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The Climate Policy of the Biden Administration in the Context of Global Carbon Governance

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Abstract: The issue of global climate change is becoming increasingly serious, and the United States, as a global actor in governance, has a climate policy of great significance to the global response to climate change. The Biden administration immediately adjusted the climate policy of the Trump administration, which had a profound impact on the development of science and technology and climate diplomacy, but essentially concealed the purpose of the U.S. hegemonic strategy. This paper takes the climate policy of the Biden administration as the object of study, analyzes its content and characteristics, and focuses on three means of shaping U.S. hegemony in the carbon border regulation mechanism.

Keywords: The Biden Administration; Global Carbon Governance; Carbon Border Adjustment Mechanism

1. Introduction

In December 2015, the Paris Agreement set forth a proposal to constrain the rise in global average temperature to 2°C above pre-industrial levels, while advocating for a more ambitious target of 1.5°C. The United Nations released the Global Roadmap to Net Zero Emissions in September 2021, which lays out the milestones needed to achieve a fundamental transformation. A series of global climate actions commit countries to achieving carbon neutrality in emissions by the second half of the 21st century, with most setting 2050 as the target for achievement. President Biden of the United States has brought new hope to climate policy by coming to power with a similar commitment to achieving carbon neutrality, promoting a clean energy transition to reduce carbon emissions, and actively participating in international climate negotiations.

As the world's largest economy, the U.S. is also a global leader in advanced low-carbon technologies, which has a profound impact on the development of global carbon governance. Against this backdrop, it is particularly important to pay attention to the Biden administration's carbon policy. Although Biden put forward the "3550" goal at the beginning of his administration, its core purpose is still to maintain the "America First" policy, only that the policy has been expanded to the field of climate

and environment, and combined with economic and social agendas, seeking to become the leader of global climate governance again. It seeks to re-emerge as a leader in global climate governance.

The methodology used in this paper mainly includes literature research method, case study method, and data analysis method. The literature research method is mainly used to collect and organize the literature related to the Biden government's climate policy, including policy documents, academic papers, news reports and so on. By sorting and analyzing these documents, the background, main content and implementation of the Biden government's climate policy can be understood, providing a theoretical foundation and basis for the subsequent research. The case study method analyzes the typical cases of the Biden government's climate policy to reveal the specific process and effect of its implementation. These cases can involve energy transformation, technological innovation, international cooperation and other aspects, which can help to comprehensively show the implementation and effectiveness of the Biden administration's climate policy. The data analysis method collects and analyzes relevant data to quantitatively assess the actual effects of the Biden administration's climate policies. By synthesizing these methodologies, this paper will conduct a comprehensive, in-depth, and systematic study of the Biden administration's climate policy, providing useful references and lessons for the development of global carbon governance.

This paper endeavors to delve into the profound implications and outcomes of the Biden administration's climate policy within the framework of global carbon governance. Through a systematic analysis of the policy's content, characteristics, and its international performance, this study seeks to address the following inquiries: What novel trends are emerging in the Biden administration's carbon policy? How effective has the implementation of this policy been? What are the ramifications of this policy on both the international and domestic fronts?

2. Literature Review

The Biden administration has shown great "climate ambition" since taking office, and its climate policy has received extensive attention from the international community. From the perspective of research, it is mainly categorized into "global carbon governance research", "great power leadership research" and "China-US strategic co-opetition research". In recent years, the Biden administration's climate policy has gradually matured in the carbon field, while the academic community has paid little attention to the policies it has introduced.

From the perspective of global carbon governance, Pan Jiahua et al. argue that the paradoxes of morality, security, and performance of countries in net-zero carbon transition paths can lead to game imbalances. Xinlei Li argues that the impact of climate change on international pattern change and the threat identification and interest perception of climate security within the United States make climate security an important influencing factor for the protection of U.S. hegemony. According to Zhu Lingling, the Biden administration's implementation of the "clean energy revolution" will inevitably require adjustments to the existing energy economy in all sectors, and this systemic change is no easy task.

Cha et al. assert that a shift away from coal and other fossil fuels is an essential measure in mitigating climate change. Nevertheless, they underscore the potential negative socio-economic implications for workers and communities dependent on these industries. Xiao Jing et al. concluded that China should remain committed to the objective of carbon neutrality and proactively seek viable strategies to manage carbon tariffs at both domestic and international levels.

