European Union Carbon Border Adjustment Mechanism: Content Review and China's Emergency Response

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Abstract: As the world's first carbon tariff system to be implemented, the EU Carbon Border Adjustment Mechanism (CBAM) has been given two main objectives: to prevent carbon leakage and to maintain a fair global industrial competition. However, when it comes to preventing carbon leakage, it ignores the logic of attributing responsibility for carbon leakage, unilaterally adopts market-based regulatory schemes, and has a strong tendency towards climate unilateralism. On the issue of maintaining the order of fair competition in the industry, through leading carbon pricing, it transfers domestic endowment advantages in the import and export links, and imposes trade restrictions on other countries, with prominent characteristics of trade protectionism. As one of the EU's most important importers, China will be deeply affected by its CBAM within its own domestic climate governance process, export trade and other areas. In view of this, at present, China should extend the buffer period of its own system by applying WTO rules and establishing international carbon tariff rules at the international level and at the domestic level, by giving full play to policy advantages, promoting carbon trading market and enterprise carbon tax system construction, and improving its own system of dealing with endogenous capacity. Finally, on the basis of both international and domestic measures, China must safeguard its national interests to the greatest possible extent while aiding in world development.

Keywords: European Union Carbon Border Adjustment Mechanism, Climate Unilateralism, Trade Protectionism Carbon Leakage, Carbon Trading

On December 13, 2022, the European Council announced the conclusion of an effective interim agreement with the European Parliament on the European Union Carbon Border Adjustment Mechanism (hereinafter referred to as the "CBAM"). The agreement marks a consensus between the EU's two main deliberative bodies on the creation and operation of a carbon tariff, which is due to come into effect in 2026 as an EU statutory regime. As the first carbon tariff

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system of its kind in the world, the CBAM has the dual attributes of climate governance measures as well as trade measures, and is a product of the combination of green rules and economic and trade rules. In essence, the CBAM is a strategic regulatory mechanism for the EU to promote climate unilateralism and trade protectionism, imposing the EU's green hegemony in global climate governance with emphasis on building trade barriers in the field of international trade. The implementation of the CBAM will bring significant challenges to the global climate governance regime and international economic and trade rules, with China, one of the EU's most important importers, bearing the brunt. Therefore, before the formal implementation of the CBAM, it is urgent and realistic to debate and discuss its implications and shortcomings, and to carry out in-depth research on its provisions and their impact, while preparing for the new measures to take effect. This will determine the extent of China's response to the CBAM in a manner that will safeguard national interests and also contribute to global development.

I. THE DEVELOPMENT AND MAIN CONTENTS OF THE EU'S CBAM

A. The Development of the EU's CBAM

In practice, the CBAM is also known as the Carbon Tariff. It is a carbon tax or carbon emission tax imposed by countries with strict carbon emissions reduction measures on imports from countries with no carbon tax or equivalent emissions reduction measures. The CBAM is the outcome of the world's efforts to deal with the global climate problem. It is rooted in the differences in domestic policies across states, and seeks to incentivize countries to decarbonise faster, reduce carbon emissions and transition to low-carbon economies. In the twenty-first century, as the main driving force for global environmental protection, the EU has never stopped in the construction and implementation of carbon tariff systems. In 2007, Mr. Jacques Chirac, as the then French President, proposed imposing carbon tariffs on countries that had not signed or complied with the Kyoto Protocol, but the proposal has not been formally considered by the EU because of the immaturity of the system and strong opposition from countries such as the US. However, with the achievement of carbon emissions reduction in EU member states and the increasing attention paid to the issue of climate

governance in the world, and based on the changes in internal and external conditions in recent years, the European Union has refocused its attention on climate issues and introduced a series of policy acts on climate governance. Among them is the package agreement "Fit for 55 Package" dated July 14, 2021 from the European Council, which is an important institutional guarantee to bring EU policy bills in line with climate governance and decarbonisation targets.[1] However, as a key element of the package, the CBAM is at the heart of the EU's efforts to meet the 2050 carbon neutrality target of the Paris Agreement in the context of addressing climate challenge.[2] It also marks the first time that carbon tariff theory has been put into practice in the world. In order to avoid the suspicion of conflict with the existing tariff rules of the World Trade Organization (hereinafter referred to as the the "WTO"), the EU has been cautious in respect of the specific wording and superficial interpretation of the document. After several internal discussions, the final agreed upon form of the mechanism was styled as "Carbon Border Adjustment Mechanism", and was not called a "tariff" or "tax" at all, unlike existing similar international climate related tax measures. To be fair, the CBAM is a non-tax regulation mechanism. However, its specific operational mechanism and functional attributes are highly similar to those of a tariff. Therefore, the CBAM is commonly referred to as an EU carbon tariff in practice, as in this paper.

Unlike the design of general policies and systems, the operation of progressive and long-lasting nature, the specific design and system construction of the CBAM has a clear concentricity and rapidity. From the point of view of institution construction and development, the theory of the CBAM was proposed a long time ago, but its concrete operational mechanism and target and implementation plan have only been agreed upon in recent years. Among them, the Draft Legislation on the Establishment of a Carbon Border Adjustment Mechanism was formally published by the European Council on July 14, 2021, and adopted by a vote of the Council of the European Union on March 15, 2022. On June 22, 2022, the European Parliament adopted an amendment to the Legislation on the Establishment of a Carbon Border Adjustment Mechanism proposed by the European Parliament and the Council and, on December 18 of the

1 Council of the European Union, *Fit for 55*, January 12, 2023, https://www.consilium.europa.eu/en/policies/green-deal/fi~for-55-the-eu-plan-for-a-green-transition/ (Last Visited on January 15, 2023).

2 Council of the European Union, *Draft Regulation of the European Parliament and of the Council Establishing a Carbon Border Adjustment Mechanism-General Approach*, p. 9.

same year, announced the conclusion of a joint interim agreement on the CBAM with the Council of the European Union. The CBAM is scheduled to start a transitional pilot operation on October 1, 2023. In less than two years, the concept of the CBAM has progressed from actualizing as a draft legislation to being amended and is now about to be put into practice. The EU is promoting the construction and improvement of the CBAM at a high speed with a view to its entry into force as soon as possible. As a multi-country consortium, behind the EU's acceleration of the CBAM is the will of the majority of its member states and their common strategic interests, namely, leading the way forward for change in global climate governance, with a view to strengthening the international discourse pertaining to the EU and improving its competitiveness in the international context of staggered changes in the global trading system and climate governance pattern, and finally reshaping and consolidating the EU's international leadership.

B. The Main Contents of the EU's CBAM

Although there are some differences and disputes among the three major institutions of the European Union on the specific operation details of the CBAM, in order to promote the implementation and effectiveness of the CBAM as soon as possible, they generally showed a high degree of coordination and cooperation, and jointly adjusted and constructed a series of rules around the CBAM to ensure its smooth roll-out and normal operation as expected. As a new mechanism, on the one hand, the CBAM needs to rely on the existing institutional basis of the EU, such as the linkage with the European Union Emission Trading Scheme (hereinafter referred to as "EU ETS"). On the other hand, new rules need to be made according to the unique characteristics of the CBAM, such as the application process of the CBAM. According to the results of the EU Council's consideration of the draft legislation, the contents of the CBAM include eleven specific aspects, including the theme, scope and definition, declaration of rights and obligations, and vouchers (See Table 1). However, the key elements supporting the operation of the CBAM mainly focus on the adjustment scope, pricing mechanism and application process of the CBAM.

