



## ETS FREE ALLOCATION RULES (FAR) REVIEW

Response to public consultation amending on Delegated Regulation amending delegated regulation (EU) 2019/331 as regards transitional Union-wide rules for harmonised free allocation of emission allowances

18 December 2023

European Aluminium, the industry association representing the full European Aluminium value chain, from bauxite mining and Alumina refinery to Primary Aluminium, transformation and recycling welcomes the opportunity to comment on the Draft Delegated Regulation amending the FAR.

In this paper, we provide our comments and proposed amendments to the draft text open for Public Consultation<sup>1</sup> until 2 January 2024.

We call upon the EU Commission and EU Member States to integrate in the final text the following points:

- **The EU Commission should design a separate ETS Product Benchmarks for Alumina refining and aluminium recycling.** These two processes of the value chain both fall under the non-sector specific ETS heat & fuel consumption benchmark currently. These two new ETS Product benchmarks are urgently needed. Otherwise, the EU's objective to increase the resilience of the Union's supply chains of critical and strategic raw materials and accelerate the shift towards a more circular and low carbon industry will be undermined. To recall, 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. For example, Alumina is also now specifically referenced in Annex I among the activities covered by the Directive together with Primary Aluminium. This means that the case of a separate benchmark for Alumina and aluminium recycling can and must be made. Annexed to this document, we enclose a MEMO with detailed legal and technical argumentation about why our industry urgently needs these two new benchmarks. We also provide a set of design proposals to be considered, starting from a proposal to amend the ETS Registry transaction log to ensure data from Alumina and recycling installations can be collected in a uniform manner across installations, and be compared with the different segments of the value chain (and other plants producing non-ferrous metals).

---

<sup>1</sup> See EC Public consultation webpage here : [https://ec.europa.eu/info/law/better-regulation/have-your-say/initiatives/13861-EU-emissions-trading-system-ETS-update-of-the-free-allocation-rules\\_en](https://ec.europa.eu/info/law/better-regulation/have-your-say/initiatives/13861-EU-emissions-trading-system-ETS-update-of-the-free-allocation-rules_en)

- **Exclude Covid 19 & energy crisis years from the calculation of the Historical activity level.**

Art 15 of the draft FAR uses a calculation approach employing the median value to calculate the historical activity level. The European Aluminium industry has been significantly impacted by the COVID pandemic and the ongoing energy crisis. Half of the aluminium primary production capacity in Europe has been curtailed. Art 15 of the draft FAR should therefore be amended to allow installations to choose between either:

- Excluding two years (for instance 2020 and 2022/2023 - the crisis years) from the baseline period 2019-2023 to avoid unrepresentative production volumes in the free allocation calculation for the 2026-2030 sub-trading period;
- opt for a calculation approach using the median value.

*A precedent had already been set by Article 9(1) of Commission Decision 2011/278/EU on FAR which had allowed the removal of years from the baseline period. The respective Article sets out a historical activity level framework where incumbent installations can use a baseline period either from 1 January 2005 to 31 December 2008, or, if the historical activity levels are higher, from 1 January 2009 to 31 December 2010. According to the draft rules, this situation is already affecting the 2021-2025 sub-trading period because of the 2-year rolling average adjustments. If no modification is introduced, these unprecedented crises would unduly penalise companies in the 2026-2030 sub-trading period, when free allocation would be based on the average reduced production volumes of the period 2019-2023. This would lead to an artificially low level of free allocation and offer little carbon leakage protection.*

- **The annual reduction of Free Allocation for installations producing CBAM products should be adjusted to reflect the possible application of the cross-sectoral correction factor.**

In case the cross-sectoral-correction factor applies towards the end of the fourth trading period, the amendments to Article 16 of the FAR (e.g. Par. 4a New) must be modified to ensure that the preliminary annual number of free allowances is adjusted both to ETS installations and the amount of CBAM certificates to be surrendered, in accordance with article 22 of the CBAM Regulation (EU) 2023/956. Otherwise there will be a mismatch between the carbon leakage protection offered by Free Allocation and the CBAM cost obligation at the border.