From the study of great power leadership, Lin argues that the rise to power of the Democratic Party in the United States is one of the reasons for the introduction of carbon policy. Yu Hongyuan believes that the Biden administration has regained U.S. influence by forming a small multilateral club on climate issues. Zhang Yuhuan believes that the Biden administration's climate diplomacy strategy has a positive effect on the international community's response to climate change and the promotion of green economic development, but it has also exacerbated to some extent the leadership struggle in global climate governance, which may trigger a new round of global trade protectionism and make the big powers' "green competition" more intense. Zhang Rui believes that the Biden administration has used climate policy to "green" the national image, and will continue to expand its military hegemony, and the destructive impact of the U.S. military's climate strategy on the international order will gradually emerge. According to Zhao Bin and Xie Shumin, the "Transatlantic Climate Alliance" formed by the US and Europe is a temporary unification, and both sides will compete for their own leadership in the climate sector.

From the perspective of strategic co-opetition between China and the United States, Liu Renhou and others, by combing through the climate security strategies of successive U.S. administrations, believe that the increasing pressure of the U.S. on China will become a key focus in the future. Zhang Jian and others believe that with the 2024 U.S. presidential election approaching, the Biden administration will utilize the climate field to tap the potential of political performance, and China should expand the space for international cooperation in the field of climate governance. Xu Jinjin and others believe that it is necessary for China and the United States to work together to address the global climate crisis, and that the two countries can cooperate in green economy and decarbonization.

Evidently, the Biden administration's climate policies have elicited considerable concern among scholars. However, the majority of this concern is concentrated on global governance or the rivalry between China and the U.S. in climate discourse. This paper aims to investigate the objectives of the Biden administration's climate policy and the trajectory of its implementation, viewed through the lens of U.S. logic.

3. The Biden Administration's Climate Policy

3.1 Action Measures

3.1.1 International cooperation

The Biden administration's carbon policy has demonstrated a positive posture in terms of international cooperation and global action to reduce carbon emissions. In April 2021, John Kerry, the U.S. Presidential Special Envoy for Climate Change, embarked on a diplomatic visit to China. During his visit, he engaged in discussions with China's Special Envoy, Xie Zhenhua. Subsequently, they issued a Joint Statement addressing the U.S.-China response to the climate crisis. In the same month, Biden convened a climate summit of world leaders, organized by video, at which he pledged to "reduce greenhouse gas emissions by 50 to 52 percent below 2005 levels by 2030," which is twice as stringent as the Obama administration's emissions reduction target.

In August 2022, President Biden enacted the Inflation Reduction Act (IRA). This legislation encompasses areas such as investments in climate change mitigation and energy security, health care, and tax reform. It projects expenditures of \$437 billion and revenues amounting to \$737 billion, thereby intending to reduce the fiscal deficit by approximately \$300 billion. The bill underscores the significance of international collaboration in addressing climate change and pledges to augment aid to developing nations for climate change initiatives. Subsequently, in December of the same year, the Biden administration issued the Investment Guide to Building a Clean Energy Economy, providing further elucidation on the tax and investment schemes proposed in the legislation.

In November 2022, during the 27th United Nations Climate Conference (COP27), the United States, in collaboration with Norway, initiated the Green Shipping Challenge. This initiative witnessed over 40 significant announcements from various countries, ports, and companies, outlining their respective actions to align the shipping industry with the objective of restricting the global temperature increase to 1.5 °C. The United States' strategy emphasized the promotion of green shipping corridors, the establishment of a domestic decarbonization strategy, and the launch of a \$1.5 million Green Shipping Corridor Initiation Project. These endeavors augment the United States' leadership in zero-emission shipping, which includes a \$3 billion investment towards zero-emission port equipment, technology, and climate action plans as mentioned in the Infrastructure Investment and Jobs Act (IIJA).

In April 2023, President Biden articulated his intention to foster global climate action via the Major Economies Energy and Climate Forum. This initiative aims to mobilize the necessary efforts to tackle the climate crisis and bring the ambitious goal of limiting global warming to 1.5°C within reach. Furthermore, President Biden underscored the commitment to bolstering climate action in developing nations. This includes a contribution of \$1 billion to the Green Climate Fund, a request for \$500 million for the Amazon Fund and associated activities, and an invitation to other countries to join the United States and its allies in leveraging multilateral development banks to more effectively address global challenges such as climate change.

In the face of the serious challenge of global climate change, international cooperation is particularly important. The Biden Administration is well aware that it is difficult to achieve the ambitious goal of carbon emission reduction on its own, and therefore actively seeks cooperation with other countries to jointly promote global carbon emission reduction actions.

3.1.2 Clean Energy Transition

The Biden administration's carbon policy is fundamentally anchored in the transition to clean energy and the promotion of renewable energy. To meet the greenhouse gas reduction targets set for 2030, the government has robustly advocated for clean energy initiatives, notably solar and wind power generation. As per the U.S. Energy Information Administration, the newly installed solar capacity in the U.S. is projected to witness a year-on-year growth exceeding 25% in 2022. Concurrently, the installed wind power capacity is also expected to demonstrate consistent growth. This transition not only helps to reduce carbon emissions, but also creates a large number of jobs and promotes economic growth.

