



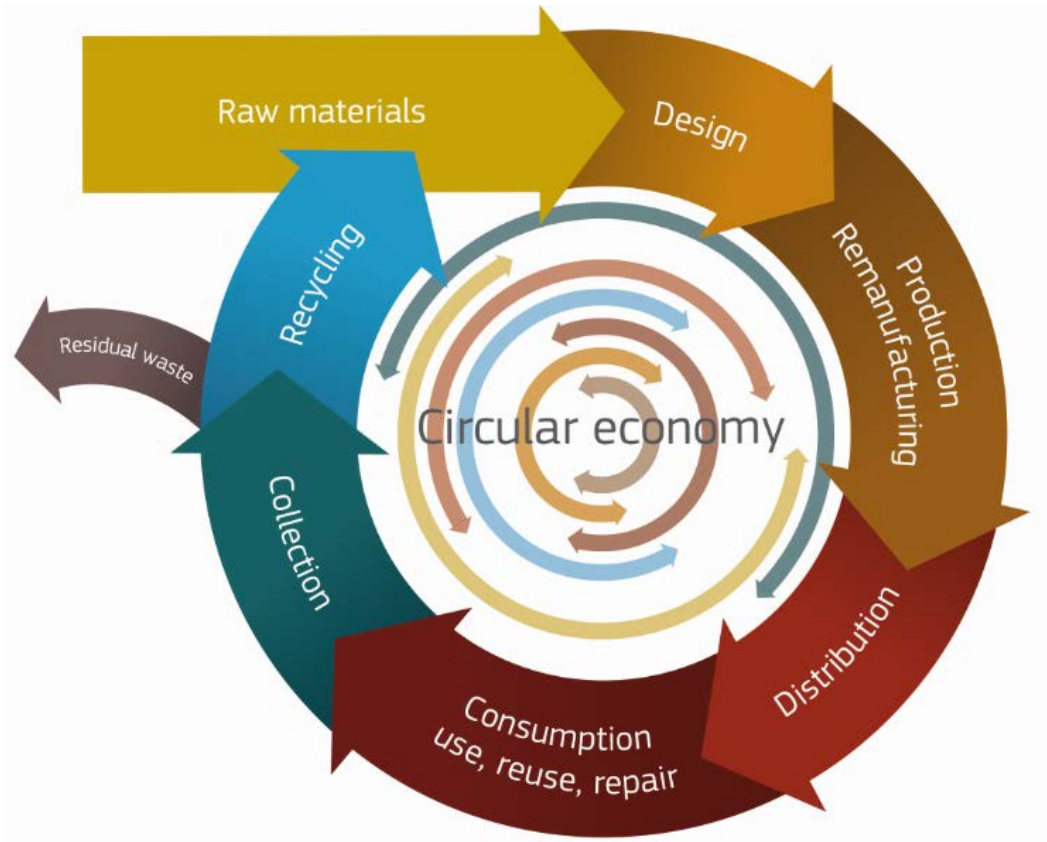
European  
Commission

# Implementing the Circular Economy in the EU



**Emmanuelle Maire**  
**Head of Unit 'Sustainable Production,  
Products and Consumption'**  
*European Commission*  
*Directorate General for Environment*

# What is the circular economy?



- An economy where the value of products, materials and resources is maintained in the economy for as long as possible, and the generation of waste minimized.

# Why urgent action is needed



- From 1970 to 2017, the annual global extraction of materials **tripled** and it continues to grow.

Source: The International Resource Panel, [Global Resources Outlook, 2019](#)



- More than **90%** of biodiversity loss and water stress come from resource extraction and processing.

Source: The International Resource Panel, [Global Resources Outlook, 2019](#)



- EU's industry accounts for **20%** of the EU's emissions.

Source: European Commission, [EU Climate Action Progress Report 2019](#)



- Only **12%** of the materials used by EU industry come from recycling.

