

# DOING BUSINESS WITH ALUMINIUM INDUSTRY IN EUROPE

## LEVERAGE ON SKYMINDER SOLUTIONS

FEBRUARY 2024 SKYMINDER NEWSLETTER



## Aluminium Industry Overview

Aluminium is the world's most used non-ferrous base metal. But with its attractive properties and strategic role in the green transition, aluminium is anything but basic. Our sustainable, versatile material allows key sectors to decarbonise and achieve otherwise impossible outcomes through its unique combination of properties and effects. Aluminium is everywhere: from packaging, consumer durables, and healthcare products to buildings, construction, mobility, aerospace, and energy generation.

Aluminium production begins with bauxite, a reddish rock that is the primary 'aluminium ore'. Most bauxite is mined in tropical or subtropical regions but also in Europe to a certain extent.

To produce primary aluminium, it's necessary alumina. Alumina is extracted from bauxite via a process called refining. The refining process has two steps: first, the bauxite is dissolved with caustic soda to remove residues and obtain aluminium hydroxide, then it is heated to remove the water contained in this hydroxide. After the refining process, alumina looks like a white powder similar to table salt.

Molten aluminium is extracted from alumina through a process called smelting. This process is fully electrified and uses a powerful electric current to extract pure aluminium from alumina. After this electrolysis, molten aluminium can be collected from the bottom of the pot. This liquid metal is transferred to the casthouse, where it is purified, alloyed to specification, and then cast into ingots or billets ready for semi-fabrication.

Aluminium ingots can be rolled into sheets for use in aluminium beverage cans, foils and car bodies. Through extrusion, aluminium billets can be shaped in their required form and deliver almost unlimited possibilities in product design for furniture, building components, or cars.

Once aluminium scrap is collected and sorted, it is placed into a melting furnace and turned into molten aluminium, which can be cast into new ingots or billets. Depending on customer requirements, alloying elements may be added to produce the desired product specifications.

Aluminium can be recycled endlessly without losing its original properties, making it a key contributor to a more resource-efficient society. Furthermore, recycling aluminium only requires about 5% of the energy used to produce primary aluminium, providing huge CO2 saving benefits.

SOURCE: European Aluminium Association



## Focus on European Aluminium Association

European Aluminium, founded in 1981 and based in Brussels, is a member-based industry association representing Europe's most complete and thriving metals value chain.

It's composed by 100+ members include primary aluminium producers; downstream manufacturers of extruded, rolled and cast aluminium; producers of recycled aluminium and national aluminium associations, representing more than 600 plants in 30 European countries.

Association's day-to-day work is managed by an international team of policy- and technical experts. It actively engage with decision makers and the wider stakeholder community to promote the outstanding properties of aluminium, secure growth, and optimise our metal's contribution to meeting the EU's sustainability and industrial leadership ambitions.

European Aluminium's mission is to create the conditions for the European aluminium industry to grow, evolve, and help build a more sustainable world. Together with members, policy makers and other stakeholders, it want to realise a vision of a competitive, decarbonised and circular European aluminium industry serving a thriving European society.

Member are the cornerstones of European Aluminium. They steer the association through their participation in Divisions, Task Forces, Committees, and Market Groups, which gather experts from the industry. The Executive Committee is responsible for overseeing the direction and management of the association, taking into account the interests of all members. It is presided by a Chair who serves a two-year term.

SOURCE: European Aluminium Association

# Facts and Figures

The European aluminium value chain is one of Europe's most complete and thriving raw materials sectors, with over 600 plants across 30 European countries. Serving six out of the EU's fourteen industrial ecosystems, the European aluminium industry plays a key enabling role in realising the European Green Deal. local communities.



