

Position paper on Carbon Border Adjustment Mechanism's Scope Extension to Finished Goods



Support the European home appliance industry, support the CBAM!

Call for a further scope extension of the Carbon Border Adjustment Mechanism to selected home appliances

On 17 December 2025, the European Commission published a proposal for a Regulation amending the Carbon Border Adjustment Mechanism (CBAM) Regulation 2023/956 as regards the extension of its scope to finished goods and anti-circumvention measures (COM(2025) 989, 2025/0419 COD). One of the main aspects of the proposal is the extension of the scope of the CBAM to downstream users of iron, steel and aluminium, with around 180 products proposed for inclusion – notably washing machines, combined refrigerators-freezers and driers, among others.

1. Main messages

- **Support for CBAM Scope Extension:** APPLiA welcomes the Commission's CBAM initiative, which has the objective to ensure fair carbon pricing and equal competition between EU and non-EU appliance manufacturers and aligns the CBAM with the EU ETS.
- **Call for Scope Extension:** APPLiA urges co-legislators to include home appliance product categories that are missing from the Commission's proposal, such as dishwashers, built-in ovens, water heaters, certain washing machines, and freezers because they face similar carbon-related challenges as those already proposed.
- **Positive Impact for Industry and Climate:** The proposal's evidence-based methodology and simple implementation create a level playing field and benefit in reducing climate change.







2. What is the issue?

Carbon pricing is regulated by two interlinked legislations: on the one hand, the **Emissions Trading System** (ETS) Directive that requires EU-based industries, as from 1 January 2026, to purchase and surrender tradable allowances in proportion to their carbon emissions (1 ETS allowance = 1 tCO₂e = around 85 EUR in January 2026); on the other hand, the **Carbon Border Adjustment Mechanism** (CBAM) Regulation should replicate the same carbon price to imported iron, steel, aluminium and cement and also certain goods that contain these raw materials through import certificates (1 CBAM import certificate = 1 ETS allowance).



While the ETS used to be the only applicable system for more than two decades (2003-2025), many EU-based industries have been receiving a share of **free allowances** when they were deemed to be strongly exposed to international competition compared to countries with laxer climate policy constraints – a phenomenon known as “*carbon leakage*”. The entry into force of the CBAM definitive regime (01/01/2026) is a game-changer, as imports of iron, steel, aluminium and cement are now subject to the same EU carbon price as in the ETS while their share of free ETS allowances is being gradually phased-out from 2026 to 2034.

However, **the initial version of the CBAM Regulation missed the case of finished goods containing the raw materials already in scope**, such as home appliances. For example, we estimate that around 70% of the raw materials contained in washing machines are covered by the CBAM (mostly iron, steel and cement).¹ While a washing machine producer based in the EU must pay the carbon price for the embedded raw materials, an imported washing machine can enter the EU market without being subject to the EU carbon price, as long as the CBAM does not cover finished goods. This situation creates a **competition imbalance** to the detriment of EU manufacturers (putting at risk European growth, investments and jobs) and to the benefit of imported goods produced outside the EU.

	Based in the EU/EEA Domestic goods	Based outside the EU/EEA Imported goods
Raw material manufacturers E.g., steelmakers	 Production of steel in the EU/EEA is covered by the EU-ETS	 Imports of steel from outside the EU/EEA is covered by the CBAM
	 Level-playing field in carbon pricing between European and foreign steelmakers	
Downstream manufacturers E.g., producers of washing machines	 Washing machine producers in the EU/EEA are affected by the EU carbon price in their value chain on the raw materials: <ul style="list-style-type: none"> • Either via the EU-ETS (for domestic production inputs e.g. European steel); • Or via the CBAM (for imported production inputs e.g. imported steel). 	 Non-EU/non-EEA washing machine producers are not subject to the EU carbon price: <ul style="list-style-type: none"> • Neither on the raw materials (as they produce in countries with different or no carbon price); • Nor on the finished goods entering the EU market (as CBAM does not apply).
	 No level-playing field in carbon pricing between EU based and non-EU based washing machine producers	

¹ APPLiA statistical report 2023-2024.