Source: [Eurostat](#), 2016 figures

# Economic benefits: micro

- **Significant cost saving** for EU industry from circular economy approaches:

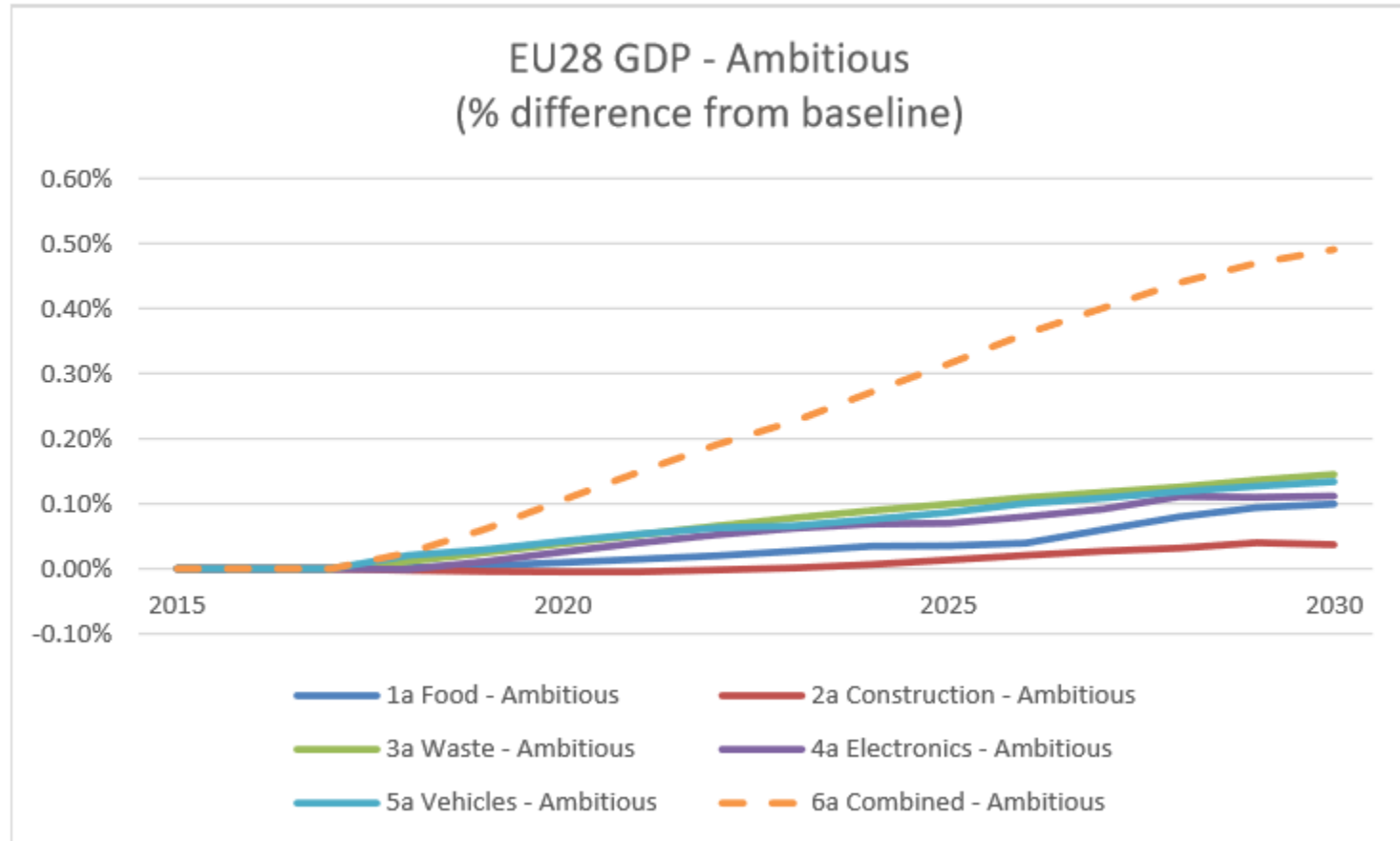
✓ Potential net benefits for businesses in the EU from improved resource efficiency (waste prevention and re-use, focus on eco-design and similar measures) = could bring net savings of €600 billion, or 8% of annual turnover, to EU businesses

