



The Element of **Possibility**™

EcoLum™

Primary aluminum with a low-carbon footprint
3.5 times better than the industry average



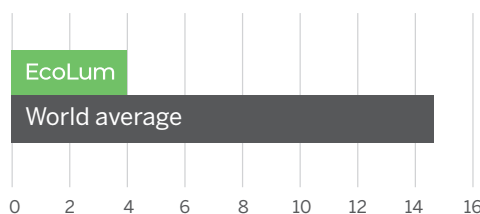
renewables

- **Mine-to-casthouse advantage:** Direct and indirect emissions measured across bauxite mining, alumina refining and aluminum smelting and casting*
- **Responsible and sustainable mining:** An alumina refining system that is the lowest per ton emitter of CO₂ among global producers**
- **Renewable energy:** Smelters powered with hydro-electric generation
- **Third-party validation:** Material available with certification from Aluminium Stewardship Initiative
- **Environmental Product Declaration:** Verified according to ISO 14025, and life cycle analysis per ISO 14044
- **Corporate greenhouse gas (GHG) inventory:** Calculations third-party verified and consistent with ISO 14064

Improve your carbon footprint with premium aluminum, superior to most of the world's production

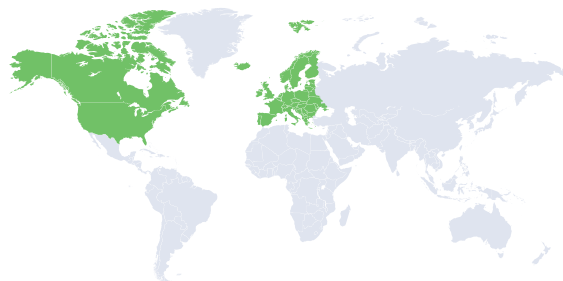
Alcoa's strong position as a sustainability leader across the entire aluminum value chain allows it to offer EcoLum™ from our Sustana line. EcoLum™ primary aluminum is produced with less than 4.0 metric tons of CO₂e for every ton of metal produced, including both direct and indirect (Scope 1 and Scope 2*) emissions across the entire production chain, including bauxite mining and alumina refining. This performance is approximately three and a half times better than the industry average.** Delivered globally from predominantly hydro-powered smelters in North America and Europe, all casthouse shapes are available. As the aluminum industry's pioneer, we are advancing sustainably and helping our customers realize new possibilities.

Average global CO₂e emissions per ton aluminum*






**Source: Average data per CRU Aluminium Cost Model 2020 and CRU Bauxite and Alumina Cost Model 2020

Region of production (smelting)



The **Sustana™** family offers industry-leading environmental performance with a mine-to-casthouse advantage:

Sustana EcoSource	Sustana EcoLum	Sustana EcoDura
Smelter-Grade Alumina 	Low-Carbon Primary Aluminum 	Aluminum with Recycled Content 
ASI certifications available Less than 0.6 CO ₂ e emissions (Scope 1 and 2) from bauxite and alumina	ASI certifications available Less than 4.0 CO ₂ e emissions (Scope 1 and 2) across bauxite, alumina, smelting, casting	ASI certifications available Minimum 50% recycled content



*Scope 1 and 2 included for bauxite, alumina and aluminum emissions, calculated in accordance with the IAI Aluminium Sector GHG Protocol, addendum to the WRI/WBCSD GHG protocol, the WRI/WBCSD Calculation Tool for Direct Emissions from Stationary Combustion, and the WRI GHG Protocol Scope 2 Protocol.