The promotion of renewable energy is particularly critical in the clean energy transition. The Biden administration has fostered the utilization of renewable energy sources, such as solar and wind, among businesses and individuals through the provision of tax incentives and the establishment of dedicated funds. On March 11, 2024, Janet Yellen, the U.S. Secretary of the Treasury, delineated the "investment tax credit" policy. This policy proposes tax deductions for homes and businesses that implement solar energy systems, thereby effectively facilitating the widespread adoption of renewable energy. In addition, the Biden administration has focused on technological innovation and research and development to improve the efficiency and reduce the cost of renewable energy. These initiatives not only help to enhance the competitiveness of the United States in the field of renewable energy, but also provide useful experience and reference for the global clean energy transition.

3.1.3 Carbon Markets and Financial Incentives

The carbon trading market and financial incentive mechanism play a crucial role in the Biden government's carbon policy. Through the establishment of a carbon trading market, the government can utilize the market mechanism to promote carbon emission reduction and achieve a win-win situation in terms of environmental and economic benefits. In this market, emission rights become a tradable commodity, and emission subjects can buy or sell emission rights to adjust their own emission reduction costs, thus forming an effective incentive mechanism for emission reduction.²⁰ In March 2024, the U.S. Securities and Exchange Commission (SEC) has passed a new regulation requiring listed companies to disclose their carbon emissions, thereby increasing corporate environmental transparency and responsibility. These new rules are designed to respond to investor demand for more consistent, comparable, and reliable information about the financial impact of climate-related risks on a registered company's operations and how the company manages those risks.

3.2 Characteristics

3.2.1 Building Hegemony Through Alliances

The Biden administration has actively sought leadership in global climate governance, demonstrating its hegemonic position in global climate governance by setting ambitious emissions reduction targets, promoting clean energy transformation, and developing carbon capture technologies. At the same time, the Biden administration is also well aware that it is difficult to achieve the ambitious goal of carbon emission reduction on its own, and therefore actively seeks cooperation with other countries to jointly address the challenge of climate change.

In the pursuit of alliances, the Biden administration has undertaken a series of measures. First, through platforms such as the Major Economies Energy and Climate Forum, it has strengthened communication and cooperation with other countries to advance global climate action.²⁰ The Biden Administration's Pacific Partnership Strategy, released in September 2012, mentions that it will "prioritize broader and deeper engagement with the Pacific Islands and launch the Blue Pacific Partnership (BPP)." Second, it will help developing countries strengthen their capacity to address climate change through the provision of financial and technological support, thereby winning more support in global climate governance. Finally, the Biden administration also focuses on cooperation with the private sector and encourages enterprises to actively participate in global carbon governance through policy guidance and market mechanisms.

This combination of hegemony and allies makes the Biden administration's carbon policy both global in outlook and practically feasible. By playing a leadership role, seeking international cooperation, and encouraging private sector participation in a variety of ways, the Biden administration is striving to promote new breakthroughs and progress in global climate governance.

3.2.2 Leveraging the Summit for Diplomatic Purposes

Since taking office, President Biden has actively promoted and advocated a foreign policy of multilateralism in order to ameliorate the negative impacts left by the Trump administration. The Biden administration has actively promoted the process of global climate governance through conference diplomacy. He has utilized various multilateral conferences and summits to discuss the challenges and solutions of climate change with leaders of various countries as a way to strengthen the international community's attention to and cooperation on climate issues. First, the Biden administration has actively participated in international conferences such as the United Nations Climate Change Conference, and worked with countries to formulate a global action plan to address climate change. At these conferences, the Biden Administration not only put forward ambitious emission reduction targets, but also actively advocated that all countries act together to address the challenges posed by climate change.

Second, the Biden Administration has also strengthened cooperation with other countries in the area of climate governance by organizing various summits. For example, the Global Climate Ambition Summit organized by the Biden administration invited leaders from nearly 200 countries and regions to

jointly discuss how to strengthen global climate governance and promote global clean energy transformation and other issues. In addition, the Biden administration also focuses on establishing bilateral or multilateral cooperation mechanisms with other countries to jointly promote the process of climate governance. For example, the United States and China have carried out a series of cooperation in the field of climate change, including jointly promoting the implementation of the Paris Agreement and strengthening cooperation in the field of clean energy. The "issue-based summits" promoted by the Biden administration provide a precedent for the U.S. to compete for discourse and leadership in global governance, designate international agendas, and enrich the U.S. diplomatic toolbox.

