



The BOSS-3D recycling solution is scalable and can be plugged into existing recycling processes | Photo source Impact Recycling

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WATER-BASED RECYCLING PROCESS CREATES LOCAL INCOME STREAMS FROM WASTE

 SUSTAINABILITY

The process produces a high-quality end-product out of difficult-to-recycle plastics

Spotted: With the scourge of plastic pollution hanging over almost every area of consumption, Newcastle-based Impact Recycling wants to get to the point where no new waste is produced. Using a continually-developed, water-based recycling process, the company turns some of the most difficult to recycle plastics into reusable base materials. The BOSS recycling system has the potential to prevent thousands of kilogrammes of fishing nets, flexible food packaging, and now dark-coloured rigid plastics from landfill or incineration.

Instead of shipping plastics that local waste management systems can't handle overseas, the BOSS-3D process provides a scalable solution that is easily integrated into existing recycling plans. By using the BOSS system, recycling companies earn more by taking in higher volumes of waste, and the environment breathes easier thanks to the reduction in the amount of plastic that is burned or dumped into landfill sites.

Impact Recycling earned End of Waste (EoW) status with the Environment Agency in the UK, which means that the end product of the recycling process is of such high quality that it ceases to be waste and instead becomes a secondary raw material. The latest iteration of the company's recycling process is the BOSS-3D version which focuses on sorting rigid plastics by colour in order to access the polymers that form the building blocks of the raw material.

Many innovators are seeking to bring a closed-loop economy closer to reality. Springwise has spotted another advanced recycling pilot in Scotland replacing petroleum with an oil made from

recycled plastics. Another recycling innovation comes from a Finnish company that turns fibre, agricultural, and paper waste into a [cotton-like fabric](#).

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Takeaway:

Recycling rates vary dramatically between countries. Research from [Statista](#) shows that the recycling rate for municipal waste in the UK was 44.1 per cent in 2018. This puts the UK slightly over halfway up the European league table – significantly behind recycling leader Germany, which has a rate of 66.7 per cent. Springwise partner edie last year [delved deep](#) into the statistics behind the UK's waste pile, highlighting that some green groups are worried by the slow progress on recycling. Looking specifically at Department for Environment, Food and Rural Affairs [data](#) for household waste, rates increased steadily but modestly between 2010 and 2019. Processes that allow us to recycle difficult plastics will be crucial if the UK is to move the dial on recycling and catch up with the world's recycling leaders.