

THE EU'S CARBON BORDER ADJUSTMENT MECHANISM MOVING TOWARDS THE FINAL STAGE OF LEGISLATION PROCESS

— EUROPEAN PARLIAMENT'S MORE STRINGENT AMENDMENTS INCLUDE A WIDER SCOPE OF COVERED SECTORS THAT COULD HAVE A GREATER IMPACT ON JAPAN —

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SUMMARY

- The European Commission's proposal to introduce the EU's Carbon Border Adjustment Mechanism (CBAM) is now at the final stage of its legislative process. The trilogue between the European Commission, the Council of the European Union, and the European Parliament to reach a final agreement will begin in September 2022.
- The three institutions are all in agreement on the need for introducing the CBAM. That being said, while the Council of the European Union has expressed its position which mostly aligns with the European Commission's proposal that was submitted in July 2021, the European Parliament has passed more stringent amendments, which include an expansion of the scope of the covered goods and an accelerated timeframe for full implementation of the CBAM. The focus now will be on how the three parties compromise on their differences.
- If an agreement can be reached by the end of the year, the transition period will begin in 2023. Companies operating in the European market will need to assess the impact on their supply chains in the EU and non-EU countries and take appropriate responses.

1. INTRODUCTION

The EU's proposed Carbon Border Adjustment Mechanism (CBAM) is moving towards the final stage of its legislative process. The Mitsui & Co. Global Strategic Studies Institute Monthly Report published in December 2021¹ summarized the overview of the European Commission's CBAM proposal that was submitted in July 2021, as well as reactions from the EU and non-EU countries. This paper first puts focus on the differences between the European Commission's original proposal and the amendments passed by the European Parliament in June 2022, followed by an examination of the impact of the amendments. This paper also examines the key points of the trilogue between the European Commission, the Council of the European Union, and the European Parliament, which will start in September 2022.

¹ MGSSI Monthly Report, "The EU's Carbon Border Adjustment Mechanism — CBAM Draws Strong Oppositions, But It Also Pushes Some Non-EU Countries to Take More Climate Action —" published in December 2021.
https://www.mitsui.com/mgssi/en/report/detail/_icsFiles/afieldfile/2022/02/04/2112e_darvell_e.pdf

2. BACKGROUND AND LEGISLATIVE PROCESS OF THE CBAM

2-1. Background

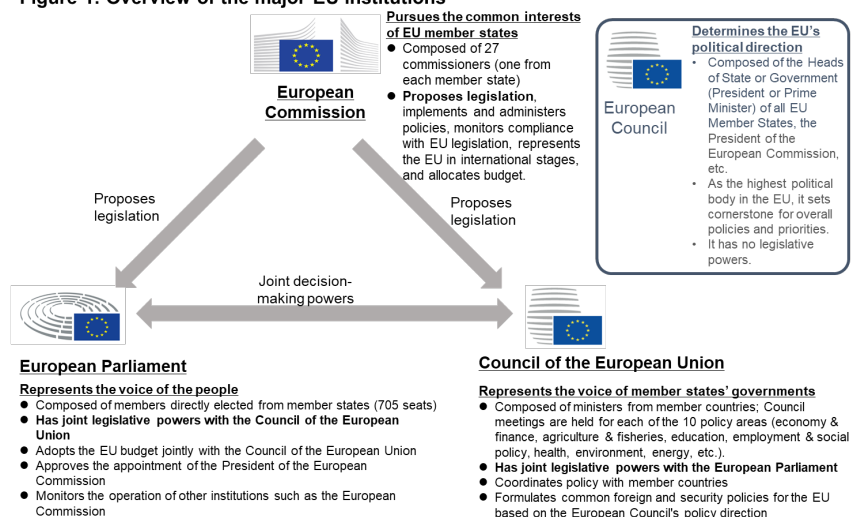
In 2005, the EU introduced the EU Emissions Trading Scheme (EU-ETS), a cap-and-trade system. It sets a cap on the total amount of greenhouse gases that can be emitted by the installations covered by the scheme. Within the cap, installations buy or receive emissions allowances, which they can trade with one another as needed. The cap is reduced over time and the sector coverage is widened so that total emissions would fall. For the risk of carbon leakage, in which companies relocate their production to other countries with less stringent environmental policy in order to avoid the cost burden and loss of competitiveness caused by such policies, the EU has been allocating emission allowances under the EU-ETS free of charge, especially for carbon-intensive and export-dependent sectors such as steel and cement. In July 2021, however, the European Commission announced a proposal to review the EU-ETS including a plan to phase out free allowances for industries with high carbon leakage risk and introduce CBAM as an alternative measure. The Commission said that it is vital to accelerate the pace of emission reduction in the EU industries to cut emissions by 55% compared to 1990 levels by 2030 and achieve climate neutrality by 2050.

