

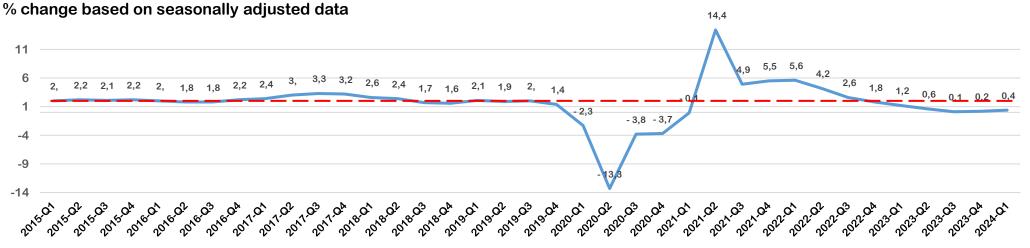
FEDERATION OF ALUMINIUM CONSUMERS IN EUROPE

THE EU ALUMINIUM INDUSTRY IN A WORLD IN UPHEAVAL: KEY RISKS AND OPPORTUNITIES

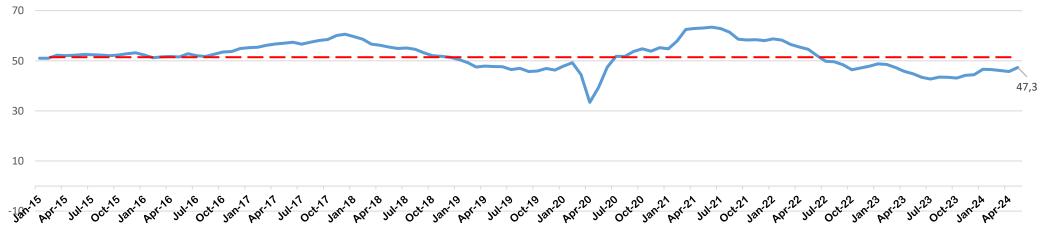
December 2024

EU INDUSTRIAL PERFORMANCE SEES GLOOMY TIMES WITH RECOVERY JUST NOT YET THERE

GDP Growth rates over the same quarter of the previous year



Euro Area Manufacturing PMI

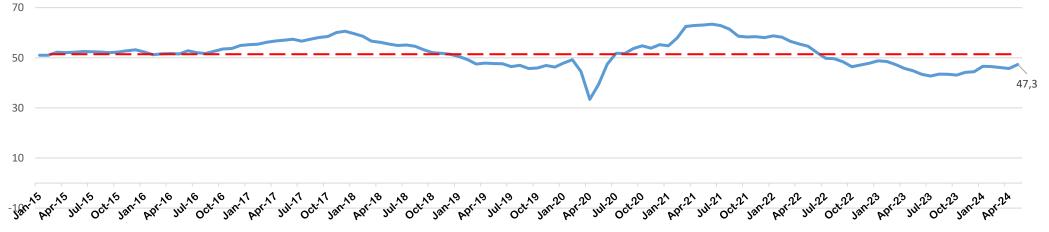


2

EU INDUSTRIAL PERFORMANCE SEES GLOOMY TIMES WITH RECOVERY JUST NOT YET THERE

- No efficient industrial policy
- Urgent need to reform, simplify and stimulate
- The reports of Enrico Letta and Mario Draghi must foster a quick political process