- **The cost of inaction:**



# Economic benefits: macro

Figure 5.1 EU GDP impacts in the circular economy scenarios (% from baseline)



# 1 action plan 4+1 key areas 5 priority sectors 54 actions

Actions	Timetable
<b>Production</b>	
Emphasis on circular economy aspects in future product requirements under the Eco-design directive	2016 onwards
Eco-design work plan 2015-2017 and request to European standardisation organisations to develop standards on material efficiency for setting future Eco-design requirements on durability, reparability and recyclability of products	December 2015
Proposal for an implementing regulation on televisions and displays	End 2015 or beginning 2016
Examine options and actions for a more coherent policy framework of the different strands of work of EU product policy in their contribution to the circular economy	2016
Include guidance on circular economy into Best Available Techniques reference documents (BREFs) for several industrial sectors	2016 onwards
Guidance and promotion of best practices in the mining waste management plans	2016
Establishing an open, pan-European network of technological infrastructures for SMEs to integrate advanced manufacturing technologies into their production processes	2015/now
Examine how to improve the efficiency and uptake of the EU Eco-Management and Audit Scheme (EMAS) and the pilot programme on environmental technology verification (ETV)	2017
Develop an improved knowledge base and support to SMEs for the substitution of hazardous substances of very high concern	2016

Consumption	Timetable
Better enforcement of existing guarantees on tangible products, accompanied by a reflection on improvements (upcoming Commission proposal for online sales of goods, and Fitness Check of consumer legislation)	2015-2017
Action on false green claims, including updated guidance on unfair commercial practices	2016
Analysis of the possibility to propose horizontal requirements on repair information provision in the context of Eco-design	2016
REFIT of Ecolabel, to be followed by actions to enhance its effectiveness	2016
Assessment of the possibility of an independent testing programme on planned obsolescence	2016
Subject to evaluation of the current ongoing pilots, explore the possible uses of the Product Environmental Footprint to measure and communicate environmental information	2016 onwards
Action on Green Public Procurement: enhanced integration of circular economy requirements, support to higher uptake including through training schemes, reinforcing its use in Commission procurement and EU funds	2016 onwards

Waste management	Timetable
<b>Revised legislative proposal on waste</b>	
Improved cooperation with Member States for better implementation of EU waste legislation, and combat illicit shipment of end of life vehicles	2015 onwards
Stepping up enforcement of revised Waste Shipment regulation	2016 onwards
Promotion of industry-led voluntary certification of treatment facilities for key waste <b>recycle streams</b>	2018 onwards
Initiative on waste to energy in the framework of the Energy Union	2016
Identification and dissemination of good practices in waste collection systems	2016 onwards

Market for secondary raw materials	Timetable
Development of quality standards for secondary raw materials (in particular for plastics)	2016 onwards
Proposal for a revised REACHs regulation	Early 2016
Proposed legislation setting minimum requirements for reused water for irrigation and groundwater recharge	2017
Promotion of safe and cost-effective water reuse, including guidance on the integration of water reuse in water planning and management, inclusion of best practices in relevant BREFs, and support to innovation (through the European Innovation Partnership and Horizon 2020) and investments	2016-2017

Analysis and policy options to address the interface between chemicals, products and waste legislation, including how to reduce the presence and improve the tracking of chemicals of concern in products	2017
Measures to facilitate waste shipment across the EU, including electronic data exchange (and possibly other measures)	2016 onwards
Further development of the EU raw materials information system	2016 onwards

Sectorial action	
<b>Plastics</b>	
Strategy on plastics in the circular economy	2017
Specific action to reduce marine litter implementing the 2030 Sustainable Development Goals	2015 onwards

