ZERO WASTE EUROPE

Aligning climate and circular economy objectives

through an enhanced CBAM

Response to the public consultation

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Introduction

As the European Union seeks to meet both climate and circular economy goals while boosting its competitiveness, the extension of the Carbon Border Adjustment Mechanism (CBAM) presents a unique opportunity to introduce financial incentives that simultaneously address carbon leakage and drive the transition toward a truly circular economy.

While the European Commission is preparing a Circular Economy Act announced for Q4 2026, the ongoing CBAM review offers a strategic pathway to integrate these two policy frameworks through market-based mechanisms that internalise environmental externalities.

Research shows that switching to renewable energy and energy efficiency can address approximately half of global greenhouse gas (GHG) emissions; to address the remaining emissions, the transition to circularity must accelerate.[1] The current fragmented approach to environmental policymaking has largely overlooked the impact of absolute levels of resource consumption on climate.[2] This omission becomes increasingly problematic as we continue to overshoot planetary boundaries and approach critical environmental tipping points.

Addressing current policy limitations

The existing CBAM framework, while groundbreaking, suffers from several limitations that undermine both climate and circular economy objectives.

As noted in recent analyses, the current system is easy to circumvent and poses risks of downstream leakage.[3] Critically, CBAM's zero emissions presumption for scrap metal creates a substantial loophole that fails to incentivise genuine circularity within the EU. These shortcomings highlight the urgent need for a more comprehensive approach that broadens CBAM's scope beyond its current sectors to encompass the full spectrum of resource-intensive activities. The extension currently under consideration is the perfect vehicle

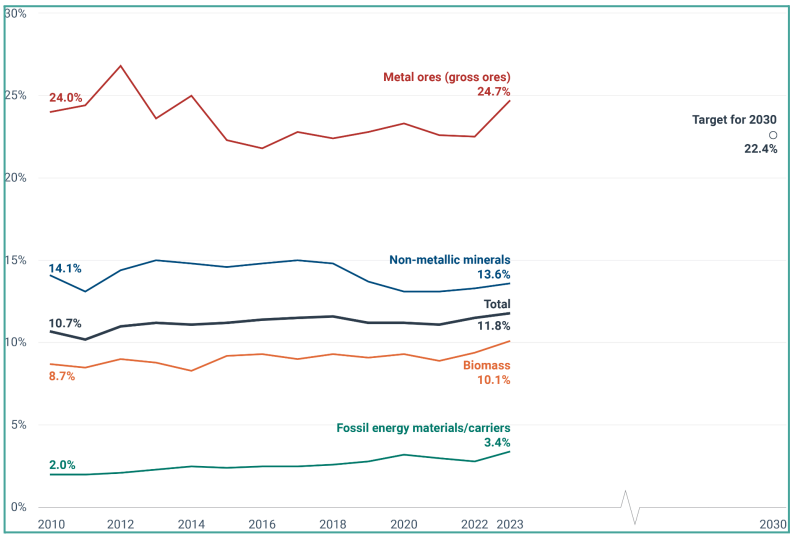
[1] Ellen MacArthur Foundation (2021) Completing the picture: How the circular economy tackles climate change.
[2] United Nations Environment Programme (2024) Global Resource Outlook.
[3] Sandbag (2024) For a systematic use of default values in the CBAM.

for this transformation, particularly if it includes organic chemicals and a comprehensive coverage of finished products to prevent production migration outside the EU.[4]

Financial incentives as catalysts for circularity and emissions mitigation

Material Productivity: By fully reflecting the carbon emissions of primary material production, ETS/CBAM would create a 'price wedge' between primary and secondary materials. This differential would naturally incentivise the use of reused, repaired, recycled, and remanufactured products and materials, as their typically lower emissions profiles would translate directly into cost advantages. The result would be increased demand for secondary materials and reduced pressure on virgin resource extraction, measured as circular material use rate (CMUR) in the EU.[5] Increasing the material circularity from the current 11.8% to 24% by 2030 has already been defined as a KPI in the EU Clean Industry Deal.[6] However, the EEA noted that the 'slow progress, along with projected increased material demand by 2030, implies that the EU is not currently on track to double the circular material use rate by 2030'.[7] As several materials considered under this circularity indicator also fall under the CBAM Regulation, CBAM is likely to affect the CMUR.

