EUROPEAN ALUMINIUM: POLICY RECOMENDATIONS FOR THE CIRCULAR ECONOMY ACT

Brussels, November 2025

European Aluminium, the association representing the full aluminium value chain in Europe, welcomes the European Commission's consultation on the Circular Economy Act (CEA) and restates its commitment to continue boosting the growth of aluminium recycling in Europe and alongside secure Europe's economic security, strategic autonomy, decarbonisation objectives and competitiveness. The CEA's core objective to reinforce a single market for secondary raw materials ought to also examine the impact of international policies on the European market and develop a consolidated policy approach, which secures both secondary raw materials and Europe's competitiveness. As such a roadmap of actions and policy interventions, setting short-term and longer-term policy objectives could become the appropriate mechanism to balance and achieve the EU's circular economy objectives, and as stated in the recent letter[1] from the European Commission President Ursula von der Leyen to the European Council be *"in full coherence with our competitiveness and independence agenda"*.

Aluminium is a material with permanent characteristics[2] capable of being recycled over-and-over again without losing its original properties, such as lightness, conductivity, formability, durability, impermeability and multiple recyclability. It's recognised by the Critical Raw Materials Act (CRMA) as a Critical and Strategic Raw Material for the European economy and documented by NATO as one of the critical raw materials for the manufacture of advanced defence systems and equipment[3]. Its properties make it a vital resource for a climate neutral and circular economy, being used for applications in key sectors, including transport, construction, packaging, renewable energy and digital technologies.

We invite policy makers and all relevant stakeholders to consider the following roadmap containing policy recommendations for a coordinated policy response to boost the EU's circular economy ambitions and secure a long-term strategy for the availability and quality of secondary raw materials:

Short-term Actions

1.Trade Action to address scrap leakage, through the introduction on an export fee

Medium-term Actions

2. Closing loopholes to ensure a rigorous implementation of Waste Legislation
3. Increasing granularity of information on the different types of scrap
4. Strengthening the CRMA and harmonising with other Regulations
5. Supporting European Competitiveness

Long-term Actions

6. Delivering a long-term strategy through the Circular Economy Act
7. Ensuring a continuous supply of secondary raw materials (e.g. scrap)
8. Improving quality of secondary raw materials

[1] Letter of the President of the European Commission to the European Council. 20 October 2025
[2] Metal Packaging Europe, "Permanent material – summary" – link
[3] NATO, "NATO releases list of 12 defence-critical raw materials", 11 December 2024 – link

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The aforesaid proposals, analysed below, must be accompanied by a very concise KPI monitoring system to assess the on-the-ground delivery of each action (and eventually their combined implementation) within a predefined time framework. European Aluminium stands ready to assist the Commission in carrying out this exercise upfront and also in supporting regular stocktaking.

Short-term policy needs

1. The need for trade action through the introduction on an export fee for aluminium scrap

We urge policy makers to restore fair trade and support a more strategic approach to scrap management through the use of export fees. Introducing export fees on aluminium scrap is a necessary and effective tool to retain this valuable resource within Europe.

As a first action, an EU trade response is needed to urgently address the aluminium scrap leakage which Europe is facing. We urge policy makers to make use of export fees, as stated in the Steel and Metals Action Plan[4]. A horizontal export fee (erga omnes) on all aluminium scrap is needed to remedy the unfair market conditions for purchasing scrap for recycling in Europe. Such a measure will address the challenge of scrap exports continuously growing due to an unlevel playing field. After the imposition of an export fee, market forces will decide which scrap will leave or stay in Europe (EU/EFTA). The introduction of an export fee would not 'close' the European market to exports, but would serve to balance demand and supply. **This is not about protectionism but about correcting an unlevel playing field created by unfair policies in third countries leading to a market distortion**. Restoring the balance in the aluminium scrap market will improve access to domestic scrap and help build a stronger, greener, and more self-sufficient industrial base. It would help channel more scrap for sorting and remelting in European recycling facilities, stimulate new investments, and close the loop within our borders under strict environmental and social standards.