From the perspective of the adjustment scope of the CBAM, according to the coordination results of the Council of the European Union and the European Parliament on December 13, 2022, steel, cement, fertilizer, aluminum, electricity and hydrogen, as well as indirect emissions and downstream products

Table 1: Main Rules Framework of EU Carbon Border Regulation Mechanism

Chapter I	Subject, Scope and Definition
Chapter II	Obligations and Rights of CBAM Authorized Declarant
Chapter III	Competent Authorities
Chapter IV	CBAM Vouchers: Sales, Pricing, Clearing, Repurchase, Cancellation
Chapter V	Customs Authorities
Chapter VI	Consequences of Execution: Punishment and Evasion
Chapter VII	Exercise of Authority and Committee Procedures
Chapter VIII	Reporting and Review Procedures
Chapter IX	Coordination Mechanism with EU ETS Free Quota Allocation
Chapter X	Transitional Clause
Chapter XI	Final Terms
Annex I	List of Commodities and Greenhouse Gas Categories
Annex II	Countries and Regions outside the Scope of the Norms for the Purpose of Article 2

Note: According to the Results of the Draft Legislation on Establishing a Carbon Border Regulation Mechanism of the Council of the European Union.

under specific circumstances, will be included in the first batch of the CBAM.[3] From the perspective of the pricing mechanism of the CBAM vouchers, the unit price of vouchers will be directly linked to the carbon trading price of EU ETS. The total price is calculated by way of the price difference method, which can be elucidated as "carbon content of export products × (EU ETS carbon price – carbon price of the exporting country)". Thus, the overall emphasis is on the coordination and consistency with the EU ETS carbon trading price.[4] From the perspective of the process that the CBAM declaration obligors need to go through, individuals and enterprises in the EU need to complete a series of procedures and fulfill a series of conditions stipulated by the CBAM if they want to import products from other countries. The start of the CBAM procedure requires the importers to meet the dual conditions in respect of subject

3 Council of the European Union, *EU Climate Action: Provisional Agreement Reached on Carbon Border Adjustment Mechanism (CBAM)*, December 13, 2022, https://www.consilium.europa.eu/en/press/press-releases/2022/12/13/eu-climate-action-provisional-agreement-reached-on-carbon-border-adjustment-mechanism-cbam/ (Last Visited on January 15, 2023).

4 *Supra* n. 8.

and behavior. Subject condition means that if the importer wants to import certain products from abroad, it shall be the qualified "Authorized Declarant" specified by the CBAM. The qualification of the authorized declarant is not limited to the region, but it should also meet the conditions stipulated by the European Union. Behavioral conditions require the declarant to apply to the country from where the product is to be imported in advance before actually importing the relevant products into the country. The relevant application documents include the declarant's basic information, EORI (Economic Operator Registration and Identification) number, main business in Europe, etc.[5] Upon meeting the conditions, the applicant shall purchase sufficient transaction vouchers from the CBAM competent authority, according to the carbon emissions measured by the authority, and only then receive the imported products to complete the transaction. At the same time, the CBAM transaction vouchers do not allow the declarant to purchase and use them belatedly or in installments. The declarant can decide the time of purchase and the quantity of vouchers purchased at its own discretion, but it should be careful that it covers the quantity that it expects to receive as imports. If the declarant purchases redundant vouchers, it can request the competent authority to repurchase them within a fixed period of time. Finally, the relevant importers also need to accept being subjected to a quarterly review by the competent authority and fulfill the annual declaration obligations and provide necessary data, including the total amount of all kinds of products imported, carbon emissions, voucher clearing and deduction amount of the previous year.[6] If fraud and disqualifications are found in these disclosures, as made from time to time, the importers will be subject to relevant penalties and import restrictions.

II. OBJECTIVES AND ESSENCE OF THE EU CARBON BORDER REGULATION MECHANISM

As early as September 16, 2020, the European Roundtable on Climate Change and Sustainable Transition (hereinafter referred to as the "ERCST") summarized and reported the two main goals of the CBAM through the webinar: Preventing Carbon Leakage and Maintaining the Fair Competition Order of Relevant

5 *Supra* n. 2, Article 5.

6 *Supra* n. 2, Article 6.2.

Products within and outside the EU.[7] But in the report after ERCST, and in the news released on the official website of the European Union, the relevant statements have also highlighted the carbon leakage prevention and fair competition maintenance functions of the CBAM many times. Therefore, preventing carbon leakage and maintaining the order of fair competition in trade are not only the direct motivation to accelerate the construction and implementation of the CBAM, but also the main goal of the CBAM.[8] In terms of the nature of preventing carbon leakage and maintaining the order of fair competition, the former belongs to the category of measures in the field of climate governance, and the latter belongs to the category of measures in the field of trade competition. In isolation, the two main objectives of the CBAM have their own legitimacy and rationality. However, on the premise where the CBAM links climate action with trade, combined with the historical background and the underlying logic of carbon leakage and carbon pricing, through analysis, it can be seen that the carbon leakage prevention that the EU wants to achieve through the CBAM is actually prevention under the garb of climate unilateralism, and the climate unilateralism attribute of the CBAM is prominent. The maintenance of fair competition that the European Union pursues through the CBAM is actually the maintenance of competition under the garb of trade protectionism, and the CBAM has a strong color of trade protectionism. Therefore, behind the accelerated construction and implementation of the CBAM by the EU, and its efforts to promote the operation of the CBAM, the strategic consideration of the EU is to achieve green hegemony in the field of climate action, build green barriers in the field of trade, and ultimately improve global competitiveness and leadership through a combination of climate unilateralism and trade protectionism.

A. Climate Unilateralism Leads to Carbon Leakage Prevention

The problem of carbon leakage and its prevention is more historical than that of the CBAM, and it stems from the differences in responsibility and degree of development of countries in the background of global climate governance. In

7 Andrei Marcu and Matteo Caspan, The Economic Impacts of an EU Carbon Border Adjustment Mechanism (CBAM), October 14, 2020, p. 2, https://ercst.org/wp-content/uploads/2020/09/20201014-ERCST-Presentation-The-Economic-Impacts-of-an-EU-CBAM.pdf (Last Visited on January 15, 2023).