Under the CBAM, importers are required to declare their total annual imports of covered goods and associated emissions (see Figure 2 below), and then purchase and surrender the required amount of CBAM certificates² accordingly. The price of the CBAM certificate will be equivalent to an average trading price of EU-EoTS. This aims to create a level playing field by imposing the same emissions cost on imports as on domestically produced goods, and encourages non-EU producers to decarbonize. It also allows for deductions of CBAM payments for the amount paid for under carbon pricing schemes in the producing countries outside of the EU, providing incentives for the introduction of carbon pricing schemes by non-EU countries.

2-2. EU's legislative process

In the EU's ordinary legislative process, the European Commission submits a legislative proposal, and the European Parliament and the Council of the European Union, which have joint legislative powers, adopt them (Figure 1). In many cases, the European Parliament and the Council of the European Union present their respective positions (i.e., approval, amendment, or rejection) on the European Commission's proposal, followed by a trilogue³, a talk between the three institutions, the Commission, the Council and the Parliament to reach a final agreement.

Figure 1: Overview of the major EU institutions



Source: Compiled by MGSSI based on materials of the European Commission and European Parliament

² A certificate in electronic form equivalent to one metric ton of embedded emissions in imported products. By May 31 of each year, the declarant must submit a declaration to the CBAM Authority stating the total amount of imported products and emissions for the previous year, and purchase and surrender corresponding CBAM certificates.

³ The adoption process will officially take the form of a three-reading system, with deliberation and voting by the European Parliament and the Council of the European Union carried out in three steps. In practice, however, to facilitate smooth and timely legislation, the European Parliament and the Council of the European Union often present their respective positions (approval, amendment, or rejection) on the European Commission's legislation proposal at the first reading, and then aim to reach a final agreement through trilogue involving the European Commission. European Parliament Briefing "Understanding trilogue: Informal tripartite meetings to reach provisional agreement on legislative files"

[https://www.europarl.europa.eu/RegData/etudes/BRIE/2021/690614/EPRS_BRI\(2021\)690614_EN.pdf](https://www.europarl.europa.eu/RegData/etudes/BRIE/2021/690614/EPRS_BRI(2021)690614_EN.pdf) (Accessed July 5, 2022)

In March 2022, the Council of the European Union expressed its position which mostly aligns with the European Commission's CBAM proposal. The European Parliament, as it found the European Commission's proposal insufficient, passed amendments on June 22, 2022, to speed up the timetable for introduction and extend the scope of CBAM covered goods. As the positions of both the Council and the Parliament are laid on the table, the trilogue is expected to get in full swing in September 2022.

3. THE EUROPEAN PARLIAMENT'S AMENDMENTS AND THEIR POSSIBLE IMPACT

This chapter aims to take a look at the main differences between the European Commission's proposal for the revision of the EU-ETS and the introduction of the CBAM and the amendments passed by the European Parliament (Figure 2). As mentioned above, as the Council of the European Union mostly aligns with the European Commission's proposals, the key point in the trilogue will be how to fill the gap between the European Commission's proposal and the European Parliament's more stringent amendments.