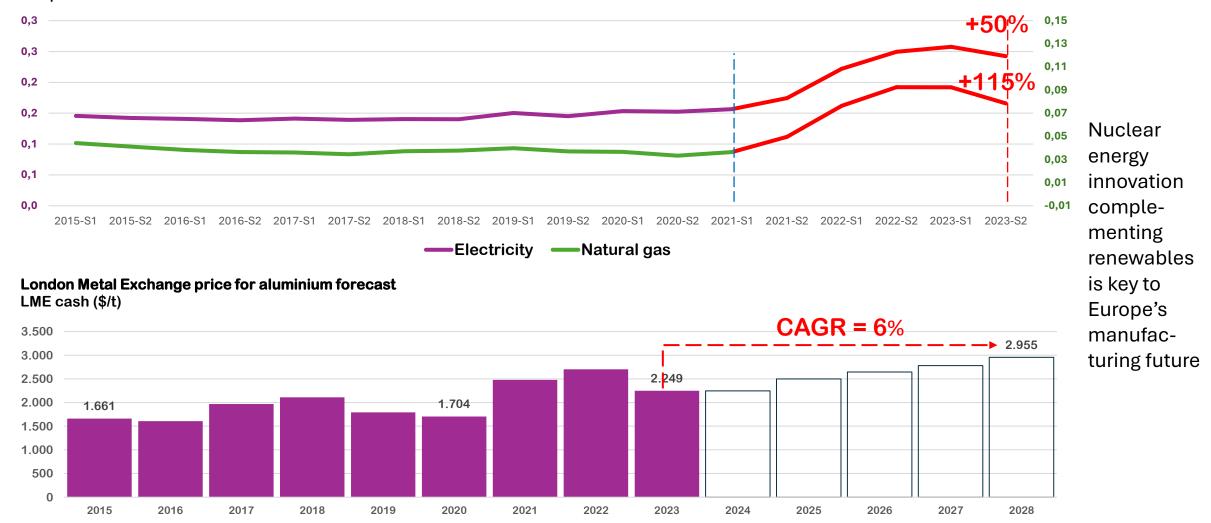


Source: Eurostat, S&P Global

3

REALITIES FOR ALUMINIUM INDUSTRY REMAIN SUBDUED

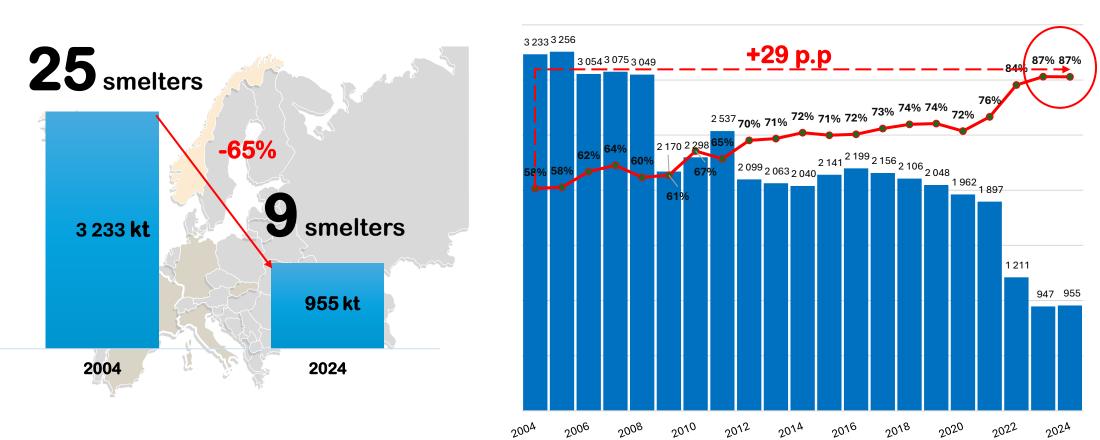
Price for natural gas and electricity for non-household consumers in the EU EUR per kilowatt-hour



Source: Eurostat, CRU

* All taxes and levies included

IT IS TIME TO UNDERSTAND EU ALUMINIUM FUTURE IS IN RECYCLING AND DOWNSTREAM PROCESSING



EU Primary aluminium production and deficit thousand tonnes

Production — Deficit

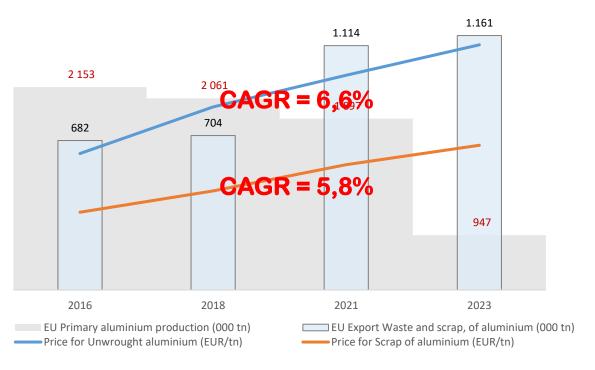
SCRAP/RECYCLING CANNOT SUSTAINABLY REPLACE PRIMARY METAL

The main drivers of European scrap prices are the primary aluminium price in the EU market as well as domestic deficit of scrap suitable for remelting.

Dynamics of scrap price resonates the one of primary metal and has been continuously increasing since 2016. Growing scrap exports (700 kt in 2016 to 1 mln t in 2021) that is a consequence of high cost of EU lowergrade scrap processing, while imports of premium scrap are also increasing.

Scrap cannot represent a sustainable solution for replacing primary metal in the EU aluminium industry, especially with cost inflation.

EU Aluminium Market Deficit pushes prices for raw aluminium up

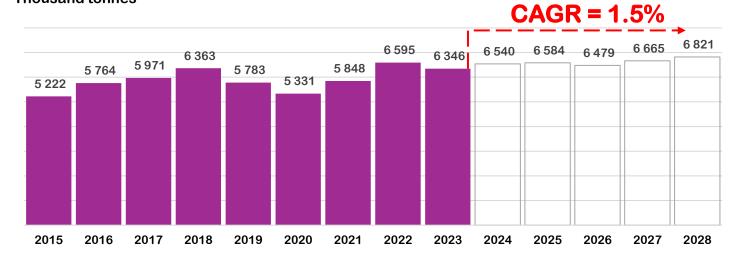


Primary aluminium must be blended with secondary metal for most applications, products made with recycled aluminium typically contain 30% of primary aluminium. Thus, even in the most ambitious circularity scenario, EU demand for, and deficit of, primary aluminium will continue to grow.

