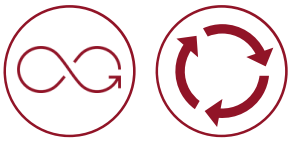
ENVASES

Factsheet:

Recycling Content & Recycling Rate



Permanent & Fully Recyclable Material

Metal is a permanent material that can be recycled infinitely, making it fully recyclable. Metal recycling is integrated into all packaging production processes because it is economical and easy.

Since scrap metal supply cannot meet demand, a high percentage of recycled content in one product would only lead to less recycled content in others. [1] [2]

Metal has no “pack-to-pack” constraint and can be recycled in various product loops, from cans to cars to bridges, without losing strength or other material qualities. [1]

When recycling aluminum, on average, using 100% scrap, saves 95% of the energy intensity needed compared to primary production [3]. Similarly, steel made from 100% scrap produces, on average, 78% less Greenhouse Gasses compared to virgin steel production. [4]

Metal recycled to products with different life cycles

Around 75% of all aluminum ever produced is still in circulation today. Similarly, approx. 75% of all steel products ever used is still in use today. [5] [6]

Since metal applications have different lifecycles – ranging from fast moving consumer goods to near permanent infrastructure like bridges etc. – there is not enough scrap metal to meet aluminum and steel demand. [2]

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When it comes to metal packaging, the recycling rate is a better measure of sustainability than the percentage of recycled content in the product.

Metal Packaging has High Recycling Rates

Back in 2018 the European Commission proposed a new harmonized calculation method for calculating recycling rates on packaging. Until now, EU member states used various calculation methods, and many reported on the amount of material collected.
Once implemented, EU member states will report on the amount actually recycled, which means much more transparency, because the new method on calculating Recycling Rate will be dependent on the waste that enters recycling and recovery activities.

Compared to last year where four contries had not provided information according to the new calculation method, only Hungary is the only country to report using the old methodology [12].
The updated 2023 numbers provided by MPE of 82% are not comparable with Eurostat data, since it includes Switzerland and UK. [8]

Untill 2019 aluminum and steel packaging was reported as metal packaging in European statistics. After 2019 each member states must report aluminum and steel packaging seperately. Therefore, only data using the new calculation method is provided [7] [9]. For steel packaging, however, Steel For Packaging (formerly APEAL) managed to calculate the recycling rate seperate from metal packaging. Therfore, both the most recent data and 2019 data, using the old calculation method, is provided.

Steel Packaging		**Aluminum Packaging**
New calculation method, 2022+2021 data	New calculation method, 2023+2022 data	New calculation method, 2023 data
80.5% [8]	**82% [8]**	**55.6% [7]**

Recycling Content & Recycling Rate

"Recycled Content vs. "End-of-Life" Recycling Rate Aluminum

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. However, being 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, on the basis of metal supply statistics, 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. [10]"*

[10] https://european-aluminium.eu/wp-content/uploads/2022/10/recycled-content-vs-end-of-life-recycling-rate-may-2016.pdf

3. The Recycled Content Approach

There are just ten major steelmaking sites in Europe that manufacture hot-rolled strip for packaging steel. Recycled steel packaging therefore is not solely introduced directly into the unique steel production process used for packaging, but used for a wide variety of steel products. Steel scrap is, for both environmental and economic reasons, taken to nearby steel plants (proximity principle). Every of the 200 steel plants in Europe is a recycling plant. In nearly every phase of the market, there is a greater demand for steel scrap than there is supply. Steel scrap does not need to be artificially marketed by the steel for packaging industry. That is why steel for packaging follows a model value approach for recycled content to demonstrate its circularity performance.

4. Methodology for Recycled Content Calculation

In the context of the recycled content approach for steel for packaging, the numerator corresponds to the recycled tonnages in Europe while the denominator corresponds to the steel for packaging production data in Europe. A rolling average 5 years is used, which is revised every 3 years, and the current underlying value is calculated on data generated from 2018 to 2022.

5. Policy and Regulatory Considerations

The necessity of increasing recycled content in specific steel products should not be the steel industry's primary focus. This would limit European steel production, interfere with the scrap market, and increase the environmental impact of the steel-making process overall. As a result, recycled content is not the right indicator for the circularity of the steel for packaging sector. Consequently, steel scrap is taken to nearby steel plants, for both environmental and economic reasons, following the proximity principle and is utilized in a broad range of new steel products. Over 90% of the European population lives within 200 km of a steel plant, which makes recycling of all steel products practical, sustainable and local.

6. Conclusion

The recycled content model value of steel for packaging in Europe Recycled content (RC) in EU for steel for packaging = Steel packaging scrap used in European steel plants (2018-2022) / Steel packaging produced in Europe (2018-2022)

RC%** = 13,535,601 tonnes / 20,127,330 tonnes = **67% **[11]***

[11] https://www.steelforpackagingeurope.eu/newsletter-article/the-recycled-content-of-steel-for-packaging/

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Sources

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[9] https://www.steelforpackagingeurope.eu/news/steel-packaging-breaks-recycling-rate-record-for-10th-year-running/
[12] https://www.steelforpackagingeurope.eu/wp-content/uploads/2025/06/Recycling-SteelPackaging-2023-EU-Map.jpg

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