

“Recycled Content” vs. “End-of-Life Recycling Rate”

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- 75% of all aluminium ever produced since the start of its industrial production is still in use.
- About half of the aluminium produced in Europe originates from recycled materials.
- As the energy required to recycle aluminium is about 5% of that needed for primary production, the environmental benefits of recycling are obvious. The amount of energy saved thanks to recycling (95%) corresponds with an equivalent saving of greenhouse gases.
- Due to the long lifespan of, volume wise dominant, aluminium applications such as buildings and transport vehicles, the available quantity of end-of-life aluminium scrap today is limited to what was put on the market many years ago.
- This volume being much less than current requirements because of continuous market growth, the missing quantity has to be supplied by the primary aluminium industry. Calling for high recycled content in aluminium parts will not change that situation.
- Instead, calling for high end-of-life recycling rates stimulates the already high collection rates for recycling of used aluminium products. The collected and separated material will remain available as a resource with permanent properties for future generations.
- European Aluminium does not support the communication of recycled content figures at product level because of their low environmental relevance and because of the high dependency of these numbers on system boundaries. Being however asked what the recycled content of materials used to produce aluminium products is, European Aluminium has decided to give specific guidelines to its members regarding recycled content calculation. These guidelines are to make sure that recycled content is associated with a clear state of the aluminium in the value chain and that a strict methodology is applied for its calculation (i.e. including all scrap generated after the definition point). This should enable all stakeholders not to be misled by any communicated number when specified that it has been calculated following European Aluminium guidelines and avoid any wrong interpretation of the number.
- European Aluminium cannot communicate recycled content figures at product level because of the high dependency of these numbers on system boundaries and suppliers. However, we estimate that on the basis of metal supply statistics, estimates that the fraction of the metal supply coming from recycling in Europe (also named recycling input rate) is about 40% when including imports from outside Europe and about 50% when focusing on European production. Such value range of 40% to 50% can be used as proxy for recycled content value when such information is asked in the context of ‘collective’ products Life Cycle Assessments.

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- The environmental performance of aluminium products is determined to a great extent by end of life recycling rates which reduce losses in the material loop. A recycled content figure alone is not suited in the context of life-cycle assessments (LCA) of aluminium parts. For that purpose, a full LCA including end-of-life recycling credits is the most appropriate approach.
- Thanks to its infinite recyclability and high scrap value at every step of the process chain aluminium products manufacturing, in terms of mass balance, hardly generates any waste of material, thus underlying its resource efficiency.

Further readings:

[Declaration by the Metals Industry on Recycling Principles](#)

Leaflet “[METALS FOR BUILDINGS, Essential and fully Recyclable](#)”

Guidance document for LCA experts “[Aluminium Recycling in LCA](#)”