The EU has been a net exporter of aluminium scrap, the secondary raw material used to produced recycled metal, since 2002, reaching a peak in 2024 of over 1.25 Mio tonnes of aluminium scrap (HS 7602) being exported, which amounts to nearly a 50% increase compared to 2019. A significant share of European scrap exports has gone to countries that recognize the critical role of scrap in reducing emissions and have therefore imposed export restrictions to secure their domestic supply (**ANNEX II**). Additional policies in third countries such as subsidies and lower environmental and labour standards, all contribute to creating a competitive disadvantage for European operators. These countries are increasingly using imported European scrap to support domestic "green metal" production, undermining EU recyclers and accelerating deindustrialisation in Europe.

Currently, 40% of the EU's aluminium supply is sourced from recycling in Europe[5]. The Circular Economy Act provides a unique opportunity to further boost recycling in Europe, reduce the EU's dependence on imports and strengthen the EU's strategic autonomy. Recycling aluminium (**ANNEX I**) uses just 5% of the energy required for primary production, making it a key lever for industrial decarbonisation. While the domestic aluminium industry is expected to face a 30% increase in demand by 2040, the EU has increased its dependence on imports[6] of primary aluminium which causes significant

[4] A European Steel and Metals Action Plan – link

[5] Aluminium industry overview | Tableau Public For the remaining metal, the EU accounts for 9% of primary metal, while the remaining 51% is imported, mainly as primary aluminium.

[6] Half of the EU's primary aluminium producing plants shut down in 2022 and 2023 in response to surging electricity prices and the lack of supportive EU policies to ensure access to affordable and decarbonized electricity. With demand remaining high, the gap in domestic

environmental and strategic consequences. In 2023, imported primary aluminium had a carbon footprint nearly 60% higher than European production, with import flows shifting towards regions where primary aluminium production is largely powered by carbon-intensive energy sources.

As such, supporting the European production of recycled aluminium through the use of exports fees is vital for the long-term viability of the entire aluminium value chain in Europe.

Medium-term policy actions

2. Closing loopholes and ensuring a rigorous implementation of waste legislation

- **Ensure a rigorous implementation of the EXTRA-EU requirements under the Recently revised Waste Shipments Regulation by implementing a strict verification and audit for non-OECD countries.**
- **Close loopholes in waste legislation by prohibiting the use of "end-of-waste" status for aluminium scrap exports outside of Europe.**

2.1 Implement strict verification and audits for non-OECD countries

The revised Waste Shipments Regulation (WSR)[7] sets a stricter framework for exports of wastes outside the EU. Non-OECD countries are obliged to notify the European Commission of their intention to import waste, specifying the categories concerned and proving that they have environmentally equivalent conditions and legislation in place. The European Commission already received the first requests from non-OECD countries for their inclusion on a list of countries to import non-hazardous waste from the EU[8].

With the first list of countries authorised to receive waste from the EU set to be established by **21 November 2026**, **it is important to conduct a strict auditing procedure** on the details provided by third countries supporting their claims on environmental equivalence and guarantee that all recycling steps will be completed in the same country. Exports of waste to non-OECD countries that are not included in the list will be prohibited from **21 May 2027** and the list will be updated regularly and at least every two years.

As such the provision is not a ban, but a safeguard to protect the environment and human health. **Many of the countries that submitted their requests are clearly not on a par with Europe in terms of equivalent environmental standards** (**ANNEX III**).

2.2 Prohibit the use of "end-of-waste" status for aluminium scrap exports outside Europe

Aluminium scrap is often transported as waste. But it can also be transported as a product due to the End-of-Waste (EoW) Regulation[9] which sets criteria for when aluminium scrap could cease to be waste. Current legal provisions create favourable conditions for the misuse of the EoW Regulation and a loophole to export under a framework with significantly fewer controls compared to that of the WSR. These are controls which act as a safeguard to protect human health and the environment in third countries.

production has been increasingly filled by imports, which, in 2023, accounted for more than half of the European consumption of primary aluminium.

