

Recycling of Coffee Cups and Similar Laminate Packaging



Summary

The Confederation of Paper Industries (CPI) is aware of the recent public outcry over the low level of recycling of coffee cups. The Times has suggested that fewer than 1 in 400 cups handed out by high street stores are being recycled; that, of the 2.5 billion cups used per year, fewer than 3 million were recycled last year (less than 1%). CPI is following the situation closely and recognises that the matter relates not only to coffee cups but also to other packaging with coated materials and multi materials.

Some organisations involved in the paper cup supply chain have stated that cups are recyclable and whilst it is true that these materials can be recycled in theory, today's practice is different. In reality, coffee cups should be regarded as currently unrecyclable through conventional paper mills using high volumes of lower grade material, particularly those reprocessing mixed paper. Current technology at these mills cannot effectively process this material. However, it can be recycled at specialist facilities, but the issue remains the collection and logistics infrastructure to ensure paper cups are separated, bulked and delivered to these facilities and recycled.

Paper Industry experience

Conventional packaging and newsprint paper mills have a problem with cups today – they can remove some of the fibre but most remains attached to the plastic coating and exits the system. The fraction as a percentage of the total is very high compared to other sources of fibre.

The paper recycling process involves immersion in water in a paper pulper for a defined period, but the pulper dwell time required to separate coatings from all coated packaging is typically greater than that in operation in conventional paper mills. This will result in a high percentage of the available fibre remaining unrecovered and the majority of the packaging passing through the system. Thus, the majority of mills using mixed paper do not wish to receive cups since the plastic coating and associated unobtainable fibre is not recovered and is filtered out by their cleansing systems, ending up as a reject going to incineration or landfill.

Mills are also aware that some cups could be contaminated by food and/or drink. The presence of this discarded residue in the paper recycling process is prohibited by BS EN643, the European list of standard grades of paper and board for recycling.

In practice, on occasion mills deal with some of this material but it is only done at a cost and with the associated risks of contamination by food waste.

There are now some specialist paper mills that successfully process coated materials of this type, so there is scope for recovering & recycling some of this valuable material through their facilities, but the logistics of collection remains key.

Logistics of collection

A fundamental issue is that cups are often disposed of 'away from home'. For recycling of any material to be viable, good volumes need to be collected and baled for simplicity of handling and transport. In addition, the material

needs to be properly segregated and of a high quality & paper cups certainly are potentially a source of quality fibre.

We would encourage the retailers of cups to take steps to improve the collection and segregation of this material. If this is done then there are specialist mills and other reprocessing opportunities, but only if a sufficient volume of consistent quality paper cups can be collected.

The future

The situation outlined above is a summary of the current paper industry position, but there are always new developments and opportunities for better design and collection that will enable wider recycling. The Paper Industry recognises that there is an issue that needs to be addressed and we are keen to work with all parties in the supply chain to help develop practical and technological solutions that can satisfy the requirements of all stakeholders.

Paper Industry position

- Paper has the highest recycling rate of any packaging material and we are proud of our superb environmental credentials.
- Conventional paper mills have a problem with wax and polythene lined cups – they can remove some of the fibre but most remains attached to the coating and exits the system with a high percentage of fibre not recovered that requires disposal.
- Food contamination remains an issue.
- Some specialist mills are able to take coated materials but viable volumes need to be collected and segregated in as good quality as possible.
- The Paper Industry as a whole recognises that there is a current issue and remains open and willing to work with all parties involved in the supply chain.

Further Information

Further information is available from Simon Weston, Director of Raw Materials on 01793 889605 or email sweston@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 paper and board manufacturers and converters, corrugated packaging producers, makers of soft tissue papers and collectors of paper for recycling.
- CPI represents an industry with an aggregate annual turnover of £6.5 billion, 25,000 direct and more than 100,000 indirect employees.
- For facts on the UK's Paper-based Industries please visit: www.paper.org.uk.

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