- **The FAR should integrate and mirror the Review mechanisms in the revised ETS Directive and CBAM Regulation.**

Article 30 of the CBAM Regulation (EU) 2023/956 and Article 30 of the revised ETS Directive (EU) 2023/958<sup>2</sup> mandate the EU Commission to “*monitor the functioning of the CBAM with a view to evaluating the impacts and possible adjustments in its application*” and to take “*additional measures, including legislative measures, to address carbon leakage risks*”, including legislative proposals. For this purpose, the FAR should be amended to reflect the wording agreed by the Co-legislators in the CBAM Regulation and ETS Directive by introducing provisions to review the application of the CBAM factor in case carbon leakage

---

<sup>2</sup> See [here](#) the CBAM Regulation as published in the EU Official Journal (16 May 2023) and [here](#) the consolidated text of the ETS Directive published in the EU Official Journal (5 June 2023).



risk increases further to the reduction of allowances and application of the CBAM. Should this happen, installations must be compensated immediately if the price increase of CBAM certificates is not proportionate to the reduction of free allowances to the given installation. It should also be further evaluated whether or not the application of the free allocation phase-out factor should be suspended.

- **Better define CBAM related reporting requirements and conditionality requirements for aluminium installations and sub-installations.** In the draft rules (or related guidance documents), more detail should be provided about which installations are bound by the obligation to present a Climate Neutrality Plan (CNP). For Aluminium production, *ETS product benchmarks* are established only for Primary Aluminium Production (electrolysis) and Anode Production. Remelt cast houses needed to collect the molten metal from the electrolysis process (and add alloying elements) or Alumina refineries for example are under the fall-back approach (heat and fuel consumption). From the rules, it should be clearer that these installations or sub-installations are not be subject to the CNP obligation (and 20% reduction of allowances).
- **Industrial heat recovery for external use, including heating community buildings outside a district heating network, should not lead to a reduction of Free Allocation.** The rules should be amended to ensure national competent authorities recognise heat recovery from industrial processes as a part of the solution with respect to reduced energy consumption. By recovering residual heat from industry to be used for the industrial site or externally, the electricity demand is reduced. As of today, industrial sites supplying heat to external users lose free quotas, even if the energy is delivered at no cost as a gift to the municipality and surrounding communities.

For further information, please contact:

**Emanuele Manigrassi**

Senior Manager, Climate & Energy

M +32 471 73 53 06

[manigrassi@european-aluminium.eu](mailto:manigrassi@european-aluminium.eu)



## ANNEX – Proposal for an Alumina & Aluminium Recycling ETS benchmark

### Summary & key policy asks

In this memo, European Aluminium, the industry association representing the entire aluminium production value chain across Europe, outlines proposals, alongside legal and political argumentation, about why the EU Commission should design a separate ETS Product Benchmarks for Alumina refining and aluminium recycling. These two processes of the value chain both fall under the non-sector specific ETS heat & fuel consumption benchmark currently.

We argue that the EU Commission is legally bound by the recent changes to the ETS Directive agreed last Spring to design such two new Product Benchmarks, specifically in the context of the upcoming revision of the ETS Free Allocation Rules (FAR), as well as because of the recognition of Aluminium as a Critical (Bauxite/Alumina) and Strategic (Aluminium) Raw Material part of the proposed Critical Raw Materials Act (CRMA).

These two new ETS Product benchmarks are urgently needed. Otherwise, the EU's objective to increase the resilience of the Union's supply chains of critical and strategic raw materials and accelerate the shift towards a more circular and low carbon industry will be undermined.

According to the revised ETS Directive, fallback benchmarks will be cut by 50% as they will be set by installations consuming biomass and belonging to an incredibly broad range of processes and industrial sectors. These are often smaller scale and / or working in lower combustion temperature ranges, compared to Alumina or secondary Aluminium production facilities. This leads to artificially low emission levels that cannot be reached by an alumina refinery or recycling plant, leading to a 50% reduction of free allocation, and consequential cost increase and closures to plants that are already struggling because of the existing emission costs and higher energy costs since the energy crisis (between 2021 and 2022 we lost respectively 1 million tons of EU Alumina and Primary Aluminium production).

