

European Aluminium represents the entire value chain of the aluminium industry in Europe. Our industry is leading the transition to a climate neutral and circular economy sitting at the start of long value chains that are key for European citizens: transport (40%), building and construction (30%) and packaging (20%). The new industrial strategy provides a framework for new promising initiatives that we support. In our [Aluminium Agenda](#)¹, we explain how **industries need to be energy efficient, competitive, circular and sustainable while operating in a free and fair-trade environment**. However, despite the positive actions announced, we have identified the following shortcomings:

- The **definition of industrial ecosystems within one (or several?) value(s) chain is very unclear**. The Commission should instead take a more focused approach and look at industries in the form of value chains, as recommended by the Strategic Forum for Important Projects of Common European Interest².
- As members of the EU's High-Level Group of Energy Intensive Industries (EIIs), we worked together with other industries and DG GROW on the "*Masterplan for a Competitive Transformation of EU Energy-intensive Industries Enabling a Climate neutral, Circular Economy by 2050*"³. **This document defined the framework conditions industries urgently require for meeting the EU climate-neutrality goal**. Unfortunately, we see that **many of the policy recommendations provided were ignored**. These included for example the importance of ensuring affordable and long-term access to low carbon electricity and measures to boost the demand of low-carbon and circular products.
- **The strategy lacks detail** on "how" the EU will support such ambitious objectives, which sectors and technologies will be prioritised and where will it choose legislation over softer policy options. Furthermore, **there is little information on the future composition of the Industrial Forum and how will different industrial sectors be associated to the policy making process**.

Aluminium is the **most used non-ferrous metal** and the second most widely used metal after iron, both in the EU and globally. The **global demand of the material is under constant growth** and our industry in Europe faces fierce competition from other global producers. China today produces 60% of worldwide primary aluminium ingots. In the past five years, Chinese exports of semi-fabricated products to the EU has more than doubled. In parallel, **Europe has lost more than 30% of its primary capacity since 2008, despite growing global demand and investments**.

We call upon the European Commission to **recognise aluminium as a strategic value chain on its own and prioritise efforts to support our industry in the upcoming alliances on low carbon industries and raw materials**. The industrial strategy must **protect the European resilience of our producers, which are important players across global value chains**. Aluminium manufacturers produce and recycle a material which is **vital for the EU's strategic autonomy and green transition**. Otherwise, in the long run the entire production will depend on China and other countries.

The current Covid-19 pandemic⁴ shows how aluminium is crucial for producing semi-finished products such as can sheet and foil sheet for the packaging of food, drinks, pharmaceutical and medical products. This crisis proves how **essential our industry is to Europe and the need to take a value chain approach**. **In the aftermath of the crisis, we support the idea that the EU should identify industrial sectors of European interest and call for the inclusion of Aluminium among the strategic value chains to strengthen in the new Industrial Strategy**.

¹ See [here](#) European Aluminium's Aluminium Agenda 2019 – 2020.

² See [here](#) the report and recommendations "Strengthening Strategic Value Chains for a future-ready EU Industry" by the Strategic Forum for Important Projects of Common European Interest to DG GROW, November 2019.

³ See [here](#) the Masterplan and policy recommendations, November 2019.

⁴ See [here](#) [our](#) statement on the Covid 19 outbreak, 26 March 2020.

Aluminium: A strategic value chain for Europe's low carbon economy

EU policymakers all agree that the industrial strategy should focus on incentivising circular, low-carbon and strategic industries in Europe while protecting their international competitiveness and stopping carbon leakage⁵. This is a crucial point for the aluminium industry in Europe which is a key value chain for European strategic interests. To deliver the EU Green Deal, our industry is well on track in terms of decarbonisation and circularity:

- **Europe's aluminium is one of the least carbon-intensive in the world. The production process is already fully electrified, thus being completely in line the EU's Green Deal objectives and the 2050 Long-Term Strategy.** Its carbon footprint will continue to decrease as the European electricity mix decarbonises⁶. Also, Aluminium primary production in Europe achieves high levels of energy efficiency.
- Given the material's unique properties, **aluminium delivers energy and CO2 savings in its use phase in leading sectors, including mobility, packaging, consumer goods, and building and construction as well as renewable energy technologies.** In particular, low-carbon mobility thanks to its light-weighting properties makes a substantial contribution to reducing CO2 emissions and improving fuel efficiency⁷.
- Aluminium is **by nature circular**, with permanent properties that do not change during use and following repeated recycling into new products. Therefore, incentives aimed to **support aluminium recycling are another important way of saving CO2 emissions and energy**,⁸ thus fulfilling the EU objective to make Europe the first climate neutral continent.