In May 2023, the European Parliament and the Council adopted the CBAM Regulation with a review clause requiring the Commission to identify products further down the value chain that are at risk of carbon leakage (Art. 30-3), and to publish a legislative proposal to extend the scope of the CBAM to those products (Art. 30-4). The risk of downstream carbon leakage has been further described in Mario Draghi's report on the future of European competitiveness, stressing that the simultaneous phasing-out of free ETS allowances and the phasing-in of CBAM import certificates for certain raw materials and other listed goods under Annexes (excluding finished products that contain them) will increase cost gaps between EU manufactured and imported products, creating an unintended incentive to relocate manufacturing industries outside the EU.²

3. Which finished goods are being proposed for a CBAM scope inclusion and why?

The European Commission has developed a carbon leakage risk assessment methodology specifically for downstream goods, partly inspired by the one that has been applied for many years in the context of the ETS Directive, based on the following indicators: (1) trade intensity, (2) the cost push factor, and (3) the emission floor.³

- Firstly, **trade intensity (TI)** measures the degree of openness of a sector to international trade and competition. The Commission retained a minimum threshold of 10%. Based on Eurostat data, we estimate the home appliance sector's trade intensity is 23%, which is well above the minimum threshold set by the Commission.
- Secondly, the **cost push factor** reflects the impacts of the carbon costs from input raw materials (stemming from the simultaneous phasing-out of free ETS allowances and phasing-in of CBAM import certificates) to the overall production costs and added value of a product. The Commission retained a minimum threshold of 5%. Based on industry consultations within APPLiA, we estimate the carbon costs to account for a significant share of the production costs of home appliances at the time when they exit the factory (i.e. before retail sales), **above the 5% threshold**, effectively impacting a large part of the EU-based manufacturer's added value.

² Mario Draghi, The future of European competitiveness, September 2024 (Part B, page 104).

³ Methodology detailed in the CBAM review communication (COM(2025) 783) and the Staff Working Document (SWD(2025) 988). See notably pages 22-24 of the SWD regarding the chosen thresholds for trade intensity, cost push factor, and emission floor.



- Based on those first two indicators only, the European Commission could have proposed an even larger CBAM scope extension of around 230-250 product categories, however it decided to apply an additional **emission floor** filter to focus only on the products with the highest climate relevance.⁴ This additional criteria reduced the list down to 180 product categories, excluding 50-70 product categories that would have otherwise been proposed for inclusion in the CBAM.

When focusing specifically on the list of home appliance products proposed for inclusion in the CBAM by the European Commission, we regret that:

- **Only certain types of washing machines, combined refrigerators-freezers and driers have been proposed for a scope inclusion**, excluding other very similar products, creating a carbon leakage and circumvention risk as importers will be able to avoid the CBAM for slightly different products (e.g. separate refrigerators or separate freezers, washing machines or driers above a 10kg capacity).
- **Several product categories with a similar material composition (and therefore a similar cost push factor) are not included in the proposal** (e.g. dishwashers, built in ovens, water heaters and freezers have not been included while washing machines were), further nurturing the carbon leakage risk of the product portfolio of home appliance manufacturing—who typically produce a variety of products with a similar material composition.

APPLiA recommends that the European Parliament and the Council of the EU to fix this issue by adding all selected home appliances (e.g dishwashers, built-in ovens, water heaters, freezers) to the CBAM, building upon the list already proposed by the Commission.

The list of CN codes for product categories and material composition justifying the CBAM scope inclusion for those products is provided in the Annex.

⁴ Policy options for downstream scope extension of the CBAM, SWD(2025) 988, p. 24.



4. What is at stake?

The home appliance sector is strongly established in the European economy and plays a key role in the decarbonisation of industry and households. It accounts for 1 million jobs, 130 factories and 3200+ companies in the EEA, with an annual contribution to the EU GDP of 79 billion EUR in 2024. Home appliances have reached a 30% increase in energy efficiency since 2000, a 12 Mtoe decrease in energy consumption since 2019, and a 92 Mtoe of energy savings for households between 2020 and 2023. **It is also an important user of CBAM-covered raw materials** such as steel, stainless steel, iron, aluminium and cement, which collectively represent around 57% of its annual consumption of materials (total 5.31 Mt in 2024).⁵

If the remaining large household appliances were not included in the scope of CBAM, the EU home appliance industry would face **unintended consequences** from the simultaneous phasing-out of free ETS allowances for raw materials and the phasing-in of CBAM import certificates. Only a CBAM scope inclusion of selected home appliances can solve the issue by ensuring a fair level playing field in carbon pricing between EU-based and non-EU based manufacturing which compete on the EU market.

As already proposed by the Commission, the methodology for calculating embedded emissions has to reflect the current simplification efforts aiming at minimising the administrative burden and ensuring a simple method that relies on default values without additional mark-ups.

The matters at stake go beyond the interests of a single industry sector. An incomplete CBAM weakens the EU industry and climate policies by increasing Europe's competitiveness gap. Addressing carbon leakage in downstream industries is a matter of public interest and cross-policy coherence.