ROBUST RECYCLING AND PROCESSING BOTH NEED IMPORTED PRIMARY ALUMINIUM

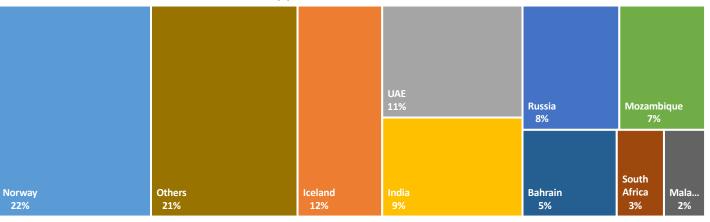
60%/40%

To ensure required properties of secondary aluminium made from low quality scrap, primary metal should be added to melted material. **Total EU deficit for primary aluminium (HS 7601) forecast** Thousand tonnes



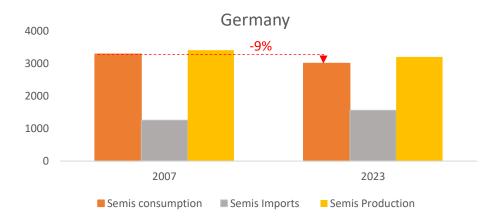
10-30%

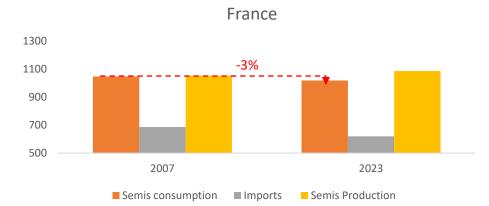
of primary aluminium should be added to decrease ferrous content and increase purity of secondary aluminium alloys. Share of main suppliers of aluminium to the EU in 2023

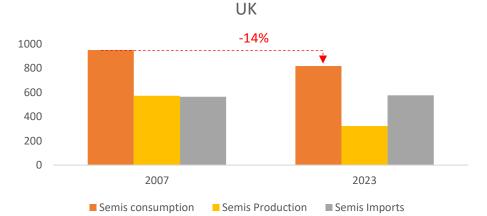


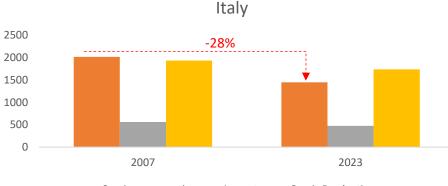
STEADILY FALLING CONSUMPTION OF ALUMINIUM SEMIS INDICATES DECREASE IN DOMESTIC END GOODS PRODUCTION

Trade defense measures on semi-finished supported domestic prices, but stimulated imports of complex products, harming EU aluminium transformers downstream. Urgent measures of industrial and trade support to reduce cost of semi-finished production are needed.