For Alumina, European Aluminium collected figures from four out of the five alumina plants in the EU, and has done a forecast of the expected CO<sub>2</sub> costs under the revised benchmark levels based on production level data between 2020 and 2022:

- **Assuming a CO<sub>2</sub> price of 100 EUR/ton, the share of ETS costs for these plants would represent between 6% and 13% of today's global price for alumina (the Alumina Price Index or API). These percentages will continue to increase as the ETS price increases. These are costs that our competitors do not face, and, given that alumina is priced in a global market, the European producers will not be able to pass this cost on to consumers. It will not be possible for the 4 remaining plants that are still operating in Europe to continue their operations when faced with a regulatory cost that is equal to 6-13% of the sale price and which is not faced by any of their global competitors.**



Similarly, also aluminium recyclers will face higher carbon costs compared to third country competitors:

- For aluminium recycling installations, biomass is not currently available in a uniform manner across the energy system, nor practically feasible because of the required high temperatures and gaseous fuels needed for a clean combustion.

***Therefore, we call upon the European Commission to commence as soon as possible designing these two product benchmarks to safeguard the European Aluminium value chain, and request EU Member States and the European Parliament, to support such request. 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. Alumina is also now specifically referenced in Annex I among the activities covered by the Directive together with Primary Aluminium. This means that the case of a separate benchmark for Alumina and aluminium recycling can and must be made.***

We also outline a set of design options for the EU Commission to consider when designing these two new product benchmarks, summarised below, and explained in more detail in the dedicated sections of this paper.

For the design of the **Alumina ETS Product benchmark**, several options could be considered, including:

- Isolating certain ETS installations, currently considered under the fall-back benchmark methodology (non-sector specific), based on the criteria of unavailability of a technology or energy carrier in sufficient quantities or quality (e.g. biomass) to decarbonise their production process or certain amount of gas or heat consumption;
- Isolating installations producing products from sectors recognised as Critical and / or Strategic in the Critical Raw Materials Act, thereby establishing a stronger link between the ETS Carbon Leakage List and the Critical/Strategic Raw Material list.

For the design of the **Aluminium recycling ETS benchmark**, the situation would require several changes to the current system, and similar options could be considered:

- It will be first key to isolate aluminium recycling facilities with transformation activities on the same site (rolling and extrusion) and amend the registry to allow them to report in the ETS Registry as “Aluminium recycling and/or transformation” in the activity description. Today, many of these plants which are also under the ETS fall-back benchmark approach, report under the activity description “Production of non-ferrous metals”. This ‘dilutes’ the emissions of secondary aluminium production within the ones of other non-ferrous metals, thereby making it extremely challenging to assess the carbon cost impact of higher ETS costs on this important segment of the value chain. For example, many recycling cast houses are integrated in rolling installations, and are also recycling scrap, blended with primary metal. For this exercise, it will be therefore crucial to first understand how much aluminium is recycled in the integrated rolling installations than standalone recycling plants.



- The design of the benchmark could for example consider isolating the best 10% aluminium recycling installations (and request the EU commission to introduce a new activity description category for aluminium recycling and transformation in EU ETS Registry) or isolate a wider group of ETS installations under the fall-back benchmark methodology (non-sector specific) based on a set of agreed criteria (E.g. circularity contribution, a certain degree of gas or heat consumption, or unavailability to use biomass).
- European Aluminium is currently collecting data to estimate the total ETS costs for recycling aluminium in Europe according to the new benchmark values, using as reference period 2020-2022 and from installations identified as Secondary Aluminium production in the ETS Registry. As for Alumina, we are working towards comparing these costs with a hypothetical third country recycling installation with no ETS or carbon tax.
- As for Alumina, one option could be to isolate installations producing products from sectors recognised as Critical and / or Strategic in the Critical Raw Materials Act, thereby establishing a stronger link between the ETS Carbon Leakage List and the Critical/Strategic Raw Material list.

These proposals are in line with the policy objectives outlined in the Green Deal Industrial Plan, and would allow the ETS to reconcile two of key EU policy objectives:

- On the one hand continue to reward the best performers and incentivize decarbonization;
- while on the other, increase protection for those sectors that produce materials that are strategic for the EU's energy transition and compete on global markets.

European Aluminium is ready to contribute to such process and discuss these proposals with the EU Commission and all other concerned stakeholders.

