



# Aluminium: Driving the decarbonization

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# Hydro: The global and complete aluminium company



“...create a more viable society by innovative and efficient use of natural resources and products”

More than 110 years of industrial development and responsibility



Aluminium – metal of the future



Hydropower – infinitely recyclable energy



Engaged in the entire value chain – R&D, innovation and tailormade solutions



Global reach, local presence

35,000 employees

150 locations

40 countries

Involved and engaged



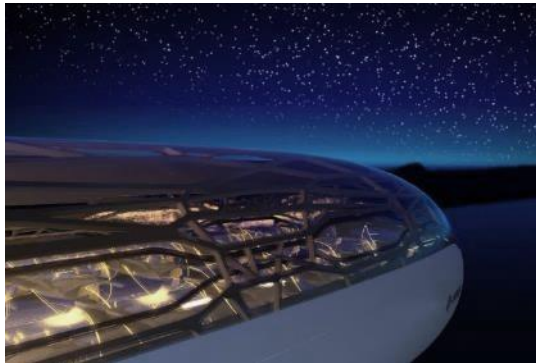
MEMBER OF  
**Dow Jones Sustainability Indices**  
In Collaboration with RobecoSAM





# Demand for aluminium is growing, driven by low carbon applications

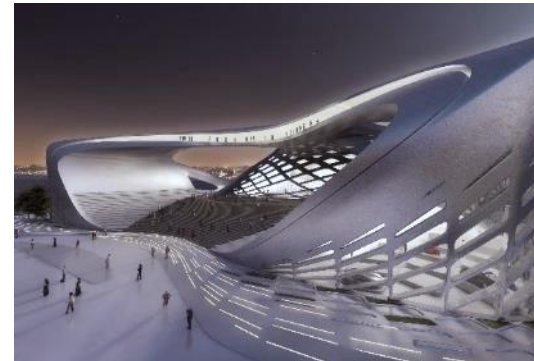
**Light-weight transport and automotive**



