End of Waste Criteria for Paper

Background

Paper for Recycling (PfR) is a valuable resource, an integral part of the circular bio-economy and a major contributor towards a resource-efficient society. The recycling rate for paper and card was almost 70% in 2022 and PfR was the most important raw material for the UK Paper and Board Industry, with around 80% of all paper products made in the UK utilising recovered paper.

These achievements have been built on strong foundations and the strenuous efforts of the UK's Paper-based Industries which are at the forefront of setting standards that define quality. The EN643 Standard has been instrumental in driving quality in supply and combined with product-related legislation and quality management systems, it maximises the chances that once sorted, PfR will be recycled and turned into a valuable resource. These measures provide confidence that paper and card will undergo the necessary inspections, which has significantly contributed towards making the Paper industry a successful industrial sector.

What is End of Waste?

According to the Environment Agency (EA), a material is waste if the holder has discarded it. But when does it cease to be waste and is classed as non-waste? The EA guidance[1] states that:

When a material meets the end of waste test

Waste materials must have been through a recycling or other recovery operation and meet all the conditions of the end of waste test to be classed as non-waste. Once they are classed as non-waste, waste controls do not apply to these materials.

Recycling or other recovery takes place when something has been done to the waste to remove any waste properties that exist (such as contamination) and turn it into a useful material that will be used in place of another non-waste material. The operation can range from a check or test to establish there are no waste properties to highly complex processes which remove contaminants or change the material.

End of waste is usually achieved at the completion of the recycling or other recovery process when the material can replace the non-waste comparator. This could be at the point that it becomes a feedstock, where the appropriate comparator is a feedstock, or where it is ready for its final use, if the comparator is a final product. For material where no appropriate comparator is available, it's likely that recovery and therefore end of waste is only achieved when it is ready for its final intended use.

Article 6 (1) WFD sets out the end of waste test. It contains 4 conditions that all recycled or recovered material must meet to achieve end of waste status.

Paper Industry Position

The position of the UK's Paper-based Industries is clear; **End of Waste (EoW) for paper and board occurs at the point of actual recycling,** i.e., the pulping stage. This is aligned with the position of the Confederation of European Paper Industries[2] (Cepi)[3].

There are a number of clear reasons which support why the EoW point for PfR can only be at the point of repulping.

Impact on quality

The first reason concerns the way in which PfR is collected in the UK and the impact that this has on the **composition and quality of the material presented**. In the UK the predominance of commingled collections means that a significant amount of PfR derives from mixed papers which hold higher levels of contamination in comparison to PfR that has been collected via a source-segregated approach. While sorting operations within the waste management industry may reduce cross-contamination and improve the quality of materials obtained, they don't consistently reduce it to acceptable levels in compliance with EN 643. As a result, PfR collected under the current UK collection systems continues to be a mixed material stream even after sorting, with a significant non-paper element, and remains a waste, and not a product.

Once the PfR waste stream has been received in the paper mill, there are significant **inspection operations in place, which measure the quality of the material**. Bales that fall outside the EN 643 standard may be rejected and sent back to the source or diverted to a depot for sorting. Once these improvement operations are complete and the material enters the pulper, it is

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[1] https://www.gov.uk/guidance/check-if-your-material-is-waste
[2] https://www.cepi.org/cepi-position-on-eu-wide-end-of-waste-criteria-for-paper/
[3] At an EU level, EoW proposals to classify PfR as a product were rejected several years ago. EoW criteria have only been defined for three different waste types: iron scrap, copper scrap and glass cullet. Decentralisation of the EoW legislation meant that a few Member States and regions developed national EoW criteria, but lack of harmonisation and different criteria for the same waste categories means it is rarely used

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recycled to produce a new paper product. For PfR to be converted to a product and achieve an EoW status prior to receipt at the paper mill, the contaminant levels should be comparable to that achieved following the pulping stage currently employed in the paper mills.