These are also relevant in view of the next revision of the EU ETS for the post 2030 trading period and part of the 2040 Climate targets policy under preparation by the incumbent EU Commission and subject to approval of the next EU Executive (2024-2029).



## Table of Contents

ETS Alumina Benchmark .....	8
Background & Introduction: .....	8
Why an ETS benchmark for alumina is urgently needed .....	9
Possible design options for an Alumina ETS Product Benchmark .....	12
ETS Aluminium Recycling Benchmark .....	14
Background & Introduction: .....	14
Possible design options for an Aluminium Recycling benchmark .....	15

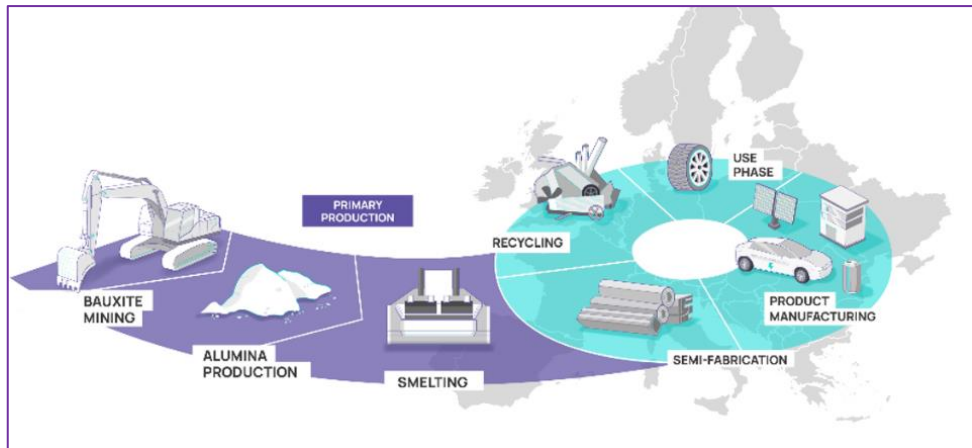


## ETS Alumina Benchmark

### Background & Introduction:

Alumina is the precursor to the production of Primary Aluminium. Without Alumina and baseload electricity, we cannot produce primary aluminium in Europe. In the EU27 we have 5 alumina plants supplying the production from electrolysis of around 2 million tons of Primary Aluminium.

The energy crisis significantly accelerated the loss of Primary Aluminium capacity in the EU27, wiping out roughly 50% of the remaining capacity because of the exorbitant electricity prices<sup>3</sup>.



This followed a period where the EU had already lost one third of its primary aluminium production capacity over the preceding 15 years, due to uncompetitive operating conditions in Europe. This European production is replaced by production in other countries, which tends to have a much higher carbon footprint (the carbon footprint of producing primary aluminium in Europe is around 50% lower than the global average).

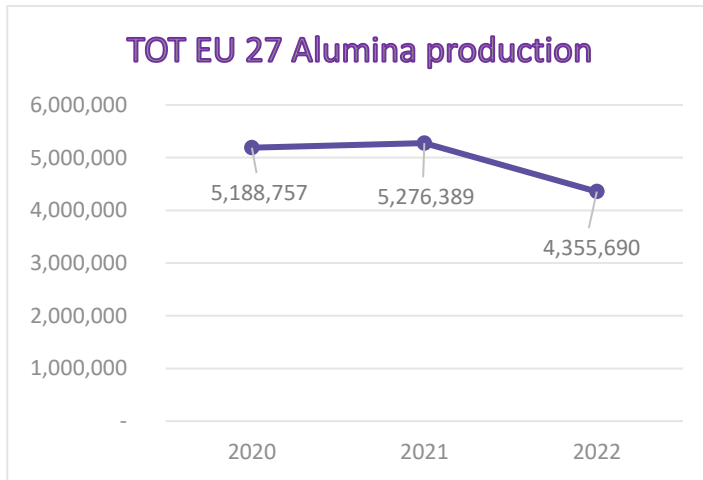
Alumina and primary aluminium are globally priced commodities, with the metal being listed on the London Metals Exchange (LME) and alumina having a Global Alumina Price Index (API). Alumina refining is generally gas or fuel based, while primary aluminium production is fully electrified.