3.2.3 Coupling Issues to Expand Areas of Competence

The Biden administration's carbon policy reflects the intersectionality of climate issues with a number of issues, covering a scope far beyond pure environmental protection and energy transition, and intertwining with a number of fields such as the economy, security, and diplomacy, forming a complex and multifaceted governance network. In the economic field, for example, the Biden administration's climate policy is not only committed to promoting the development of a green economy, but also through a series of specific measures, such as investing in clean energy and improving energy efficiency, in order to promote economic growth and create jobs. Under the impetus of the green economy, the Biden administration has actively guided the flow of capital to renewable energy, energy efficiency enhancement and other areas, and promoted technological innovation and industrial upgrading. These initiatives serve a dual purpose. Firstly, they contribute to the reduction of greenhouse gas emissions and the mitigation of the adverse effects of global climate change. Secondly, they foster the creation of new business opportunities and industrial chains, thereby infusing fresh impetus into economic growth. In addition, the widespread application of clean energy and energy-efficiency upgrading technologies can also reduce energy costs and improve the competitiveness of enterprises, thereby promoting sustainable economic development.

The Inflation Reduction Act, signed into law by the Biden administration in August 2022, carries highly protectionist and discriminatory subsidy provisions. The bill, which invests about \$369 billion in climate and clean energy frameworks, is regarded as the largest climate bill in U.S. history, with a number of subsidy policies and tax incentives for U.S.-based companies or companies operating in the U.S. only. Such discriminatory subsidy provisions have triggered international concern and controversy to a certain extent, but also reflect the Biden administration's strategic consideration of strengthening its economic interests through climate issues.

By closely coupling climate issues with economic and security issues, the Biden administration has succeeded in giving more "legitimacy" to its global climate governance policies. This legitimacy is not only reflected in the domestic political level, but also in its promotion of the green economy, economic growth and employment and other specific measures to win broad social support and recognition. At the same time, the Biden administration has also actively sought cooperation with the

international community to jointly address the challenges of global climate change, further enhancing its leadership in the field of global climate governance.

4. U.S. Carbon Border Adjustment Mechanism

Carbon Border Adjustment Mechanism (CBAM) is a general term for a series of institutional measures that tax imports containing greenhouse gas emissions, especially carbon emissions, by imposing additional taxes or tariffs on imports as a way of compensating for differences in the country's environmental policy vis-à-vis its own. It is receiving increasing attention as a creative response to the global climate problem. The WTO defines the carbon border adjustment mechanism as a "carbon border adjustment tax", which means that, according to the destination principle, exported products are exempted from part or all of the taxes on their domestic sales, while imported products are subject to part or all of the taxes on their domestic counterparts. The U.S. think tank Resources for the Future (RFF), considered by the Biden administration to be a leading authority on climate, environment and energy resources, defines CBAM as "a system that imposes a tax on imports and a rebate on exports based on each country's carbon-pricing policy".

4.1 Motivation

4.1.1 Urgent Need for Objective Reality

With the frequent occurrence of extreme weather events triggered by global warming in recent years, the whole world has suffered greatly. On the one hand, global tensions have intensified, such as the fierce international competition for the right to exploit Arctic mineral deposits; on the other hand, inter-State conflicts have become more chaotic, such as the gradual reduction of the land area of Pacific small island States as a result of sea-level rise, which has made it necessary for them to become "climate refugees". Therefore, the United States Government should take appropriate measures to address the issue of global climate security without delay. According to the U.S. National Oceanic and Atmospheric Administration, the global carbon dioxide concentration is now more than 50% higher than the pre-industrial level, and the U.S. has had 156 extreme weather disasters between 2005 and 2019, which led to a total of 1.16 trillion U.S. dollars in economic losses.

The climate crisis presents a systemic international security risk, threatening the natural environment and societal structures upon which humanity relies for survival. The need for global carbon governance is pressing, a cause that the Biden administration seeks to champion through the implementation of a carbon border adjustment mechanism. By levying additional tariffs on commodities with high carbon emissions, the U.S. aims to incentivize other nations to adopt more stringent carbon emission controls, thereby advancing the objective of global carbon emission reduction. The introduction of this mechanism underscores the U.S.'s leadership role and influence in global carbon governance. On January 27, 2021, Biden enacted Executive Order 14008, encapsulating the policy of "Elevating the Climate Crisis to the Center of U.S. Foreign and National Security". This demonstrates

the Biden administration's commitment to placing the climate crisis at the forefront of U.S. foreign affairs and national security considerations. It elevates the response to the climate crisis to a level commensurate with safeguarding U.S. national security and homeland security, introducing CBAM as a tool for climate crisis mitigation.

