

Calculation Method under the revised Waste Framework Directive (WFD) for paper recycling

Calculation method for paper and board

The most suited "calculation point" is at the **output of paper recovery facility**. At this point, the accepted payload of recovered paper is identical at the output of the PR facility and at the input into the paper mill facility, which avoids any double counting for statistical purposes.

It is also the point where **end-of-waste** applies in Member States or regions which have enacted national end of waste criteria based on EN 643 quality standard. At this calculation point, rejected loads are not paid and cannot be reported either by the supplier or by the consumer.

For the paper recycling value chain, this is the best calculation point enabling to both report the origin and the composition of the collected waste for statistical purposes and deduct losses occurring during the different steps of the process, including rejected loads which will thus not be double-counted. Regarding the origin, at the input into a production facility (paper mills), it is not possible to identify the origin of the waste.

Average loss rates

The quality standard EN 643 which lays down a maximum of typically 1,5% of non-paper components should be used as a basis to derive average loss rates. As a matter of fact, this rate of 1,5% as well as eventual further production losses in the manufacturing process using recovered paper as a secondary material to produce paper should be seen as inherent losses.

If the load exceeds 1,5% of non-paper components, the two options for the purposes of calculating recycling rates are:

- Excess of non-paper components is deducted from the accepted tonnage. The accepted tonnage is then reported for statistical purposes, without prejudice to any commercial agreement.
- The load is refused and sent to a paper recovery (sorting) facility to be reprocessed. *It can hence not be reported for recycling target purposes.*

If the load exceeds 12% of moisture, the two options for the purposes of calculating recycling rates are:

- Excess to the 12% of moisture is deducted from the accepted tonnage. The accepted tonnage is then reported for statistical purposes, without prejudice to any commercial agreement.
- The load is refused and sent to a paper recovery (sorting) facility to be reprocessed. *It can hence not be reported for recycling target purposes.*

CEN TC/172 is developing or has developed standards for sampling of unwanted/non-paper components and measurement of moisture content, due to be used in case of disagreement between the supplier and the consumer.

Calculation point for exports

Exports of recovered paper shall be accounted for the attainment of recycling targets if they comply with the EN 643. Receiving facilities located outside Europe buying EN 643 grades are deemed to be broadly equivalent (in terms of technology and process used) with European ones as they transform the same quality. In this case, the measurement point should be the output of the paper recovery facility where compliance with the EN 643 is identified.

For waste paper which is not EN 643 compliant (non-standard grades), consumption in Europe or export outside of Europe is allowed and foreseen but shall not be reported in recycling rates.

EuRIC – The European Recycling Industries' Confederation – is the umbrella organisation for recycling industries. Through its Member Federations from 20 EU & EFTA countries, EuRIC represents across Europe over:

- *5,500+ companies generating an aggregated annual turnover of about 95 billion €, including large companies & SMEs, involved in the recycling of various resource streams;*
- *300,000 local jobs which cannot be outsourced;*
- *Million tons of waste recycled per year (metals, paper, plastics, glass and beyond).*

Recyclers play a key role in a circular economy. By turning wastes into resources, recycling is the link which reintroduces recycled materials into the value chains again and again.