Therefore, any extra regulatory costs imposed by the EU and which are not faced by our global competitors (e.g. the EU ETS costs) cannot be passed on to our consumers without losing market share to other global players. As we have explained in various position papers, the CBAM will unfortunately not be capable of solving this problem and re-establishing a level playing field.

<sup>3</sup> See [open letter](#) on the impact of global energy crisis on European production capacity, January 2022







As a result, our global competitors have a significant competitive advantage over European producers, and can easily replace EU production, thereby increasing the Union’s overall import dependency, to the detriment of Europe’s green industrial growth and strategic autonomy.

Alumina plants in the EU were also hit, with 1 out of the (only!) 5 refineries deciding to stop production and lay off about 70% of staff<sup>4</sup>.

Latest European Aluminium figures show how the EU has lost around 1 million tons of alumina since 2020, because of the energy crisis and higher energy costs EU producers face in Europe. This trend will continue and make the Union more dependent on imports if immediate action is not taken to protect this crucial first upstream segment of the European aluminium value chain<sup>5</sup>.

***The latest reform of the EU Emission Trading System (ETS) and its implementation via the foreseen changes of the existing ETS Benchmarks in the Free Allocation Rules (FAR) represent an opportunity to correct the problematic mistreatment of alumina under the current rules (which is leading to carbon costs which unfortunately cannot be mitigated because of unavailability of technology and / or quantity or quality of renewable fuels), and therefore to facilitate a growth of alumina production in the EU, in line with the recent EU proposal to increase the processing of strategic materials by 40% by 2030 as part of the Critical Raw Materials Act (CRMA)<sup>6</sup>.***

### Why an ETS benchmark for alumina is urgently needed.

According to the ETS FAR today in force there are two product benchmarks set for the aluminium sector, mainly related to the primary smelting process: one for electrolysis (1.514 tCO<sub>2</sub>/t Al in phase III) and one for the anode production (0.324 tCO<sub>2</sub>/t Anode in phase III<sup>7</sup>).

All the other remaining segments of the aluminium value chain (upstream and downstream) are covered by the generic and non-sector specific heat and fuel consumption fall-back benchmarks (62.3 tCO<sub>2</sub> /TJ and 56.1 tCO<sub>2</sub>/TJ in phase III respectively). **Alumina production is under such so-called “fall-back” benchmarks.**

<sup>4</sup> See Reuters [article](#) « Romanian alumina producer to halt production, lay off 500 staff », July 2022

<sup>5</sup> See an overview of the European Aluminium value chain here: <https://european-aluminium.eu/about-aluminium/aluminium-industry/>

<sup>6</sup> See [EC Press release](#) « Critical Raw Materials: ensuring secure and sustainable supply chains for EU's green and digital future », March 2023

<sup>7</sup> See [here](#) Annex I to Delegated Regulation (EU) 2019/331



This is problematic because according to the latest ETS Reform, ETS fallback benchmarks will be cut by 50% because they are set by installations consuming biomass belonging to an incredibly broad range of processes and across many sectors, often smaller scale and / or working in lower combustion temperature ranges compared to alumina production facilities. This leads to artificially low emission levels that cannot be reached by an alumina refinery, leading to a 50% reduction of free allocation, and a consequential cost increase and closures of the few refineries still functioning.

Such treatment is unfair and inconsistent for a set of technical legal, and political reasons:

**Technically:** In the ETS phase III, the fuel benchmark was taking natural gas as a reference fuel, being the most available and abundant energy source used EU-wide. Biomass instead is not uniformly available within the EU and across different sectors. Alumina refineries are unable to switch to biomass because:

- Biomass is not uniformly available across the EU<sup>8</sup>;
- Biomass is not suitable because of the required high temperatures and gaseous fuels needed for a clean combustion;
- Biomass cannot provide a steady supply of high-pressure heat for the production of alumina.

Such treatment runs contrary to the entire rationale of the ETS benchmarks, which are supposed to incentivize CO<sub>2</sub> reductions up to the level of the best performers. Alumina producers facing these costs have no technical or economically viable way to actually reduce their emissions to the benchmark level. Already, this is causing a shortfall of around 20% in free allocation for Europe's alumina refineries, creating ETS costs not faced by global competition, and this problem will become even more pronounced from 2026 onwards, following the benchmark updates.