Circular material use rate in the EU and breakdown by material group between 2010 and 2023 (EEA, 2025)



[4] Equanimator for Zero Waste Europe (2025) Towards resource autonomy: Proposals for a Circular Economy Act.
[5] European Environment Agency (2024) Circular Material Use Rate.
[6] European Commission (2025) The Clean Industrial Deal.
[7] European Environment Agency (2024) Circular Material Use Rate.

Recommendations for policy integration

Comprehensive Scope Expansion: The CBAM review should embrace a comprehensive approach that includes downstream products, organic chemicals, and other resource-intensive sectors. This expansion is essential to prevent circumvention and ensure that the full environmental impact of production is captured within the mechanism. The inclusion of all relevant downstream products would eliminate the current incentive to relocate final assembly operations outside the EU while maintaining access to European markets.

Broadening the scope to **organic chemicals**, including refined fossil fuels (e.g., monomers/**polymers**), would increase the CBAM's effectiveness for emission reduction,[8] level the playing field for European production vis-à-via imports, and encourage more (plastics) recycling in Europe if it is less carbon-intensive than virgin production.

Furthermore, there is a need to review the manner in which **methane** is dealt with. For example, overseas producers of organic chemicals imported to the EU are placed at an advantage relative to domestic producers because they avoid regulation of upstream emissions associated with fossil-derived feedstocks. Given that a significant share of chemical life-cycle emissions originates during the production of fossil feedstock, for example, methane, the EU ETS/CBAM combination fails to address a large component of precursor emissions.[9] The EU ETS and CBAM, in combination with the EU Methane Strategy, must therefore ensure equal treatment of domestic and overseas producers.

To stimulate recycling in the EU and ensure equal treatment, the CBAM exemption effectively given to **scrap** should be removed.[10] This measure would follow the same logic as the 'mirror clause' applied in the PPWR[11]

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[8] Cement, metals, and plastic production are responsible for a majority of GHG emissions. See: ZWE, Eunomia (2022) Is net zero enough for the materials sector?

[9] Although methane emissions from the energy sector are discussed in the Methane Strategy and regulated via Regulation (EU) 2024/1787 on the reduction of methane emissions in the energy sector, it seems likely that embodied methane emissions in plastics exported to the EU would not be covered. It may make sense to extend the scope of emissions to feedstocks, including methane, partly because the difference in feedstocks used in ethylene crackers might imply implicitly subsidising some overseas production at the expense of EU production (largely naphtha-based crackers, naphtha mainly derived from oil). See: Equanimator (2025) Towards resource autonomy: Proposals for a Circular Economy Act.

[10] There are concerns that process scrap receives 'a free pass' under CBAM, and if a 'material content' approach is adopted, then defaulting to final weights in end-products might overlook the embedded emissions within materials lost in the process (in process scrap). It would seem appropriate to ensure that emissions embedded in process scrap are not overlooked. Given that material loss rates are likely to be difficult to pin down precisely, ensuring that scrap is included in the scope of CBAM would seem preferable. See: Sandbag (2024) A Scrap Game: Impacts of the EU Carbon Border Adjustment Mechanism; Carbon Pulse (2024) Comment. Closing the CBAM scrap loophole.

[11] The 'mirror clause' in the context of the EU's Packaging and Packaging Waste Regulation (PPWR) refers to a provision allowing the use of recycled plastic from outside the EU to fulfil mandatory recycled content targets in packaging, provided the imported material

that requires imported products to meet the same environmental standards as those imposed on domestically produced goods and prevents imports from undercutting domestic producers who adhere to stricter regulations.

The **inclusion of downstream products** in CBAM to capture embedded emissions will undoubtedly face complex implementation. However, a close link with EU product policy could facilitate this process. While the current focus is on steel- and aluminium-intensive downstream products, the Digital Product Passport (DPP) under the ESPR[12] can act as an important enabler to go beyond these product groups. The DPPs will help determine the material content of complex products through reference to a consolidated DPP registry for all products. The information included in the DPP will depend on the specific product in question but can include details about lifecycle environmental impacts.[13] The 'Ecodesign for Sustainable Products and Energy Labelling Working Plan 2025-2030' has identified priority products (e.g., finished products such as textiles and intermediate products like iron & steel and aluminium) with a high potential to improve sustainable production and consumption and lower environmental impacts. This working plan already noted that 'measures under ESPR are expected to complement existing environmental and climate measures on aluminium products and production such as ETS and CBAM.'[14]

Pending the introduction of DPP for a product group, accurate assessment of embedded emissions will remain difficult. The use of default values, as proposed in the CBAM omnibus 2025, is therefore prudent: if an operator is unable to determine the carbon price paid in a third country, a default carbon price to be published by the EC can be used.[15] Setting default values at the upper end of justifiable prevents unfair advantages for importers while encouraging the disclosure of actual emissions data. This approach will reward genuine low-carbon production while penalising opacity in supply chains.