**600 +**  
PLANTS ACROSS  
EUROPE (EU, EFTA,  
UK, TURKEY)



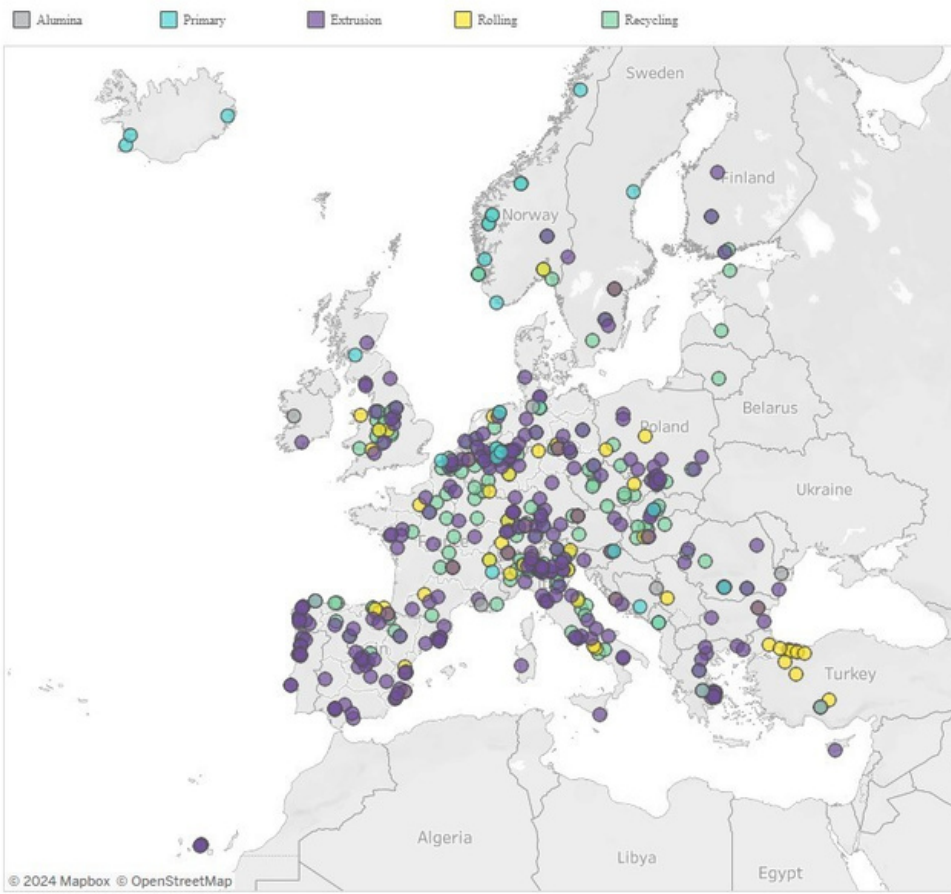
**€ 2.1**  
BILLION IN  
EUROPEAN  
INVESTMENTS