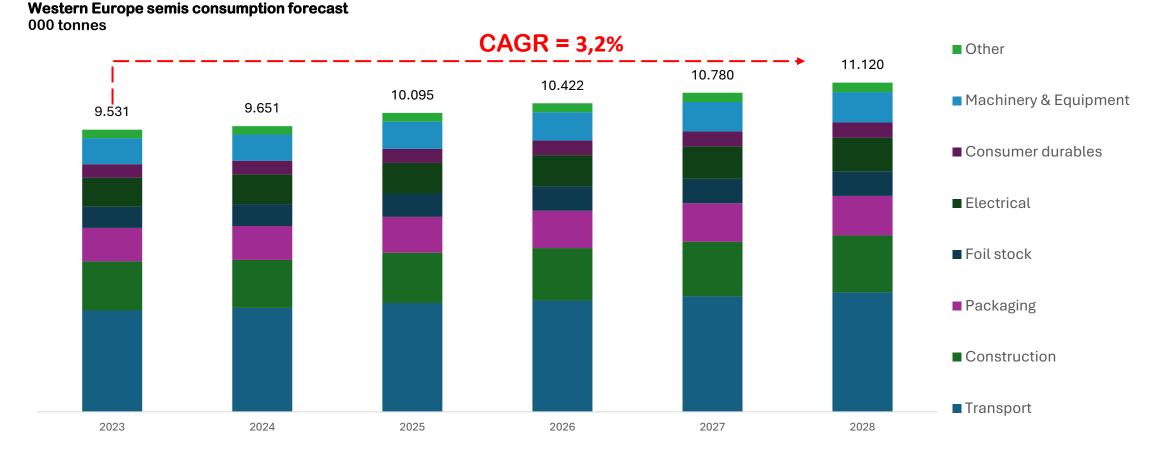






Semis consumption Imports Semis Production

HOWEVER INDUSTRIAL DEMAND FOR SEMI-FINISHED ALUMINIUM PRODUCTS IS PROMISING FOR FURTHER GROWTH



GREEN AGENDA AND RE-INDUSTRIALISATION ARE THE MAIN DRIVERS

+25%

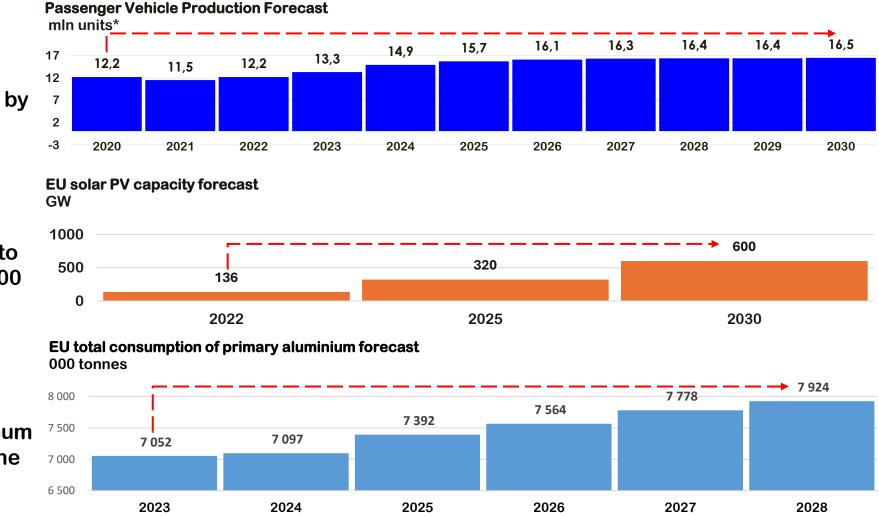
Passenger vehicle production in Europe by 2030

10 Mt

Of aluminium will be additionally required to meet EU's target of 600 GW of solar PW capacity by 2030

+1 Mt

Of aluminium per annum will be consumed in the EU in 5 years



Source: Ducker, LMC Automotive Q3-2022, Q4-2021; *Ducker applied the 2026–2029 CAGR to estimate the 2030 production volume which is not yet available in LMC forecasts, CRU * EU27+UK

ALUMINIUM DOWNSTREAM PROCESSING WITH ITS >8Mt OUTPUT AND >200k EMPLOYEES IS A KEY ELEMENT FOR THE EU'S INDUSTRIAL FUTURE

Critical and strategic minerals are the building blocks for the green and digital economy. Aluminium is among key metals in the global move toward net-zero. Aluminium is used in the energy, aerospace, food packaging, automotive, construction and other industries. <u>What the energy</u> <u>transition means for copper and</u> <u>aluminum (reuters.com)</u>

Aluminium is the world's most used non-ferrous metal – and for good reasons. In its use phase, aluminium delivers significant energy and CO2 savings that enable the decarbonisation of other sectors, including mobility and transport, buildings, packaging and clean energy technologies. The endless recyclability of our metal further contributes to decarbonisation and the circular economy. <u>Aluminium in</u> <u>Use - European Aluminium</u> (european-aluminium.eu)

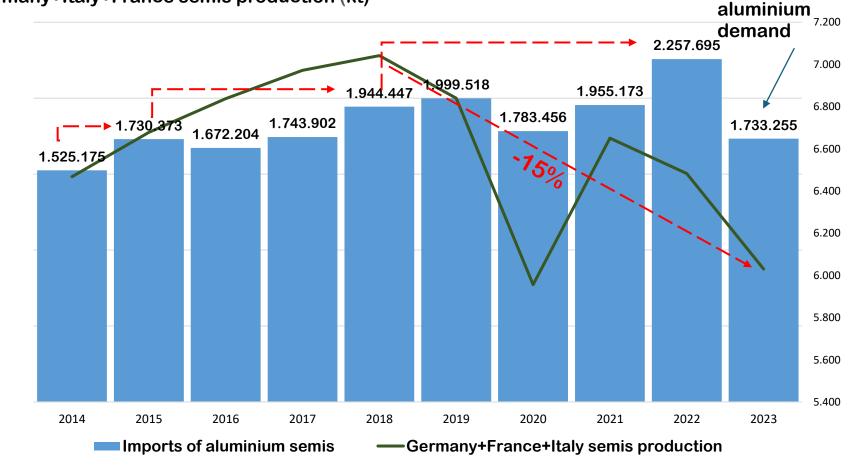
	Aluminium (primary)	Copper (refined)			
EU/US Lists of CRM/SRM	Included	Included Telecom (37%) Electrical (27%) Consumer Durables (23%) Transport (8%) Construction (5%)			
	Transport (26%) Construction (21%)				
Key applications	Electrical (15%)				
	Machinery & Equipment (11%) Packaging (8%) Foil Stock (8%) Consumer Durables (6%)				
World demand 2024 (mln tonnes)	71.4	25.8			
World supply 2024 (mln tonnes)	71.6	26.1			
World demand 2050 (mln tonnes)	88 (+23%)	53 (+105%)			
World supply 2050 (mln tonnes)	75.3 (+5,1%)	37.1 (+42%)			

THE EU IS FAILING TO KEEP ITS DOWNSTREAM ALUMINIUM TRANSFORMERS COMPETITIVE – THEIR SURVIVAL IS AT RISK

Challenges for the downstream industry

- Weak economic environment
- High price of raw material
- Growing competition
- Interruptions of supply chains
- Administrative and tax burden
- CBAM
- Absurd import tariffs on raw aluminium despite massive and growing import dependency

EU imports of aluminium semis from non EU countires (tonnes) vs Germany+Italy+France semis production (kt)