Figure 2: Proposed Carbon Border Adjustment Mechanism (CBAM)

	European Commission's proposal (announced in July 2021) (In March 2022, the Council of the European Union represented its position that mostly aligns with the European Commission's proposal in general)	European Parliament's amended proposal (Adopted by the European Parliament on June 22, 2022)
Transition period	<ul style="list-style-type: none"> January 2023–December 2025 	<ul style="list-style-type: none"> January 2023–December 2026
Coverage (For a detailed list of items, please refer to the reference material at the end of this report.)	<ul style="list-style-type: none"> Steel, fertilizer, aluminium, cement, electricity 	<ul style="list-style-type: none"> In addition to the items listed to the left, chemicals (hydrogen, ammonia, organic chemicals) and polymers (plastics and their products) were added. For chemicals and polymers, a review will be conducted during the transition period to examine the method of measuring embedded emissions and the effectiveness of the CBAM for carbon leakage in these sectors, and a decision will be made on whether to apply the CBAM for those sectors in subsequent years.
Timeframe of the phasing-in of the CBAM and the phasing-out of free allowances for sectors subject to the CBAM under the EU-ETS	<ul style="list-style-type: none"> 10 years from 2026 to 2035. Reduce free allowances under the EU-ETS by 10% per year after 2026, to reach zero in 2035. The CBAM is to be applied gradually in phases, at the same pace with the phasing out of free allocations. The Council of the European Union proposes that the free allowances be reduced by annual rates of 5% in 2026–2028, 7.5% in 2029–2030, 10% in 2031–2032, 15% in 2033–2034, and 25% in 2035 to eliminate free allowances completely. In parallel, the CBAM is to be increased gradually at the same pace. 	<ul style="list-style-type: none"> 6 years from 2027 to 2032. The allocation of free emission allowances will be 100% for 2023–2026, followed by gradual reductions to 93% in 2027, 84% in 2028, 69% in 2029, 50% in 2030, 25% in 2031, and 0% in 2032. The CBAM is to be applied gradually in proportion to the phased reduction of free allocations (7% in 2027, 16% in 2028, etc.)
Deductions for carbon price payments in producing countries	<ul style="list-style-type: none"> Deductions will be allowed for carbon price payments in the country of production (although it did not make clear whether explicit carbon prices only or implicit carbon prices are included) 	<ul style="list-style-type: none"> Deductions will be allowed for explicit carbon price payments in the country of production
Calculation of embedded emissions	<ul style="list-style-type: none"> Covers "direct emissions" in the production process Calculated based on actual emissions When actual emissions cannot be adequately determined, default values shall be used. These values shall be set at the average emission of each exporting country and for each of the goods. When reliable data for the exporting country cannot be obtained, the default values shall be based on the average emission of the 10% worst performing EU installations for that type of goods. 	<ul style="list-style-type: none"> In addition to "direct emissions" from the production process of products, "indirect emissions" from electricity and heating/cooling consumed in the production process are also included in the calculation. Calculated based on actual emissions. When actual emissions cannot be adequately determined, default values shall be used. These values shall be set at the average emission of the 10% worst performing installations in each exporting country and for each of the goods. When reliable data for the exporting country cannot be applied for a type of goods, the default values shall be based on the average emission of the 5% worst performing EU installations for that type of goods.
Review	<ul style="list-style-type: none"> By the end of the transition period (end of 2025), review will be conducted on expansion of covered emissions to indirect emissions, extension of the scope of goods covered to other sectors with high carbon leakage risk as well as to downstream products and whether to strengthen governance. 	<ul style="list-style-type: none"> By the end of the transition period (end of 2026), the European Commission will review the CBAM putting particular focus on the need to strengthen the CBAM and possible expansion of the coverage in order to achieve climate change goals by 2050. A decision will also be made on whether to include the aforementioned chemicals and polymers. By January 2028, the Commission will report to the European Parliament and the Council of the European Union on the CBAM in terms of the competitiveness of EU industry, emissions in non-EU countries, impact on EU exports, possible practices of circumvention, possibilities to enhance climate change actions, etc. After 2028, the Commission will report every two years to the European Parliament and the Council of the European Union.