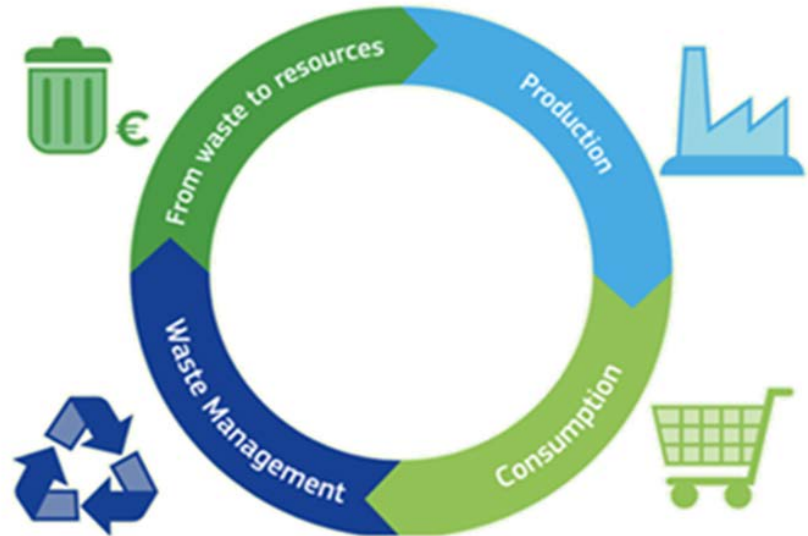
Food waste	
Development of a common methodology and indicators to measure food waste	2016
Stakeholders platform to examine how to achieve SDGs goals on food waste, share best practice and evaluate progress	2016
Clarify relevant EU legislation related to waste, food and feed in order to facilitate food donation and utilisation of former foodstuffs for animal feed	2016
Explore options for more effective use and understanding of date marking on food	2017

Critical raw materials	
Report on critical raw materials and the circular economy	2017
Improve exchange of information between manufacturers and recyclers on electronic products	2016 onwards
European standards for material-efficient recycling of electronic waste, waste batteries and other relevant complex end-of-life products	2016 onwards
Sharing of best practice for the recovery of critical raw materials from mining waste and landfills	2017

Construction and demolition	
Pre-demolition assessment guidelines for the construction sector	2017
Voluntary industry-wide recycling protocol for construction and demolition waste	2016
Core indicators for the assessment of the lifecycle environmental performance of a building, and incentives for their use	2017 onwards

Biomass and bio-based materials	
Guidance and dissemination of best practice on the cascading use of biomass and support to innovation in this domain through Horizon 2020	2016-2019
Ensuring coherence and synergies with the circular economy when examining the sustainability of bioenergy under the Energy Union	2016
Assessment of the contribution of the 2012 Bio-economy Strategy to the circular economy and possible review	2016

Innovation and investments	
Initiative "Industry 2020 and the circular economy" under Horizon 2020	October 2015
Pilot project for "innovation deals" to address possible regulatory obstacles for innovators	2016
Targeted outreach to encourage applications for funding under EFSI, and support the development of projects and investment platforms relevant to the circular economy	2016 onwards
Targeted outreach and communication activities to assist Member States and regions for the uptake of Cohesion Policy funds for the circular economy	2016 onwards
Support to Member States and regions to strengthen innovation for the circular economy through smart specialisation	2016 onwards
Assessment of the possibility of launching a platform together with the EIB and national banks to support the financing of the circular economy	2016
Engagement with stakeholders in the implementation of this action plan through existing fora in key sectors	2016 onwards
Support to a range of stakeholders through actions on public-private partnerships, cooperation platforms, support to voluntary business approaches, and exchanges of best practices	2015 onwards
<b>Monitoring</b>	
Development of a monitoring framework for the circular economy	2017



# 1<sup>st</sup> CEAP: ingredients of success



**Systemic approach along entire value chains – full life cycle**  
**In some cases, material-wide approach: plastics strategy**  
Single Use Plastic Items Directive & Circular Plastics Alliance

