

**Aluminium**

**Low-emission solutions**



**RULCA**<sup>®</sup>  
RAICO-ULTRA-LOW-CARBON-ALUMINIUM

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RAICO-LOW-CARBON-ALUMINIUM

**FOR A  
RESOURCE-  
EFFICIENT  
FUTURE**

Aluminium stands for sustainable construction –  
dimensionally stable, durable, made for generations.

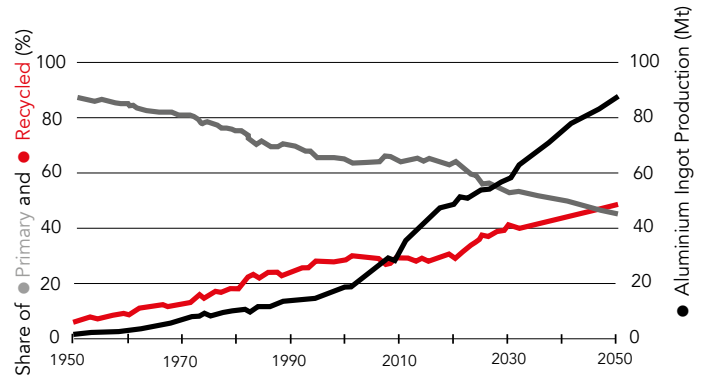
# ALUMINIUM

## A resource for present and future generations

Aluminium is a lightweight, versatile and valuable material and recyclable product that offers the particular advantage of being infinitely recyclable and reusable. This makes aluminium not only a material for the present, but also a valuable resource for future generations.

Aluminium is particularly impressive in the construction industry thanks to its durability. Aluminium window, façade and door systems often remain in use for over 50 years and are therefore a long-term fixture in buildings. This long service life contributes to aluminium's long-term use and means that it retains its value thanks to its almost unlimited recyclability. In addition, the production of secondary aluminium requires only 5% of the energy needed for primary aluminium – a decisive contribution to resource conservation and CO<sub>2</sub> reduction.

## Share of primary and recycled aluminium



According to a study by the International Aluminium Institute, demand for aluminium will continue to rise until 2050. Due to the long service life of construction products in building construction, the availability of end-of-life aluminium is limited. Primary aluminium will therefore continue to be needed to meet growing demand. We rely on low-carbon aluminium grades from both primary and secondary aluminium to provide the optimal solution for your project.

## ALUMINIUM AT RAICO

### Our Standard

We rely on aluminium from European pressworks and supply partners – with an average value of around 5.10 kg CO<sub>2</sub>e per kilogram of aluminium, this is just under a third of the global average. This not only optimises the CO<sub>2</sub> balance of our product systems, but also shortens supply chains and strengthens the local economy. In this way, we create durable window, façade and door systems that protect the environment and conserve resources.

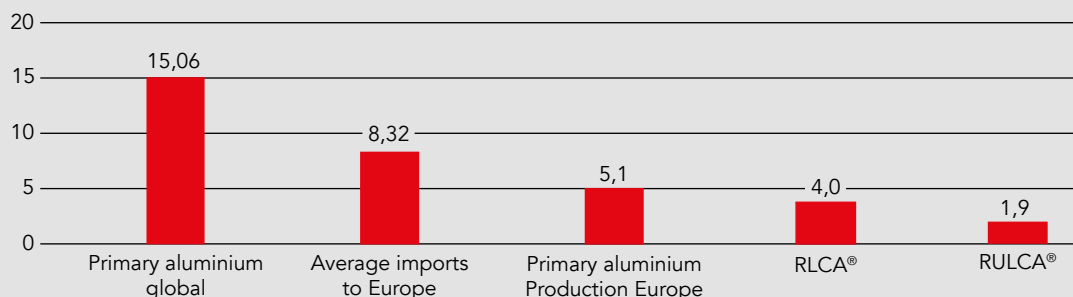
### RLCA® - RAICO Low Carbon Aluminium

By using renewable energy for the production of aluminium, RAICO Low Carbon Aluminium achieves a GWP value of 4.0 kg CO<sub>2</sub>e/kg aluminium. Compared to the European average value for primary aluminium production, RLCA® saves approx. 1.1 tonnes of CO<sub>2</sub> per tonne of aluminium, which means a 22% reduction in CO<sub>2</sub> emissions.

### RULCA® - RAICO Ultra Low Carbon Aluminium

RAICO Ultra Low Carbon Aluminium has a GWP value of 1.9 kg CO<sub>2</sub>e/kg aluminium and consists of at least 75% end-of-life aluminium (post-consumer aluminium). Compared to the European average for primary aluminium production, RULCA® saves approximately 3.2 tonnes of CO<sub>2</sub> per tonne of aluminium, which equates to a 63% reduction in CO<sub>2</sub> emissions.

## Carbon Footprint (kg CO<sub>2</sub>e/kg Al)



## EFFICIENCY & TRANSPARENCY

### by quota

The quota system ensures an efficient material flow of RULCA® and RLCA®. We do not differentiate between profiles made from standard, low-carbon or ultra-low-carbon aluminium, as these do not differ in their chemical or mechanical properties. The decisive CO2 savings are already achieved during the production of the aluminium. By keeping a complete record of the low-carbon aluminium grades we purchase and sell, we ensure that at least as much

RLCA® and RULCA® is put into circulation as was ordered from us. In this way, we not only optimise the material flow, but also reduce costs and transport and logistics expenses, which leads to more efficient value creation overall. When you place your order, your project is allocated the appropriate quota so that we can precisely document and confirm your contribution to CO2 reduction.