[7] Regulation (EU) 2024/1157 – link

[8] Commission receives first requests from non-OECD countries for inclusion on list of countries eligible to import non-hazardous waste from EU – link

[9] Council Regulation (EU) No 333/2011 – link

The EoW rules are based on article 6 of the Waste Framework Directive (WFD)[10] and as a concept exist to legally translate the European waste hierarchy (Art 4 of the WFD). A concept, fundamental for Circular Economy, which is absent from any other legal framework in the world**. The EoW rules being purely a European legal framework, designed to facilitate the growth of recycling in the EU must not be used to ease exports of aluminium scrap outside Europe,** on the basis of environmental equivalence and in order to ensure a level playing-field in terms of compliance with environmental legislation. All aluminium scrap should thus be treated as waste when exported to third countries.

3. Increasing granularity of information on the different types of scrap

Establish a coordinated policy approach which will increase the granularity of information on the generation, and shipments of scrap.

A coordinated policy approach is a necessity to track progress in various policy areas and develop future-proof legislation. As a first step**, an update of the relevant trade codes for aluminium waste and scrap under chapter CN7602 is needed**, which can be complemented with an **EU coordinated monitoring system for the exports of aluminium waste and scrap** as well **their generation** from the treatment of the different end-of-life products.

4. Strengthening the Critical Raw Materials Act (CRMA) and harmonising with other Regulations

Align the future CEA with the CRMA to support its implementation and facilitate progress in achieving the EU recycling benchmarks and support a uniform approach on the national circularity measures.

Aligning the future CEA with the CRMA will support its implementation and the planned revision in 2028, especially on the need to evaluate the benchmarks targeting 2040 and 2050 and for individual strategic raw materials, and as stated in Article 48.2.f "*the appropriateness of establishing further measures to increase the collection, sorting and processing of waste, in particular with a view to metal scraps, including ferrous scraps*."

For critical and strategic raw materials, such as aluminium, recycling plays a key role in ensuring reliable sourcing to meet the growing demand. It will be **essential to ensure that the provisions under Article 26 concerning ''national measures on circularity'' are consistently implemented among Member States,** and the various developments at Member State level are considered in the upcoming Circular Economy Act to ensure a common approach. Those provisions foresee improving collection, sorting and processing of waste, stricter enforcement of end-of-waste criteria, and increased technological maturity of recycling technologies among others. Moreover, we would like to stress the **importance of having a specific recycling benchmark for each strategic raw material** as stated in article 5.2.

The WSR should explicitly promote recycling of critical raw materials (CRM) waste, such as aluminium scrap, and be more closely linked with the CRMA to strengthen Europe's raw material self-sufficiency and promote a true European single waste market, for example by establishing a **European register of pre-approved recycling facilities** with **automatic mutual recognition across Member States**, ensuring that transfers of waste to these facilities are approved more quickly through a simplified and transparent procedure.

5. Supporting European Competitiveness

Support European competitiveness by establishing a specific ETS Product Benchmark for aluminium recycling and create mechanisms to encourage the market to invest in products and services with lower CO_2 emissions and boost recycling.

Designing a separate ETS Product Benchmarks for aluminium recycling, will support European competitiveness and will reward the role of recycling for its role in the EU's decarbonisation efforts. As it stands currently, aluminium recycling falls under the non-sector specific ETS heat & fuel consumption benchmark (''fall-back''), which currently unfairly penalise recyclers (as they are based on technologies that cannot be implemented in the aluminium recycling process), create a serious carbon leakage risk and discourage energy efficiency. In the revised ETS Directive, both Parliament and Council provided a mandate to the EU Commission to review the existing ETS Benchmarks, considering circularity and new amendments to the ETS Directive about the benchmarking methodology[11].

