

Evolution of Low-Carbon Aluminium in the Market for More Sustainable Economic Development

Jerome Lucaes

Director Marketing and Sustainability

RUSAL, Zug, Switzerland

Corresponding author: Jerome.Lucaes@rusal.com

Abstract

Aluminium is a key enabler of more sustainable economic development and ‘green’ recovery worldwide. A number of forces drive the differentiation of approach to aluminium based on its carbon footprint. These drivers underpin the evolution of low-carbon aluminium in the market. First, regulatory push to decarbonize and disclose comes with an increasing price of carbon and carbon trading and taxation mechanisms. Second, customer pull for low carbon footprint and product lifecycle emissions assessments is more palpable across all aluminium-consuming segments, including but not limited to automotive, packaging, building and construction. Third, pressure from investors for greater environmental and climate transparency is on the rise, which makes low-carbon aluminium better positioned for access to funding. Aluminium producers are responding to these drivers and developments with accelerated efforts to calculate, reduce, and disclose emissions from cradle to gate. Their main focus remains on sources of power, process emissions, R&D, and circularity, among others. Business case for low-carbon and circular transitions across the entire value chain is emerging, which is highlighted by the COVID emergency.

Keywords: Low-carbon aluminium, climate, sustainable economic development, ‘green’ recovery.