8 Sean Bray, What the EU's Carbon Border Adjustment Mechanism Means for Europe and the United States, https://taxfoundation.org/cbam-eu-carbon-border-tax/ (Last Visited on January 15, 2023).

modern times, the total amount of global carbon emissions has been rising, resulting in continued warming of the climate and further deterioration of the environment. In 1995, the United Nations Framework Convention on Climate Change (UNFCCC) was adopted by the governments of the world for reducing carbon emissions in order to control rising global temperatures and protect the environment. It helped shape the subsequent Kyoto Protocol, the Copenhagen Protocol, the Paris Agreement, and other environmental protection and climate governance treaties. The obligations and responsibilities of state parties are specified in the relevant agreements. Among them, the Kyoto Protocol, which came into force in 2005, for the first time highlighted the "Common but Differentiated Responsibility Principle" applicable in order to distinguish between developed and developing countries working towards reducing carbon emissions. The Kyoto Protocol divided its signatories into "Annex I" and "Annex II" countries. "Annex I" countries were mostly developed industrial countries that were to assume the main responsibility during the first commitment period (2008-2012); "Annex II" contained mostly developing countries and the extent of their responsibilities and their target requirements were lower than those of developed countries. The Kyoto Protocol's emphasis on the "Common but Differentiated Responsibility Principle" is based on the logic that, as elucidated under the United Nations Framework Convention on Climate Change, developed countries are major emitters of greenhouse gases, such as carbon dioxide, and so it is only up to developed countries to take on more responsibility to reduce their total emissions, while other nations were required to keep their total emissions stable. In this manner, the global total of greenhouse gases released ever year could be reduced continuously.[9] However, while the agreement focuses on carbon emissions at different levels of development, it does not carefully consider the spillover effect of the "Common but Differentiated Responsibility Principle", i.e. carbon leakage. Under agreements such as the Kyoto Protocol, developed countries are more responsible for cutting emissions and have higher carbon targets than developing countries and so they tend to adopt stricter production policies for high-carbon-emitting industries at home and to aggressively regulate large-scale production. This causes the relevant enterprises to often shift production from high-carbon sectors to developing countries, with

9 Wang Youyou, Zhang Xiaotong, Zou Lei and Wu Zhifeng, The European Union's New Carbon Tax Policy: Content, Impact and Response, *International Economic Cooperation*, No. 5, 2021, pp. 13-24.

less restrictive policies, in order to reduce production costs.[10] This is the process of carbon leakage from the developed countries, and the net result is that the emissions reduction measures of the developed countries are not targeted and the total global carbon emissions are still rising. To put it bluntly, carbon leakage happens when companies shift production from countries with strict carbon emissions policies to countries with lax policies, which ultimately leads to an increase in total carbon emissions.[11] It is mainly caused by the differences in rigor of domestic emissions reduction policies and measures in different countries. Therefore, in order to actually achieve emissions reduction and prevent carbon leakage, the EU took the lead in proposing the concept of carbon tariff, and put the carbon tariff theory into practice as the CBAM. Therefore, carbon leakage is the direct cause of the CBAM and the prevention of carbon leakage is the primary goal of the CBAM. The EU expects that by increasing the cost of imported products through the CBAM, exporting countries will be forced to adopt equivalent policy measures and charge for carbon emissions, and thereby raise the cost of production and raw material, thus eliminating the way production transfer profits are generated which, in turn, is fundamental for the prevention of carbon leakage. From the perspective of the EU's unilateral prevention of carbon leakage and maintenance of its own efforts to reduce carbon emissions, the CBAM is realistic and logical. However, as the world's first border adjustment mechanism to introduce carbon pricing into the import and export chain, the impact of the CBAM is not limited to the EU itself, but extends to the vast majority of countries outside the EU. Based on the international perspective and the underlying theory of carbon leakage, it can be seen that the EU's goal of implementing measures to prevent carbon leakage with the CBAM is not simple, and the environmental protection effect of the CBAM is by no means pure. Through the CBAM, the European Union is forcing other countries to accept its own theories and solutions on carbon leakage and, in effect, pushing climate unilateralism and building its own global green hegemony.

From the perspective of attribution and distribution of carbon leakage, the international community has not reached an agreement on the subject of responsibility for carbon leakage and the degree of responsibility. The most

10 Dong Jingbo, An Analysis of the Legitimacy of Carbon Tariff under the WTO Framework — Centered on the 20 General Exceptions of GATT, *Macroeconomic Research*, No. 6, 2022, pp. 126-136.

11 Clear Center - Clarity and Leadership for Environmental Awareness and Research at UC Davis, *What Is Carbon Leakage?* https://clear.ucdavis.edu/news/what-carbon-leakage (Last Visited on January 15, 2023).

authoritative definition of carbon leakage at this stage was put forward by the Intergovernmental Panel on Climate Change (hereinafter referred to as "IPCC") in 2007. The IPCC uses total carbon emissions as the standard for measurement and considers carbon leakage as the ratio of increased carbon dioxide emissions by countries or areas that have not adopted environmental regulatory measures to reduce carbon dioxide emissions, to countries or areas that have adopted environmental regulatory measures; but the concept still does not address the issue of liability for carbon leakage.[12] The lack of international consensus on the issue of attribution of responsibility for carbon leakage leaves room for the European Union to further its views on the attribution of carbon leakage through the CBAM without scruples. Through the CBAM, the EU has trampled on the global climate governance consensus on the allocation of responsibilities under the "Common but Differentiated Responsibility Principle", while shirking its own primary responsibility for carbon leakage. First of all, the CBAM undermines the "Common but Differentiated Responsibility Principle" through the special pricing mechanism and its non-discriminatory external application. In the special pricing mechanism, the price of the CBAM certificates is linked to the EU ETS carbon price, which is mainly regulated by the market. The price is a reflection of the EU's unilateral carbon reduction policy and level of carbon and emissions reduction. The EU is now using the EU ETS carbon trading price as a price reference for the CBAM certificates, so that all exporting countries are in line with the EU ETS carbon trading price, and the consistent nature of the carbon price would mean that all exporting countries must take the EU's carbon reduction standards as their own requirements, and establish a new and standard climate governance system with the EU as the core. In this way, the CBAM is a serious departure from the "Common but Differentiated Responsibility Principle" and has the attributes of climate unilateralism and hegemony. In terms of applicable countries, as a climate governance measure, the CBAM applies to all countries sought to be covered by the CBAM regime without distinction, which is a direct violation of the "Common but Differentiated Responsibility Principle", whether it is a developing country or a developed country. Secondly, while undermining the "Common but Differentiated Responsibility Principle" the CBAM has also led

12 Meng Guobi, Carbon Leakage: Rule Game and Strategic Thinking between Developed and Developing Countries, *Contemporary Law*, No. 4, 2017, pp. 38-49.

to an unfair distribution of liability for carbon leakage, causing the EU to shift some of its responsibility for carbon leakage to developing countries. The phenomenon of carbon leakage is a direct result of developed countries undertaking more carbon reduction and emissions reduction obligations under international law, and it is directly caused by developed countries and their enterprises unilaterally. Therefore, the developed countries should be able to foresee the possibility of carbon leakage while fulfilling their obligations for carbon and emissions reduction, and should assume the derivative responsibility of preventing carbon leakage,[13] rather than requiring developing countries to join them indiscriminately in dealing with carbon leakage when it occurs. But under the CBAM framework, the EU and developing countries are equally responsible for carbon leakage. It completely neglects the derivative responsibility of the EU, of preventing their domestic manufacturing industries and service enterprises from shifting abroad, and makes the developing countries bear more responsibility for the harm caused by the EU member states for which the responsibility should be borne by the EU itself. It tilts the balance of interests in favor of the EU and has the characteristics of climate unilateralism.