It is essential to foresee mechanisms to **encourage the market to invest in products and services with lower CO_2 emissions and boost recycling**. By incentivizing recycling, the legislation would cut down greenhouse gas emissions and decrease waste sent to landfill facilities. Integrating resilience criteria when developing new policies to promote 'Made in Europe' (EU/EEA/EFTA) products must be at the forefront. This should be accompanied by a **revision of State Aid rules** to enhance support for circular economy initiatives. **Financing mechanisms, such as tax breaks and subsidies,** should also be proposed to improve the economic viability across the entire value chain. These incentives are essential for **improving the collection, sorting, and pre-treatment infrastructure**, which are critical to supporting the recovery of strategic and critical raw materials and achieving higher quality outcomes.

Longer-term policy actions

6. Delivering a long-term strategy for the availability and quality of secondary raw materials

The future CEA should enhance aluminium recycling by harmonising existing waste legislation and addressing scrap leakage, to create a long-term strategy for the availability of secondary raw materials and secure Europe's supply, strategic autonomy, competitiveness, and sustainability objectives.

Aluminium scrap is an important secondary raw material used as feedstock for aluminium recycling production (**ANNEX I**). Clarity on terminology is necessary to develop follow up actions, as well as market and sustainability data. As such: **aluminium scrap is a secondary raw material** which requires sorting before it can be integrated in the melting and then casting process to produce **recycled aluminium in the form of an ingot, slab or billet.**

Considering the need to **reinforce the single market for secondary raw materials,** the CEA's legal basis should not be limited to Article 114 TFEU[12] but consider Article 207 TFEU[13] in parallel to establish measures which will promote market harmonisation and an EU-wide export monitoring and control regime for wastes containing Critical and Strategic Raw Materials (CRM-waste).

For such wastes, the approach to their management should be established at EU level and foresee mechanisms which will assess the individual CRM-waste streams (e.g. aluminium scrap), their specificities and market dynamics to create the most appropriate tailor-made policy responses. Managing the overall approach at EU Level can be justified on the basis of economic resilience and of economic security, which enables a stronger EU-level intervention. Similarly to dual-use products[14], **the EU should act to effectively protect its interests and values[15] when it comes to exports of CRM-waste**.

[11] European Aluminium has developed a technical proposal for the development of a dedicated ETS benchmark for aluminium recycling which can be shared upon request.
[12] Provisions on the Single Market
[13] Provisions on common commercial policy and tariff rates
[14] https://policy.trade.ec.europa.eu/help-exporters-and-importers/exporting-dual-use-items_en
[15] White Paper on Export Controls, COM(2024) 25 Final of 24.01.2024 – link

Coordination at EU level will ease pressure on Member States, improve the negotiating position of the Union and align the overall approach to address administrative procedures as well as common risks and interests and promote Europe's competitiveness and independence agenda.

Under the CEA, specific provisions should be assessed and established to address the management of CRM-waste. These should:

- **Treat CRM waste as a strategic resource**, managed at EU level for reasons of economic security and resilience.
- Consider the most appropriate mechanisms which will allow **for EU companies to be prioritised over exports** and guarantee the economic and environmental benefits are captured within the European value chain
- Allow exports only to countries and facilities with equivalent environmental and recycling standards, verified through EU-level audits and listings.

These provisions will promote policy coherence, prevent fragmentation among Member States, and reinforce Europe's industrial autonomy.

7. Ensuring a continuous supply and demand of Secondary Raw Materials

- **Promote efficient collection systems such as DRS and support circular materials through EPR Schemes.**
- **Adjust Public Procurement policies to aid European companies.**
- **Carefully assess recycled content measures for their benefit to the European value chain and their impact at different product categories.**

Efficient collection systems such as **Deposit Return Systems (DRS)**[16] are proven methods of guaranteeing a good quality of secondary raw materials and improving efficiency across the value chain. In parallel, the eco-modulation of fees for **Extended Producer Responsibility (EPR) schemes** could support circular materials by making sure that is based on the recyclability of materials. EPR and DRS schemes should work for the benefit of the European value chain. The added value from these systems must be re-circulated in Europe to guarantee long-term certainty.