European Aluminium collected figures from four out of the five alumina plants in the EU, and has done a forecast of the expected CO<sub>2</sub> costs under the revised benchmark levels based on production level data between 2020 and 2022<sup>9</sup>:

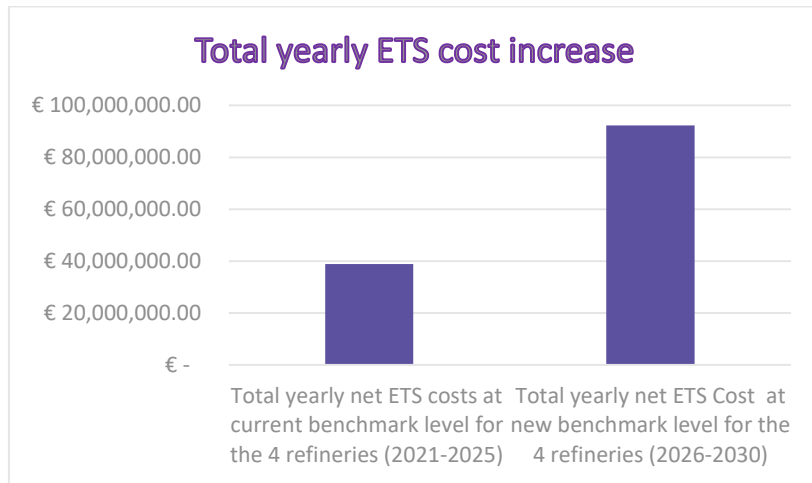
- **Assuming a CO<sub>2</sub> price of 100 EUR/ton, the share of ETS costs for these plants would represent between 6% and 13% of today's global price for alumina (the Alumina Price Index or API). These percentages will continue to increase as the ETS price increases. These are costs that our competitors do not face, and, given, that alumina is priced in a global market, the European producers will not be able to pass this cost on to consumers. It will not be possible for the 4 remaining plants that are still operating in Europe to continue their operations when faced with a regulatory cost that is equal to 6-13% of the sale price and which is not faced by any of their global competitors.**

---

<sup>8</sup> "Cogeneration facilities can be co-fired with biomass instead of coal. However, due to the lack of availability of large volumes of sustainably sourced biomass at a commercially competitive price point and in close proximity to the point of consumption, the feasibility of biomass in alumina refinery applications is low [...]". See p.30 [study](#) by Deloitte, Arena & Australian Government Renewable Energy Agency, November 2022

<sup>9</sup> These figures are an estimation, because for some refineries part of the hydrate production is sold and one plant stopped production in July 2022





**Politically:** Alumina refining comes from Bauxite, and bauxite is a mineral on the EU Critical Raw Materials (CRM) list. Moreover, Alumina is the precursor for the production of Primary Aluminium, where both the EU Parliament and EU Council have recognised the metal’s crucial role for our energy transition by including it on the list of Strategic Raw Materials part of the recently proposed Raw Materials Act. EU policy making must therefore be consistent and not work in silos, in line with the revamped Green Deal Industrial plan:

- The EU cannot on the one hand set ambitious targets for the domestic production of Strategic Raw Materials, while at the same time continuing to increase production costs for European producers of these materials (who are already frontrunners when it comes to sustainability) when our global competitors do not pay these costs.
- The Critical Raw Materials Act foresees an increase in production of strategic materials by 40% by 2030. Increasing carbon costs via the ETS (above the level of CO<sub>2</sub> performance that is technically achievable for an alumina refinery) will undermine such objective, because producing alumina in the EU will be significantly more expensive than producing alumina outside the EU.
- Gallium is a byproduct of the production of Alumina. The recently introduced restrictions on exports of gallium from China are endangering Europe's supply of this critical raw material that is required for the production of semiconductors and solar panels. Europe’s alumina refineries could offer the raw material (i.e. bauxite residue) to produce enough gallium to cover Europe’s needs. However, if we are to have production of Gallium in Europe, it is crucial to first provide Alumina refineries framework conditions to ensure continued economic viability of the primary process (i.e. alumina refining). Alumina producers will not consider nor invest in producing a by-product (gallium) if they cannot even ensure the continued economic viability of their main process (alumina production).
- Finally, Alumina refineries are located in mono-industrial regions or regions with little other employment opportunities.