**9 MILLION TONNES –**  
YEARLY EUROPEAN  
DEMAND FOR PRIMARY  
ALUMINIUM

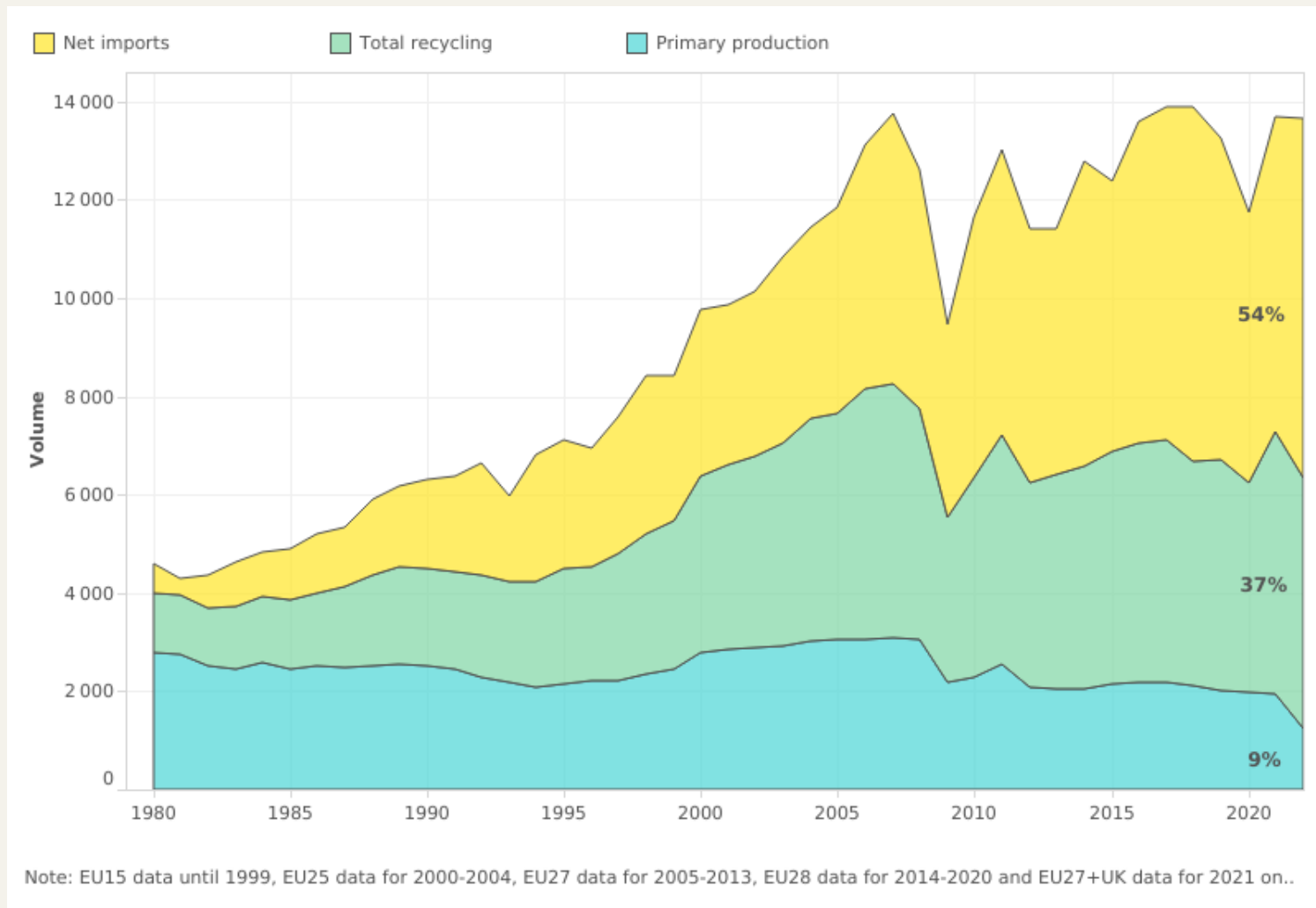


**18 MILLION TONNES - THE**  
FORECASTED TOTAL  
EUROPEAN DEMAND FOR  
ALUMINIUM IN 2050



Europe has a well established and complete aluminium value chain; from mining to recycling. While multinationals often own smelters and rolling mills, the vast majority of the extrusion and recycling plants are SMEs. All serve as important actors within local communities.

To meet the growing demand for aluminium, more and more is imported from third countries. This is because European producers are struggling to remain competitive due to the energy crisis and an unlevel playingfield for trade. There is an overview of Europe's aluminium supply broken down into three sections: imports, European secondary aluminium production (recycling) and European primary aluminium production. One thing is clear: Europe cannot afford to become more dependent on unreliable trade materials for a material that is a critical component in virtually all low-carbon technologies: from batteries to electric vehicles and wind and solar power to energy-efficient buildings. Increasing and preserving the capacity of Europe's low-carbon primary aluminium production and world-class recycling sector is the only way to meet growing demand and overcome import dependencies.



SOURCE: European Aluminium Association



# Aluminium Sustainability

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. Because aluminium can be recycled over and over again, it is no surprise that 75% of all aluminium ever produced is still on the market today.

## Renewables & Electricity Transmission

Aluminium is at the heart of Europe's green energy transition. It is used in almost all energy generation, transmission, and storage technologies: from wind and solar power to alternative fuel cells and hydrogen production to high-voltage cables and batteries. Not only is aluminium highly conductive and lightweight, but thanks to its corrosion resistance, it is also the ideal material for harsh outdoor conditions. It is easy to install, low maintenance, and durable, ticking all the boxes for renewable energy generation systems.

Aluminium alloys consistently exceed other metals for mechanical stability, dampening, thermal management, and reduced weight.

## Aluminium: an enabler of solar power

Aluminium's corrosion resistance and light weight make it an optimal choice for solar modules. According to the World Bank, our metal already accounts for 85% of most solar photovoltaic components. Increasing solar PV capacity from today's 136 gigawatts to 600 gigawatts by 2030, as proposed by the EU Solar Strategy, will require +10 million tonnes of aluminium.