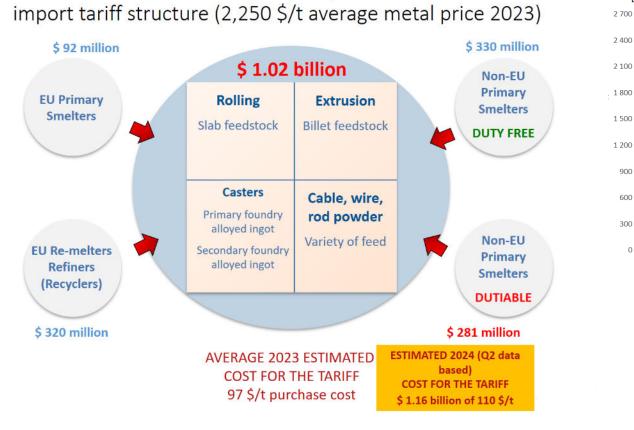
2023 is not

representative

due to the fall of

PRICE FOR RAW MATERIALS IS THE MAIN CHALLENGE

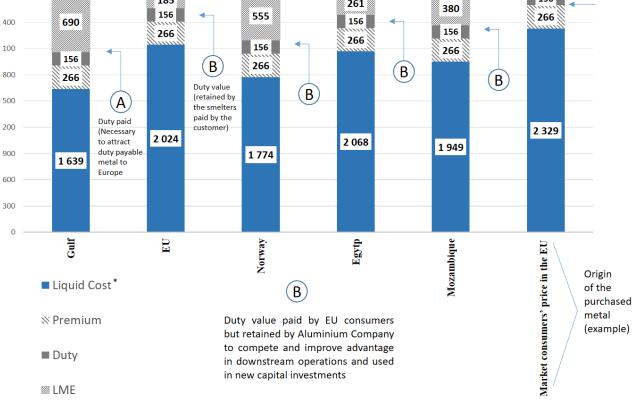
All aluminium consumed in the EU is sold at a duty-paid level of price, irrespective of its origin. Primary and secondary producers enjoying duty-free status pocket the difference.



Annualized Semi-fabricating industry additional costs from 3-4-6%



BILLET PRICE STRUCTURE PAID BY A EUROPEAN CONSUMER



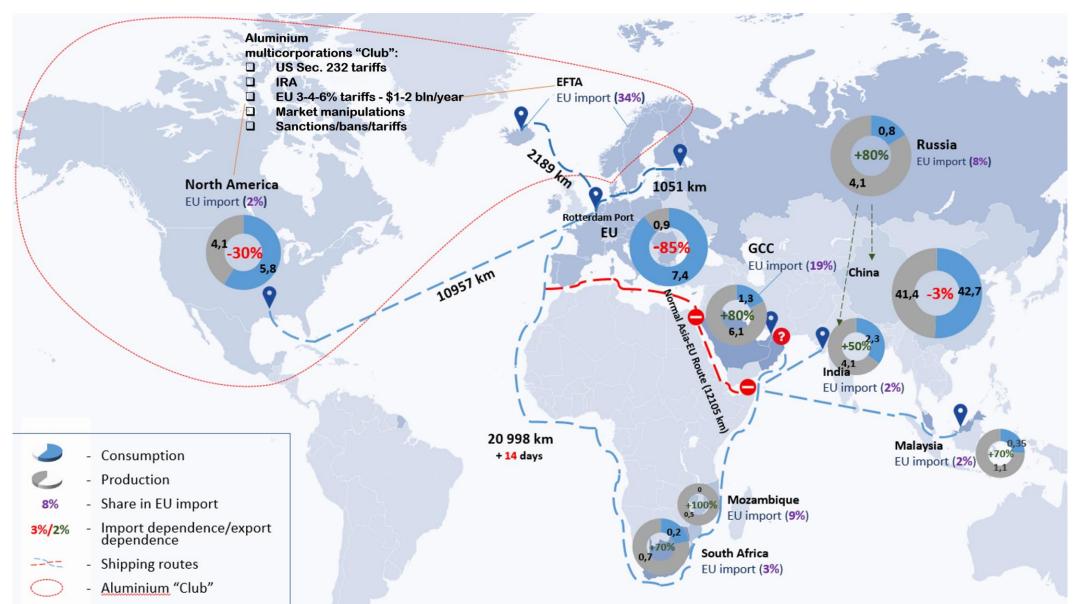
*Liquid cost is a part of total production cost of aluminium. Only includes costs of aluminium's liquid form production

Global

Market

Price

EU IS MOST AT RISK OF SHORTAGE AND PREMIUMS HIKE FOR ALUMINIUM SUPPLIES



PILING UP OF EXTRA COSTS IS A MAJOR THREAT RISK OF DISAPPEARENCE OF THE EU ALU INDUSTRY

€1bln

Extra costs for EU downstream producers from EU import tariffs on raw aluminium (€24 bln for 2000-24)*