In terms of solutions to the problem of carbon leakage, preventing carbon leakage is an urgent aspect and purpose of global climate governance, and is an area in which countries around the world should participate and negotiate on an equal footing. Therefore, specific programmes to prevent carbon leakage should also be jointly studied, prepared and agreed upon by countries. However, without consulting other countries, the EU has taken the lead in establishing and implementing the CBAM with a view to preventing carbon leakage through market-based regulatory measures, which is fundamentally a climate unilateralist measure. On the one hand, market-based regulatory measures are by no means the only solution to the problem of carbon leakage. Countries can also impose restrictions on enterprises that cause carbon leakage through domestic legislations after multilateral or bilateral consultations. On the other hand, the market adjustment measure of preventing carbon leakage is not the mainstream tool accepted by all countries in the world at this stage. According to statistics from the International Carbon Action Partnership (hereinafter referred to as "ICAP"), there are 34 carbon markets operating globally, while there are only eight national carbon markets outside the European Union. Most

13 *Ibid*., p. 38.

countries have not yet started building carbon markets, or are only in the early stages. Under such circumstances, the EU is accelerating the implementation of the CBAM's market-based solution for carbon leakage, ignoring the actual development of carbon markets in most countries. The implication is that the EU intends to make its carbon market a template for all countries, and a global benchmark, thus imposing a unilateral order and hegemony in the climate arena with far reaching consequences.

To sum up, it is reasonable and necessary for countries to take corresponding measures to prevent carbon leakage, but the relevant measures should comply with the "Common but Differentiated Responsibility Principle" on the one hand, in order to achieve an equitable distribution of responsibility for emissions reduction among countries; on the other hand, the views and recommendations of the majority of countries should be fully taken into account and respected in view of the urgency of action that the climate crisis demands. However, the CBAM currently sought to be implemented by the EU, although it has some function of preventing carbon leakage, has seriously undermined the "Common but Differentiated Responsibility Principle" and ignored the interests of most countries in the world. Therefore, as a concrete carbon leakage prevention measure, the CBAM is actually a carbon leakage prevention measure led by climate action unilateralism and hegemony.

B. Trade Protectionism under the Garb of Protection of Fair Competition

In order to fulfill the Kyoto Protocol's commitment to reduce carbon emissions, the EU took the lead in putting the concept of carbon market regulation into practice by establishing the EU ETS in 2005. The EU ETS is now the world's largest carbon trading market with the broadest coverage. EU ETS adopts a Cap-and-Trade Mechanism which sets a cap on each member's carbon emissions. Each member country allocates emissions to its carbon-emitting enterprises within the cap, and the units within the cap are called European Emission Units (EUAs). When a company's carbon emissions are less than its assigned amount, it can sell the surplus, and if it exceeds its assigned amount, it will be penalized, including by way of fines and cuts in the next year's cap. According to a World Bank report, the total EU ETS turnover reached US $91,910 (million) in the first year after the trial ended (2008). This means that EU-related enterprises under the EU ETS will bear the cost of carbon emissions more than their counterparts in other countries. Therefore, in order to reduce the initial economic

pressure on EU enterprises during the initial phase of the EU ETS implementation, during the first and second phases (2005-2012), the vast majority of industrial companies with high carbon emissions received free carbon allowances which the EU plans to allocate.[14] As companies were becoming more resilient to the EU ETS, the 2016 Paris Agreement provided further incentives for the EU to accelerate carbon reduction. The EU is planning to gradually reduce the allocation of free allowances; the cost of carbon emissions will gradually and effectively be included in and increase the production costs of enterprises, and then the international competitiveness of these enterprises under the EU ETS will decline. Therefore, in order to ensure the international competitiveness of domestic enterprises of EU member states, in the context of the continuous reduction of the EU ETS free quota, the EU intends to increase the carbon emission cost of other countries' relevant export products by establishing the CBAM, so as to bring them at par with the export products by EU enterprises manufactured at higher cost due to the payment of the EU ETS carbon price. From the perspective of the European Union, the CBAM is a good mechanism for maintaining fair participation of its enterprises in the international market competition. However, in-depth analysis of the origins, participants and core mechanisms of the new system in the name of the CBAM's function of maintaining competitiveness show that the CBAM actually ties the issue of trade with the issue of climate governance, and pushes for trade protectionism in the name of environmental protection.[15]

From the perspective of the maintenance of competitiveness, the reason why the CBAM takes it as its main goal is rooted in the carbon market regulation mode adopted by the European Union in China. It is precisely because the EU ETS has led to the cost disadvantage of EU Enterprises that the need was felt to use the CBAM to make up for the cost gap. However, this logic actually ignores the attribution of responsibility for the cost disadvantage of the EU ETS. The Paris Agreement reaffirms the traditional "Common but Differentiated Responsibility" approach to climate governance and encourages countries to adapt to their national circumstances and capabilities, and adopt independent, non-intrusive, non-confrontational methods to achieve national climate goals.

14 Chen Hongyan, The Legitimacy of the EU's Carbon Border Adjustment Mechanism and Its Response, *Law*, No. 12, 2021, pp. 177-192.

15 Chen Jiemin and Wang Qin, "Carbon Tariff": A New Form of Trade Protection, *Heilongjiang Foreign Trade and Economic Cooperation*, Vol. 4, 2010, pp. 30-31 & 132.

Therefore, the EU adopts a market-based regulation mechanism for carbon emissions within its borders, and stipulates that the specific policy criteria of the mechanism is a matter of its sovereignty, and that other countries have no right to interfere. However, when the market adjustment mechanism within the EU is extended to the international scale through the CBAM, even the governance measures that conform to existing international rules at the domestic level are not justified as per the new proposed order. Because the EU did not negotiate with other countries when it unilaterally established and developed the EU ETS in 2005, other countries have no participation in the EU ETS and are independent of it; therefore, the impact of EU ETS on the EU should also be borne by the EU itself. And even though climate measures are global public goods,[16] based on the "Common but Differentiated Responsibility Principle", different countries should pay different costs for the cost disadvantage of the EU. However, at this stage, the European Union seeks to use the CBAM to pass on the responsibility for the EU ETS product cost disadvantage through import duties and fees by non-discriminatory attribution of liability to all countries. In fact, it puts other countries in an unfavorable position in respect of market competition, restricts other countries' trade, and clearly grants favor and protection to domestic products. Therefore, the competitive order sought to be launched by the CBAM is actually the competitive order motivated by EU trade protectionism.

