



Interpretation and Analysis of EU and US Carbon Tariff Policies

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Abstract. Carbon tariff mechanism has been one of the major focuses of great power competition concerning climate change with increasingly growing impact on the positions and roles of many countries in global trade and industry and value chains as well as the globalization of various industries. The present article interprets the history of development of the carbon tariff policies in the EU and US and also relevant laws and regulations. The influences and countermeasures of the carbon tariff and other trade barriers are analyzed herein.

Keywords: Carbon tariff, European Union, United States

1 Introduction

The rise of carbon tariffs stems from the global climate governance and the need to prevent carbon leakage. Economies like Europe and the United States use carbon border adjustment mechanisms to balance domestic emission reduction costs with international trade fairness. The European Union Carbon Border Adjustment Mechanism (CBAM) is the first implemented carbon tariff system. Its transition period began in October 2023, requiring importers in six high-carbon industries such as cement and steel to report embedded carbon emissions. Starting in 2026, fees will be formally linked to the EU Emissions Trading System (EU ETS) prices, gradually replacing the industry's free allowances. Although the United States has not yet established a unified carbon market, it is actively accelerating relevant legislation. The Clean Competition Act (CCA) and the Foreign Pollution Fee Act (FPFA) plan to levy taxes on products with high pollution levels. This article provides a detailed introduction to the CBAM mechanism and U.S. carbon tariff-related policies, and analyzes their significant impacts.

2 Policy Interpretation

2.1 European Union

The CBAM [1], also known as the Carbon Border Tax/Tariff, is the EU taxation imposed on the carbon emissions of some import goods. It is basically adopted to prevent carbon leakage[2].

Carbon leakage acts as a stringent control measure of the EU ETS over the EU enterprises featuring high energy consumption, where higher levies are imposed[3]. In order to reduce production cost, the enterprises may expand imports from other countries with flexibly loose climate policies. This results in the transfer and relocation of production business and emission of carbon intensive industries from the EU to other countries and regions, and even higher rather than lower carbon emissions total worldwide. The EU therefore intends to reduce carbon leakage by imposing carbon tariff and encourage other countries to adopt stricter climate change policies[4]. Figure 1 shows the cost differences in enterprise product exports under different conditions, with or without the CBAM mechanism.

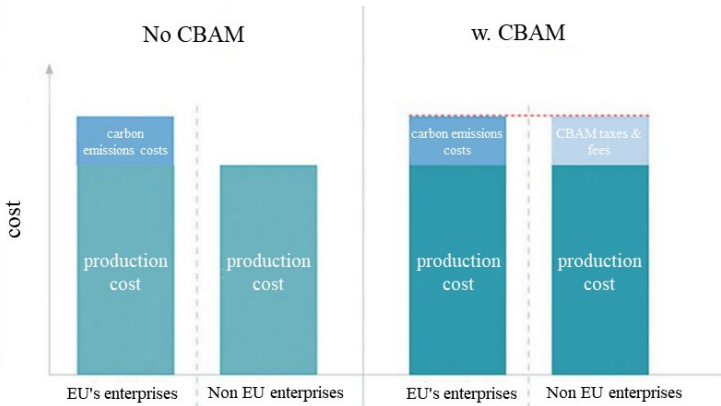


Fig. 1. CBAM Principle Diagram.

Development History.

EU ETS was established in 2005. Some energy and raw materials industries featuring high carbon emission in member nations were under the authority of the EU-ETS, while EU importers were not controlled. EU carbon trading once witnessed a historical high of 100Euro/ton in 2023. Although the carbon price has dropped to 65-70 Euro/ton in 2024, it is now the globally highest priced carbon trading system with the highest compliance costs to adhere to carbon emission regulations[5].

Feasibility of carbon tariff on imports were discussed since 2007. France has been all through the most active supporter of carbon tariff within the EU. In 2007, Chirac, the French president back then, proposed the imposition of carbon tariff; in 2009, the French then-president Sarkozy emphasized that the EU should impose tariff on the exports from the countries with weaker emission reduction policies and measures; and in 2016, French proposed that the imported goods with high carbon emissions should

be subject to the EU-ETS. However, the consensus among the EU members and international society was not reached, and there was not any constructive breakthrough on the EU carbon tariff proposal, which remained an initiative.

