countries. Although China's relatively centralized political system is conducive to the formulation and transmission of major policies, it is difficult to implement them at the local level, and the process of domestic climate governance is relatively slow, with insufficient effectiveness. Therefore, the United States often mistakenly believes that China's actions on climate change issues are not proactive enough and lacks confidence in China. Although the U.S. has a strong sense of public awareness in China, it is comprehensively influenced by the "separation of powers" political system, two-party system, and interest groups, which makes it impossible for the United States to fully shoulder its responsibilities in climate negotiations, often leaving an irresponsible image in the international community, resulting in many differences between China and the United States in the process of addressing climate change issues, such as the division of responsibilities. The differences in political systems between two countries have led to deviations in their recognition of each other in addressing climate change issues, leading to many challenges in climate consociation between China and the United States.

In short, the differences in climate management models between China and the United States have led to differences in their cooperation models. Although China's relatively centralized political system is conducive to the formulation and transmission of major policies, it is difficult to implement them at the local level, and the process of domestic climate governance is relatively slow, with insufficient effectiveness. Therefore, the US government has always believed that China's actions on climate change issues are not very positive and does not trust China. Despite the strong public awareness in the United States, it is precisely because of the comprehensive impact of the "separation of powers" political system, the bipartisan system, and interest groups that the United States government cannot fully relax and assume full responsibility in climate negotiations, which often creates an irresponsible image for breeding. The differences in political systems between China and the United States have led to some differences in their responsibilities to address climate change.

#### **4 The importance of climate co-operation between China and the United States**

At this stage, China is in a critical period of economic development, and the rapid economic growth has brought earthshaking changes to itself. However, while making great achievements in economic development, the neglect of environmental protection issues has also led to more serious climate issues. The continuous deterioration of the climate has brought great negative impacts to China. If China do not strengthen climate cooperation and participate in climate governance, the changes in rainfall and temperature caused by climate issues can affect agriculture and even industry, fundamentally affecting economic development. On the other hand, with the rapid development and improvement of China's economy, some western countries in the world have used climate change issues to create international public opinion, putting pressure on China to address climate change issues. Therefore, China should actively participate in climate cooperation and defuse international pressure. China, as a major carbon emitter, should also assume the obligation to reduce emissions.

The issue of climate change is a global issue, and the impact of climate change will not be limited to a certain region. The United States' participation in climate cooperation aims, on the one hand, to consolidate its hegemony in the world and win leadership on climate change issues, and on the other hand, to serve the recovery of the domestic economy of the U.S.. In addition, the United States' participation in climate cooperation is also aimed at maintaining national security and reducing the negative impact of climate change issues on the United States.

The impact of climate change is complex and dynamic. In the coming decades, climate change is likely to have significant and highly uncertain impacts on society. Global climate change has increased the

frequency and severity of natural disasters. In response, the United States Department of Defense also acknowledged that measures must be taken to alleviate this situation, otherwise it would pose a serious security risk. The 2010 US Quadrennial Defense Assessment Report states that although climate change itself does not cause conflict, it may become a catalyst for instability or conflict, and a burden on global civil institutions and military responses [6]. Climate governance requires the participation of major countries. As the two countries with the largest carbon emissions, the smooth consociation between China and the United States has become the key to the success of climate governance [7]. The conflicts and differences between the two countries in various aspects not only harm their development interests, but also hinder the governance of global climate issues. Fighting leads to defeat, and harmony leads to win-win results. This is an unchanging rule from ancient times. As China's strength grows stronger, it is speaking on behalf of the vast number of third world countries on the international stage. North-South cooperation is a win-win outcome that countries are willing to see, in line with the theme of the times of peace and development. As leaders and facilitators of important climate issues in the world, China and the United States play a pivotal role in the global arena. Only through the coordinated participation of these two countries can they provide a good initial platform for multilateral cooperation. In the era of global economic transformation, climate consociation between China and the United States can promote global cooperation, but also promote the economic transformation of a large number of countries and achieve high-quality economic development [8].