From the perspective of the participants in maintenance of a system of fair competition, the CBAM places non-EU countries in a carbon emissions market based on the standards of the EU, and the enterprises of non-EU countries have to bear the same costs as those of EU member states under the EU ETS. This arrangement seems reasonable on the surface. However, it actually ignores the differences between the EU and the participating countries, especially the developing countries' domestic conditions and natural endowments in the EU ETS. On the one hand, since the EU ETS was established in 2005 and has been implemented in phases, EU companies have more experience in participating in the EU ETS than those of other countries; EU companies have a better grasp of the details and rules of carbon trading, and there are even service agencies within the EU to help them do so. But most of the non-EU countries

16 Zhou Yamin, An International Political Economic Analysis of Unilateral Climate Regulation — A Case Study of the Construction of Green Hegemony in the United States and Europe, *World Economy and Politics*, No. 12, 2022, pp. 158-159.

that will have to go through the CBAM do not have a carbon market comparable to the EU ETS, and so domestic firms have less experience with carbon trading than EU firms. Since the CBAM is due to be enforced in October, 2023, there will not be enough time to make necessary preparations to adapt to a carbon market, and non-EU companies will be forced to bear a higher transaction cost than the EU companies to adapt to market regulation of carbon emissions. At the same time, the lack of experience in carbon trading also means that the non-EU enterprises will be at a disadvantage both in import and export trade. Therefore, the competitive order that the CBAM purports to pursue and maintain is actually a competitive order based on the protection of the competitive advantage of EU enterprises. On the other hand, in terms of the types of products exported by different countries, most of the products exported by developing countries are mainly raw material, primary manufactured goods and semi-finished goods, and their resource utilization efficiency is lower than that of developed countries. At the same time, due to the lack of low-carbon production technology, their level of carbon reduction cannot be compared with that of developed countries. Therefore, if the CBAM is implemented, it will have a bigger impact on developing countries' exports. According to a report by the United Nations Conference on Trade and Development, if the CBAM were implemented at US $44 per tonne of embedded CO_2 emissions, developing countries would see a 1.4% reduction in exports from related carbon-intensive industries, and a 2.4% reduction in exports if implemented at US $88 per tonne; developed countries are hardly affected by this since most of them have adopted advanced carbon-reduction measures to make themselves far less carbon-intensive than developing countries.[17] The UNCTAD's projections imply that the implementation of the CBAM would impose special restrictions on products originating in developing countries and achieve special protection for products originating in the EU and imports from developed countries. It is typical of trade protectionism to place developing countries at a competitive disadvantage and restrict their exports.

From the point of view of the core mechanism for maintaining a competitive order, the linkage mechanism between the CBAM voucher price and the EU ETS carbon emission trading price is the core of the CBAM's function of

17 United Nations Conference on Trade and Development, *European Union Carbon Border Adjustment Mechanism: Implications for Developing Countries*, July 14, 2021, p. 23.

maintaining a competitive order. In determining the price, the CBAM certificates are priced based on last week's average price for the EU ETS carbon emissions trading. The EU wants the importers to bear the cost of the CBAM certificates, which match the price of the EU ETS carbon emissions, in order to bridge the cost gap between domestic and foreign products. However, the connection between the CBAM and the EU ETS actually breaks the boundary between domestic market and international market of EU-related products, which will create the dominant position of the EU-related products in the international market and restrict the international trade of other countries. The core of the EU ETS is to play the role of the market in regulating carbon emissions, with the emphasis on market dominance. However, the overall size and direction of development of the market are determined by the EU itself. In the process of the development of the EU ETS, the EU will inevitably take into account the non-climate governance factors, such as the international politics and economy, in order to improve its international competitiveness. To put it bluntly, the EU ETS, as a market-based mechanism for regulating carbon emissions, is not purely market-based and is always affected by non-climate governance factors within the EU. The carbon price is also set on the basis of the EU's interest-first principle. Therefore, because of the price of the CBAM certificates being highly compatible with the price of the EU ETS emissions trading, and the export of other countries' EU-related products being also based on the EU's interest-first principle, it is undoubtedly a design to harm the export interests of other countries by deploying the trade barrier of the nature of hidden and difficult to break, thus having a distinctive element of trade protectionism.

To sum up, the CBAM takes the maintenance of a fair and competitive order overtly as its main goal, but it ignores the unique conditions and endowments of other participants. On the surface, the CBAM's carbon price levelling mechanism seems to mete out equal treatment, but in fact, it puts the EU and other countries on uneven footings, and the maintenance of the competitive order that the CBAM purportedly pursues is actually trade protectionism under the garb of protection of fair competition.

III. THE INFLUENCE OF THE EU'S CBAM ON CHINA

The CBAM has the dual attributes of climate unilateralism and trade protectionism. It is a powerful measure for the EU to reshape its international standing

and dominance by promoting the integration of climate measures and trade. Its formal implementation will result in significant challenges and profound influence on the current international economic and trade rules, as well as the global climate governance regime. As the world's largest developing country and one of the EU's most important importers, China may have to bear the brunt of a global upheaval that could be brought about by the CBAM. Therefore, it is necessary for China to reasonably assess the impact of the CBAM's implementation on itself and decide whether or not to take any measures.

A. The Impact of the EU's CBAM on China

The degree of influence of the CBAM on China will determine the response of China, and the possible impact can be evaluated from three perspectives: the impact possibility, the impact scope and the impact time.

First of all, the impact of the CBAM on China has certainty. China is within the scope of applicable countries of the CBAM, and it will be affected by the overall impact of the CBAM. The CBAM provides for exemptions and price deductions; a small number of countries and regions, including Iceland, Norway, Switzerland and the Büsingen (German region) etc., are exempt from the EU ETS and are subject to special conditions, such as association with the EU ETS. China is not on the exemption list of the CBAM and is unlikely to be exempted in the short term. At the same time, the CBAM price deduction covers countries that already charge for their carbon emissions domestically. China currently has neither a carbon tax nor a carbon trading market that can match the price of the EU ETS. There is a huge gap between China's current carbon price level and that of the EU ETS, so the price deduction effect of the CBAM is very small. Thus, there is no doubt that the CBAM will have an impact on China.

Secondly, it is predicted that the CBAM's impact on China will be extensive, and a considerable part of China's exports to the EU will be affected. Under an interim agreement reached between the European Council and the European Parliament on December 13, 2022, the CBAM was resolved to be applicable to products including steel, cement, fertilizer, aluminium, electricity and hydrogen, as well as specific circumstances of indirect emissions and downstream products. Taking into account the types and quantity of products exported from China to the EU, taking 2021 as an example, most of the products imported by the EU from China, such as machinery and chemicals, will be affected to varying

degrees by the CBAM (See Table 2). Therefore, the influence of the CBAM will be extensive. At the same time, with the increase of EU's import from China in recent years (See Table 3) and the possible expansion of the collection scope of the CBAM, the scope of the expected impact of the CBAM on China's products will continue to increase.

Finally, the impact of the CBAM on China is imminent, and it is urgent for China to deal with the challenges posed by the CBAM at the earliest possible point in time. The interim agreement reached between the Council of the European Union and the European Parliament revised the date of enforcement and the transition period for the CBAM. At the same time, it has been stipulated that the CBAM mechanism will be formally and fully implemented by 2026, which means that China's relevant export products will be affected and there is little time left for China to study and adapt to the CBAM before formally integrating within the CBAM's operational system.