4.1.2 Means of Countering the EU

The U.S. CBAM can be understood as a countermeasure, primarily against the carbon border adjustment mechanism introduced by the EU. On May 16, 2023, the EU CBAM was formally legislated as a key component of the Fit for 55 Package. The EU's CBAM is an environmental policy designed to impose an additional tax on imports that do not meet the EU's carbon emission standards as a way to protect manufacturers within the EU from external competitive pressures, while also promoting global attention to and control of carbon emissions. Theoretically, CBAM prevents carbon leakage and promotes global emissions reduction, which in turn protects domestic industries and guides consumers to low-carbon consumption. In practice, however, the European Union's CBAM was opposed by a wide range of countries once it was introduced because of the mechanism's susceptibility to trade disputes and its highly unfair nature.

Initially, the United States was not supportive of the EU's initiative, but the Biden administration has begun to reverse its disadvantage by actively working with Europe to take ownership of global climate governance. In response to the impact of the EU's CBAM program on the U.S. trading system, the Biden administration has initiated a bill to charge pollution emissions from high-carbon commodities. By imposing carbon tariffs, the U.S. can balance the trade inequalities caused by the EU's CBAM. This U.S. policy is designed to protect its own manufacturers from EU CBAM and reflects the U.S. government's leadership role in global climate governance. In an interview with POLITICO, former Secretary of State John Kerry said that he began helping negotiate the Paris agreement during the Obama administration, and that the EU CBAM program could not be blocked, and that the U.S. could only fight back from itself.

4.1.3 Complementary Domestic Climate Policies

The Biden Administration's climate policies have multiple goals, including promoting clean energy development, strengthening international cooperation, enhancing domestic emissions reductions, and improving climate adaptation and disaster response. These policies aim to address global climate change, promote U.S. economic growth, and enhance U.S. international influence, while safeguarding national security and people's livelihoods. However, these policies often face domestic political, economic, and technological challenges and constraints. Therefore, the Carbon Border Adjustment Mechanism (CBAM), as a complementary measure, can help the Biden administration better achieve its climate policy goals. At the domestic level, the U.S. government faces calls and demands for environmental protection from all sectors of society. As public awareness of environmental protection increases, more and more companies and consumers are concerned about the carbon emissions of their products. In

order to respond to these calls, the U.S. government needs to promote the development of a low-carbon economy and reduce domestic carbon emissions by formulating relevant policies.

The Carbon Border Adjustment Mechanism (CBAM) fits this need as a policy tool that can induce domestic producers and consumers to switch to low-carbon products. The Biden administration has made domestic emissions reductions an important part of its climate policy and has enacted a series of stringent emissions reduction policies. For example, the Biden administration has set stricter fuel efficiency standards, limited the extraction and use of fossil fuels, and promoted the development of electric vehicles. In addition, the Biden Administration has strengthened domestic emissions reductions by encouraging green buildings and promoting energy-efficient and emissions-reducing technologies. In August 2021, President Biden issued a decree that the U.S. Environmental Protection Agency (EPA) and the National Highway Traffic Administration (NHTSA) would be required to develop regulations for future multi-pollutant emissions, which would include fuel economy standards for light- and medium-duty vehicles. At the end of January 2022, the Biden Administration initiated the "Methane Emissions Reduction Action Plan," which aims to reduce greenhouse gas emissions from the oil and gas industry, abandoned coal mines, landfills, agriculture, and construction, while protecting public health and safety.

4.2 Formation of CBAM

Initial exploration of CBAM in the U.S. can be traced as far back as 2003, when the Senate debated the Lieberman-McCain Climate Stewardship Act, which aimed to create a nationwide carbon emissions trading system, but failed to pass. The Lieberman-Warner Climate Security Act of 2007, on the other hand, was the first U.S. legislative proposal on carbon border regulation, with detailed rules on how imports could be traded for carbon dioxide emissions credits. By 2009, the U.S. House of Representatives passed the Clean Security Act, which provides that if the world does not agree on climate change by January 1, 2018, then the President shall establish a carbon border regulation program. The program should require importers to purchase emission credits from international reserve allowances and proposes to impose carbon tariffs on products such as electromechanical products as a way to force developing countries such as China to reduce emissions in line with U.S. environmental requirements. Unfortunately, the bill was not supported by the Senate. The legislative process related to carbon pricing and border carbon adjustment has been more active in the United States during the 2019-2020 period, with at least ten draft bills submitted to the U.S. Congress, primarily targeting regulations on fuel- and energy-related emissions-intensive traded products, but none of them have been voted into formal law.

After the Biden administration came to power, it made every effort to launch a policy layout from the perspective of global climate governance, striving to return to the center of the world's power stage, coupled with a favorable domestic policymaking environment, the U.S. CBAM has gradually been put back on the agenda. Primarily, at the diplomatic level, foreign visits are conducted by John Kerry.