**Packaging and recycling**



**Efficient buildings and construction**



**Applications and end-user products**



# Enabling the low-carbon transition through renewables and new technology

## Hydroelectric / Wind / Solar



## Technology & innovation



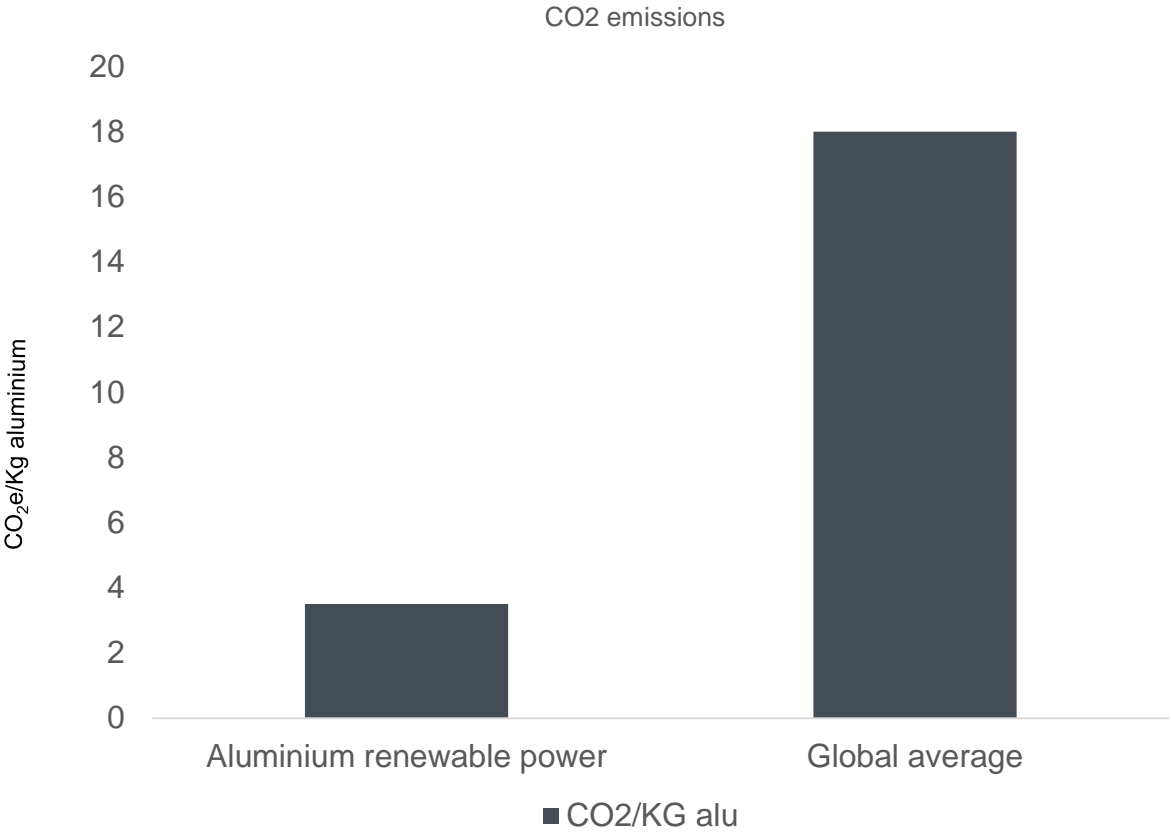
## Products



Our new target is to reduce own CO<sub>2</sub> emissions - 30% in the value chain by 2030