In 2009, the EU proposed a radical climate targets. The UK withdrew from the EU in 2009, and the Green Party of Germany became politically more prevailing. In the same year, former German Federal Minister of Defence Ursula von der Leyen took office as president of the European Commission and issued the strategic development plan, the *European Green Deal*, which made the promise that GHG emission in 2030 would be 55% reduced comparing that in 1990 and carbon neutrality in 2050. In the *European Climate Law* effective later in 2021, the climate targets were legally established thereby[6].

CBAM had been put on the “fast lane” into EU legislation since 2021[7]. In July 2021, the European Commission voted for the package of action measures Fit for 55, which was formulated for implementation of the emission reduction targets set in the European Green Deal, and CBAM was included. CBAM legislative process was officially initiated subsequently, and the EU CBAM entered into force in 2023 after 2 years of legislation. Figure 2 shows the CBAM development timeline.



Fig. 2. CBAM Development Timeline.

Main Content of CBAM.

Since 2026, importers shall bear carbon emission fees. CBAM will require importers to purchase “CBAM certificates” according to the carbon emissions of respectively imported goods from designated organizations, and the certificates shall be priced in correlation with EU-ETS price. Carbon tariffs are essentially designed to equalized the carbon costs of imported goods with those of EU-made goods. This will prompt other countries to establish respective ETS or levy carbon tariff, whereby to reduce CO₂ emissions through carbon pricing, or raise carbon price to align with that of the EU. The payable carbon tariff under CBAM can be calculated as following.

$$\begin{aligned}
 \text{CBAM – regulated price} &= (\text{carbon content embedded in exported goods} \\
 &\quad - \text{free allowance granted to comparable EU goods under EU} \\
 &\quad - \text{ETS}) * (\text{EU carbon price} - \text{China carbon price})
 \end{aligned}$$

The transitional period starts on 1st October 2023 and ends on 31st December 2025[8], wherein the importers shall render carbon emissions reports of imported goods, while not have to make the payment. Eventually, CBAM will be officially performed as of 2026 and fully effective by 2034. The proportion of free allowances and allowances subject to charges under the CBAM during the transition period up to 2034 is shown in Figure 3.

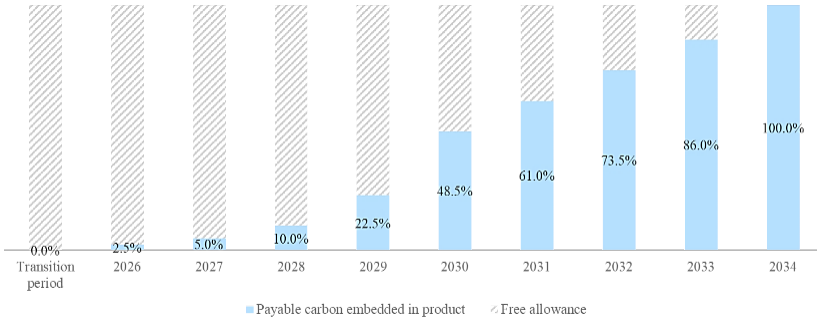


Fig. 3. Ratio of Free Allowance to taxable allowance under Carbon Border Adjustment Mechanism during transitional period -2034.

CBAM covers 6 categories of products. In the transitional period, CBAM concerns such products as cement, iron and steel, aluminium, chemical fertilizer, electricity and hydrogen. As for iron/steel, aluminium and hydrogen, the direct emission during production (e.g. the emissions from combustion of fossil fuels, heating and cooling processes) shall be charged only; as for cement, electricity and chemical fertilizers, CBAM charges both the direct production emission and the indirect emission (e.g. the emissions caused by electric power consumption). Before the end of the transitional period, the European Commission will assess again if the wider product coverage and larger calculation scope shall be considered[9].

Calculation of carbon emissions covers the carbon emissions in goods production and raw materials production. Imported goods are classified into “basic goods” and “processed goods”. “Basic goods” refer to those requiring simply basic materials during production (e.g. pig iron); while “processed goods” refer to those requiring other basic goods during production (e.g. iron tubes). Regarding processed goods, the carbon emissions refer to not only the emissions in its production process, but the emissions of its upstream materials in production (i.e. basic goods) as well.

See calculation of the carbon emissions of basic goods.

$$SEE_g = \frac{AttrEm_g}{AL_g} \quad (1)$$

SEE_g : carbon emission per goods g;

$AttrEm_g$: emission from goods g, i.e. the carbon emissions generated in production process of goods g;

AL_g : activity data of goods g , i.e. the total mass of goods g produced in the relevant production process within reporting period.