CBAM in the European Union has developed earlier, with a clearer and better system. Kerry has visited Europe several times, and has great research interest in the EU's carbon tariffs and carbon border regulation system, etc. In December 2021, Kerry advocated for a meeting of the "Europe-U.S. High-Level Climate Action Group" at the European Commission in Brussels, where CBAM was discussed. On behalf of the Biden Administration, Kerry has been actively involved in the international dialogue at international conferences to prepare the ground for the introduction of CBAM in the U.S. At the COP28 Climate Summit, Kerry repeatedly emphasized the importance of CBAM for global climate action and advocated for other countries to take similar steps. These efforts of his have helped raise the awareness and acceptance of CBAM in the international community. In addition, the U.S. is actively promoting CBAM-related advanced technologies, such as carbon capture and storage (CCS) technology, with a view to improving the efficiency and effectiveness of CBAM on a global scale.

At the domestic party level, the carbon tariff system has become a valuable bipartisan consensus. Democrats tend to implement a series of reform policies to promote climate solutions, as the Democratic Party, Biden came to power, and immediately pulled back the previous Republican "deviation" of climate policy. U.S. Senator Sheldon Whitehouse said the White House and 49 senators support a proposal to impose a carbon fee of nearly \$20 per ton of carbon as part of President Biden's climate and spending legislation. Support for a carbon tariff-related regime has also emerged from within the Republican Party, which has always tended to oppose the climate sector as it relates to national security. In February 2020, the U.S. Climate Leadership Council released its Nonpartisan Climate Roadmap, which proposes a "four-pillar Carbon Dividend Program's four pillars" to protect the competitiveness of domestic industries, which has received strong support from domestic academics and politicians. The emissions intensity of high-carbon products is a key basis for the U.S. to pursue carbon tariffs, and if passed, the Biden administration would be able to build the U.S. CBAM framework on a global scale.

At the local group level, climate policy in the United States is taking on a positive dynamic, with state and local governments taking action to promote a low-carbon transition. Although the U.S. federal government has not yet established a national carbon tax system, many state governments have begun to actively explore carbon border regulation mechanisms as an important means of promoting sustainable development in their regions. California, as a major economic province and environmental pioneer in the United States, has taken the lead in implementing strict carbon emission regulations and plans to gradually establish a carbon border adjustment mechanism in the coming years. This initiative aims to encourage importers to procure low-carbon products and promote the development of a low-carbon economy through market mechanisms. With the deepening of global climate governance, low-carbon products will become the mainstream of the market, a trend that has attracted the attention of more and more industry associations and enterprises.

It is noteworthy that the United States CBAM proposal focuses mainly on the industrial sector, which has led some industry associations and enterprises to focus on the implementation of the carbon border adjustment mechanism. They recognize that in order to remain competitive in the global market,

they must take active measures to strengthen technological research and development and product innovation in order to reduce production costs and improve the carbon efficiency of their products. Statistically, commodities from the U.S. are 40% more carbon-efficient compared to the global average. Consequently, the application of CBAM to account for elevated emissions in other countries could enhance the competitiveness of numerous domestic industries. The American Petroleum Institute has also begun to support pricing greenhouse gas emissions, arguing that guiding behavior through economic signals and replacing tough regulatory measures at the federal level with carbon pricing would be more consistent with the marketplace and more reflective of the support of U.S. fossil energy interests for U.S. action to develop CBAM. This shift not only reflects a deepening awareness of climate change in the U.S. oil industry, but also signals a gradual shift from resistance to active participation in global climate governance by the U.S. fossil energy industry.

In summary, the positive actions of the federal and state governments on climate policy, as well as the support and participation of industry associations and enterprises in the carbon border regulation mechanism, indicate that the United States is gradually building a sustainable development system led by a low-carbon economy. Although the federal government has not yet adopted a national carbon tax system, exploration and experimentation at the local level have laid a solid foundation for future climate policymaking.

4.3 Measure

The United States carbon border adjustment mechanism, as a policy initiative crafted by the Biden administration in the context of global carbon governance, has undoubtedly injected new vitality into international climate governance. While the mechanism has pushed the climate governance process forward, it has also demonstrated its unique political specificity and far-reaching international impact.

4.3.1 Reformulation of the Transatlantic Climate Action Agenda

First, the Biden administration has rewritten the transatlantic climate action agenda through the United States carbon border mechanism. The transatlantic relationship, unlike any international relationship, is rooted in the victory of World War II and has been a cornerstone of the free world order for more than 70 years. And today, despite Europe being its first ally, U.S. engagement with Europe is usually focused on NATO, and the transatlantic relationship is in dire need of transformation. The Biden administration has expressed a desire to repair relations with Europe and to "revitalize this Western military alliance." The shift in U.S. attitudes toward the EU CBAM not only deepens U.S.-European climate cooperation, but also provides a new opportunity for both sides to work together to address the global challenge of climate change. In June 2021, the U.S.-European Summit endorsed a declaration titled "Toward a New Transatlantic Partnership". This declaration seeks to reconcile the discord between the U.S. and Europe that emerged during the Trump era. Furthermore, it outlines a joint commitment to strategize on achieving net-zero emissions by 2050. In addition to this, the U.S. and Europe resolved to

establish a U.S.-EU High-Level Climate Action Group (HLCP). This group is intended to bolster consultation and collaboration on regional climate issues.