€ 5,8 bln

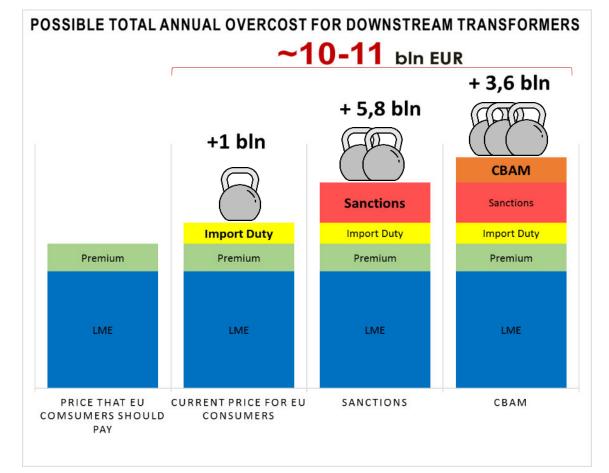
If implemented, from annually higher market premiums in a post-sanctions / ban scenario on all Russian EU imports**

€ 3,6 bln

Estimated costs that will be passed down to consumers from the Carbon Border Adjustment Mechanism**

= up to € 11 bln

Annual extra costs that risk killing our industry !



** FACE estimates

^{*} LUISS University estimated 2000-17 cumulative extra-costs for EU-28 downstream producers at €17.8 bln and €1 bln per annum (LUISS Study (all documents): The European Union Aluminium Industry, the impact of the EU trade measures on the competitiveness of downstream activities (face-aluminium.com)

CBAM EVENTUALLY MEANS MORE ADMINIDTRATIVE AND FISCAL PRESSURE ON DOWNSTREAM

- CBAM entered into force in 2024 stage-wise with payments starting in 2026
- CBAM is designed to mirror EU ETS to level playing field
- CBAM covers all aluminium products classified under HS codes 7601, 7603-7614, 7616
- CBAM payments can be reduced through the use of recycled metal in products
- CBAM does not cover indirect emissions, but the EU can review its scope in Q2 2025
- CBAM creates a bureaucracy too complex for SMEs + risk of penalties if errors made

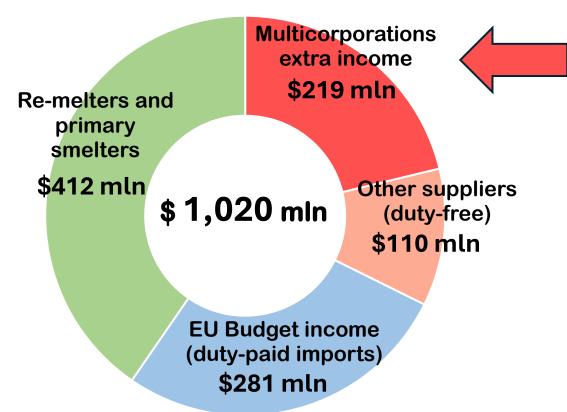
2024-2025	2026	2027	2028	2029	2030	2031	2032	2033	2034
 indirect emissions to avoid penalties Starting from January 1, 2025 report on emissions calculated upon the EU methodology and use default values to a limited extent 	I(PAYME)IEU ETS fromIEU declaraIEU declaraIReport ofIPurchasIpaymenIDeclara	ee allowand ants shall: on embedde e CBAM ce ts will be ap nt cannot to ies at initia	ed emission rtificates fo pplied to the rade certificates	radually ph ns (by 31 M or emissior e part of er cates but c d price.	ased out by ay every ye is based or missions no an return u	ear) EU ETS w ot covered ip to 1/3 un	with free a lused certit	llowances	E

THESE DISPROPORTIONALITIES MOSTLY SUPPORT AN OLIGOPOLY OF PRIMARY SUPPLIERS, MOST OF THEM FOREIGN

Between 2000 to 2023, around <u>€ 22 bln</u> of artificial extra costs have been harming the EU's downstream aluminium transformers because of the EU's 3%-4%-6% import tariffs Re-melters and Re-melters and EU downstream extra costs from EU import tariffs in 2023

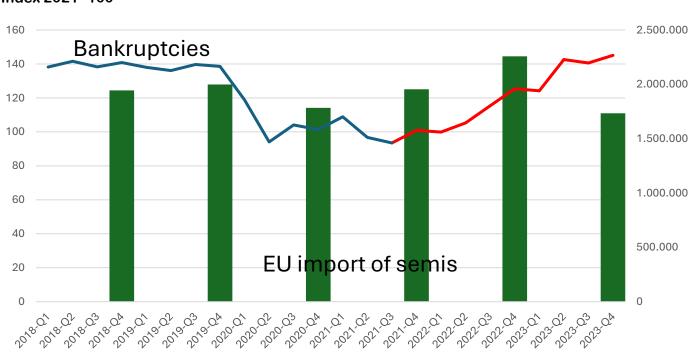
Of this amount, billions were pocketed by a producers' oligopoly, who shut down 65% of EU production in that same period and invested in smelters outside of the EU.