# It matters where and how aluminium is produced



Source: CRU, Hydro Analysis, IAI

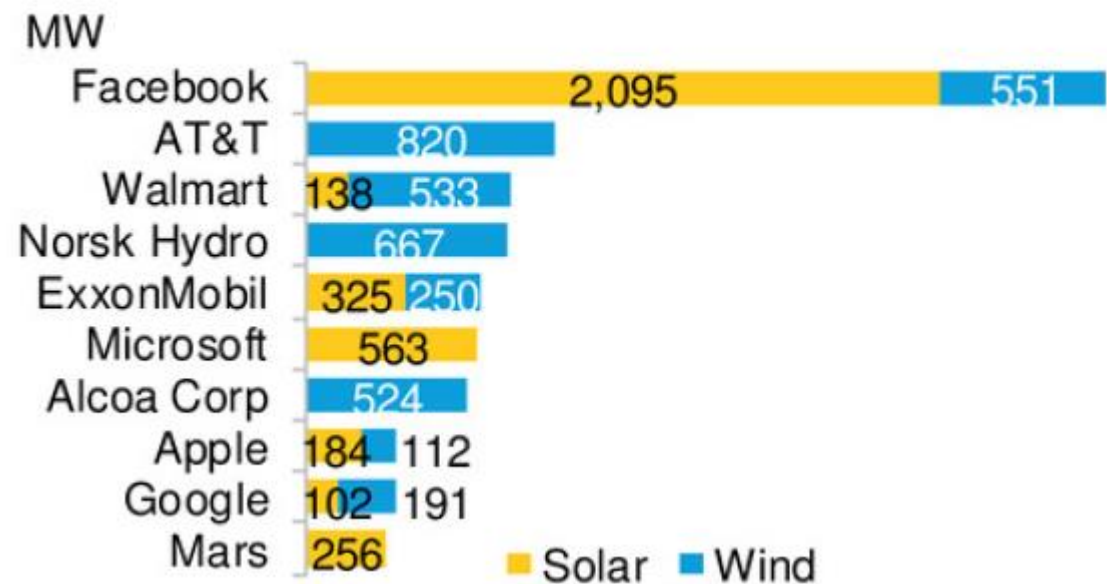


# Renewable power is at the heart of cleaner aluminium

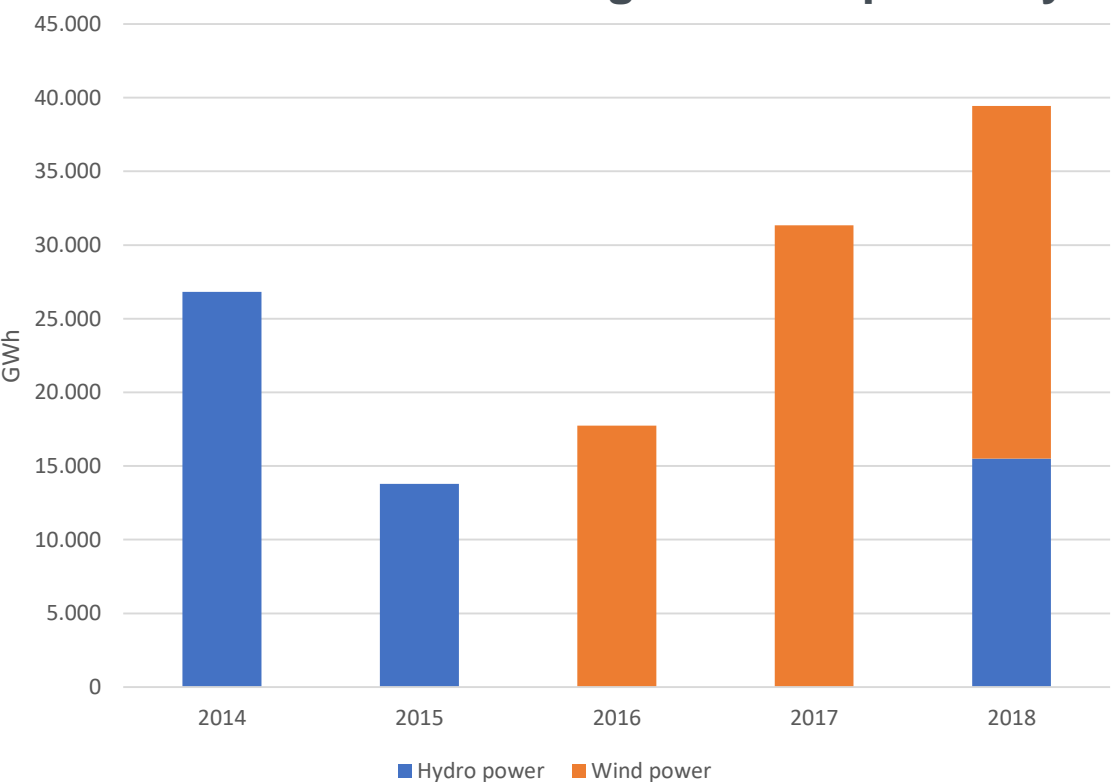


Hydro is the 4th largest buyer of renewable energy in the world

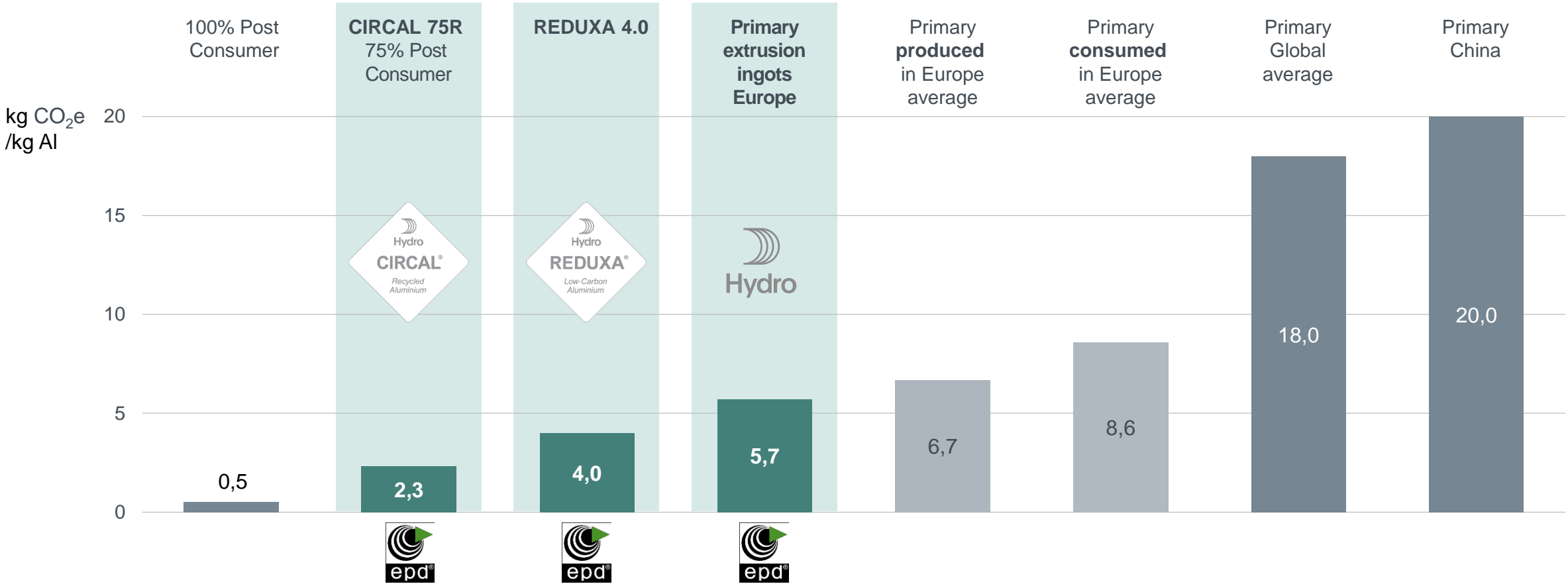
Figure 3: Top corporate offtakers, 2018



Total contracted volume signed in respective year



# Aluminium CO2 footprint by origin







**By using low-carbon aluminium, total CO2 emissions from producing a car would be up to **42% lower** than the global average.**



# Investing in R&D for zero-carbon technology toward 2050

A tall, dark smokestack on the left side of the slide, emitting a plume of white smoke that drifts to the right. The background is a clear blue sky.