In order to strengthen the transatlantic partnership, they have been trying hard to promote the establishment of the "Carbon Tariff Club". After the outbreak of the Ukrainian crisis, the issue of energy security in Europe was highlighted, and in June 2022, at the G7 summit in Bavaria, Germany, as the rotating presidency, wanted the G7 to become a founding member of the "Climate Club" to promote collaboration between the EU, the United States, and Japan. The declaration issued at the summit proposed the establishment of an "International Climate Club" by the end of 2022 to support the development of an effective carbon pricing mechanism in the countries concerned. As an important symbol of the club, carbon tariffs, unlike traditional trade alliances, are not intended to harmonize the foreign trade policies of member countries within the club, but rather as a punitive measure against countries outside the club for failing to contribute to climate governance in a way that is acceptable to them. In December 2023, for instance, the U.S. put forth a proposal to the EU for the establishment of an international consortium, termed GASSA. This consortium would enforce carbon-based tariffs on all imports of steel and aluminum with high carbon intensity. Notably, non-member countries would be subject to elevated charges. Overall, transatlantic climate cooperation is about reshaping the U.S. and European economies and shaping international economic rules.

4.3.2 Complementary Domestic Climate Policies

Second, the Biden administration has reaffirmed the rationality of the global carbon emission reduction policy for CBAM. In the current context of global climate governance facing many challenges and difficulties, the Biden administration has created rationality and necessity for the carbon border adjustment mechanism by emphasizing the necessity and urgency of carbon emission reduction policies. At the beginning of his term, the Biden administration's climate executive order clearly states that the climate crisis will be placed at the center of U.S. foreign policy and national security, and it is also the first time that Biden announced that the U.S. will achieve net-zero emissions by 2050 and an electricity sector free of carbon emissions by 2030 based on the 1.5°C goal. In April of the same year, Biden at the Leaders' Climate Summit again elevated it to an international level commitment, emphasizing the importance of the U.S. 2050 net-zero emissions transition to the global achievement of the 1.5°C goal, and in doing so updating the U.S. nationally autonomous contribution target of a 50% to 52% reduction in emissions in 2030 compared to 2005.

The Biden Administration has adeptly linked policymaking to real-world necessities to achieve its objectives. It is dedicated to leading through multilateral platforms such as the United Nations, the Group of Seven, and the Group of Twenty to further global climate objectives. Upon rejoining the Paris Agreement, the Biden Administration reiterated the global imperative to curtail carbon emissions. It has identified the carbon border mechanism as a policy necessitated by the need to incentivize businesses to reduce greenhouse gas emissions and foster green, low-carbon development via measures such as

establishing carbon emission standards and implementing a carbon pricing mechanism. Concurrently, the United States is vigorously promoting international cooperation to encourage nations to share the responsibility of emission reduction and collaboratively tackle the challenges posed by global climate change.

4.3.3 Complementary Domestic Climate Policies

In addition, the United States carbon border regulation mechanism has reshaped the multidisciplinary synergistic governance mechanism. Climate governance is a complex task involving multiple fields and levels, requiring the participation and collaboration of governments, enterprises and all sectors of society. The Biden administration, through the carbon border adjustment mechanism, has closely integrated climate governance with trade, investment, energy and other areas, forming a new pattern of multidisciplinary synergistic governance.