See formula 3 for the calculation of the carbon emissions of processed goods.

$$SEE_g = \frac{AttrEm_g + EE_{InpMat}}{AL_g} \tag{2}$$

EE_{InpMat} : total of carbon emissions from input materials in production.

$$EE_{InpMat} = \sum_{i=1}^n M_i \cdot SEE_i \tag{3}$$

M_i : mass of input material i consumed in production process;

SEE_i : total of carbon emission per ton of input material i .

EU will define the default values for calculation of carbon emission. According to CBAM requirements, the carbon emissions of the products imported from 1st July 2024 to 31st December 2025 can be calculated by relevant enterprises based on the default values (every product under CBAM is assigned with an EU combined nomenclature code (CN code), which matches respectively a matching default value); while the carbon emissions calculated based on default value shall account for max. 20% of total emissions. During transitional period, globally harmonized default values are available; when CBAM is officially effective, the country-specific or even region-specific default values will be provided. The key aspects of CBAM implementation during the transition and definitive phase are shown in Table 1.

Table 1. Key aspects of CBAM implementation during transitional period and definitive phase.

	Transitional period	Definitive phase
Implementing regulation	Implementing Regulation (EU) 2023/1773	/
Entity of liability	CBAM declarant (EU importer or importer’s indirect customs representative)	Authorized CBAM declarant (authorized EU importer or importer’s indirect customs representative)
Obligations	CBAM report for previous quarter shall be rendered quarterly no later than a month after the end of the quarter. The report describes: <ol style="list-style-type: none"> 1) Info. on CBAM-covered imports in the previous quarter; 2) Total carbon emissions embedded in CBAM-covered goods; 3) Indirect carbon emissions embedded in CBAM-covered goods; 4) Carbon costs paid by country of origin (if applicable); 	CBAM declaration for previous calendar year shall be rendered before 31 st May each year and covers the topics below: <ol style="list-style-type: none"> 1) Total volume of CBAM-covered imports in the previous calendar year; 2) Total carbon emissions embedded in CBAM-covered goods; 3) Total number of CBAM certificates to be surrendered (wherein the carbon costs paid by the country of origin has been deducted); 4) Copy of audit report for embedded carbon emissions;
	Non-EU enterprises exporting goods to the EU market shall provide the required data and documents related to calculation of carbon emissions.	

Revision Proposal for Simplification of CBAM Regulation.

On 26th May 2025, the EU Commission released a comprehensive simplification proposal, aiming to alleviate the administrative burden on importers. The *Proposal of European Parliament and Council of the EU for Simplification and Enhancement of Carbon Border Adjustment Mechanism (CBAM)* (hereinafter referred to as “*Simplification Proposal*”) was involved. On 22nd May 2025, the European Parliament voted for the *Simplification Proposal*. On 18th June, the European Parliament and Council of EU reached a consensus on the final plan for CBAM simplification. Eventually, the *Simplification Proposal* will come officially into effect on the third day after the issue of the *EU Official Journal*.

The Simplification Proposal makes adjustments to CBAM in terms of declaration scope, audit process, carbon emission calculation, deadlines and certificate requirement.

CBAM declaration scope is narrowed and small-/medium-sized importers are no longer subject to reporting obligation. Allowing for a large number of small-/medium-sized importers, competent CBAM authorities in EU member states have to undertake excessive administrative responsibilities, and therefore their resources cannot be concentrated on monitoring the high-emission import to ensure the compliance. The *Simplification Proposal* suggests a narrowed scope of reporting entities, wherein the “importers with annual import value greater than 150 Euros” is to be modified to “importers with annually imported CBAM-regulated products (steel & iron, aluminium, chemical fertilizers and cement) exceeding 50 tons in cumulative mass”. According to EU estimation, approx. 91% of importers will be exempted from CBAM compliance obligation, while ensuring min. 99% of carbon emissions are supervised by CBAM.

Importers can be granted CBAM authorization without mandatory consultation procedure. Currently, if an importer applies to become an “authorized CBAM declarant”, it has to undergo a mandatory consultation. Generally the importer will spend tens of thousands of Euros to entrust the application for CBAM authorization to customs indirect representative as its agent. *Simplification Proposal* suggests to replace the mandatory consultation procedure with an optional procedure, and therefore importers will no longer be required to hire customs indirect representatives. Importers will then entrust CBAM declaration and calculation of carbon emissions to “CBAM representatives”, while the importers shall still remain full legal liability for CBAM compliance. This will alleviate the economic and administrative burdens on the importers.

