

OPPORTUNITIES FOR INNOVATION

# THE PLASTICS **VALUE CHAIN**



As part of the EU Plastics Strategy, more than a dozen common single-use plastic products are being targetted by legislation intended to reduce the impact of plastic on the environment and promote the transition to a circular economy. In 2020, new rules will also be proposed to ensure that by 2030, all plastic packaging on the EU market will be either reusable or recyclable in a cost-effective way.

## MASSIVE WASTE. MISSED OPPORTUNITIES

It is in the interest of European businesses to invest in the modernisation of the plastics value chain.

The current plastics economy produces waste by design; the way plastics are currently made, used and discarded fails to capture the economic benefits of a more 'circular' approach.

Of Europe's 25 million tons of plastic waste:

only **30%** IS RECYCLED

**39%** 

ends up IN LANDFILLS





Of the plastic that is actually recycled, a significant share is sent to be treated otside the EU. That means that the potential for recycling used plastic remains largely unexploited in the EU.

The potential annual energy savings that could be achieved from recycling all global plastic waste is equivalent to 3.5 billion barrels of oil per year. This would have a significant effect on our carbon footprint.



## **HOW DO CONSUMERS FEEL?**

"In your opinion, how important is each of the following in reducing plastic waste and littering? ")

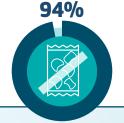
Eurobarometer



### OF RESPONDENTS SAID THAT

### Products

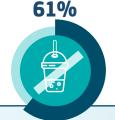
should be **DESIGNED** in a way that FACILITATES THE RECYCLING OF PLASTIC



## **OF RESPONDENTS SAID THAT**

#### Industry and retailers

should make an EFFORT TO REDUCE PLASTIC PACKAGING



## OF RESPONDENTS SAID THAT

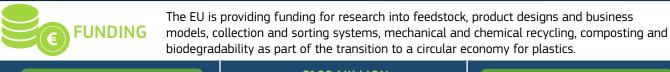
### Consumers

should PAY AN EXTRA CHARGE FOR SINGLE-USE PLASTIC GOODS (cutlery, cups, etc.)

### WHAT'S IN IT FOR EU INDUSTRY?



### WHAT IS THE EU DOING TO SUPPORT INDUSTRY IN THE TRANSITION?



## Horizon 2020

has provided
OVER 250 MILLION EUROS

to finance research and innovation in areas related to the **EU Plastics Strategy.** 

## €100 MILLION

to be spent during the remainder of Horizon 2020

financing the development of **smarter and more recyclable plastics materials**, and making processes more efficient.

## The Work Programme 2018-2020

includes funding calls for pilots for CIRCULAR SYSTEMS IN PLASTICS, developing frameworks for monitoring and assessment, and "smart" plastics materials.

## A Strategic Research and Innovation Agenda on plastics

is being developed to provide guidance for research and innovation funding after 2020.

## 5.5 BILLION EUROS of Cohesion Funds



have been dedicated to **improve waste management** across Europe.

## **POLICY SUPPORT**

The Circular Economy Financing
Platform

has been set up to identify the main challenges and obstacles for circular economy initiatives.

## Bio-Based Industries Joint Undertaking (BBI JU)

is a public-private partnership under Horizon 2020 that is helping to **develop the EU's bio-based industrial sector.** 

### The Bioeconomy Strategy

mobilises key actors in the plastics value chain to support the development of substitutes to fossil resources,

in particular bio-based, recyclable and marine biodegradable alternatives.

### The Circular Plastics Alliance

brings together the key industry stakeholders from the full plastics value chain as part of its efforts to reduce plastics littering, increase the share of recycled plastics and stimulate market innovation.

### A pledging campaign

invited stakeholders to submit voluntary pledges to boost the uptake of recycled plastics. The target is to have 10 million tonnes of recycled plastics finding their way into new products in Europe by 2025. **70 voluntary pledges** have been submitted.

## PROJECT EXAMPLES

The innovation developed by the project **SYMBIOPTIMA** constitutes a breakthrough in the recycling of PET. It can represent a business opportunity by allowing more efficient recycling of widely-available plastic waste in an economically viable way.

circ-pack aims to develop a more sustainable, efficient, competitive, less fossil fueldependent, interconnected plastic value chain, addressing the design of products with biodegradable and compostable plastics. **EFFECTIVE** is developing first-ofits-kind economically viable routes for the production of recyclable and biodegradable plastics from sustainable, renewable feedstock.

PolyCE tests the feasibility of the circular plastics supply and value chain while substantially reducing the WEEE (waste electrical and electronic equipment) plastics generation and enhancing the use of recycled plastics in new applications.