Table 2: The Proportion of Major Products Imported from China by the EU in 2021

Machines and Vehicles	56.57%
Other Manufactured Goods	35.36%
Chemicals	7.7%

Data Source: Eurostat.

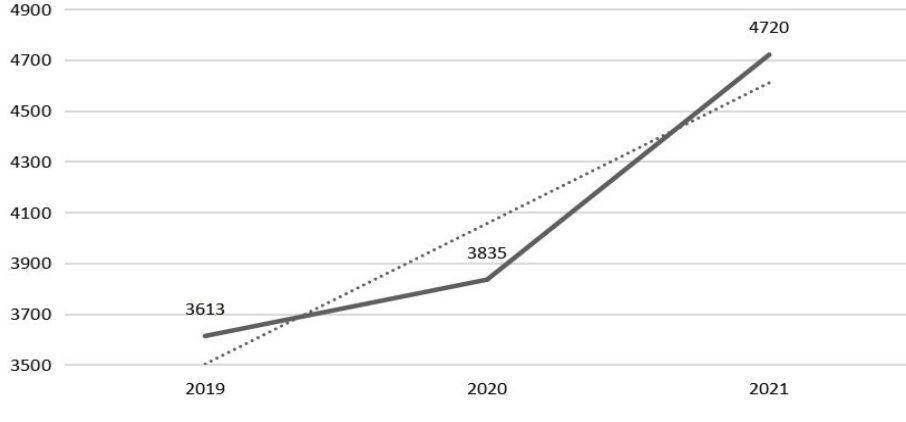

Figure 1: EU Import Trade Volume from China from 2019 to 2021 (Unit: 100 Million Euros)
Data Source: Eurostat.

B. The Positive Impact of the EU's Carbon Border Regulation Mechanism on China

1. Force Enterprises to Reduce Carbon and Other Emissions, and Help in the Construction of an Ecologically Intelligent Civilization

The CBAM is a unilateral climate measure, imposing the economic and political considerations of the EU, and belongs to the field of climate governance, having the function of promoting global carbon and other emissions reduction. For China, increase in the cost of production caused by the CBAM will force Chinese enterprises to put more factors of production into the manufacture of low-carbon goods, improve low-carbon production technologies, and ultimately reduce China's total carbon dioxide emissions on the whole, and contribute to the construction of an "ecologically intelligent society".

2. Promote the Optimization of Industrial Structure and Expand the Export Foreign Trade Market

Primary manufactured goods and raw material with low resource utilization efficiency are the main types of China's export products at this stage. Therefore, China's rapidly developing export trade has been at the cost of high energy consumption and high carbon emissions,[18] and it is not sustainable in the long run. However, due to the large demand for Chinese products in the international market and the lack of external pressure, the relevant carbon-intensive enterprises in China have not felt incentivized to take the initiative to improve production technologies or spread awareness of the need for industrial transformation and upgrading. As a result, the production factors have remained concentrated in low-technology energy-intensive industries while ignoring technology-intensive industries. In the long run, the overall optimization and adjustment of China's industrial structure will inevitably be limited. However, after relevant enterprises become the targets for adjustment by the CBAM, and as the CBAM increases the cost of production for enterprises by applying tax-like levies, in order to reduce the production costs increased due to carbon emissions, based on the principle of maximizing producer profits, relevant enterprises will gradually transform and upgrade towards low-carbon and technology-based industrial sectors, and ultimately help bring about the adjustment and optimization of China's

18 Li Huahua and Liu Jiao, Influence of Carbon Tariff on China's Export Trade and Countermeasures, *China Economic and Trade Guide*, No. 20, 2018, pp. 12-14.

overall industrial structure. Secondly, the industrial transformation of enterprises can expand the types of China's export products, alleviate the structural imbalance between energy-intensive products and technology-intensive products in China's export market, and open a new market for China's technology-intensive products.

C. The Negative Impact of EU Carbon Border Regulation Mechanism on China

1. Increase Export Costs and Worsen Export Environment

The implementation of the CBAM means that high carbon emission enterprises will bear higher cost of production and one of the main types of products that China exports to the EU is high carbon emission and low technology products. Therefore, the vast majority of Chinese enterprises exporting to the EU will have to bear the cost of purchasing the CBAM vouchers, which increases the export cost, reduces the export profit, directly limits the export ability of enterprises, and reduces the enthusiasm of enterprises engaged in export business.[19] Some enterprises will even go bankrupt because of rising costs and falling profits. The final result is that the export of entire industries may become limited and its international competitiveness reduced, which further worsens the export trade environment.

2. Limit Low-carbon Technology Transformation and Curb Emerging Industries

There are two main ways for Chinese enterprises to respond under the CBAM: the first is to bear the CBAM voucher costs and lose the previous cost advantage passively; the second is to accelerate their transition to low-carbon production technologies and reduce or even avoid costs resulting from carbon emissions. The result of the first response will be that the export of products will become limited and the foreign trade environment will deteriorate; the result of the second response may be that if enterprises complete the transition to low-carbon production technologies, they may reduce or even avoid the costs altogether. However, in the face of similar enterprises in developed countries, they will still lack international competitiveness (and even lose a great degree of domestic

19 Shen Keting, Carbon Tariff Dispute and Its Impact on China's Manufacturing Industry, *China's Industrial Economy*, No. 1, 2010, pp. 65-74.

competitiveness due to capital investment in low-carbon production technologies), which is determined by the differences in industrial structure and low-carbon production technologies possessed by developed countries and China. Compared to China, the industrial structure of developed countries has a smaller proportion of secondary industry, so these countries do not need to invest a lot of resources to achieve the adjustment and optimization of their industrial structures. At the same time, developed countries are generally more mature than China in mastering and applying low-carbon production technologies. Therefore, even if China's carbon-intensive enterprises have completed the transition to low-carbon production technologies, because they have paid a large cost for this transformation and their low-carbon production technology is not yet mature, it will be difficult for them to compete with similar enterprises from developed countries in the international market, which may eventually lead to the emerging low-carbon industry in China being restrained by developed countries and unable to develop due to lack of a free and stable international trading environment. It can, thus, be seen that the impacts of the CBAM's restrictions on China's carbon-intensive enterprises are comprehensive and far-reaching. Whether it is to passively bear the rise in costs, or actively carry out transition to low-carbon production technologies, the original international competitiveness of Chinese enterprises will be weakened.