Extending the CBAM scope to home appliances is critical to:

1	Preserve EU jobs, growth and investments: fair carbon pricing between EU and non-EU home appliance producers ensures the business case for EU-based industrial investments and jobs does not decline due to ETS policy. Companies need certainty to motivate investments in the EU.
2	Reinforce European competitiveness through fair trade and competition: as the carbon price is expected to grow significantly in the coming 5-10 years, ⁶ EU based finished goods manufacturers such as home appliance producers would be increasingly exposed to unfair competition without an extended CBAM scope.
3	Improve European economic security: European finished goods manufacturers such as home appliance producers should not be incentivised to relocate outside Europe due to an incomplete ETS/CBAM policy, which would create competitive disadvantages to the benefit of manufacturing outside the EU.

⁵ APPLiA statistical report 2023-2024; DSS+ report on the home appliance industry in Europe.

⁶ Conservative estimates from the International Energy Agency and European Central Bank mention a 140 EUR/tCO₂ price by 2030 (e.g. Assessing the macroeconomic effects of climate change transition policies, ECB Economic Bulletin Issue 1, 2024); third party research sometimes exceed 200-300 EUR/tCO₂ by 2030-2035.



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Enable decarbonisation investments and reduce carbon emissions in Europe: the transition to a low-carbon economy cannot happen if industry production (and emissions) are simply relocated outside the EU. Carbon pricing reaches its climate objectives only when it does not create competitive imbalances.

5. Ensuring fair competition

The European Commission has proposed a Temporary Decarbonization Fund (TDF), amounting to 25% of the revenues generated by Member States from sales of CBAM certificates. The TDF will provide financial support in 2026 and 2027 to producers of CBAM goods that are particularly exposed to a risk of export carbon leakage due to high weight, such as iron, steel, aluminium and fertilisers.

APPLiA believes that producers of finished products, such as home appliances, should also benefit from the financial support against export carbon leakage, once they enter the CBAM in 2028. Raw materials have been selected because of their high risks of carbon leakage, but this risk is equally relevant when exporting finished products from the EU. Without support from the TDF (or its successor after 2028), exported home appliances will lose market edge vis-à-vis exports from non-EU markets.

Furthermore, the cost increase arising from the application of CBAM on finished goods could be more readily offset by indirect support (energy pricing, raw material access, subsidies) by third countries as the sector experiences different structural and long-term cost pressures compared to the ETS-covered sectors. Unlike finished goods producers, ETS-covered sectors also benefit from targeted trade measures (e.g., steel safeguards) as well as future financial support via TDF. As a result, the home appliance manufacturers - even with the welcomed CBAM extension - without the TDF will be exposed to structural trade asymmetries.

In regard to anti-circumvention measures, we welcome the Commission's proposal for additional safeguards, such as the ability to request additional supporting documents when there is reason to believe that reported actual emissions instead have been used in a fraudulent manner. While the process of using actual emissions data must be straightforward and avoid administrative complexity, all stakeholders must be able to trust that the emissions data is correct and that it is not possible to undermine fair competition by submitting false emissions data.

6. FAQ: debunking myths about the CBAM

Does the CBAM tax consumers?

Short answer: no.

The CBAM is not a tax, it is an adjustment mechanism aiming at replicating the already existing EU carbon price (ETS) as from 1 January 2026, applicable to the EU industries to goods that are made in third countries and are imported to the EU. This means that the carbon price targets the supplier, the producer and/or the importer of goods. Contrary to the Value Added Tax (VAT) that specifically targets the consumer, the ETS/CBAM costs are spread across the supply chain between many different actors engaged in various business-to-business (B2B) trade relations, in the same manner as e.g. energy costs, labour costs, transport costs, etc. It is incorrect to say that the ETS or the CBAM "taxes" the



consumer, as no direct correlation can be made between one specific expenditure item in the supply chain (such as the carbon costs) and the final consumer price of a product.

However, it is imperative to strive for a fair level playing field between EU and non-EU manufacturing in their carbon pricing obligations, so that EU-based actors in the supply chain are not disadvantaged. An incomplete ETS/CBAM policy will directly harm their competitiveness and capacity to operate from the EU in a globalised market.

Does the CBAM make the EU climate policy (even) more stringent?

Short answer: no, but it makes it smarter and fairer

The EU climate policy objectives are set in the European Climate Law Regulation. Carbon pricing is one of the pillars of the EU climate policy, alongside many others. The philosophy of carbon pricing is to translate climate policy into market-based mechanics through business incentives: the less CO₂ you emit in the atmosphere, the less you have to pay, and vice versa.

The CBAM only mirrors the carbon pricing dynamics of the EU ETS, which itself follows the objectives of the European Climate Law Regulation. CBAM does not make the EU climate policy more or less ambitious: it only aims to ensure that everyone plays by the same rules.

