

# THE JOURNEY OF A EUROPEAN ALUMINIUM BEVERAGE CAN

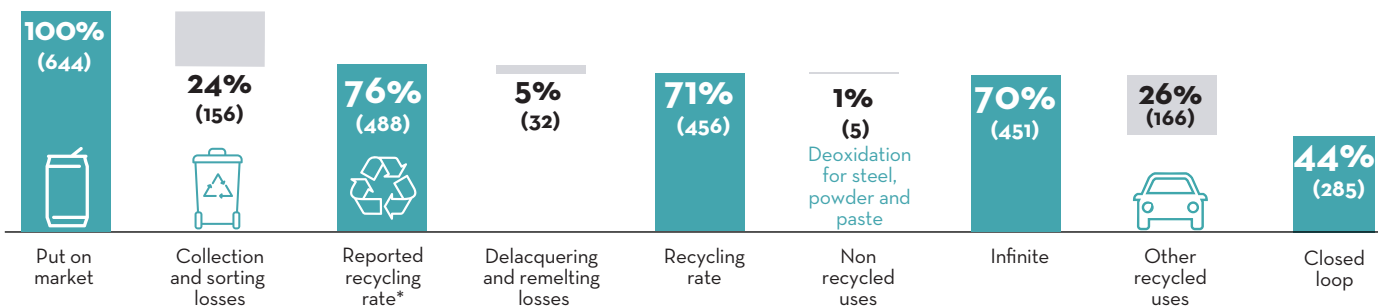
The International Aluminium Institute has traced the sourcing, recycling and the added value of an aluminium beverage can put on the European market in 2019. The data shows that, while primary raw materials are mainly imported, almost 90% of the total added value for producing a European beverage can is generated domestically.

## The study

Eunomia Research and Consulting, on behalf of the International Aluminium Institute (IAI), has built a material flow model for aluminium cans sold in Europe, including raw material extraction and all production stages. The model displays where raw material extraction and production are taking place to produce an aluminium can put on the market in Europe. The IAI has visualised the Eunomia data on [alucycle.international-aluminium.org](https://alucycle.international-aluminium.org). To calculate the domestic value added, the IAI combined the results generated by Eunomia with selling prices of a product and the cost of bought-in materials based on UN-Comtrade data.

## RECYCLING PRODUCTION

### EUROPEAN ALUMINIUM CAN RECYCLING RATES, 2019 (1,000 TONNES)



\*Aluminium beverage can recycling rates 2019. FFACT and European Aluminium, 2021.

[https://www.european-aluminium.eu/media/3403/ffact-report-aluminium-beverage-can-recycling-rates-2019\\_final-20december2021.pdf](https://www.european-aluminium.eu/media/3403/ffact-report-aluminium-beverage-can-recycling-rates-2019_final-20december2021.pdf)

## TACKLING THE CHALLENGE OF COLLECTION

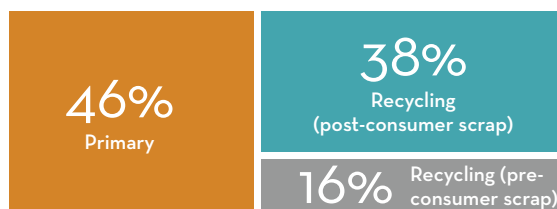
### Modern deposit return systems

- Needs support by a dedicated return deposit infrastructure
- High return and high material quality

### Curbside collection systems

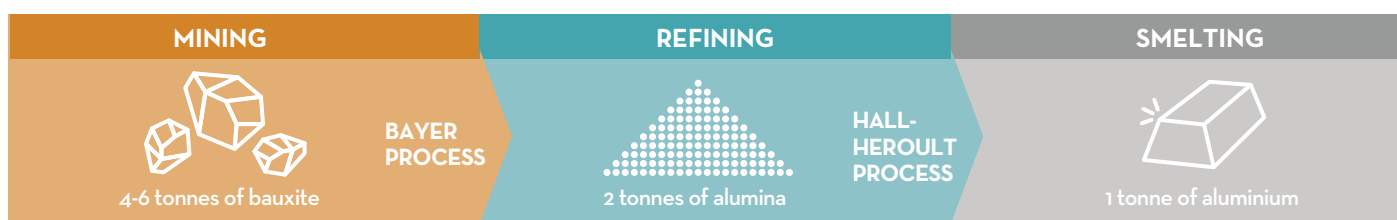
- Needs properly set-up and well-maintained systems
- Needs education - regular and targeted recycling campaigns
- Needs on-the-go collection infrastructure
- Needs increased efficiency of sorting centres

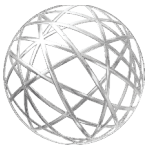
## AVERAGE RECYCLED CONTENT OF EUROPEAN ALUMINIUM CAN SHEET



IAI calculations based on Eunomia data

## PRIMARY PRODUCTION





Raw materials used to produce primary aluminium metal are mostly sourced through imports from international markets, either directly or via value chains outside Europe, with bauxite produced mainly from Guinea and Australia, and alumina refined in Australia or Brazil.