## Strong Stakeholder Engagement

### EU Circular Economy Stakeholder Platform

EU Platform on Food Losses and Food Waste

Circular Economy Finance Support Platform

European  
Circular Economy  
Stakeholder Platform

## Investing in the transition

### More than €10 billion since 2016

**€1.4 billion** from Horizon 2020 until 2018

**€7.1 billion** from Cohesion Policy

**€2.1 billion** European Fund for Strategic Investments and Innovfin

**€100 million** at least invested through LIFE



# Example: Waste Management



## *The Waste Package*



The new rules will make the EU a global leader in recycling:

- By 2030, at least **70 % of all packaging waste** in each EU country should be recycled
- By 2035, all EU countries should **recycle at least 65 % and landfill less than 10 % of municipal waste**



There are also **recycling targets** for specific packaging materials:

- Paper and cardboard: 85 %
- Ferrous metals: 80 %
- Aluminium: 60 %
- Glass: 75 %
- Plastic: 55 %
- Wood: 30 %



# Example: Plastics Strategy

Improve the economics and quality of plastics recycling

All plastic packaging will be **reusable or recyclable** (by 2030)

**Boost the market** for recycled plastics



Curb plastic waste and littering

Actions on **single-use plastics and microplastics**



Drive investments and innovation towards circular solutions

**Strategic Research Innovation Agenda for Plastics** (2018)



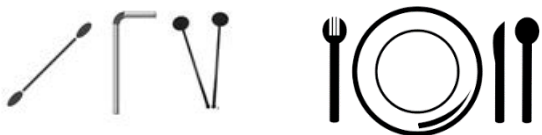
Harness global action

Support to **multilateral initiatives** on plastics



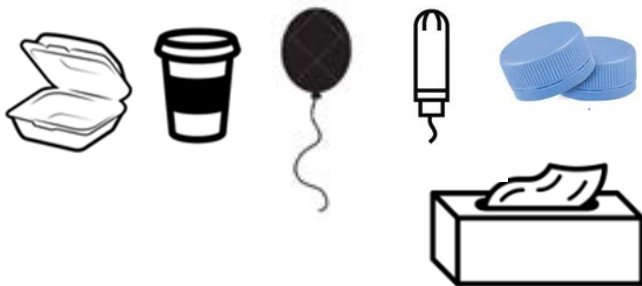
# Directive on single-use plastics and fishing gear

items with available sustainable alternatives



promote less harmful alternatives:  
market bans

items with no clear alternatives



prevention measures:  
design requirements,  
consumption reduction,  
consumer information



better waste management:  
separate collection,  
extended producer  
responsibility + clean-up