From a business perspective, the EU home appliance industry highly welcomes the scope extension of the CBAM to the finished goods made from iron, steel and aluminium, as it improves competition fairness with meaningful decarbonisation incentives between EU and non-EU based manufacturing.

Does the CBAM increase the regulatory burden on industry?

Short answer: to a limited extent, only.

- On 8 October 2025, the European Parliament and the Council adopted the proposed simplification reform of the CBAM as part of an omnibus package proposed by the Commission.⁷ This so-called “CBAM omnibus” introduced many business-friendly measures aiming at reducing the regulatory burden on industry, in particular on SMEs, such as a broader use of default values in the CBAM system instead of actual emissions – a measure further proposed for application on finished goods in the scope extension proposal from 17 December 2025.
- **As long as the methodology for assessing the embedded emissions follows the path of streamlining and simplifying reporting requirements and utilising the use of default values (for finished goods and listed goods in Annexes) with no additional mark up, the CBAM regulatory burden should be reasonably bearable by the economic operators.** However, it is important to refrain from adding excessive additional reporting requirements on top of the currently existing ones.

⁷ Regulation (EU) 2025/2083.



Is the CBAM a protectionist policy?

Short answer: no, it is a fair trade measure

- Currently, EU-based producers of home appliances are indirectly subject to the EU carbon pricing that started on 1 January 2026 through purchasing of raw materials and energy, be it from the EU-ETS (e.g. for European steel) or from the CBAM (e.g. from imported steel). However, home appliances that are produced outside the EU and imported to the EU market can fully avoid both systems, creating **unfair trade conditions** to the detriment of the EU manufacturers
- Extending the CBAM scope to finished downstream goods, such as home appliances with a higher share of CBAM-covered materials and higher trade intensity, is economically necessary, politically legitimate and justified, as **it corrects a competitive imbalance** in the current regulatory framework.

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ANNEX

List of CN codes for inclusion

APPLiA recommends to the European Parliament and the Council of the EU to include all of the CN codes listed below into Annex I of the CBAM Regulation

CN Code	Description	Already in the Commission's proposal
Washing machines, dryers and dishwashers		
8450 11	Washing machines, fully automatic, dry linen capacity ≤10 kg	Yes
8450 12	Other household or laundry -type washing machines, with built -in centrifugal drier	Yes
8450 19	Other household or laundry -type washing machines, of a dry linen capacity not exceeding 10 kg	Yes
8451 21	Drying machines, dry linen capacity ≤10 kg	Yes
8450 20	Washing machines, dry linen capacity >10 kg	No
8422 11	Dishwashing machines, household type	No
8451 29	Other drying machines, exceeding 10 kg	No
Refrigerators and freezers		
8418 10	Combined refrigerator-freezers, fitted with separate external doors	Yes
8418 21	Refrigerators, household type, compression-type	No
8418 29	Refrigerators, household type, other (non-compression type)	No
8418 30	Freezers of the chest type, not exceeding 800 litres	No
8418 40	Freezers of the upright type, not exceeding 900 litres	No
Other kitchen equipment		
8414 60	Ventilating or recycling hoods incorporating a fan, whether or not fitted with filters, Hoods having a maximum horizontal side not exceeding 120 cm	No
8516 60 80	Ovens for building in	No
8516 60 10	Cookers (incorporating at least an oven and a hob)	No



ex 8516 60 50	Cooking plates, boiling rings and hobs, designed for fixed installation (non-portable)	No
Residential heating and cooling		
8516 10	Electric instantaneous or storage water heaters and immersion heaters	No
8419 19	Other instantaneous or storage water heaters, non-electric	No
8419 12	Solar water heaters	No
ex 8418 61	Heat pump water heaters	No
8516 29 10	Liquid-filled radiators	No
8516 29 50	Convection heaters	No
Other		
ex 8508 11 00	Vacuum cleaners, with self-contained electric motor of a power not exceeding 1500 W and having a dust bag or other receptacle capacity not exceeding 20 l, excluding robot vacuum cleaners	No

* This list of CN codes might be updated with additional product categories.

* 'ex' in front of the CN code in the table above means that only a part of the CN code scope is included.



Material composition

Product	CBAM-covered materials (%/unit,kg)
Washing machine	70%
Tumble dryer	47%
Fridge	43%
Freezer	36%
Dishwasher	58%
Oven	58%
Water heater	76%
Heat pump water heater	76%
Household heating and ventilation	75%
Cooker	67%
Hood	77%
Hob	65%
Vacuum cleaner	22%