Source: Compiled by MGSSI based on materials of the European Commission and the European Parliament

3-1. Schedule for CBAM introduction

As for the timeframe for the introduction of the CBAM, the European Commission's proposal sets a three-year transition period from January 2023 to the end of December 2025, during which time only emissions reporting will be required, and no carbon charges will be levied. Thereafter, the obligation to pay CBAM charges will come into force from January 2026, but the introduction will be in phases over a 10-year period through 2035, in parallel with the phasing out of free allowances under the EU-ETS.

In contrast, the European Parliament's amendments extend the transition period to four years, from January 2023 to the end of December 2026, to give companies in the EU and non-EU countries sufficient time to prepare for administrative procedures and decarbonization. The European Parliament, however, has insisted that the need to accelerate emission reductions is urgent and that the European Commission's proposal to complete the full implementation of the CBAM by 2035 is too slow, pushing for the complete implementation in 6 years between 2027 and 2032. As a result, companies in both the EU and non-EU countries will need to further accelerate their decarbonization efforts.

3-2. Extending the CBAM coverage

The European Commission's CBAM proposal covers steel, cement, fertilizer, aluminium, and electricity. Free allowances for these sectors under the EU-ETS will also be phased out. The European Parliament's amendments, meanwhile, add chemicals (organic chemicals along with hydrogen, anhydrous ammonia, and ammonia hydroxide) and polymers (plastics and their products)⁴.

Although the chemicals sector was initially included in the European Commission's scope in their initial study as it is regarded as a sector with high carbon leakage risk, it was not included in the Commission's proposal due to insufficient data. Meanwhile, the European Parliament's amendments added chemicals with the condition that enough data will be gathered and analyzed during the transition period in order to review whether or not they should be included in the scope. Out of total EU imports (value basis), the products covered by the European Commission's proposal make up only 3.7%, while the European Parliament's amendments would increase this to 9.2% (Figure 3). As for Japan, the products subject to the CBAM out of EU imports from Japan account for 1.9% of the total under the European Commission's proposal, but when chemicals and polymers

Figure 3: EU imports of products subject to the CBAM from top 10 trade partners (2021)

	Total value of imports (€ mn)	Of the total, products subject to the CBAM (€ mn)							European Commission's proposal: % of total imports subject to the CBAM if covered products are (1)-(5)	European Parliament's amendments: % of total imports subject to the CBAM if covered products are (1)-(7)	
		(1) Fertilizer	(2) Cement	(3) Steel	(4) Aluminum	(5) Electricity	(6) Chemicals	(7) Polymers			
1	China	472,729.1	38.0	8.5	4,628.9	975.4	0.0	14,951.9	14,011.1	1.2%	7.3%
2	US	232,611.6	76.2	1.1	891.0	220.2	0.0	10,412.1	8,333.9	0.5%	8.6%
3	Russia	162,620.7	1,965.3	0.6	7,241.7	2,217.2	802.6	2,037.2	1,293.8	7.5%	9.6%
4	UK	146,912.6	200.1	35.7	3,868.3	912.4	659.9	3,606.4	6,420.0	3.9%	10.7%
5	Turkey	77,962.2	129.5	249.8	5,711.9	1,968.2	88.8	503.7	3,651.4	10.5%	15.8%
6	Japan	62,270.9	2.3	7.0	1,058.2	129.0	0.0	2,423.8	2,090.1	1.9%	9.2%
7	South Korea	55,431.2	1.9	0.0	2,643.8	283.0	0.0	1,490.5	3,917.4	5.3%	15.0%
8	India	46,153.8	1.0	0.0	4,523.2	595.6	0.0	4,889.5	1,129.7	11.1%	24.1%
9	Vietnam	38,507.2	1.2	12.2	1,820.9	80.4	0.0	6.2	872.3	5.0%	7.3%
10	Taiwan	35,579.1	4.0	0.0	1,943.2	21.5	0.0	362.7	1,309.8	5.5%	10.2%
	Total	1,916,385.3	6,256.4	570.8	47,043.9	13,567.1	4,196.2	51,344.4	53,700.6	3.7%	9.2%

Source: Compiled by MGSSI based on Eurostat data

⁴ Please refer to the reference material at the end of this report for a list of products covered by the CBAM, including additional items included in the European Parliament's amendments.

are added, the figure exceeds 9%, which could have a greater impact on Japanese businesses. That being said, it has been pointed out that these products have complex value chains and the initial application of the CBAM is likely to be limited to upstream raw materials and primary products.