Calculation methodology for carbon emissions is clarified and double counting can be eliminated. Calculation of carbon emissions by by-products of some aluminium and steel & iron products and the secondary processing emissions is complicated, and the calculation rules for indirect carbon emissions from electrical consumption are not explicit. In addition, double counting occurs regarding the carbon emissions caused by the upstream raw materials (precursors) produced in the EU for CBAM products and the carbon emissions generated by the production of CBAM products. *Simplification Proposal* suggests that, as for certain aluminium and steel & iron products, the calculation of carbon emissions from by-products and secondary processing can be excluded,

and the direct carbon emissions relevant to electricity consumption can be only considered in emissions calculation. The upstream raw materials as inputs for CBAM products, which are already controlled by EU-ETS or the carbon pricing system relevant to the EU-ETS, are allowed not to be counted in CBAM carbon emission calculation.

The deadlines for CBAM declaration and certificate surrender / buyback can be extended. Currently, the deadline for annual CBAM declaration and certificate surrender is set at 31st May, which is quite a tight schedule for the majority of declarants. Annual deadline for EU-ETS has been extended from 30th April to 30th September, which differs from that for CBAM declaration. *Simplification Proposal* suggest that the annual deadline for CBAM declaration and certificate surrender can be extended to the 31st August, the deadline for certificate buyback extended to the 30th September and the revocation date of certificate set at 1st October, whereby to provide importers with more sufficient time for compliance.

Number of certificates subject to mandatory pre-purchase is reduced and full certificate buyback is allowed. The number of certificates by the end of each quarter held by the present CBAM declarant in the CBAM account is required to be greater than or equal to 80% of the carbon emissions contained in the products imported since the beginning of the year. After annual surrender, the max. number of certificates to be repurchased by the competent authority of a member state is set at 10% of the total number of certificates purchased by the declarant the previous year. Thus, the declarant may suffer financial losses due to excessively purchased certificates. *Simplification Proposal* suggests that the ratio shall be reduced from 80% to 50%, and the certificate buyback restriction shall be adjusted, whereby to allow a declarant to sell all the excessively purchased certificates back to CBAM execution organization, and the buyback option is applicable within the year of purchase. Meanwhile, the start of sale of certificates in 2026 is planned to be postponed to as late as 1st February 2027, during which a declarant is allowed to purchase certificates to cover the emissions embedded in the products imported in 2026. The certificates are priced based on the quarterly average EU-ETS closing price, and the number of certificates to be purchased by importers will then be more precise. In addition, the EU Commission will determine the default carbon price of each nation, and a declarant is allowed to select the default carbon price or provide evidence of actually paid carbon price under the currently effective CBAM regulation, to apply for deduction.

2.2 US

The proposal of carbon tariff in the US encountered multiple twists and turns. At present, the Democratic Party and Republican Party both uphold carbon tariff legislation, while certain issues, such as if domestic enterprises shall be subject to carbon tariff imposition, what imposition methods shall be adopted and what indexes shall be defined in the bill, are still under discussion. Notwithstanding, US carbon tariff bill has been preliminarily drafted[10].

Development History.

Since 2007, carbon tariff proposals have been put forward many times in the US. In 2007, the *Low Carbon Economy Act* was submitted while failed to get approved by the Senate. Several climate-relevant proposals concerning carbon tariff were put forward thereafter, focusing on the carbon allowances to be purchased by the importers of energy-intensive products. In 2009, the House of Representatives voted for the proposal of *American Clean Energy and Security*, aiming to impose carbon tariff on carbon-intensive imports since 2020. However, this proposal was rejected by the Republican-dominated Senate in the end as the carbon pricing issue brought on a conflict with the interests of the Republicans. Due to the carbon pricing not well settled, carbon tariff issue did not make any progress during the 2 Obama's presidential terms (2009-2017). In the first Trump's term (2017-2021), the US withdrew from the *Paris Agreement* and tried to rejuvenate coal industry. Therefore, fossil fuel sectors like coal and oil business were given priority for development, while the issues relevant to carbon tariff were put on hold.