#### Certificate DEKRA

The quota system, material flow and mass balance are monitored and validated externally by DEKRA.



DEKRA CERTIFICATE

[WWW.RAICO.DE/EN/DOWNLOAD/BROCHURES/](http://WWW.RAICO.DE/EN/DOWNLOAD/BROCHURES/)

#### RAICO promotes recycling

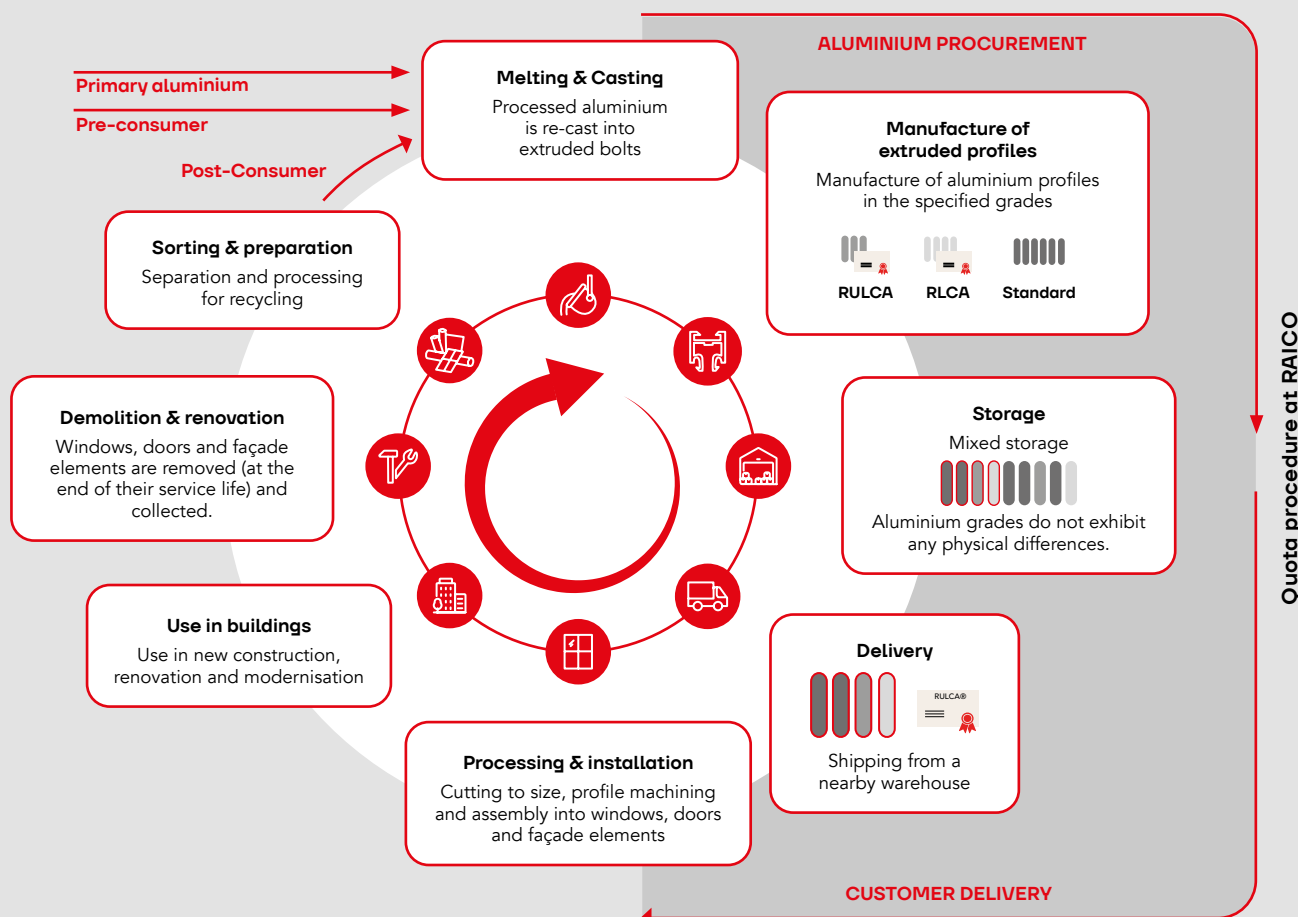
RAICO is an active member of AIUIF e.V., an association committed to closing the recycling loop for aluminium from old building components, thereby enabling high-quality recycling.



[FIND OUT MORE ABOUT THE INDUSTRY INITIATIVE AND THE GOALS OF THE AIUIF!](#)

## VALUE CHAIN

### The aluminium cycle



## Want to learn more about RAICO?

### DISCOVER

Fascinating façade solutions and innovative product developments, as well as our current projects, can be found on our social media channels:



[LinkedIn](#)

RAICO Bautechnik GmbH



[Instagram](#)

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