**Legally:** Article 10a of the Revised ETS Directive<sup>10</sup> clearly mandates the Commission to “Review the determined Union-wide ex-ante benchmarks in relation to their application in the period from 2026 to 2030”, also taking into account “the level playing field of installations using existing technologies”. The following sentence in the article then further clarifies that for existing product benchmarks the system boundaries could be potentially reviewed considering a set of guiding principles.

- This firstly means that the Directive does allow for the introduction of a separate product benchmark for sectors that currently fall under the fall-back approach, because Article 10a mentions first that the ex-ante benchmarks should be reviewed.
- Secondly, in the last Discussion Paper by DG CLIMA circulated to the Climate Change Expert Group (CEEG) (May 2023), DG CLIMA included among the criteria chosen for deciding to amend existing benchmarks “changes in the activity descriptions of Annex I to the revised ETS Directive”. Alumina is now specifically referenced in Annex I among the activities covered by the Directive together with Primary Aluminium. This means that the case of a separate benchmark for Alumina can be made.
- Thirdly, a separate benchmark could be considered because the ETS text does not explicitly prohibit creation of new benchmarks, based therefore on the legal principle that “what is not prohibited is permitted”.

### Possible design options for an Alumina ETS Product Benchmark

When the ETS Benchmarks applicable to the Aluminium industry were first designed in 2009, it was decided not to pursue the establishment of a separate Alumina Benchmark based on the 10% most emission efficient installations. This was because of the difficulty to come up with one value for the alumina plants due to the small number of plants and the large spread between them.

Also, the lowest emitting plant used a completely different process technology for hydrate production from the other plants, and such technology could not be adopted by the other plants without complete demolition and rebuilding of the installation. For this purpose, it was decided to stick to the general fall-back approach.

However, with the recent political and legislative developments, European Aluminium would support considering alternative approaches to the fall-back methodology. Some ideas to consider could be:

- Isolate certain ETS installations, currently falling under the fall-back benchmark methodology (non-sector specific), based on two criteria:
  - Unavailability of a technology or energy carrier in sufficient quantity or quality (e.g. biomass) to decarbonise their production process;
  - A certain amount of gas or heat consumption;
  - Recognition as Strategic in the Critical Raw Materials Act thereby establishing a stronger link between the ETS Carbon Leakage List and the Critical/Strategic Raw Material list

---

<sup>10</sup> See consolidated text of the ETS Directive [here](#), June 2023



These approaches would allow the ETS to reconcile and re-balance two key EU policy objectives:

- On the one hand continue to reward the best performers and incentivize decarbonization;
- while on the other, increase protection for those sectors that produce materials that are strategic for the EU's energy transition and compete on global markets



## ETS Aluminium Recycling Benchmark

### Background & Introduction:

Like Alumina, European aluminium recycling installations fall under the non-sector specific heat & fuel consumption benchmark, (provided they are above the 20 MW threshold of total thermal input installed capacity).

The aluminium recycling sector will be severely impacted by the drastic reduction of the fall-back benchmarks. As for alumina, European Aluminium<sup>11</sup> requested the assessment on the improvement of the CO<sub>2</sub> reductions to be done only taking into account installations using natural gas, leaving out of the calculation those using other energy sources, such as biomass. For aluminium recycling installations, biomass is not currently available in a uniform manner across the energy system. This depends on several factors including national/regional population densities and the relative sizes of agriculture, forestry, marine and waste-based sectors.