Moreover, in the European Commission's proposal, the calculation of embedded emissions is limited to direct emissions from production facilities, while the European Parliament's amendments include indirect emissions, such as electricity consumed in the production process. This is because emissions from power generation facilities are covered by the EU-ETS, and the cost of those emissions is passed on to goods producers through electricity fees. In the initial study phase, the European Commission also considered that it is ideal to include indirect emissions in the CBAM to ensure a level playing field between products made in the EU and non-EU countries. Later, however, the Commission decided not to include indirect emission due to the complexity of calculations⁵. According to the International Energy Agency (IEA), the total amount of emission from the steel industry including indirect emissions, comes to approximately 1.5 times that of direct emissions⁶. According to the European Roundtable on Climate Change and Sustainable Transition (ERCST), the global average direct emissions from aluminium production (per metric ton of aluminium) is 2.1 metric tons of carbon dioxide equivalent, however, the amount of emission balloons to almost six times⁷ when it is combined with the 10.4 metric tons of indirect emissions including electricity consumed in the smelting process. If indirect emissions are included in the calculation of embedded emissions as per the European Parliament's CBAM amendments, the costs imposed on these industries could be significantly higher than under the European Commission's proposal.

3-3. Deducting carbon price payments in the country of production

With the CBAM, importers can claim a reduction of the CBAM for carbon price paid in the country of production. The European Commission's proposal did not specify whether the deductions would include only explicit carbon prices, such as carbon taxes and payments under emissions trading schemes, or implicit carbon prices, such as subsidies, tax incentives, and energy taxes. In contrast, the European Parliament's amendments limit the scope of the deduction to explicit carbon prices only as implicit carbon prices are considered difficult to quantify. Nevertheless, if the EU truly values cooperation with its trading partners and respects the bottom-up approach of the Paris Agreement, which states that participating countries set their own targets and take action to mitigate climate change, some argue that eliminating implicit carbon prices would be inappropriate⁸. In some countries, such as the US, it is difficult to introduce a nationwide explicit carbon price, and many countries are promoting decarbonization through implicit carbon prices. There are concerns that this more stringent amendments by the Parliament could trigger a risk of trade friction, which could lead to the imposition of sanctions such as additional tariffs. The German Chancellor Olaf Scholz has advocated the creation of a "climate club" to collaborate multilaterally on mitigating global carbon leakage risk, including the standardization of methods for calculating embedded emissions, quantifying explicit and implicit carbon prices, and setting a minimum carbon price. This kind of dialogue and multilateral cooperation with trading partners will need to be closely monitored, as it could lead to changes in the CBAM framework.

⁵ European Roundtable on Climate Change and Sustainable Transition (ERCST) "Border Carbon Adjustment in the EU: Indirect Emissions in the CBAM" P2, <https://ercst.org/indirect-emissions-in-the-eu-cbam-2022/#> (Accessed July 12, 2022)

⁶ International Energy Agency (IEA) "Iron and Steel Technology Roadmap - Towards more sustainable steelmaking" https://aceroplatea.es/docs/Iron_and_Steel_Technology_Roadmap_IEA.pdf (Accessed July 12, 2022)

⁷ European Roundtable on Climate Change and Sustainable Transition (ERCST) "Border Carbon Adjustment in the EU: Indirect Emissions in the CBAM" P5, <https://ercst.org/indirect-emissions-in-the-eu-cbam-2022/#> (Accessed July 12, 2022)

⁸ The European Roundtable on Climate Change and Sustainable Transition (ERCST), Addressing "Crunch Issues" in the EU CBAM: A Review of the ENVI Committee Rapporteur's Draft Report, <https://ercst.org/wp-content/uploads/2022/01/20220110-Addressing-crunch-issues-in-CBAM-v5-final.pdf> (Accessed July 12, 2022)

4. FUTURE PROSPECTS

The European Commission, the Council of the European Union, and the European Parliament are on the same page about introducing the CBAM, and the focus of the trilogue will be on how to fill the gap between the Commission's proposal and the Parliament's amendments.