Other incentives such as **Public Procurement** policies should incorporate sustainability criteria assessing the overall recyclability potential of products and materials and go beyond circularity, to consider all potential trade-offs, alongside **resilience criteria to support European companies**. These criteria should become **mandatory at a European level**, which at its core should promote a "Made in Europe[17]" criterion.

Measures such as **recycled content** could accelerate the circular economy. An important consideration is how recycled content can be '**made in Europe**' and safeguard the resilience and competitiveness of European operators. The impact and feasibility should be carefully assessed per product category based on market applications and for its potential effect on market dynamics, the availability of well-sorted pre and post-consumer scrap streams and the different lifespans of

[16] Additional guidance is beneficial to ensure the recovery and retention of high-purity materials from mandated European Deposit Return Schemes (DRS). Specifically, that within Annex X Minimum Requirements for Deposit and Return Schemes an additional requirement is placed upon System Operators to demonstrate that high-quality Used Beverage Can scrap is offered for sale to the European market before alternative markets are explored. Also, that countries seeking derogation from the provisions of Article 50 through Article 50 (5a) and reasonably demonstrate that whilst meeting the same 90% collection rate required by the Regulation, they also deliver the same high-quality scrap created within a DRS and become subject to the same European marketing provisions suggested above.

[17] For the European aluminium sector is important to consider the interconnectivity of European operators across the continent. Therefore the 'Made in Europe' notion should include EEA and EFTA countries.

fast-rotating vs. long-lifetime products, as this is a necessity to determine where such provisions will yield the most desirable results and provide an advantage for European companies and drive high-quality recycling.

From the perspective of a permanent metal, it has to be noted that not all product categories require the same level of stimulus. **Increasing end-of-life recycling** by supporting the most efficient collection and sorting of end-of-life products, so that more secondary raw materials will be available on the market for high-quality recycling, is also key to achieving a sustainable circular economy.

8. Improving the quality of Secondary Raw Materials

Establish quality requirements for end-of-life aluminium scrap fractions and increase transparency at the product design level regarding the presence of critical and strategic raw materials, to support high-quality recycling.

Provisions should be introduced to establish quality requirements for the separation of aluminium scrap fractions at the end of the pre-treatment process. This can already materialise in a first stage in the current revision of the End-of-life Vehicles Directive (ELVD), where we propose setting quality requirements to separate aluminium fractions into wrought and cast alloys to enhance material recovery[18]. The inclusion of quality standards for output fractions, such as aluminium, represents a significant step toward improving the recovery of high-purity materials and will contribute to increasing the quality of the overall recycling process. This approach could be applied to other markets, depending on the specific characteristics of the alloy composition of the aluminium products used.

For the case of **waste electrical and electronic equipment** (WEEE) the approach should be aligned with the ongoing revision on the ELVD to ensure that if authorised treatment facilities and waste management operators shred ELVs, along with other waste streams such as WEEE, minimum quality requirements are met to maximise the amount of CRMs being recovered.

Additionally, **increasing transparency at product design** level for the presence of critical and strategic raw materials will lead to improving their recovery potential and facilitate their ease of recycling.

[18] European Aluminium, Improve the Quality of Aluminium Scrap From ELVs - link

ANNEX I: Aluminium Recycling Process

The recycling process of aluminium is a multi-step process which takes place along the value chain and includes the following steps:

- Collection & sorting as a first step
- Pre-treatment, e.g. scrap preparation
- Melting, e.g. scrap melting
- Casting of liquid metal into a shape, e.g. ingot, slab or billet

There two key steps which are important to consider: scrap preparation and scrap melting.