It is the **quality criteria and standards set by the Paper Industry** that enhance the value of the material and ensure it is recycled and turned into a valuable resource. The point at which paper is no longer waste is at the point of actual recycling. Moving EoW at an earlier point would decrease these standards and lead to adverse impacts on quality.

Further improvements could be achieved via **policy instruments and legislative reforms** that support separate collections for paper and card, which is the key driver to securing high-quality material and achieving resource efficiency. This is the single biggest step that could be taken to improve the quality and increase the quantity of the UK recovered fibre stream. With the Government response on the Consistency of Collections consultation still pending, and still much work to be done for the UK's EPR system to be fully developed, this is clearly not the right time to reclassify when paper becomes waste, and it can undermine any progress made on waste reforms.

Economic impact

Conferring EoW prior to pulping would have an adverse effect on the **competitiveness of the UK market**.

The UK has a trade deficit in goods; we consume millions of tonnes more paper than we are able to recycle in UK paper mills. Competition from outside the UK and energy cost competitiveness issues have led to a decline in papermaking in the UK and currently, there is no capacity to recycle all of the paper placed on the market. Although the UK has the largest surplus of PfR in Europe, with nearly 4 million tonnes of exports per year, it is also experiencing higher contamination levels in PfR than seen in many other European countries that have embraced source-segregated collections.

At the same time, there is a trend towards countries imposing **higher quality standards on imports** which disrupted global markets. In 2017 the Chinese Government decided to introduce a ban on all PfR imports as an attempt to improve the environmental standards and health of its population that were occurring due to the poor quality of recycled paper. More recently other countries in Asia, such as Indonesia, have introduced far stricter requirements for imports of PfR and exports from the EU to Organisation for Economic Cooperation and Development (OECD) countries are becoming more strictly controlled. This trend is likely to continue in the future and should serve as a warning.

High quality recycling in the UK is only maintained through commercial and technical systems that enable paper mills to secure value from their recycling operations. Conferring EoW prior to pulping would create a two-tier quality system in the UK. High quality material would be selected preferentially for export, leaving the lower-quality streams that are do not comply with waste export legislation or meet EoW criteria for the domestic market. The only alternative for the UK paper mills would be to pay higher prices to secure the material otherwise ear-marked for export.

Consequently, efforts to support the investment required in the UK recycling of paper would be compromised and papermaking could be driven into further decline, leading to a waste mountain, collapse of the circular economy, and massive disposal costs. Maintaining EoW at its current location is essential to produce high-quality output and maintain the value of the material for as long as possible.

Conclusions

The Paper Industry's position is that **EoW is currently at the best place for the quality of UK recycling, namely at the pulper of the paper mill.** Moving EoW at an earlier point would have adverse environmental and economic impacts.

Inspections, quality criteria and standards set by the Paper Industry achieve low levels of contamination and ensure PfR is turned into a valuable resource. For EoW to be conferred post-sorting, the sorted material should be at levels of contamination comparable to material that has been through the mill receipt and pulping stages.

There is a need to drive an improvement in quality of PfR in the UK, but EoW is not the appropriate policy mechanism to achieve this; we should instead be focussing on separate collections and ensuring that the existing standards (EN643) are consistently met.
To ensure the UK market remains competitive the EoW point for PfR can only be at the point of repulping. Conferring EoW post sorting would potentially drive a two-tier system that would penalise the UK Paper Industry, with high quality material being exported, leaving the lower-quality streams for the UK market. Such a move would increase costs for the UK Paper Industry, deter investment, and drive papermaking into decline.

Further Information

Further information is available from Dimitra Rappou, CPI Executive Director - Sustainable Products, email drappou@paper.org.uk

Confederation of Paper Industries

- The Confederation of Paper Industries (CPI) is the leading trade association representing the UK's Paper-based Industries, comprising recovered paper merchants, paper and board manufacturers and converters, corrugated packaging producers, and makers of soft tissue papers.
- CPI represents an industry with an aggregate annual turnover of £11.5 billion, 56,000 employees, and supports a further 93,000 jobs in the wider economy.
- For facts on the UK's Paper-based Industries please visit: www.paper.org.uk

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