## 5 Constructive suggestions for China's climate cooperation with the United States

During the 26th Conference of the Parties to the United Nations Framework Convention on Climate Change, China and the United States issued the "Glasgow Joint Declaration of China and the United States on Enhancing Climate Action in the 2020s". Wang Huiqing, a researcher at the Bank of China Research Institute, believes that this is a historic cooperation agreement reached between China and the United States in addressing climate change, reflecting the determination of the two countries to strengthen cooperation in addressing climate change, which is conducive to improving the global capacity to address climate change [9].

First, cooperation on disaster risk early warning for global extreme climate events is essential. Both China and the United States might face more extreme weather disasters such as extreme cold and snow disasters, extreme rainfall, high temperature and drought, hurricanes and tsunamis. The two countries of China and the United States use advanced meteorological observation and Earth simulation technology to cooperate in establishing regional and global extreme

climate event early warning and prediction platforms, providing public products for the global response to the climate crisis.

The second is the carbon market and green finance consociation between China and the United States. The huge market demand of China and the U.S. gestures huge potential for carbon market cooperation. China and the United States can first explore and carry out pilot urban carbon market cooperation to expand opportunities for green finance cooperation between two countries. The establishment of the Green and Low Carbon Fund between China and the United States, a landmark event that marks the entry of a new era in the development of environmental protection, energy conservation, and low carbon between two countries, is an opportune moment, a natural fit, and a promising initiative. The cooperation between the two sides not only contributes to the green development of China and the United States, but also contributes to global environmental protection, green development, and low-carbon cooperation [10].

Third, China and the United States could establish cooperation on the methane reduction and control, and promote joint research on methane emission reduction challenges and solutions. China also promises to develop a comprehensive and robust national action plan for methane in addition to the national independent contributions announced recently, with a view to achieving significant results in controlling and reducing methane emissions in the 2020s [11].

Fourth, establishing a climate security and strategic dialogue mechanism between China and the United States is also necessary. The primary motivating impact of the climate issue on global security is emerging more clearly. China and the United States will face more and more strategic competition on climate security in international and regional affairs. In order to prevent the strategic competition between the two countries in regional affairs from intensifying and damaging their respective interests, they can establish a "climate security and strategic dialogue mechanism between two countries" to closely communicate on their carbon neutral policies, to engage in dialogue on regional climate security and strategic issues to maintain healthy competition and cooperation, jointly safeguard world peace, encourage international cooperation and sustain a just and reasonable international order.

## 6 Conclusion

The common experience of the world in successfully controlling the threat of nuclear war and establishing the World Trade Organization to promote economic globalization in the 20th century is to start with the countries that bear the primary responsibility for the problem. Once they decide to assume responsibility for seeking a solution, they can introduce other countries into a package of sub agreements and coordinated actions. Global climate governance driven by major country governance should become a complementary mechanism to the United Nations led political framework for addressing climate change, rather than replacing or

weakening existing global governance structures and mechanisms. The large economies, energy consumption, and emissions of China and the United States both determine that their climate governance strategies and actions will have a significant impact on how the globe responds to climate change in terms of pattern and process. China and the United States should play a more effective leading role as major countries in climate governance. The issue of climate change in the 21st century needs stronger and more comprehensive policy support due to its long governance cycle and large impact range. At the same time, effective international cooperation is also very important. Currently, the climate change policies of China and the United States are characterized by being "more powerful," "more comprehensive," and "more scientific" than in the past. The prospects for climate cooperation between the two countries are good, but there are also key obstacles that need to be overcome. At the moment when the COVID-19 has not yet completely ended, and for a period of time after the epidemic, how to return to the normal economic and social order in the world, and take this opportunity to successfully transform the green and recyclable development model, slow down or even reverse the climate change crisis that threatens human health and long-term development, is a question that national leaders and policy makers should think deeply about.

The widespread application of COVID-19 vaccine is expected to successfully help countries around the world, including China and the U.S., to resume normal production and life. On the premise of ensuring the normal operation of the international community, more funds should be invested to effectively implement policies to address climate change, truly achieve the emission reduction goals of the Paris Agreement, and provide a sustainable, green, and healthy Earth home for all mankind.

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