Just in 2023, this aluminium multicorporations "club" * from North America and non-EU EFTA countries earned **\$219 mln**, generated due to the EU import tariff for primary aluminium (added to the price of all aluminium sold in the EU).



FOR EU SMEs, HIGH COSTS AND LOW DEMAND RESULT IN DECLINE THAT UNDERMINES THE FUTURE OF THE EU ALUMINIUM INDUSTRY

Business insolvencies continued to rise in Europe in 2023, increasing by an annual average of 24% from 2022 (following 2022's annual average rise of 30% on 2021). They rose above their 2019 level in Q2 2023 and, in Q4 2023, stood close to the Q2 2016 figure.



Business bankruptcy index by NACE Rev.2 activity amid Growing semis imports

Industry, construction and market services Index 2021=100

SANCTIONS IS ANOTHER CASE OF SELF-INFLICTED DAMAGE WITH HIGH POTENTIAL OF RUINING THE EU DOWNSTREAM ALUMINIUM SECTOR

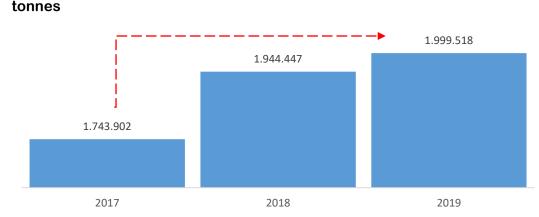
In 2018, the announcement of the U.S. sanctions against RUSAL caused

35% rise in market prices (LME)

80% hike of price for alumina

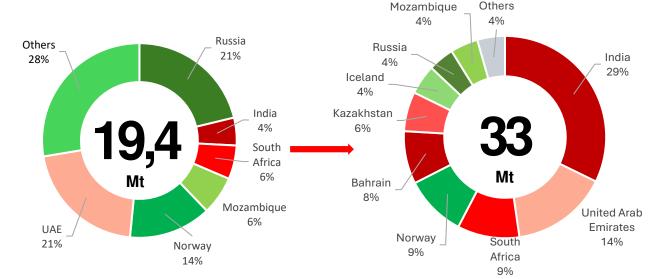
15% growth of competing imports just between 2017-2019

Replacement of low-carbon suppliers by high carbon supplies from Asia lead to the increase of high-carbon suppliers from 30% to 45% (2015-2023)



Share of Import of CO2 Eq to the EU*, 2015 vs 2023

EU imports of aluminium semis from non EU countires



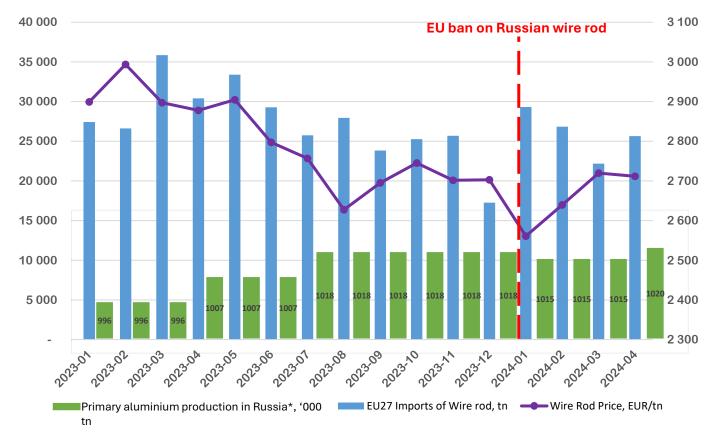
SANCTIONS ON ALUMINIUM CAN'T REACH ANNOUNCED GOALS BUT CAN DAMAGE THE EU INDUSTRIAL TISSUE

Those calling for aluminium sanctions seek nothing but their own profit. They seek to eliminate a competitor by using non-market practices and to inflate prices by agitating market fears.

After imposition of EU sanctions on Russian wire rod:

- Price for EU downstream on wire rod jumped
- Imports from Russia were replaced by highcarbon Asian suppliers
- Russian production of primary aluminium (including wire rod) remained stable

RUSAL is a private company and with plants in 4 EU member states. The group is an integral and major part of the European aluminium system through strategic supplies and intra EU production. The group's chairman is American, ex top US official. The Russian state gets only from national taxes on private profits a very marginal and negligible percentage of the revenues of the sales of RUSAL's aluminium in the EU. Therefore, sanctioning or banning Russian aluminium will in no way affect Russia's military capacities but will irreversibly harm EU industry and will benefit China, India, Turkey, etc.