EU industries are also calling for a more gradual phasing out of the free allowances in the EU-ETS, taking into account the economic impact of the current situation in Ukraine. The European Steel Association (EUROFER) has stated that a more cautious transition to CBAM from existing ETS carbon leakage rules is needed. They also asked for effective measures to maintain both the competitiveness of European companies and decarbonize industries⁹. Furthermore, 16 industry associations, including the European Automobile Manufacturers' Association (ACEA), the European Association of Automobile Suppliers (CLEPA), and Home Appliance Europe (APPLiA), warned in their joint statement that the abolition of free EU-ETS allowances and the introduction of the CBAM will lead to higher raw materials costs and pose the risks of job losses in downstream industries and the relocation of production to non-EU countries (carbon leakage)¹⁰.

These voices from the industry will have a certain impact on the trilogue. If the talks are finalized by the end of the year, the transition period will begin in January 2023, but a delay is possible.

Companies operating in the European market will need to keep a close eye on the outcome of the talks. In preparation for the upcoming introduction of the CBAM, they will need to comprehensively assess the actual emissions throughout their supply chains both in the EU and non-EU countries as well as verify whether there are any carbon price payments at the country of production, to determine the degree of impact and take necessary measures. In addition, the direction indicated by both the Commission's proposal and the Parliament's amendments is to expand the sectors subject to the abolition of free allowances under the EU-ETS and the CBAM over the medium to long term¹¹. This means that companies will be required to step up their decarbonization efforts and take actions from a medium- to long-term perspective.

⁹ EUROFER Press Release, June 22, 2022, "Next steps crucial to make ETS and CBAM fit for the green steel transition, cautions EUROFER after EP vote" <https://www.eurofer.eu/press-releases/next-steps-crucial-to-make-ets-and-cbam-fit-for-the-green-steel-transition-cautions-eurofer-after-ep-vote/> (Accessed July 12, 2022)

¹⁰ ACEA Press Release, February 28, 2022, "Joint Statement: ETS and CBAM proposals need to take into account downstream industries" <https://applia-europe.eu/images/John/Up2DateCBAM.pdf> (Accessed July 12, 2022)

¹¹ The European Commission's proposal also indicates a direction to apply the CBAM to all imports in the sectors covered by the EU-ETS in the medium- to long-term by strengthening the system, such as by expanding the sectors covered by the CBAM during the transition period and through periodic reviews of the system thereafter.

European Commission, Brussels, 14.7.2021, COM(2021) 564 final 2021/0214 (COD), "Proposal for a Regulation of the European Parliament and of the Council establishing a carbon border adjustment mechanism" https://ec.europa.eu/info/sites/default/files/carbon_border_adjustment_mechanism_0.pdf (Accessed July 12, 2022)

Reference: Goods covered by the CBAM (shaded goods are those added in the European Parliament's amendments)