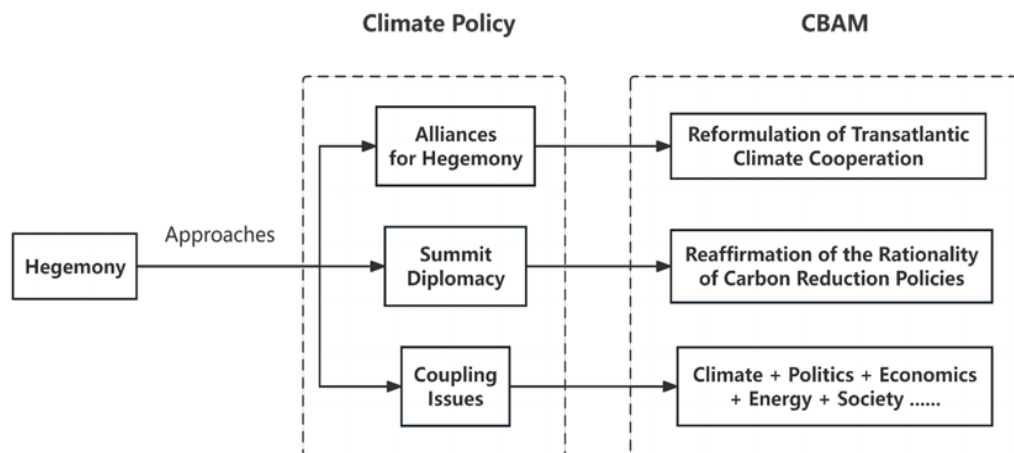
At the societal level, the Biden Administration has underscored that curbing carbon emissions is not merely a requisite step in addressing climate change, but also a strategy to stimulate economic growth and generate jobs. The "Justice40" initiative is a policy that aims to allocate 40% of the overall benefits from federal investments to disadvantaged communities. These communities are often marginalized, underserved, and disproportionately affected by pollution. In doing so, he emphasized the economic opportunities and jobs that lie in the fight against climate change. At the economic level, carbon tariff policy is not about "carbon" but about "tariffs". Since the United States controls the rules of import and export trade, energy conservation and carbon reduction will be the perfect excuse to exploit other countries.

At the energy level, the Biden administration is actively advocating for the Inflation Reduction Act. This legislation encompasses \$369 billion in investments dedicated to clean energy, a move with substantial implications for the burgeoning energy industry. This includes tax credits for the purchase of electric vehicles and photovoltaic equipment, investment tax credits and subsidies for the establishment of clean energy manufacturing industries such as electric vehicle battery factories, and investment subsidies for the clean energy industry chain. The Biden administration has also created the Major Economies Energy and Climate Forum (MEF) mechanism, which will hold two summits in September 2021 and June of the following year, respectively, and has repeatedly emphasized the urgency and necessity of transforming the traditional energy industry. In addition, in March 2022, in order to reduce the EU's dependence on Russian energy, the U.S. and Europe jointly formed an Energy Security Task Force aimed at reducing the EU's demand for natural gas by strengthening clean energy technologies.

Overall, the Biden administration's pretext for introducing climate policy - for world peace and environmental justice - cleverly masked its aim of achieving hegemony. As the chart below shows, with its subsequent policies, the Biden administration has attempted to move toward its goals in three ways. Specifically, it sought to solidify its interests by reshaping alliances through transatlantic climate action;

to assert the legitimacy of its own policies by convening and attending summits; and to extend its hegemony in all directions, including the economy and energy, by combining climate issues with other levels of policy. Ultimately, the Biden administration launched the CBAM, which is a nationally driven, internationally-driven initiative that will ultimately lead the way in global carbon governance.

Figure 1: Depicting Practical Approaches to Hegemony in Climate Policy



5. Conclusion

As one of the world's largest economies, the United States' climate policy has an important impact on global carbon governance. The Biden administration's New Deal on Climate has made positive progress in promoting U.S. domestic carbon emissions reductions and clean energy development, providing new impetus for global carbon governance. However, U.S. climate policy also faces challenges such as political party factors and traditional energy interests, which need to be overcome in policy formulation and implementation. At the same time, global carbon governance also requires countries to strengthen cooperation and communication to jointly address the challenges posed by climate change.

In the future, U.S. climate policy may continue to be affected by domestic political factors, with certain fluctuations and uncertainties. But in any case, the trend of global carbon governance is irreversible, and all countries need to actively participate in this process and jointly promote global climate governance in a more positive and effective direction. At the same time, countries also need to strengthen technological innovation and financial investment and promote the development of clean energy and low-carbon technologies, so as to provide more powerful support for addressing climate change.

However, at the same time, the hegemonic tendency of the United States on climate issues is also increasingly visible, which will adversely affect the pattern of global climate governance. In the face of the global challenge of climate change, all countries need to work together to promote international cooperation and jointly address the climate crisis. In this process, it is necessary to be alert to the

hegemonic behavior of the United States and other countries to ensure the fairness and sustainability of climate governance.

In conclusion, the Biden administration's New Deal for Climate has had a far-reaching impact on global carbon governance, providing new opportunities and challenges for global carbon governance. Countries need to actively address these challenges, strengthen cooperation and communication, and jointly promote the development of global climate governance in a more positive and effective direction.

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Author Contributions

The author confirms sole responsibility for the following: study conception and design, data collection, analysis and interpretation of results, and manuscript preparation.

Availability of Data and Materials

The data on which the study is based were accessed from a repository and are available for downloading through the following link.

<https://www.eia.gov/todayinenergy/detail.php?id=50818>

<https://www.congress.gov/bill/117th-congress/house-bill/5376>

Conflicts of Interest

The authors declare that they have no conflicts of interest to report regarding the present study.

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