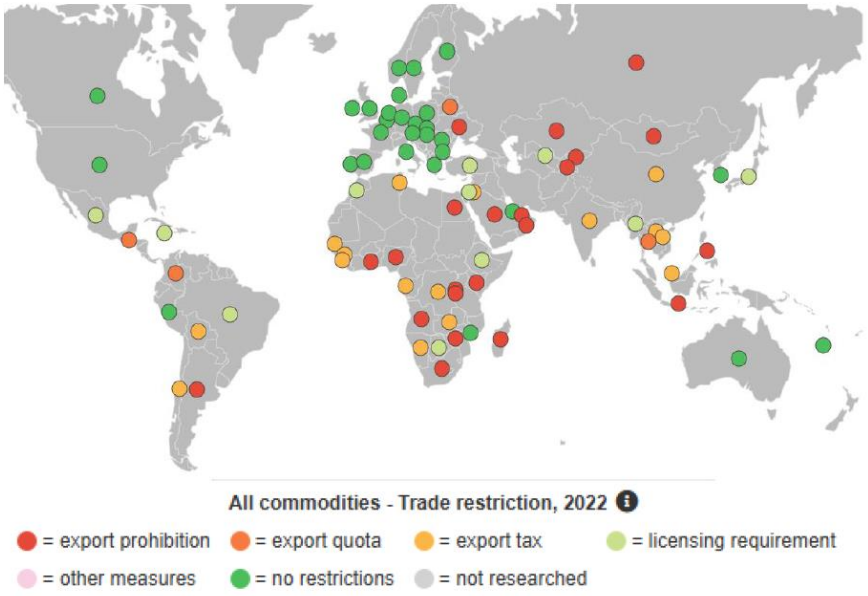
Scrap preparation may include several steps, such as shredding, sizing, sorting, drying, decoating. The output of this initial step is a scrap fraction optimised for the melting process to maximise quality, minimise losses and ensure safety of the operations.

In many cases, prepared scrap available on the market are not sufficiently prepared and need to undergo further preparation step in the aluminium recycling plant before being fed to the furnaces.

The prepared scrap is then melted in recycling furnaces (scrap recycling), and the molten metal is poured into casts to produce 'recycled' or 'secondary' ingots. The output from our recycling furnaces - where scrap is melted, and an ingot is produced – is the point of assessment of the environmental impact of a product.

ANNEX II: Overview of Export Restrictions on Industrial Raw Materials, based on OECD Inventory

The aim of the OECD Inventory of Export Restrictions on Industrial Raw Materials is to improve the transparency of the use of these export restrictions, in place since 2009. The inventory covers information on 80 exporting countries and 65 industrial raw materials, representing the most comprehensive inventory on raw materials export restrictions. The map below shows the presence and degree of any type of export restrictions applied from the 80 jurisdictions in the sample.



ANNEX III: Environmental Equivalence

Environmental Performance Index 2024
(rank 1-180; score range 0-100 ; 0 = worst ; 100 = best)

	Top destinations of EU aluminium scrap					European Countries				
	India	Thailand	Malaysia	Pakistan	China	Italy	Spain	France	Germany	Norway
rank	176	90	118	179	156	29	22	12	3	7
score	27,6	45,7	41	25,5	35,4	60,3	64	67	74,5	69,9
Air quality										
rank	177	139	79	178	168	57	45	29	26	5
score	6,8	25,4	43,2	6,3	14,3	52,2	56,2	65,2	66,9	82,9
Waste management										
rank	86	78	71	107	39	21	29	18	7	20
score	31,8	33,6	35,4	29,3	43,3	57,5	50,8	59,6	67,4	58,3
Controlled solid waste										
rank	113	86	81	111	47	50	1	1	1	51
score	9,3	40,1	47,2	10,8	91,4	90,9	100	100	100	90,4
Waste recovery										
rank	61	40	37	101	93	20	28	19	5	13
score	9,3	26	32,2	3,6	4,5	70,2	48,1	75,2	98,9	87,3

Source: https://epi.yale.edu/measure/2024/epi