Europe's transition to a low-carbon economy will therefore need more aluminium⁹, which is an **indispensable raw material for Europe's future strategic autonomy and sovereignty in global value chains.**

However, we regret to see that EU policymakers **do not yet explicitly include aluminium among those crucial sectors alongside steel, chemicals and cement, that need protection vis-à-vis international competition and carbon leakage as well as support in their decarbonisation efforts.** EU institutions **must urgently act to address the competitiveness challenges we face and recognise the strategic dimension of our value chain for Europe's future sovereignty and autonomy.** This is ever more crucial today in the context of the EU's ongoing and future actions to protect the economy from the consequences of the Covid-19 Pandemic. We thus call upon EU policymakers to take into due consideration our policy recommendations on EU energy & climate, trade, circular economy and innovation policy¹⁰, also explained in more detail in the following section of this paper.

We hope they will be reflected in the upcoming **Strategies on Raw Materials and Sustainable Mobility**, but also the other relevant policy initiatives referenced in the new Industrial Strategy, such as the upcoming **White paper on an instrument on foreign subsidies and alliances on low carbon industries and raw materials.**

⁵ See [here](#) European Parliament resolution of 15 January 2020 on the European Green Deal (2019/2956(RSP)): "[...] The industrial strategy should focus on incentivising value chains for economically viable and sustainable products, processes and business models aimed at achieving climate neutrality, resource efficiency, circularity and a non-toxic environment, while maintaining and developing international competitiveness and avoiding the delocalisation of European industries".

⁶ The carbon footprint of the primary aluminium production in Europe (EU28 + EFTA) is three times lower compared to China.

⁷ Aluminium's light-weighting properties enable cars produced in Europe this year to prevent 50 million tons of unwanted CO2 in vehicle emissions during their lifetime. Aluminium is also a key material for electric vehicles, making them not only lighter but are also providing a solution for the battery systems and charging infrastructure.

⁸ Recycling aluminium saves 95% of the energy used in primary production and an equivalent reduction in CO2 emissions.

⁹ See [here](#) our Vision 2050 Report: the global demand for our metal is expected to grow by 50% by 2050. Half of that demand will be met by primary aluminium and the other half by recycling. Provided the right policy conditions are in place, the CO2 emissions from primary aluminium production can be reduced by up to 70% and increased recycling can save an extra 1 500 million tonnes of CO2 emissions by 2050.

¹⁰ Also see our [I+Manifesto](#).

Challenges & policy recommendations

Carbon leakage and electricity costs

Primary aluminium production is extremely electro-intensive (about 15.4 MWh/t). Europe has the highest electricity prices vs. main competitors (Russia, UAE and China), due to increased costs under the EU emissions trading scheme (ETS indirect costs) and the greening of power generation systems. Between 2008 and 2017, electricity costs were 37% on average of total production costs of primary aluminium smelters¹¹. As a consequence, **Europe has lost more than 30% of its primary capacity since 2008, despite growing demand globally and significant investments in other parts of the world.** This is because no aluminium smelter outside Europe is exposed to carbon costs in their electricity prices, as well as other regulatory costs, primarily linked with European climate policies. Since aluminium is globally priced by the London Metal Exchange (LME), European producers cannot pass on these extra carbon costs without losing significant market share and are price takers on the market.

The ongoing review of the State Aid ETS Guidelines and on Energy and Environment (EEAG) are thus crucial for protecting the European producers' competitiveness against carbon leakage¹². We appreciate the European Commission's intention to stop carbon and investment leakage, also by considering the possibility of introducing a Carbon Border Adjustment Mechanism (CBAM) for selected sectors. However, so far we consider that a CBAM for the aluminium industry, which is one of the most, if not the most exposed sectors to carbon leakage, is not the best tool to achieve such policy objective given the challenges in factoring indirect costs and the need to have a system covering our entire value chain¹³.

Recommendations: Higher climate ambition with enhanced carbon leakage protection

- The 2030 targets to 50%-55% should be legally enshrined into the EU Climate law only after a detailed impact assessment of how it will affect electro-intensive industries like aluminium and how these industries can be protected to stop carbon leakage.
- Carry out an in-depth assessment of carbon pricing options accompanying improved carbon leakage provisions and their impact on industrial competitiveness post 2030.
- Financial tools to support the transition should be considered. These could include support schemes to facilitate corporate investments in renewable technologies¹⁴ to ensure stable and affordable sourcing of carbon-neutral electricity.

Recommendations: A more globally focused competition policy to accelerate industrial transformation

- Set a policy framework for long-term power purchase agreements (PPAs) and incentives for industrial facilities participating in energy balancing markets and demand response schemes.
- A revised state aid policy framework, including revised EEAG that goes beyond the Important Projects of Common European Interest (IPCEI) approach tailored to support strategic value chains that must innovate and are at risk of carbon leakage, while also supporting the development of low-carbon products.