During Biden's term (2021-2025), both Parties proposed respective carbon tariff bills. Biden took office as the president in 2021, and then the US rejoined the *Paris Agreement*. Subsequently, the Democrats and Republicans both submitted proposals. The Democrats put forward the Clean Competition Act (CCA) in 2022, which differed significantly from the previous versions of carbon tariffs as the carbon tax obligation defined therein was applicable to both high-carbon imports and high-carbon US-made products. The Republicans proposed the Foreign Pollution Fee Act of 2023 (FPFA) in 2023, which intended to impose carbon tariff on imported goods only.

Survey plan for carbon emission data of products was jointly proposed by both Parties and set the foundation for later implementation of carbon tariff. On 7th June 2023, Democrat senator Chris Coons and Republican senator Kevin Cramer put forward a joint proposal of Providing Reliable, Objective, Verifiable Emissions Intensity and Transparency Act of 2023 (PROVE IT) for legislative drafting. PROVE IT was developed to direct the Department of Energy to collect the data on the emissions intensity of certain products produced in the US as taxation criteria.

Both Parties by now proposed respective carbon tariff plans, while the major divergence was whether the carbon fees should be levied on the US-based enterprises. At present, the plans of the both Parties are in the stage of legislative proposal, and it will take certain time for either to be an effective act[11]. The US carbon tariff policy timeline is shown in Figure 4.

Main Topics of CCA and EPFA Proposals.

Democrat CCA Proposal.

Taxable scope. CCA levies tax on imported and locally made energy-intensive primary products, which are categorized into (20) carbon-intensity industries according to the North American Industry Classification System (NAICS), such as fossil fuels, refined petroleum products, petrochemicals, chemical fertilizer, hydrogen, adipic acid, cement, iron and steel, aluminium, glass, pulp, paper and ethanol.

Levy method. Allowing for the average carbon content of the US-made products as the benchmark, CCA levies tax on the imported goods and locally made products that feature higher carbon content, while the imports are taxed individually and the domestic products are taxed based on production facilities. The data for benchmark calculation are sourced from the domestic manufacturing enterprises producing the equivalent products and assuming the obligation to report GHG emissions to the US Environmental Protection Agency (EPA). The US Department of Treasury is responsible for calculation of the average carbon content (covering scope 1 and scope 2 emissions) of individual US-made product, based on CO₂ emissions, annual electricity consumption and annual output, as the benchmark value. In 2024, the benchmark is 100%; from 2025 to 2028, benchmark value drops every year by 2.5%; after 2029, it drops yearly by 5% till zero.

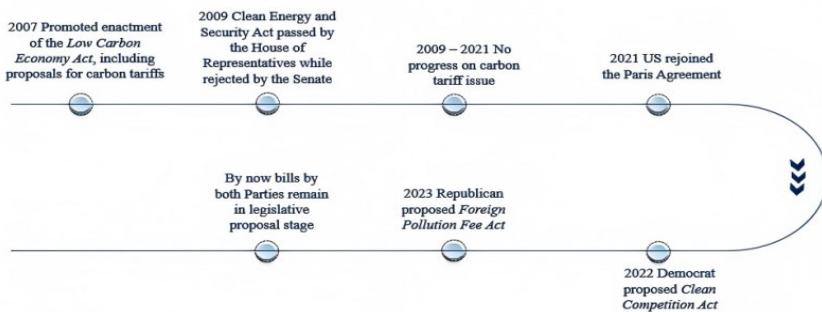


Fig. 4. US carbon tariff policy timeline.

Taxation timeline. The carbon tax is initially levied at 55 USD/ton with an annual increase of 5%. As for imported goods, the taxable scope will be extended to downstream products, i.e. if an imported manufactured product contains 500-pound primary products that are subject to CCA criteria, the imported product should be taxed accordingly since 2026; and the threshold should be further lowered to 100 pounds as of 2008. The industrial average carbon intensity of the country of origin will be referred to for the carbon content of the imported products. If the emission data of the country of origin are not reliable or verifiable, the country-specific economy-wide carbon intensity can be referred to. The primary products made in the US are eligible for carbon tax rebates on exportation, while the manufactured products are not qualified. The US will exempt imports from the least developed countries from paying the tax.

Republican FPFA Proposal.