## Building & Construction

Aluminium's design flexibility and contribution to energy efficiency make it the material of choice for many applications in building and construction. Metal has been enabling the energy efficiency, recyclability, comfort, safety, and durability of houses, offices, bridges, and other building & construction applications for over a century.

Aluminium is an architect's dream: it can be cast and extruded in virtually any shape, offering endless design possibilities. Furthermore, aluminium can be anodised or painted in any colour and on any number of surfaces. These processes further improve our products' durability and corrosion resistance and simplify maintenance. Currently, only 1% of buildings in the EU undergo energy-efficient renovation annually. The EU's Renovation Wave, a flagship initiative of the EU Green Deal, aims to double annual energy renovation rates in the next 10 years.

As a result of the EU's Renovation Wave, the demand for our sustainable building solutions is expected to grow significantly. The renovation of old buildings using energy-efficient aluminium solutions that minimise heat loss and maximise heat gains offers a huge opportunity to improve the environmental performance of buildings in Europe.

### Packaging & Consumer Goods

Aluminium is everywhere, so much so that we often don't notice it. It is part of the bike, kitchen utensils, and your. The two most recognisable applications we come across every day are perhaps aluminium foil and beverage cans. Aluminium is a popular packaging material for food, drinks and medicine because it provides a total barrier function, keeping products safe from bacterial contamination, oxidation, moisture, and light, to protect the product's integrity and extend its shelf life. It is also very light, making it easy to stack and less costly to transport.

Last but not least, the endless recyclability of metal allows to offer highly circular packaging solutions in a fast-moving consumer good area. It has bold commitments when it comes to recycling aluminium packaging and believes that we can increase circularity in the packaging sector through cooperation with local authorities, product developers, consumers, and waste management operators.

On the way towards 100% recycling for aluminium beverage cans

Today, Europe's recycling rate for used aluminium beverage cans stands at 76% (2019), an important milestone in our joint roadmap to 100% recycling of aluminium cans by 2030 with Metal Packaging Europe. This ambitious target can only be reached if European packaging collection systems are further optimised or replaced by balanced deposit return schemes (DRS) for beverage cans and other relevant beverage containers.

SOURCE: European Aluminium Association

# SKYMINDER AT A GLANCE FOR ALUMINIUM INDUSTRY

Solutions available for more than **240**  
countries and jurisdictions

Best in class information thanks to more  
than **40** providers, both local and global

**12** available products and solutions

**Web** and **API** integration





# SKYMINDER SOLUTIONS

SkyMinder is the worldwide CRIF platform helping you to take decisions based on high-quality information. If you are required to evaluate a business partner in the Aluminium Industry, a customer or a supplier, in a risk evaluation process or for compliance requirements or a cyber risk assessment, SkyMinder is the right solution.

Requirement	SkyMinder Solution	Description
Know business partners and risk level <ul style="list-style-type: none"> <li>- have on board new suppliers</li> <li>- understand in depth customers creditworthiness</li> </ul>	<b>Full Report and Slim Report</b>	Information, with different level of details, related to all companies in the world, including firmographics, credit limit, risk indicator, management, shareholders, negative events etc.
Receive immediate notification with related details if a change affects a company	<b>Full Monitoring</b>	Detailed information about changes affecting a company as soon as happened. Combined possibility to request for free updated report.
Be alerted if there is change in company's information	<b>Alert</b>	Information related to the area involved by a change as soon as an event happened.
Periodically checks if there are changes involving companies	<b>Planned Revision</b>	Scheduled revision with updated report including company's changes if applicable
Obtain documents from Official Registry and LEI repository	<b>Official Registry and LEI</b>	Product range including documents coming from public sources or from LEI Registry
Company ownership overview	<b>Verification Report</b>	List of shareholders to understand company's structure
Compliance requirements and fraud checks	<b>Compliance Report and Extended Check Report</b>	Anti Bribery and Money Laundering lists checks related to financial crimes.
Risk of Cyber attack	<b>Cyber Risk Report</b>	Assess the level of risk related to a business partner in being involved in a cyber attack
Understand overall value of intangible assets of a company	<b>Patent Due Diligence Report</b>	Patent Asset Overview with geographical coverage, remaining life of active patent assets, high-value patent assets, technology and patent deployment, technology timeline, peer comparison, key inventors.