

THEMATIC PRIORITY:



**RESOURCE AND  
MATERIALS EFFICIENCY**

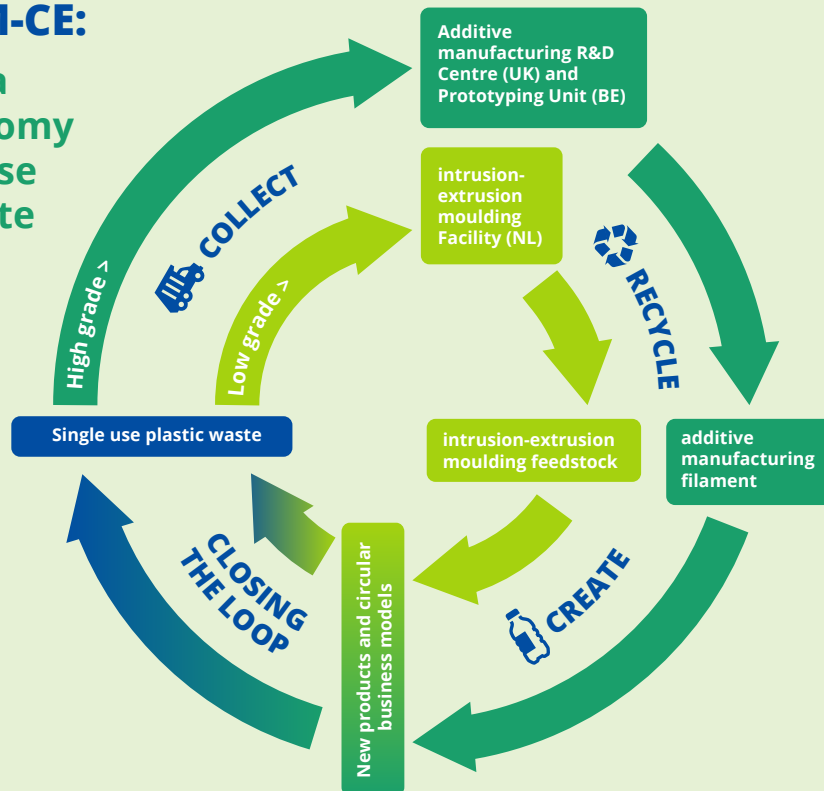


**TRANSFORMing single use plastic waste and  
creating a Circular Economy business model**

**Be part of the transformation!**

## TRANSFORM-CE:

Creating a  
circular economy  
for single use  
plastic waste



### An introduction

The European Union manufactures millions of plastic products each year, however, only a fraction of these are made using recycled plastic. Even more surprising, half of the plastic waste collected for recycling is exported outside the EU for processing. The EU plastics industry is thereby losing valuable potential raw materials at a time when demand is increasing. In recognition of this, as well as the possible environmental and social benefits, TRANSFORM-CE brings together four North West European countries to develop innovative solutions for recycling these materials into new products for a circular economy.

### Transforming local plastic waste into raw materials for new products

TRANSFORM-CE is using two innovative technologies to create new products from single use plastic waste – additive manufacturing (AM) and intrusion-extrusion moulding (IEM). To support this, an R&D Centre (UK) and Prototyping Unit (BE) have been set up to develop and scale the production of recycled filaments for AM, whilst an intrusion-extrusion moulding Facility, the Green Plastic Factory has been established in the Netherlands to expand the range of products manufactured using IEM. Businesses are being encouraged to take up these technologies and recycled materials, to develop new products

and circular business models, through TRANSFORM-CE's business support package. This includes the provision of sample filaments, as well as help with product design, prototyping, business model innovation, material analysis and product testing. Through this, and the project's business support and outreach activities, TRANSFORM-CE is demonstrating the potential value of single use plastic waste, the possibilities for recycling it into new products, and a scalable model for widespread uptake across North West Europe.

## Who benefits?

The development of a circular economy for single use plastic waste and the strengthening of the market for recyclate will bring many benefits to North West Europe. It will help businesses to become independent of virgin and recycled plastic imports, valorise local waste streams, stimulate demand for recycled plastic products, and reduce the environmental impacts associated with the extraction,



processing, landfilling and incineration of virgin plastic.

TRANSFORM-CE will not only divert hundreds of tonnes of single use plastic waste from landfill across North West Europe, but will create new circular economy opportunities for businesses based on demand for recyclate, both locally and further afield.

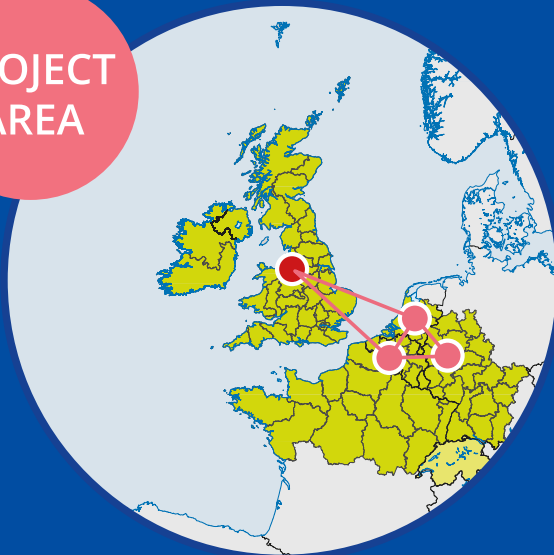
**Be part of this transformation!**  
**Visit [nweurope.eu/transform-ce](https://nweurope.eu/transform-ce)**

## Outputs

- 1 pilot plant (IEM) in the Netherlands
- 2 facilities (AM) in the United Kingdom and Belgium
- Diversion of 308.2 tonnes of plastic waste from landfill and incineration over the 3 years
- A Circular Economy Plastic Roadmap
- Take up of IEM/AM technology by 20 NW Europe businesses to embed recycled municipal plastic into the design and manufacturing of new and existing products

[nweurope.eu/transform-ce](https://nweurope.eu/transform-ce)

## PROJECT AREA



**Duration:**  
2019 - 2023

**Budget:**  
Total € 6.93 million  
ERDF € 4.12 million

## Contact Information:

**Manchester Metropolitan University**

Lead partner

✉ [circulareconomy@mmu.ac.uk](mailto:circulareconomy@mmu.ac.uk)

in [linkedin.com/company/transform-ce](https://www.linkedin.com/company/transform-ce)

🐦 [@Transform\\_CE](https://twitter.com/Transform_CE)

🏠 [Nweurope.eu/transform-ce](https://Nweurope.eu/transform-ce)



## Project partners:

The TRANSFORM-CE partnership includes 9 organisations from four regions in North West Europe: The UK, The Netherlands, Germany and Belgium.

- Manchester Metropolitan University
- Materia Nova
- SOENECS Ltd.
- Municipality of Almere
- Save Plastics
- Technische Universiteit Delft
- Hogeschool Utrecht
- IfaS (Institut für angewandtes Stoffstrommanagement)
- bCircular GmbH

**Transform-CE contributes to the circular economy by developing solutions for local single use plastic waste.**