On the path to **ZERO**

## Exploring different paths toward 2030:

- Carbon-free process
- Carbon Capture and Storage (CCS)  
Carbon Capture and Utilization (CCU)
- Biomass anodes



## **Key messages**

- **Strong industrial strategy, hand in hand with renewed climate ambition**
- **Ensure globally competitive electricity prices**
- **Create market incentives for circular and low-carbon products**





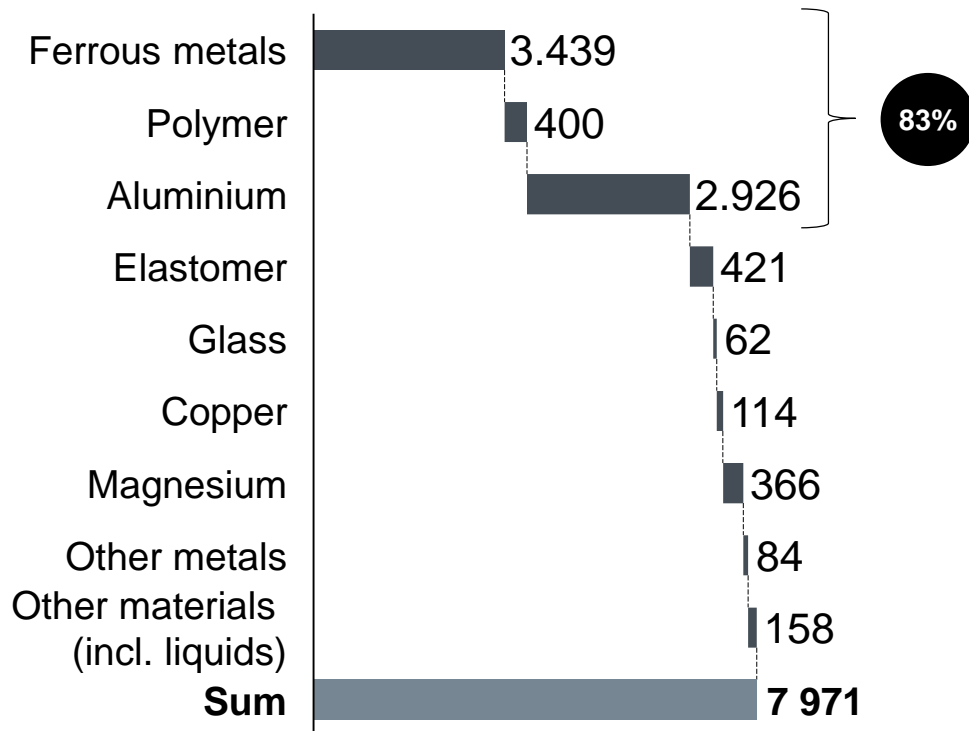
# Hydro

*We are aluminium*

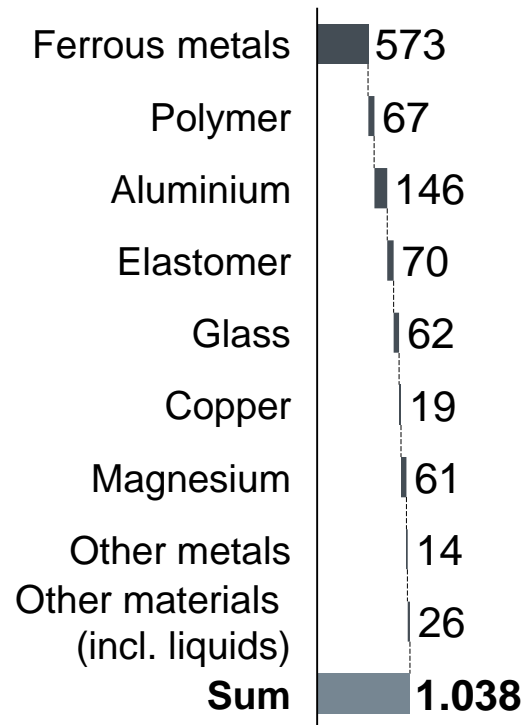


# A car made of 100% recycled material would have ~85% reduced CO2 footprint

**CO2 breakdown (virgin material)**  
(XC60 ICE example) kg



**CO2 breakdown (recycled material)**  
(XC60 ICE example) kg



## Pre-requisites

Sufficient market for high-quality recycled material, primarily when it comes to **metals** and **plastics**

Source: Volvo Cars, GABI GWP factors, Material Economics