Aware of such challenge, in the final text of the ETS Directive agreed in Spring this year, Article 10a on the Transitional Union wide rules for harmonised free allocation and the Benchmarks was amended to ensure the climate mitigation potential of recycling should be taken into account in the Benchmarks review process:

- “[...] *In order to provide further incentives for reducing greenhouse gas emissions and improving energy efficiency and to ensure a level playing field for installations using new technologies that partly reduce or fully eliminate greenhouse gas emissions, and installations using existing technologies, the determined Union-wide ex-ante benchmarks shall be reviewed in relation to their application in the period from 2026 to 2030, with a view to potentially modifying the definitions and system boundaries of existing product benchmarks, considering as guiding principles the circular use-potential of materials and that the benchmarks should be independent of the feedstock and the type of production process, where the production processes have the same purpose. The Commission shall endeavour to adopt the implementing acts for the purpose of determining the revised benchmark values for free allocation in accordance with paragraph 2, third subparagraph, as soon as possible and before the start of the period from 2026 to 2030.*

The text therefore included a clear mandate to review existing ETS benchmarks, also taking into account circularity.

Furthermore, adjusting the EU ETS so as to incentivise aluminium recycling in Europe would be in line with Aluminium’s strategic role and recycling objectives under the Critical Raw Materials Act and supportive of numerous product-specific regulations such as the Packaging and Packaging Waste

---

<sup>11</sup> See [here](#) European Aluminium Consultation Response on ETS Benchmark values for free allocation in the period 2021-2025, December 2020 & on the EU ETS Reform [here](#), February 2021



Regulation, End of Life Vehicles Regulation etc. Recycling aluminium reduces CO2 emissions and reduces import dependency.

### Possible design options for an Aluminium Recycling benchmark

Secondary aluminium is produced via remelting or refining scrap. Scrap can contain other materials and impurities. It must therefore be refined prior to remelting. This increases the energy intensity, thereby increasing the overall process emissions and GHG emission intensity.

When the ETS Benchmarks applicable to the Aluminium industry were first designed in 2009, European Aluminium collected data from European refiners and re-melters, identifying 36 installations in total above the 20 MW threshold (20 re-melters and 16 refiners respectively).

As the range of emission intensities of remelting and refining at the time were of comparable magnitudes, it was initially suggested to group remelting and refining together in one benchmark for secondary aluminium. Three remelting installations would determine the benchmark value based on the 10% most carbon efficient installations<sup>12</sup>. It was however eventually decided to use instead the generic fall-back benchmark because of the lack of comparable data and different type of plant configurations.

Furthermore, we see that today's ETS Registry doesn't fully reflect the number of recycling plants and remelting furnaces across the value chain, as some of them report under the activity description "Production of non-ferrous metals". This 'dilutes' the emissions of secondary aluminium production within the ones of other non-ferrous metals or aluminium transformation (extrusion, rolling, finishing etc.), thereby making it extremely challenging to assess the carbon cost impact of higher ETS costs on this important segment of the value chain. For example, many recycling cast houses are integrated in rolling installations, and are also recycling scrap, blended with primary metal. For this exercise, it will be therefore crucial to first understand how much aluminium is recycled in the integrated rolling installations than standalone recycling plants.

We believe it is time to design a new ETS Benchmark for Aluminium recycling plants because of:

- The new provisions and legal principles in the revised ETS Directive;
- The carbon leakage risks of aluminium recycling because of the higher energy costs in Europe;
- And the circularity/ EU supply chains resilience objectives part of the EU's Critical Raw Materials Act (CRMA),

The design could include the following options for consideration:

- Isolate the best 10% aluminium recycling installations (and request the EU commission to introduce a new activity description category for aluminium recycling and/or transformation in EU ETS Registry);

---

<sup>12</sup> The sector study indicated a benchmark value of about 220 kg CO<sub>2</sub>/t of secondary aluminium. See study by Ecofys « Methodology for the free allocation of emission allowances in the EU ETS post 2012 », November 2009



- Isolate all ETS installations under the fall-back benchmark methodology (non-sector specific) based on two criteria:
  - Unavailability of a technology or energy carrier (e.g. biomass) to decarbonise their production process;
  - Circularity contribution;
  - A certain amount of gas or heat consumption;
  - Recognition as strategic in the Critical Raw Materials Act thereby establishing a stronger link between the ETS Carbon Leakage List and the Critical/Strategic Raw Material list.

For further information, please contact:

**Emanuele Manigrassi**

Senior Manager, Climate & Energy

M +32 471 73 53 06

[manigrassi@european-aluminium.eu](mailto:manigrassi@european-aluminium.eu)