3. Interfere with China's Carbon Reduction Process and Weaken China's Voice

China has always been an active participant in global climate governance. From striving for the construction of an ecologically intelligent civilization in its Five-sphere Integrated Plan,[20] to its development plans based on the motto that "Clear waters and green mountains are as valuable as mountains of gold and silver", China has always been committed to building a clean and beautiful home on earth. China's efforts towards global environmental protection and climate governance have won the recognition of most countries in the world, and relevant Chinese systems and concepts have also been referenced and studied by many countries. In order to fulfill the carbon and other emissions reduction obligations stipulated in the Paris Agreement, and to promote the construction of a "Beautiful China" and a beautiful world, China has clearly proposed and

20 The Five-sphere Integrated Plan refers to China's overall plan for building the socialism with Chinese characteristics, that is, to promote coordinated progress in the economic, political, cultural, social and eco-environmental fields.

is pursuing the strategic goal of achieving "carbon peak" in 2030 and "carbon neutrality" by 2060, which means that China will steadily advance the process of carbon and other emissions reduction in accordance with its own needs and plans. However, the implementation of the CBAM will increase China's export costs significantly in a short period of time, affect China's strategic pattern of maintaining the balance between economic development and climate governance, and interfere with China's plan to promote the process of carbon and other emissions reduction, which is not conducive to the realization of the goals of "carbon peak" and "carbon neutrality" within the stated time period. The EU unilaterally promoted the CBAM without consensus with other countries, trying to establish a new regime of global climate governance centered on its own considerations and forcing other countries to participate in it, which will weaken China's influence and voice in the field of global climate governance.

4. Reduce Wages and Benefits, and Increase Employment Pressure

Under the CBAM, Chinese enterprises, whether they choose to bear rising costs or choose to transform and upgrade, will all suffer from a decline in profits. The decline in profits may lead some enterprises to maintain their cost advantage by reducing employee wages and benefits in order to remain competitive. In the past, a section of enterprises chose to close down or go bankrupt due to debts because of an unprofitable business environment, resulting in a large number of people losing their jobs. At the same time, from the perspective of the export market as a whole, the decline in the export capacity, caused by the increase in costs, will reduce the share of energy-intensive and carbon-intensive enterprises in the international market, making such enterprises unable to maintain the original production scale efficiency, and ultimately lead to a decline in the demand for labor in the entire sector, and the unemployment problem in relevant industries will become more severe.[21]

IV. CHINA'S RESPONSE TO THE EU'S CARBON BORDER REGULATION MECHANISM

The implementation of the CBAM will have a wide and far-reaching impact on

21 Huang Qingbo, Wang Mengmeng, Xue Jingyan and Li Yan, An Empirical Study on the Impact of Carbon Tariff on China's Manufacturing Export Structure and Social Welfare, *China's Population, Resources and Environment*, No. 3, 2014, pp. 5-12.

China, and bring about a series of challenges, including the restriction of exports and foreign trade, and the obstruction of industrial transformation. For this reason, at this stage, China should accelerate its research and gradually prepare its response to the CBAM measures so as to be able to cope with the impact of the CBAM and safeguard national interests. On the whole, China can develop its response strategies to the CBAM at both international and domestic levels. At the international level, on the one hand, China should make good use of the existing international rules and question or even deny the compliance of the CBAM; on the other hand, China should actively negotiate with other countries to jointly build an international alternative to the CBAM, and extend its own buffer period for dealing with the CBAM. At the domestic level, China should, on the basis of giving full play to its existing policy advantages, explore new mechanisms, including improvements to its own carbon trading market and corporate carbon taxes, in order to enhance its adaptability and ability to control the directions and modifications that will be forced along by the CBAM, and overall improve its endogenous ability to deal with the CBAM.

A. China's International Strategy to Deal with the EU's Carbon Border Regulation Mechanism

1. Applying WTO Rules to Doubt and Deny the Nature of Compliance

Although the EU has repeatedly stressed the consistency of the CBAM with WTO rules in the process of promoting the CBAM, its essence is still the product of climate unilateralism and trade protectionism, i.e., trade protectionism in the name of environmental protection. From the perspective of the basic principles of the WTO, the CBAM is suspected of violating the rules against national treatment and most-favored-nation (MFN) treatment under the principle of non-discrimination. The principle of non-discrimination requires similar products to be treated in the same way, but the carbon emissions and carbon content of products at this stage have not yet become the standard for distinguishing product categories.[22] Therefore, the EU is suspected of violating the principle of national treatment by charging the CBAM fees for similar products from abroad. At the same time, the CBAM takes the degree of carbon emission charges of the applicable countries and the correlation between the carbon trading market and

22 *Supra* n. 15, p. 128.

the EU ETS as the applicable specific conditions and standards, and treats countries differently, which is suspected of violating the most-favored-nation treatment principle. On the basis of trampling on the principle of non-discrimination, the CBAM places the EU and other countries in an unfair international market competition environment, which is contrary to the original intention of the WTO to maintain fair competition. Therefore, China can submit the fact that the CBAM violates the basic principles of the WTO to the WTO for trade policy review of the CBAM. Secondly, the key clauses cited by the EU in promoting the CBAM compliance are the general exception clauses stipulated in Article 20 of the GATT. However, according to the practice of the WTO, under the existing world trade system, the certification process of the Article XX of the GATT 20 is relatively complicated, and the technical rules are relatively complex. The EU accelerates the establishment of the CBAM in line with the WTO rules in a short time, which will inevitably lead to technical mistakes and disputes. Even if the CBAM can comply with the WTO rules, legally, the cost of the CBAM's implementation will be very high.[23] Therefore, China can start with the theoretical analysis and practical research on Article 20 of the GATT, cooperate with other countries to question and deny the compliance of the CBAM, and use the WTO rules to resist the implementation of the CBAM.

2. Actively Participating in the Formulation of an International Carbon Tariff System

The CBAM will officially enter the transition period for trial operation in October, 2023, and will be fully implemented by 2026. However, due to the current suspension of the WTO Appellate Body, the process for determining whether or not the CBAM is WTO compliant is relatively complex and will be time-consuming. Therefore, China has no time to use the WTO rules to resist the CBAM in the short term. As the United States, Japan and other countries pay more attention to carbon tariffs, the international nature of carbon tariffs is constantly strengthening and gradually becoming a mechanism with global influence. Therefore, at this stage, China can take the implementation of the CBAM in the EU as an opportunity to actively explore and establish an alternative fair and reasonable international carbon tariff system with other countries, and replace the CBAM with an international carbon tariff system that will safeguard its legitimate interests. Moreover, even if an alternative international carbon

23 *Supra* n. 15.

tariff system cannot be fully established in the short term, the multilateral consensus reached by countries in the negotiation process can effectively impact the operation of the CBAM. Specifically, in the design of the international carbon tariff system, China should work with other developing countries to uphold the "Common but Differentiated Responsibility Principle" in the field of climate governance. In terms of the specific contents of an international carbon tariff system, such as the taxable items, tax base, taxation rates, collection methods, etc., the differences between developing and developed countries in the industrial export structure and low-carbon production levels should be fully considered in order to conform to the "Common but Differentiated Responsibility Principle", and the establishment of an international carbon tariff system in line with the WTO principles of fair competition and non-discrimination, and backed by the consensus of a majority of countries, should be promoted. At the same time, on the issue of identification and allocation of responsibility for carbon leakage, China should negotiate with the majority of developing countries as well as the developed countries.[24] We should resolutely oppose the absence of liability of developed countries on the issue of carbon leakage, and strive to build an international carbon tariff system that conforms to the principle of equitable distribution of responsibility for carbon leakage.