¹¹ Source: CEPS, Jan 2019: [Composition and drivers of energy prices and costs in Energy Intensive industries](#)

¹² See [here](#) our position paper on the draft ETS Guidelines, March 2020.

¹³ See [here](#) European Aluminium's response to the European Commission's consultation on the Inception Impact Assessment Roadmap for an EU wide Carbon Border Adjustment Mechanism (CBAM).

¹⁴ These difficulties were outlined by the European Commission in the [report](#) "Competitiveness of corporate sourcing of renewable energy, Part 2 of the Study on the competitiveness of the renewable energy sector", ENER/C2/2016-50, June 2019

Trade

Europe is squeezed between subsidised excess aluminium capacity in China and the unilateral US section 232 tariffs. **Chinese excess capacity is the root cause of market distortions in our industry.** A recent **OECD report**¹⁵ shows how subsidised aluminium production in China undermines European production, distorts global markets and depresses global aluminium prices, threatening the competitiveness of the European aluminium industry. China has also begun supplying and even acquiring domestic EU production capacity likely to be backed by state subsidised due to the magnitude of state interference in their aluminium industry and the choice of aluminium as a strategic material.

Recommendations: Establishing free and fair-trade conditions

- Governments and international organisations need to address state-subsidised excess capacity in China, both for primary and semi-fabricated aluminium.
- The EU must adopt an appropriate trade policy including effectively implemented trade defence instruments as well as a robust investment screening mechanism and instrument on foreign subsidies.
- The EU should pressure its trade partners to comply with the Paris Agreements and make new trade deals conditional to climate change policies.
- WTO rules should be reformed to protect the multilateral trade system by increasing transparency and introducing improved rules on industrial subsidies.

Circularity

Europe should support our industry to achieve a 100% recycling rate for all products containing aluminium to match its circular economy ambitions. Aluminium recycling process requires only 5 percent of the energy needed to produce the primary metal, thereby avoiding high CO₂ emissions by replacing carbon-intensive aluminium imports. Our recycling rates are among the highest of all materials¹⁶. However around **1 million tonnes of aluminium scrap are still exported to non-European regions**, which represents a loss to the European circularity system.

Recommendations: Achieving aluminium's full circular potential by 2030

- Enhance design for circularity, to incentivise dismantling before shredding and provide clearer information to customers and end-users on the recyclability of materials introduced into the market.
- Harmonised collection and sorting systems should be promoted, with a fair and transparent recovery system for beverage cans.
- Remove remaining barriers to the internal market on waste shipment. The administration around waste shipment needs to be simplified, be more efficient and effective and harmonised. The interpretation and the implementation of existing rules varies significantly from one Member State to another which slows down or even stops waste being shipped across borders.
- Create incentives to make circular and low-carbon solutions and products cost-competitive: to stimulate innovation and demand for low carbon solutions; recognise the role of recycling in mitigating climate change. Incentivise in priority investment in collection and sorting and shredding infrastructures and technologies as well as adapted re-melting capacities.

¹⁵ See OECD report "[Measuring distortions in international markets: the aluminium value chain](#)". Over the 2013-2017 period 17 international companies received up to USD 70 billion in different forms of support. 85% of this went to just 5 Chinese firms. The report acknowledges "excess capacity in the sector that is depressing global aluminium prices and threatening the viability of producers worldwide".

¹⁶ In Europe, recycling rates are over 90 percent in the automotive and building sectors, and 75% for aluminium cans.

Innovation

Investments in greenfield operations are challenging due to the lack of predictability related to regulation and access to affordable and green electricity. **Disruptive and breakthrough innovation is the only way to move primary aluminium production towards carbon-neutrality and reduce direct emissions in the production process.** With regards to indirect emissions, many technologies exist but the financial and regulatory costs are still extremely high.

Similarly, **innovation in recycling facilities require considerable upfront capital. Sorting, pre- and re-melting technologies are also important to further close the loop.** Aluminium manufacturers need to also significantly invest in product development to reinforce the material's unique decarbonisation and circular potential, especially in the mobility, building and packaging sectors but also in other low carbon applications such as Renewable Energy System (RES) units, energy storage solutions and electricity/data transmission grids.

Recommendations: Investing in the future

- Provide a more predictable and favourable regulatory framework to address the high energy costs and stimulate investments in greenfield operations. Remove regulatory barriers that prevent scaling up of innovations and more recycling in Europe. The framework should also support Aluminium producers to invest into available and mature low-carbon technologies as well as facilitate their access to low carbon electricity.
- Strategic value chains should benefit in priority from the Just Transition Fund and the other two pillars of the Sustainable Investment Plan, based on their contribution to decarbonisation and circularity.
- EU research and innovation funding and investment programmes must equally and fairly address key sectors without diverting massive amounts towards specific sectors.
- Support in developing new melt purification technologies to produce high quality recycled aluminium and investments in advanced shredding and sorting technologies.

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