# Example: Energy savings due to Ecodesign and Energy Labelling

Measures taken by 2016:  
**energy use of Italy**

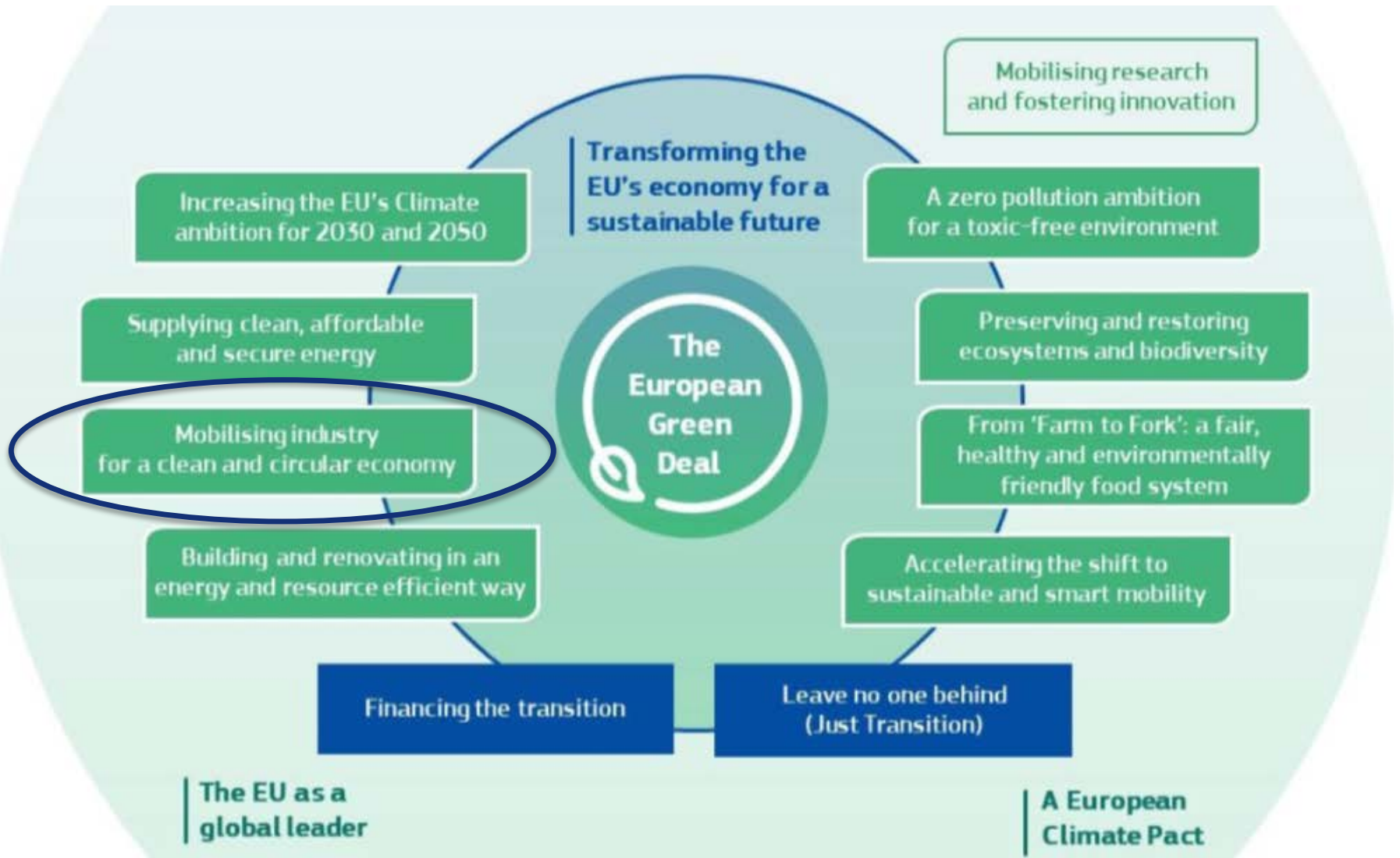


Revisions by 2020:  
**energy use of Denmark**



*Improved measures (e.g. refrigerators, washing machines, TVs) also address reparability (spare parts), recyclability, etc.*

# The European Green Deal



# New Circular Economy Action Plan (2020)

As announced in European Green Deal:

- **Action in the next 5 years**, to transform the economy by 2050
  - Publication together with industrial strategy
- **Sustainable Products policy**: green products to become the norm
  - Long product lifetime: durable, repairable, upgradeable
  - Low environmental impacts: material use, waste, etc.
- **Digitalisation as an enabler**
  - electronic product passport
- **Empowering consumers**:
  - no misleading green claims
  - Reliable information for consumers
  - 'right to repair'
- **Focus on resource intensive sectors**
  - e.g. textiles, construction, electronics, plastics

# Stakeholder engagement

#CEstakeholderEU

## European Circular Economy Stakeholder Platform

A joint initiative by the European Commission and the European Economic and Social Committee

Home Good Practices Strategies Knowledge Policy & Commitments Dialogue Contribute! News & Events About

- **Advancing the circular economy concept on the ground**
- **Strengthening cooperation among stakeholders' networks**



*representatives of networks of businesses, civil society and local, regional and national public authorities*



**Submit your own good practices, knowledge, strategies and voluntary commitments!**

Link to website: <http://circulareconomy.europa.eu/platform/>