European Aluminium
ANYTHING BUT BASIC

TO: Energy Ministers of the Council of the European Union

CC: Ms Teresa Ribera, Commissioner for Clean, Just and Competitive Transition; Mr Stéphane Séjourné, European Commissioner for Prosperity and Industrial Strategy; Mr Wopke Hoekstra, Commissioner for Climate, Net Zero and Clean Growth; Mr Dan Jørgensen, European Commissioner for Energy and Housing; Mr Kurt Vandenberghe, Director General for DG CLIMA; Ms Ditte Juul Jørgensen, Director General for DG Energy; Ms Linsey McCallum, Director General for COMP; Ms Kerstin Jorna, Director General for DG GROW.

Subject: Swift action is needed for a fully electrified European aluminium value chain

17 October 2025

Dear Energy Ministers, Commissioners and Director Generals,

On behalf of European Aluminium, the association representing over 100 members across the entire aluminium value chain, and ahead of the exchange of views in this week's Energy Council meeting, I am writing to share four key actions our sector requires in the upcoming European Commission's Electrification Action Plan.

We welcome the European Commission's announced efforts to reduce electricity prices and promote electrification, aiming to decarbonise our economies, end our reliance on imported fossil fuels, and achieve our climate goals. However, globally competitive electricity prices are the condition *sine qua non* for accelerating industrial electrification across our value chain, as well as upfront OPEX and CAPEX support for costly investments in industrial electrification for both electrified and non-electrified technologies.

Aluminium primary production is already electrified, but smelters in Europe are curtailing production because electricity prices are two to four times higher than in the US and China, primarily due to carbon costs and regulatory charges on energy bills.[1][2] Without significant policy intervention, it is unlikely that both aluminium upstream and downstream production processes will survive and electrify at scale.

To level the playing field with competitors, we propose four actions, highlighted in detail below:

1. **Adopt state aid and de-risking instruments to reduce the cost of matching variable renewable energy sources with baseload industrial consumption profiles.**
2. **Provide upfront OPEX and CAPEX support for all industrial electrification technologies.**
3. **Make demand-side response voluntary and adequately remunerated to recognise sectoral limitations.**
4. **Improve grid efficiency and balance industrial network costs among all consumers.**

We look forward to working with the EU Commission services, governments, and broader stakeholders on our proposed actions. These are further detailed in the annexe to this letter.

Yours sincerely,

Paul Voss

[1] European Commission, *Report on Energy Prices and Costs in Europe*, February 2025.
[2] Nearly half of Europe's aluminium smelters have been forced to curtail or completely halt production since October 2021 due to increased energy costs.

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EUROPEAN ALUMINIUM INDUSTRY'S PROPOSED ACTIONS FOR THE ELECTRIFICATION ACTION PLAN

1. *Adopt state aid and de-risking instruments to reduce the cost of matching variable renewable energy sources with baseload industrial consumption profiles*

Many European Commission initiatives aim to decrease energy prices by increasing the uptake of Power Purchase Agreements (PPAs). However, our producers have so far signed a few PPAs due to their stable consumption profile and market volatility. New de-risking mechanisms are necessary, starting with addressing the risks and costs associated with matching the variable renewable energy sources' electricity to more stable consumption profiles, as per the Draghi report.[1] We propose including such de-risking mechanisms in the Action Plan and further discussing these solutions in the context of the upcoming Tripartite Contracts on Affordable Energy. State aid support for energy-intensive industries is also key to protect us against carbon leakage. As a price-taker and electricity-intensive ETS sector, aluminium is one of the most exposed, making ETS indirect cost compensation crucial. We call for the extension of indirect cost compensation under the EU ETS beyond 2030. The addition of new sectors must not at have a negative impact on the level of compensation received by already eligible sectors.

2. *Provide upfront OPEX and CAPEX support for all industrial electrification technologies*

The high OPEX costs of current electrified processes and the limited availability of affordable renewable energy already put price pressures on the aluminium industry. Electrifying alumina refining, transformation, and recycling - through the development of electric furnaces and heating technologies, infrastructure upgrades, and fuel switching - will require substantial, decades-long public and private investments to cover both CAPEX and OPEX costs.[2] Therefore, we recommend directing investment from EU funding instruments towards energy-intensive industries and subsidising the OPEX costs of energy-intensive companies for the electrification of carbon-intensive production.

3. *Make demand-side response voluntary and adequately remunerated to recognise sectoral limitations*

Multiple initiatives under the Clean Industrial Deal focus on demand-side response (DSR). However, DSR is not a one-size-fits-all solution. The potential for DSR across the aluminium value chain is very limited, seasonal, and dependent on national market remuneration schemes and plant configurations. Therefore, future national flexibility schemes and policies must accommodate the technical, regional, and economic constraints of different sectors and remain voluntary. Also, flexibility requirements should not be used as a conditionality instrument to limit access to state aid.

4. *Improve grid efficiency and balance industrial network costs among all consumers*

Rising electricity demand from decarbonisation and existing electrified industries is placing growing pressure on electricity grids. Public investment will be needed to modernise, digitalise, and expand infrastructure and interconnectors. Additional investments in renewables, storage, capacity mechanisms, and flexibility will increase costs for industrial consumers at a time when the European industry already faces higher network charges and levies than in the US and China. Therefore, we call for (i) maintaining and extending reductions on surcharges and levies for industry to cover future grid costs and capacity mechanisms; (ii) establishing a dedicated network tariff regime lowering charges for industrial consumers; and (iii) designing targeted network charges for flexible consumers consuming electricity during oversupply, ensuring baseload industrial consumers remain competitive.

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[1] The power sector and other energy-intensive industries agreed this is the key challenge for energy-intensive industries to electrification in recommendation 1B of the Antwerp Dialogue Recommendations on Industrial Electrification & Competitiveness.

[2] To illustrate, the European aluminium industry requires €33 billion in CAPEX (excl. R&D and infrastructure costs) to reduce emissions by 93% and meet the 2050 climate target, yet it faces a significant funding gap compared to international competitors.