B. China's Domestic Strategy to Cope with the EU's Carbon Border Regulation Mechanism

1. Adhering to the Construction of an Ecologically Intelligent Society and Implementing the Concept of Green Development

From the perspective of environmental protection and climate governance, the CBAM is consistent with China's national policies and strategic objectives. In the report of the 18th National Congress of the Communist Party of China (CPC), the CPC clearly proposed the overall layout of the objectives of the Socialism with Chinese characteristics, which is "Five in One". It took the construction of an ecologically sound civilization as an important part of the overall layout, and formulated a series of policies and regulations around environmental protection and climate governance. For the first time, the report of the 19th National Congress of the Communist Party of China regarded "Beautiful

24 Lan Qingxin and Duan Yunpeng, The Essence, Impact and Countermeasures of Carbon Tariff, *Administrative Reform*, No. 1, 2022, pp. 37-44.

China" as an important goal of a modern socialist power, highlighting the development goals and strategies of a green and low carbon economy. Therefore, China has the policy basis and advantages consistent with the objectives of the CBAM at the level of domestic environmental protection and climate governance. Under the guidance of relevant policies, China has made a series of major achievements in the construction of ecologically sound communities and promoted environmental protection. According to the report on ecological and environmental protection issued by the Publicity Department of the Central Committee of the Communist Party of China, in the ten years since the 18th National Congress of the CPC, China's carbon dioxide emissions per unit of GDP have decreased by 34.4%, the proportion of coal used for primary energy consumption has decreased by 12.5%, and renewable energy generation has exceeded 1 billion kilowatts.[25] That is, with the decrease of carbon dioxide emissions per unit of GDP and the proportion of coal consumption, it can also be predicted that the CBAM, which is oriented towards carbon and other emissions reduction, will reduce its overall regulatory capacity and degree in China. Therefore, in order to reduce the negative impact of the CBAM, at this stage, China should continue to promote the construction of an ecologically intelligent society, implement the concept of green development, based on the existing environmental protection and climate governance policy foundations, give full play to the policy advantages, and constantly improve its endogenous ability to cope with the forthcoming impacts of the CBAM.

2. Promoting Supply-side Structural Reforms and Strengthening Domestic Economic Cycle

Compared with developed countries, the negative impact of the CBAM on China will be larger, mainly due to the structural imbalance between supply and demand within China and the weak domestic circulation capacity. From the perspective of China's domestic supply and demand relationship, most of the products provided by the supply-side are low-end energy-intensive and labor-intensive products, while the demand for such products is gradually decreasing, and the demand for technology-intensive products is rising. Therefore, many carbon-intensive industries, such as steel and cement, have serious excess

25 *See* the contents of the press conference of the Publicity Department of the CPC Central Committee, and the transcript of China's ecological environment construction in the past ten years, https://baijiahao.baidu.com/s?id=1744022956732884898&wfr=spider&for=pc (Last Visited on January 15, 2023).

manufacturing capacity problems. The only utilization of these products resulting from excess manufacturing capacity is by way of export trade, and one of the avenues for export trade is the EU that will soon implement the CBAM. Therefore, in order to reduce the negative impacts of the CBAM on relevant Chinese enterprises, China should actively promote internal supply-side structural reform, adjust and optimize the supply-side industrial structure to promote the rational distribution of production factors, reduce the policy preference for excess manufacturing capacity sectors and increase support for technology-intensive sectors. At the same time, while promoting the reform and optimization of the supply-side structure, China must also strengthen the dominant position of domestic circulation within the new development pattern of "dual circulation", further invigorate the domestic market, improve the functioning of the domestic market to drive China's economic growth, and reduce the excessive dependence on the international market so as to prevent/reduce the economic damage caused by the reduction of the international market as a result of the CBAM.

3. Accelerating the Construction of a National Carbon Emissions Trading Market and Striving for More Say in the Issues about Carbon Pricing

There are two main ways to reduce the negative impacts of the CBAM: one is to be exempted from the application of the CBAM, and the other is to deduct the price of the CBAM vouchers. From the perspective of exemption, the CBAM directly exempts countries that have joined the EU ETS or have realized the connection between the carbon trading market and the EU ETS. From the perspective of deductions, the CBAM allows importers to deduct the carbon price paid for imported products in the exporting country, and the payment of carbon price mainly includes carbon trading or carbon tax. Therefore, the construction and development of a country's carbon trading market is a key factor in limiting the negative impact of the CBAM. Through the carbon trading market, China can not only try to connect with the EU ETS to secure exemption from the application of the CBAM, but also charge domestic carbon fees to offset the CBAM prices. At the same time, as countries around the world pay more attention to the carbon and other emissions reduction, the market based tools for reducing carbon emissions have gradually become an internationally recognized and important climate governance measure. Therefore,

whether for the purpose of reducing the negative impact of the CBAM or based on the consideration of long-term and in-depth participation in international cooperation on climate governance, China should accelerate the construction of its national carbon emissions trading market at this stage, strengthen the regulatory role of the market in reducing carbon emissions, and strive for more say and the right to be consulted on the issues relating to carbon pricing in the international arena without being subjected to the EU ETS. On the one hand, China should fully absorb the experience and lessons of the EU ETS, because the EU ETS is the largest and most mature carbon emissions trading system in the world. Through the study of its theory and practice, we can quickly find the key to the establishment of carbon emissions market regulation. On the other hand, China should, based on the actual situation of supply and demand structure and the industrial development in different regions of the country, continue to expand the pilot project of carbon emissions trading market in an orderly manner, establish a set of laws governing carbon emissions trading system in line with China's national needs and policies, strive for more say in matters relating to carbon pricing in the international arena, and strive to promote China's carbon trading market regulation system in the world, so as to achieve the joint promotion of climate governance and economic development.

4. Adjusting and Optimizing the Taxation System and Exploring the Creation of an Enterprise Carbon Tax

In addition to collecting domestic carbon emission fees through the carbon trading market to offset the CBAM voucher prices, it can also be collected through a carbon tax. Taxation has significant advantages, being practical in nature and mandatory at a national level. Therefore, it is an efficient and reasonable way for the country to charge carbon fees by directly imposing carbon taxes on enterprises. The so-called carbon tax refers to a tax specifically aimed at carbon emissions and taking carbon dioxide emissions as the reason and incident of taxation. Regardless of the way in which emissions are released by an enterprise, collection of the tax and its elements are directly related to the carbon dioxide emissions.[26] Although China's current environmental protection tax, resource tax and even vehicle and vessel tax are directly or indirectly related to

26 Xu Wen, Research on Carbon Tax Collection under Carbon Emissions Peak and Carbon Neutrality Targets, *Tax Research*, No. 8, 2021, pp. 22-27.

carbon dioxide emissions, none of them take the carbon dioxide emissions as the direct taxable event. Therefore, even though China has actually collected fees related to carbon dioxide emissions through taxation, due to the lack of pointed and prominent nature of the object, it is still not a deductible carbon emission charge by the CBAM's standards. Therefore, at this stage, it is necessary for China to consider imposing a corporate carbon tax with carbon dioxide emissions as the direct taxable incident in order to offset the price of the CBAM vouchers and reduce the negative impact of the CBAM on China in the future.