More than half (54%) of primary

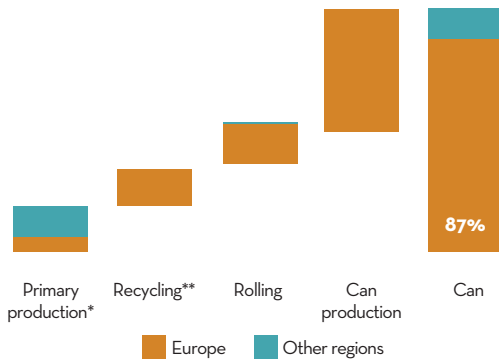
aluminium production used for cans put on the market in Europe is located in Europe, followed by Russia (18%) and UAE (7%).

However, recycling facilities, rolling mills and can-making plants are predominantly located in Europe; therefore, 87% of the overall added value for making a

European can is created domestically. European Aluminium and Metal Packaging Europe has launched a joint roadmap towards increasing recycling to 100% by 2030<sup>1</sup>. This will likely increase the recycled content in the future and lessen dependency on foreign countries.

<sup>1</sup>Find out more at [www.canroadmap2030.eu](http://www.canroadmap2030.eu)

## 87% OF THE VALUE ADDED IS GENERATED IN EUROPE

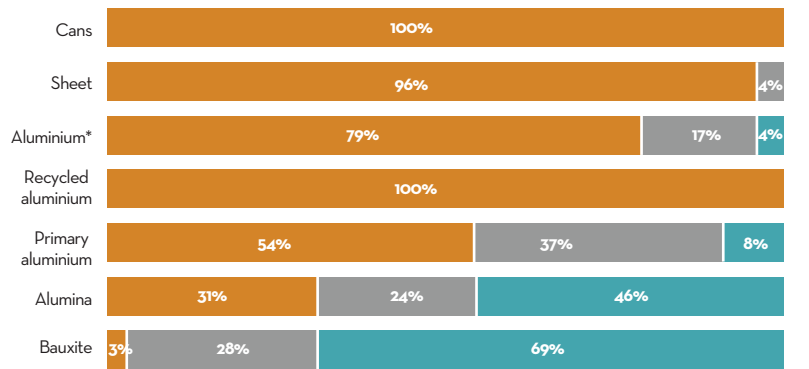


\*Includes mining, refining, smelting and casting.

\*\*Includes used beverage can collection, scrap processing, remelting and casting.

IAI estimates based on Eunomia data

## IMPORT RELIANCE OF A EUROPEAN CAN



Legend: Produced in Europe (orange), Imports to Europe (grey), Material contained in downstream products (teal)

\*Recycled and primary aluminium

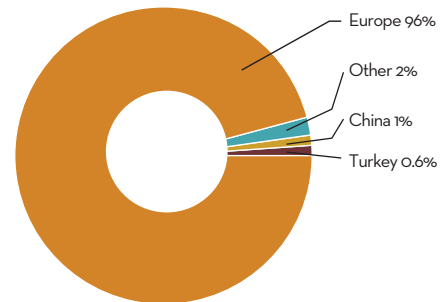
## CAN MAKING



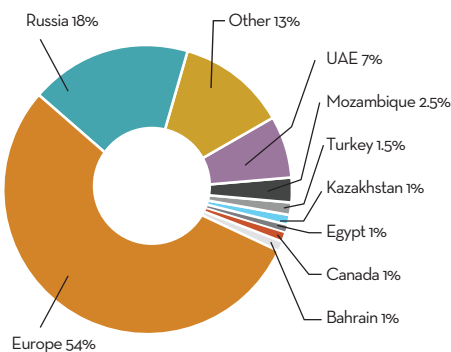
## RECYCLING



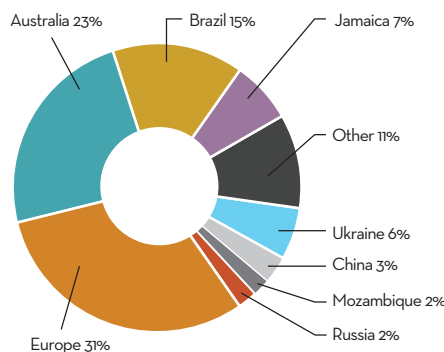
## ROLLING (SHEET)



## SMELTING (PRIMARY ALUMINIUM)



## REFINING (ALUMINA)



## MINING (BAUXITE)