Taxable scope. The FPFA taxable targets are energy products, such as natural gas, crude oil, hydrogen, minerals, solar cells and wind turbines, and manufactured products, such as aluminium, cement, glass, iron, steel, petrochemicals and paper. New imported products can be listed if 50% of domestic US manufacturing enterprises submit applications, and pollution intensity value, ratio and product coverage will be assessed again every 3 years.

Levy method. Fees are determined as the products of rates and product values, where the fee rates are tiered based on the difference of GHG emission intensity values

between imported products and US-made products. The GHG emission intensity values of US-made products are calculated based on the GHG data provided by the EPA, and the GHG emission intensity values of imported products are calculated or modelled by national labs according to relevant formulas. The verified data provided by import enterprises can also be adopted, if available. The products with 10-50% difference of GHG emission intensity are classified into tier A, 50-200% are classified into tier B, while the products with a difference greater than 200% are classified into tier C. The fee rates escalate at an increment of 5% per tier (e.g. 10%, 15%, 20%) with multiple sections. The Department of Energy is responsible for determination of specific rate.

Taxation timeline. FPFA proposal will be implemented in 3 stages. In stage 1 (year 1-6 since the act becomes effective), carbon tariff will be imposed on the products with 50% higher GHG emission intensity than that of the equivalent products made in the US; in stage 2 (year 7-12 since the act becomes effective), carbon tariff will be imposed on the products with 25% higher emission intensity; and in stage 3 (after year 12), carbon tariff will be imposed on the products with 10% higher emission intensity. Certain products will be less taxed or immune to carbon tariff. For example, the goods imported from the countries of free trade agreement with the US and the GHG emission intensity is not greater than 50% of that of the US-made products, the products that are relevant to national security and imported from specific countries, or the products made in the US account for less than 5% of the domestic demand. Table 2 shows the differences in key points between the CCA and EPFA proposals.

Table 2. Comparison of key points in the CCA and EPFA proposals.

Content	Democrat CCA proposal	Republican FPFA proposal
Taxable scope	Imported or domestically made energy-intensive primary products	Imported energy products and industrial products
Levy method	Both domestically made and imported products with carbon content greater than the benchmark values will be taxed	Fee = rate × product value
Taxation procedure	Carbon tariff will increase year by year while benchmark lowers annually, and the taxable scope will be expanding gradually since 2026	Implemented in 3 stages

3 Impact Analysis

In view of the carbon tariff policies, such industries as iron and steel, aluminium and cement are relatively more affected. Developed countries and regions have implemented the carbon tariffs, with the background and objectives to be summarized as “one transfer and three restructuring attempts”, in particular the policies are promulgated to transfer climate governance costs and restructure market competitive environment, industry supply chains and international economic and trading rules. The carbon tariffs,

however, will not affect simply iron and steel as well as aluminium manufacturing industries, but potentially also influence the global expansion of enterprises across all sectors.

Firstly, every export-oriented enterprise will be subject to raised compliance cost, and the Going Global progress can be impeded. The taxable scopes of EU CBAM and the Democrat / Republican carbon tariff proposals can possibly be extended. Almost every export enterprise worldwide has to seriously observe the carbon tariff policies before commencement of international commodity trading, and study and assess the impact due to certain policies. The enterprises in the industries concerned will also perform carbon emission management and obtain carbon emission accreditation conferred by designated foreign certification bodies. Allowing for the implementation of carbon tariff policies, enterprises are forced to invest more time and resources in compliance issues, which will bring on higher indirect compliance cost. With regard to the compliance costs in practice, the study by Bixuan Wu and other experts indicates that Egypt, Turkey and India feature larger proportion of CBAM-covered exports to EU market and apt to be vulnerable to the EU CBAM policy; China is the largest steel & iron and aluminium exports supplier to the EU market and may be confronted by greater EU carbon tariff pressure. The proportion of CBAM products in the total exports to Europe and the comparison of the 2022 trade volume of CBAM products exported to the EU by various countries can be seen in Figures 5 and 6.

