

Achieving the full circular potential of aluminium

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/ European Aluminium in a snapshot

+08

members

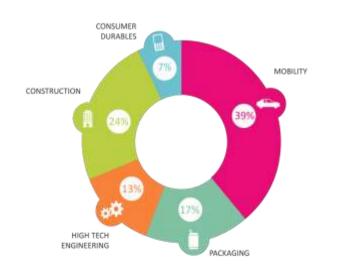
approx. 600 plants in

30 European countries (EU 28, EFTA and Turkey)

million + direct and

indirect jobs across Europe's value chain

An innovative value chain serving EU key markets



Europe produces

16%

of worldwide aluminium, half of which from recycled sources

100%

Permanent material

Aluminium properties do not change during use and following repeated recycling into new products



5% of original energy consumption

75% of all aluminium ever produced is still in use today

90%

of aluminium is recycled in construction and automotive in Europe

/ Aluminium is fit for circularity



- Recyclability: Aluminium recycling rates are among the highest compared to other materials: in Europe recycling rates are over 90 % in the automotive and building sectors, and 75 % for aluminium cans.
- Durability: Aluminium products can have a long lifespan e.g. 50 years in construction and 15 years in transport.
- Energy bank: the aluminium recycling process saves 95% of the energy needed to produce the primary metal.
- Permanent material: aluminium can be recycled multiple times without losing its original properties.

/ Achieving full circularity by 2030



Our strategy to boost circularity in the aluminium value chain

- Maximising the use of post-consumer aluminium scrap
- Limiting the amount of imported carbon intensive primary aluminium
 - 50 % of the demand could be supplied through postconsumer recycling in 2050
 - Recycling can contribute to CO₂ savings of 46 % of per year in 2050
- Increasing Europe's sovereignty in raw materials

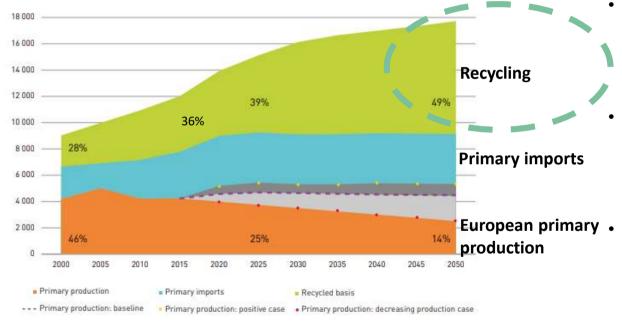
To make the required investments, we need a fair market and the right policy conditions

/ Decarbonisation pathways by 2050

European aluminium demand for aluminium ingot (2000 - 2050)

Volumes (in ktonnes

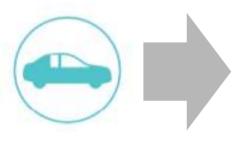
Including a decreasing production case, a positive and a baseline scenario for the primary production in Europe (i.e. EU28+EFTA)



- The European demand for aluminium in 2050 will be met by almost equal shares of primary and recycled aluminium production.
- To enhance its strategic autonomy,
 Europe should preserve its
 aluminium primary production and
 further boost its recycling capacity.
- If domestic primary production goes down, Europe will increase its dependency on imports from regions with a higher carbon footprint.

Source: European Aluminium based on CRU data base

/ From good to great



- Intelligent dismantling of vehicles
- Cast and wrought aluminium is recycled in closer loops
- Better statistics and reporting of end-of-life cars by Member States



- Striving for 100% recycling of beverage cans
- Fair and transparent recovery systems for aluminium packaging
- Additional investments for more and better collection and sorting technologies



- Separate collection of various aluminium product types on site: extrusion-based vs sheet-based
- Better scrap preparation to separate non-aluminium parts
- Recycling in extruded or rolled products



Questions? Contact us!

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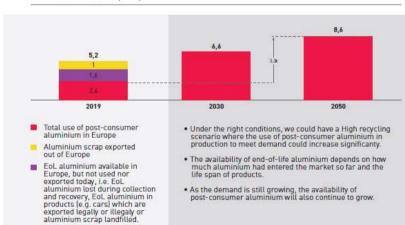


/ Boosting the circular systems

Figure 3: Total use of post-consumer aluminium by 2050

Mton aluminium in year 2017, 2030, 2050 Source: CRU data - 2019.

Mt end-of-life aluminium, 2019, 2030 and 2050



Main challenges today:

- 1 Mt of aluminium scrap are exported every year
- 4 million of end-of-life vehicles are unaccounted for
- Some countries have relatively low packaging recycling rates
- Landfilling still a solution in some countries
- Need to address informal can collection