	List of goods (code numbers are combined nomenclature (CN) codes)	GHG
Cement	2523 30 00 – Aluminous cement	CO2
	2523 10 00 – Cement clinkers	CO2
	2523 21 00 – White Portland cement (whether or not artificially colored)	CO2
	2523 29 00 – Other Portland cement	CO2
	2523 90 00 – Other hydraulic cements	CO2
Electricity	2716 00 00 – Electrical energy	CO2
Fertilizer	2808 00 00 – Nitric acid, sulphonitric acids	CO2, nitrous oxide (N2O)
	2814 – Ammonia, anhydrous or in aqueous solution	CO2
	2834 21 00 - Nitrates of potassium	CO2, nitrous oxide (N2O)
	3102 – Nitrogenous fertilizers (limited to mineral or chemical fertilizers)	C CO2, nitrous oxide (N2O)
	3105 – Mineral or chemical fertilizers containing two or more fertilizing elements (nitrogen, phosphorus, and potassium); other fertilizers and items of kind in tablet form or other similar form or in packages of a gross weight not exceeding 10 kg. Except: 3105 60 00 - Mineral fertilizers and chemical fertilizers containing the two fertilizing elements phosphorus and potassium	CO2, nitrous oxide (N2O)
Steel	72 – Iron and steel, except: 7202 – Ferro-alloys 7204 – Ferrous waste and scrap; remelting scrap ingots and steel	CO2
	7301- Sheet piling of iron or steel, whether or not drilled, punched or made from assembled elements; welded steel shapes	CO2
	7302 – Railway or tramway track construction material of iron or steel used for the following: rails, guard rails, rack rails, switch rails, crossing frogs, connecting rods and other turnout pieces, sleepers (cross-ties), fish-plates, chairs, chair wedges, sole plates (base plates), rail clips, bedplates, ties and other material specialized for jointing or fixing rails	CO2
	7303 00 – Cast iron tubes and hollow profiles	CO2
	7304 – Tubes and hollow profiles made of steel (limited to seamless ones, excluding those made of cast iron)	CO2
	7305 – Other tubes made of iron or steel (e.g., welded, riveted, or similarly joined (limited to those with a circular cross-section and an outside diameter exceeding 406.4 mm)	CO2
	7306 – Other tubes and hollow profiles of iron or steel (e.g., open-seamed and welded, riveted, or similarly joined)	CO2
	7307 – Iron or steel pipe fittings (e.g., couplings, elbows, and sleeves)	CO2
	7308 – Structures and parts thereof (limited to those made of iron or steel. For example, bridges, bridge sections, lock gates, towers, lattice masts, roofs, roof frameworks, doors, windows, door frames, thresholds for doors, shutters, railings and columns. Excluding prefabricated buildings under heading 94.06) and steel plates, bars, profiles, pipes, and other similar articles fabricated for structural purposes	CO2
	7309 – Iron or steel storage tanks and other similar containers (limited to those with a capacity exceeding 300 liters, whether or not lined or insulated, and excluding those for compressed gas or liquefied gas and those fitted with mechanical or heating devices)	CO2
	7310 – Iron or steel tanks, barrels, drums, cans, boxes, and other similar containers (limited to those with a capacity of 300 liters or less, whether or not lined or insulated, and excluding those for compressed gas or liquefied gas and those fitted with mechanical or heating devices)	CO2
7311 – Containers for compressed or liquefied gas, of iron or steel	CO2	
Aluminium	7601 – Unwrought aluminium	CO2, perfluorocarbons (PFCs)

	7603 – Aluminium powders and flakes	CO2, perfluorocarbons (PFCs)
	7604 – Aluminium rods and profiles	CO2, perfluorocarbons (PFCs)
	7605 – Aluminium wire	CO2, perfluorocarbons (PFCs)
	7606 – Plates, sheets, and strips of aluminium (limited to those exceeding 0.2 mm in thickness)	CO2, perfluorocarbons (PFCs)
	7607 – Aluminium foil (limited to aluminium foil with a thickness (excluding the thickness of the backing) of 0.2 mm or less whether printed or not, or lined with paper, paperboard, plastic or other similar reinforcing material)	CO2, perfluorocarbons (PFCs)
	7608 – Aluminium tubes and pipes	CO2, perfluorocarbons (PFCs)
	7609 00 00 – Aluminium tube or pipe fittings (e.g., couplings, elbows, and sleeves)	CO2, perfluorocarbons (PFCs)
Chemicals	29 – Organic chemicals	CO2
	2804 10 000 - Hydrogen	CO2
	2814 10 000 - Anhydrous ammonia	CO2
	2814 20 00 - Ammonia in aqueous solution	CO2
Polymers	39 - Plastics and articles thereof	CO2, nitrous oxide (N2O)

Note: The CN (combined nomenclature) code is an eight-digit tariff item classification number used in the EU, with the first six digits corresponding with the HS code.

Source: Compiled by MGSSI based on European Parliament materials