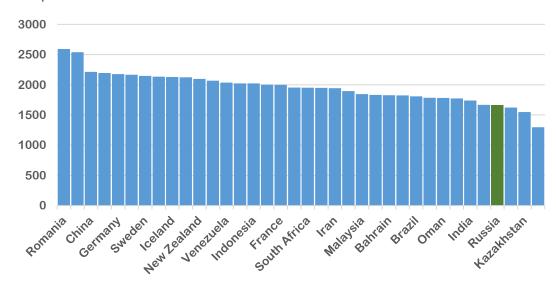
Influence of the ban on Russian Wire Rod on the EU market

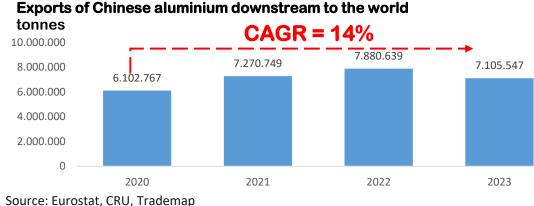
Source: Eurostat, CRU

* Due to the peculiarities of the aluminium market volumes of production are usually equal to the volumes of sales, which means that production in Russia is almost the same as sales of Russian aluminium

CHINA WOULD BE THE MAIN BENEFITTER OF BANS ON **RUSSIAN ALUMINIUM**

Word aluminium producers liquid costs US \$/t

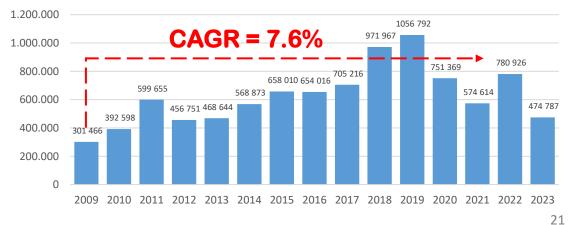




China's primary aluminium imports from Russia



EU Imports of downstream from China tonnes



THE UNITED STATES HAVE CHANGED, THE EU BECOMES **A TARGET**

THIS IS NOT THE TIME FOR WEAKENING FURTHER THE EU ALUMINIUM INDUSTRY



- Profound changes in the USA mean the "good old transatlantic relationship" exists no more
- The EU must urgently prepare for an aggressive US ٠ economic policy under Donald Trump and J.D. Vance
- The new US administration will massively deregulate • and boost fossil energy production to stimulate innovation and industry growth
- Universal 10%-20% import tariffs and very high tariffs on ٠ China specifically may be applied – but also against the EU in a possible coercion scenario
- Policy areas which will remain contentious include aluminium and steel but also:
 - Big tech companies (Google, Amazon, Facebook, Apple, X/Twitter...)
 - AI regulation ٠
 - EU digital regulation in general ٠
 - Possibly defense and agriculture ٠
- The EU may be treated as an adversary and will be heavily impacted by this administration's policies and by the redirection of Chinese exports

INDUSTRIAL POLICY RECOMMENDATIONS FOR THE EU ALUMINIUM INDUSTRY'S COMPETITIVENESS

e

EU import tariffs on unwrought aluminium should be abolished, as they artificially raise downstream costs without offering any appreciable results in supporting the upstream.

Furthermore, the remaining EU smelters of primary aluminium sell more than 90% of their production to their regional European clients, which are the very downstream transformers who are suffering from import tariffs on raw aluminium. Therefore, maintaining or increasing import tariffs on raw aluminium will not only shrink our value-chain downstream but also speed its disappearance upstream.



Keeping primary aluminium production can be justified by recognizing its strategic value for the entire EU economy. Government intervention will be needed to ensure the EU will not be totally dependent on imports. We need economic stimulus and an IRA-style EU investment, rather than a penalizing CBAM. Civil nuclear energy and the promise of SMRs should be supported to help restart EU primary aluminium production, support our prosperity and economic sovereignty.



Secondary aluminium production should be encouraged through appropriate support schemes other than customs duties, by also ensuring that the second raw materials produced in the EU would be fully recycled and reused domestically rather than exported to third countries. EU consumers should not be obliged to pay EUmade secondary aluminium at a duty-paid price. Primary aluminium must be blended with recycled metal for most applications. Therefore, even in the most ambitious circularity scenario, EU imports and deficit of primary aluminium will continue to grow.

INDUSTRIAL POLICY RECOMMENDATIONS FOR THE EU ALUMINIUM INDUSTRY'S COMPETITIVENESS



Europe faces a dangerous geopolitical and geoeconomic situation: the conflict in Ukraine, escalating conflicts in the Middle-East and Gulf region, tensions with China and now a US administration with President Trump who will target the EU.

We must urgently strengthen our strategic resilience and maintain all our supplies of low carbon aluminium. The Letta and Draghi reports must be translated into assertive action and "radical change".



user industries.

We need to **reindustrialise** to **decarbonise**, this is the equation of our **Green Competitiveness**. Only a vibrant industrial base can finance the climate and digital transitions, innovate and sustain competition. There is no world power without a robust industry. **Trade policy must be at the service of industrial policy**.



To **improve policy making**, reliable data and economic statistics would be needed, thus allowing to better take into account the overall impact of proposed measures all along the value chain and, ultimately, on European consumers. There are still important data gaps in the EU aluminium sector. Industry knowledge must improve.

All EU policies and decisions must go through ex ante and ex post impact assessments – the EU public policies matrix must be coherent and produce gains of competitiveness and productivity.

Thank you for your kind attention

You can download this presentation on our website: https://face-aluminium.com/

Federation of Aluminium Consumers in Europe Rond Point Schuman 6, Box 5, 1040 Brussels, Belgium