

## Cracking down on plastic waste – new initiative “eCircular” to radically reduce the use of plastic materials

EIT Climate-KIC and partners (University of Bologna, Wuppertal Institute, Lund University, Montanuniversität Leoben and Ecomatters) have launched an exciting programme to cut down plastic demand, promoting a more circular approach to plastic-based material systems.

The project aims to explore and use innovative digital tools to improve plastics waste prevention. This can, for example, include blockchain solutions for improved market transparency, data analytics for simulation and forecast applications, and cyber physical systems for improved reuse and remanufacturing business models.

49 million tons of plastic were used in the EU in 2015 for packaging, building and construction, electronics or the automotive industry. Currently, less than 40 per cent are recycled, more than 30 per cent are incinerated for energy recovery and the remaining are landfilled.

The quality of recycled plastics is increasing – however, the overall uptake of recycled plastics remains low. Only 6 per cent of new plastic materials come from recycling; 95 per cent of the potential economic value in plastic packaging currently goes to waste.

eCircular aims to tackle this issue, enhancing plastic waste prevention by developing and supporting digital innovations.

Project lead Alberto Bellini, from the University of Bologna, says: “eCircular thrives for radical digital innovations for waste prevention and their upscaling. Digital technologies foster traceability of materials and products, allow for accurate information flows on product qualities and availability, reducing gaps in knowledge and regulation.”

“The programme seeks to strongly contribute to the European strategy for plastics in a circular economy. It gathers and unites the relevant actors on a powerful platform to overcome major barriers, different knowledge bases, and priorities,” says Kirsten Dunlop, CEO at EIT Climate-KIC.

Sira Saccani, EIT Climate KIC’s Director of Sustainable Production Systems, adds that the programme “aims to transform the plastics value chain, addressing current structural inefficiencies through innovative business models & eco-design, as well as supporting the shift to new consumer choices and behaviours.”

eCircular is one of the EIT Climate-KIC’s initiatives on addressing the challenges plastic value chains face. EIT Climate-KIC’s ambition is to co-design and launch a series of circular economy interventions on cement, plastics and metals value-chains, to achieve its goal of recasting material production towards net-zero emissions.



## Background

eCircular was launched in May 2018 by [EIT Climate-KIC](#), with research and activities carried out by the [University of Bologna](#) (lead organisation), [Wuppertal Institute](#), [Lund University](#), [Montanuniversität Leoben](#), and [Ecomatters](#).

EIT Climate-KIC is contributing by leveraging its innovation network of key stakeholders in the industry to catalyse a change in the system.

### **About EIT Climate-KIC**

EIT Climate-KIC is Europe's largest public-private innovation partnership focused on climate innovation to mitigate and adapt to climate change. Supported by the European Institute of Innovation and Technology, we identify and support innovation that helps society mitigate and adapt to climate change.

For more information please visit:

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