Complementary policy integration: CBAM should be accompanied by targeted measures that amplify its circular economy impacts. Mandatory take-back schemes for products containing critical raw materials, deposit-refund systems for key product categories, and green public procurement would work synergistically with carbon pricing to drive circular market transformation. These policies would ensure that the financial incentives created by CBAM translate into practical changes in consumption and production patterns.

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meets equivalent quality and sustainability standards as those required within the EU. This clause aims to ensure a level playing field for European recyclers and maintain the integrity of the EU's recycling industry. See: Euric, FEAD (2024) Joint Statement.

[12] Regulation (EU) 2024/1781 of the European Parliament and of the Council of 13 June 2024 establishing a framework for the setting of ecodesign requirements for sustainable products, amending Directive (EU) 2020/1828 and Regulation (EU) 2023/1542 and repealing Directive 2009/125/EC.

[13] European Commission (2024) Ecodesign for Sustainable Products Regulation.

[14] Eur-lex: COMMUNICATION FROM THE COMMISSION Ecodesign for Sustainable Products and Energy Labelling Working Plan 2025-2030 COM/2025/187 final.

[15] COM(2025) 87 Proposal for a Regulation of the European Parliament and of the Council amending Regulation (EU) 2023/956 as regards simplifying and strengthening the carbon border adjustment mechanism. Art. 1 para (7).

Outcome

Design innovation: Higher costs for carbon-intensive primary materials would drive innovation in product design, encouraging manufacturers to develop products that are more easily repairable, remanufacturable, and recyclable. This market-driven approach would complement regulatory measures while ensuring that circular design becomes economically attractive rather than merely compliant.

Waste management optimisation: A strengthened CBAM would intensify efforts to manage waste materials in ways that maximise their potential for reuse and high-quality recycling. The financial incentives would support investments in advanced sorting, processing, and recovery technologies that are currently economically marginal.

Economic gains: The integration of CBAM with circular economy objectives would deliver multiple benefits that extend far beyond emissions reductions. The European remanufacturing market, currently valued at €31 billion, is projected to reach €100 billion by 2030, creating 500,000 new jobs. Increased carbon pricing would accelerate this growth while ensuring that circular business models become economically advantaged rather than dependent on regulatory support.[16]

Resource autonomy represents another critical benefit. By making secondary materials more economically attractive, the EU can reduce its dependence on primary resource imports[17] while building domestic circular value chains. Strategic autonomy becomes increasingly important in an era of supply chain volatility and geopolitical uncertainty, as pointed out in the Letta and Draghi Reports.[18] One building block of the EU Clean Industrial Deal is 'circularity and access to materials',[19] making circularity an integral part of the EU's decarbonisation and competitiveness agendas.

[16] European Commission (2025) A Competitiveness Compass for the EU.

[17] European Commission (2025) Physical Imports and Exports – Statistics Explained.

[18] Maria Draghi (2024) The future of European competitiveness; Enrico Letta (2024) Much more than a market.

[19] European Commission (2025) The Clean Industrial Deal.

Conclusion

The convergence of climate and circular economy objectives through an enhanced CBAM represents more than an incremental policy improvement; it offers a fundamental reimagining of how market mechanisms can drive environmental progress.

By internalising externalities across the full spectrum of environmental impacts, properly designed carbon border adjustments can simultaneously address carbon leakage, resource depletion, and waste generation. The impact assessment should therefore take into account the positive effects on circularity and options to better integrate the objectives of CBAM and CE policies.

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Zero Waste Europe (ZWE) is the European network of communities, local leaders, experts, and change agents working towards a better use of resources and the elimination of waste in our society. We advocate for sustainable systems; for the redesign of our relationship with resources; and for a global shift towards environmental justice, accelerating a just transition towards zero waste for the benefit of people and the planet.
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