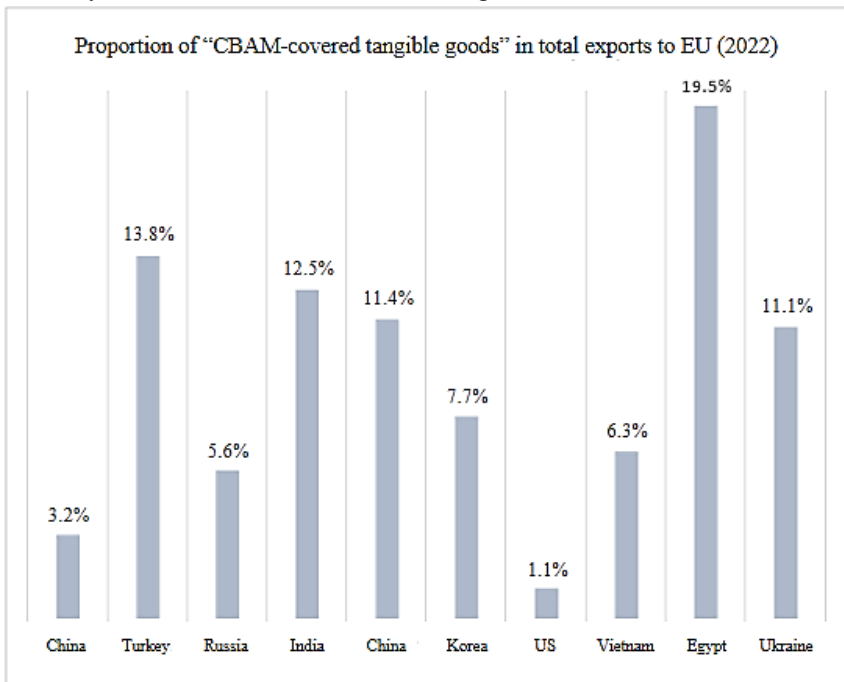


Fig. 5. Proportion of CBAM-covered products in total exports to EU market.

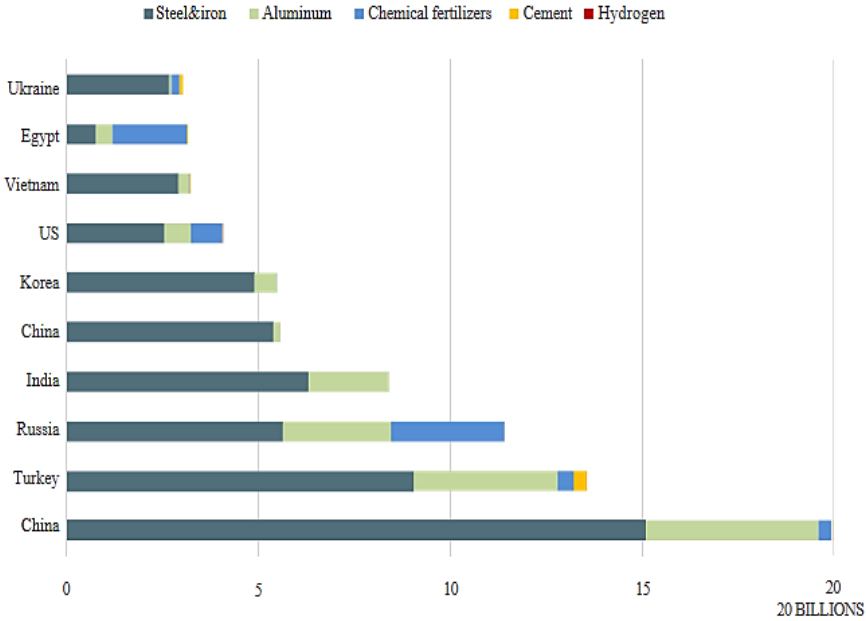


Fig. 6. Comparison of trading volumes of CBAM-covered exports to EU market by country (2022).

Secondly, carbon tariff policies are the major tool for foreign governments to adopt for protection of respective domestic industries. According to the study by Bixuan Wu and relevant researchers, the EU imports a large volume of steel & iron and aluminium goods every year, and consequently a certainly substantial amount of capital is flowing out of the EU. Carbon tariff basically changes trading cost and therefore directs trading flows and further changes the special distribution of short-term outputs and emissions; continuous change of trading cost will reshape the orientation of industrial investment, and eventually influence the paths of the structural changes of industries in various countries. Carbon tariff mechanism has long-term impact on EU-exporting enterprises in the industries concerned and trends of invest structure of transnational companies, and as a result will impact the reconstruction of global industrial chain as well as industrial transitions and upgrade paths in all countries. Therefore, the mechanism shall not be ignored. The ranking of CBAM-covered steel/iron exports to EU by country in 2022 and the ranking of CBAM-covered aluminium exports to EU by country are shown in Figures 7 and 8.

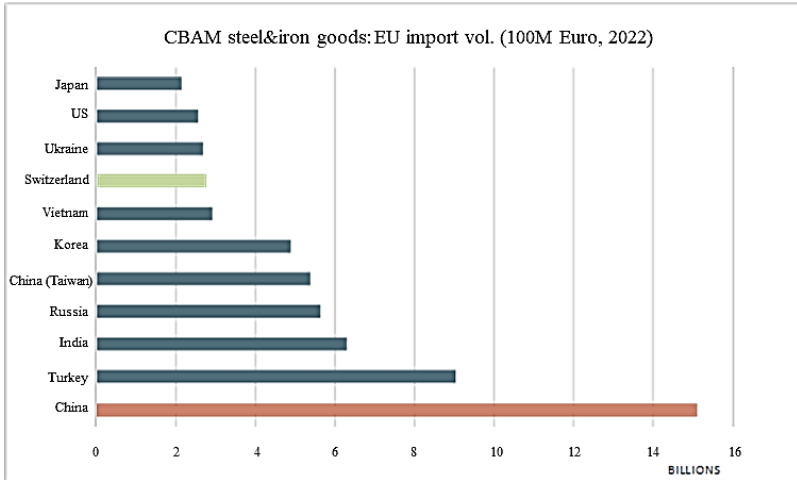


Fig. 7. Ranking of CBAM-covered steel/iron exports to EU by country (2022).

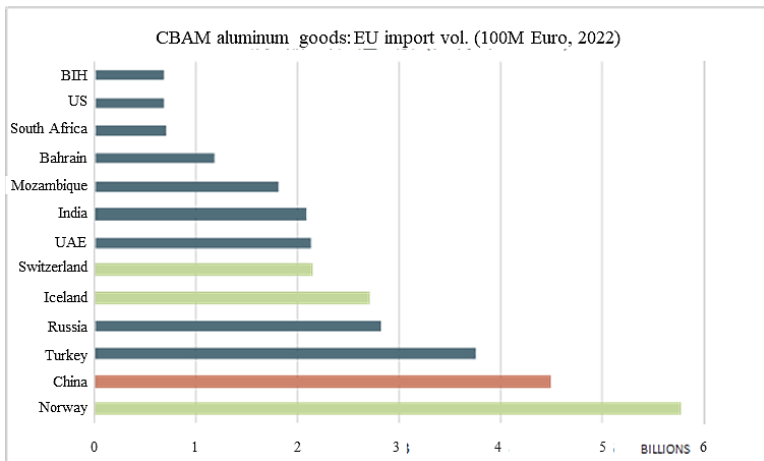


Fig. 8. Ranking of CBAM-covered aluminium exports to EU by country (2022).

4 Conclusions

In view of the presently favoured anti-globalization, carbon tariff mechanism has become the embodiment of great power competition in climate governance. Carbon tariff coverage is expanding and the mechanism suggests an inevitable future of the ecology-oriented globalized industrial chains. This will reshape the global trade and pose a definite impact on respective roles in the industry and value chains, and has to be seriously observed. Carbon tariff is designed to ensure essentially that the manufacturing entities of both imported goods and domestically made goods bear the same carbon emission cost. As it is implemented, the mechanism will result in the added compliance costs for

and slackened expansion of export and international business development of the foreign enterprises, and in the meantime become the effective main tool to protect the relevant and domestic enterprises. All countries need to pay close attention to the updates of relevant laws and regulations and study carefully the design of rules accordingly, and communicate important information to the enterprises affected by the policy instruments, in order to guide them to formulate and revise the green and low-carbon development strategies. First, establish quicker and refine the policy framework for carbon peaking and neutrality management, and accelerate domestic research on the policies and standards relevant to carbon tariff and carbon tax; secondly, optimize carbon-emission monitoring measures, and establish the more scientific and better refined audit, monitoring and reporting standards and systems, so as to direct enterprises to implement emission reduction and energize continuously industrial transition towards a low-carbon future; thirdly, enhance the training and guidance of enterprises concerning climate change and international economic and trading rules, and improve the competence of enterprises to preserve their trade and economic interests; and fourthly, provide the enterprises focusing on international markets with more support in green energy transition, e.g. independently constructed photovoltaic system, so as to enhance the low-carbon competitiveness of products.

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