

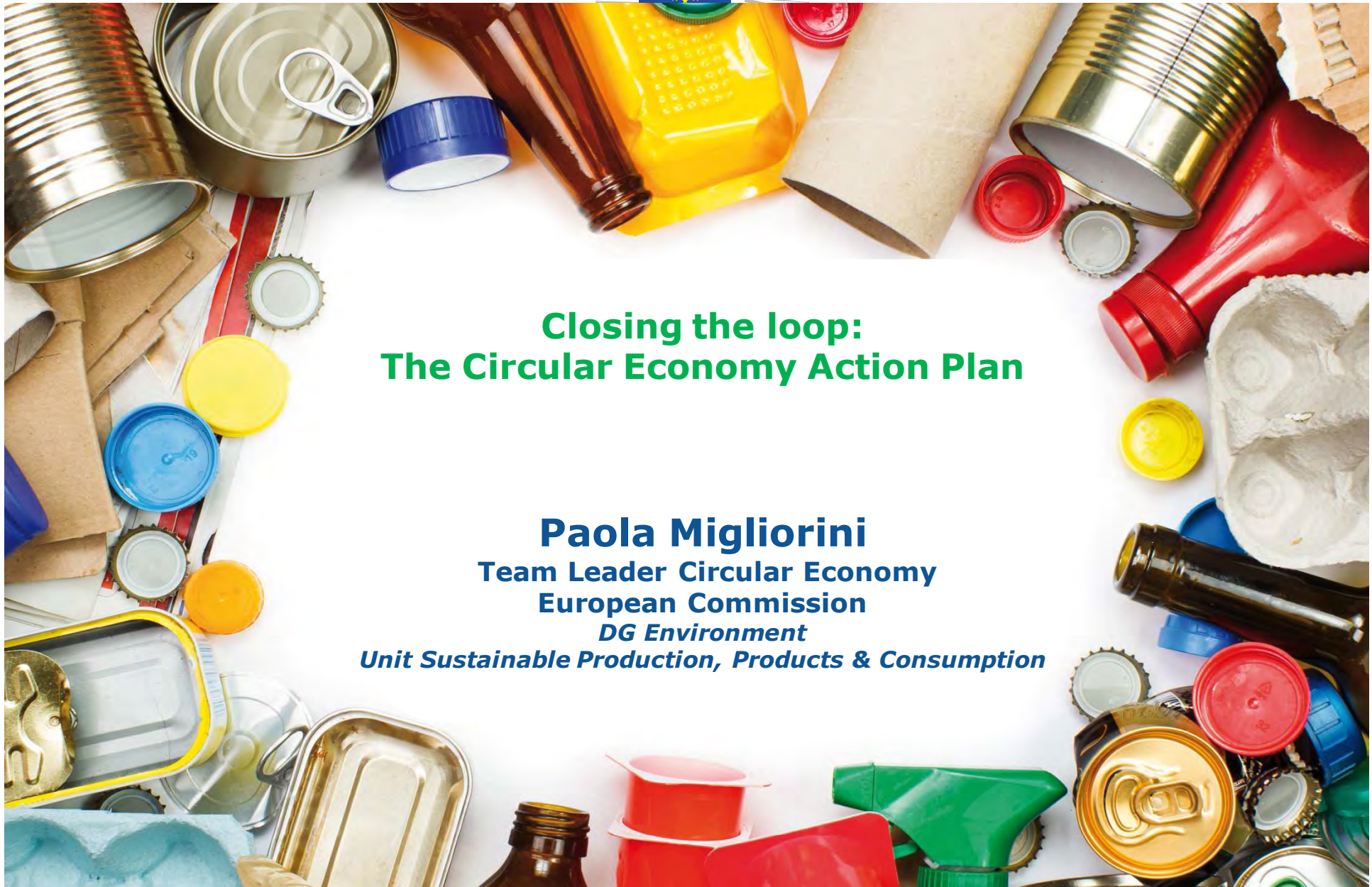


# **Closing the loop: The Circular Economy Action Plan**

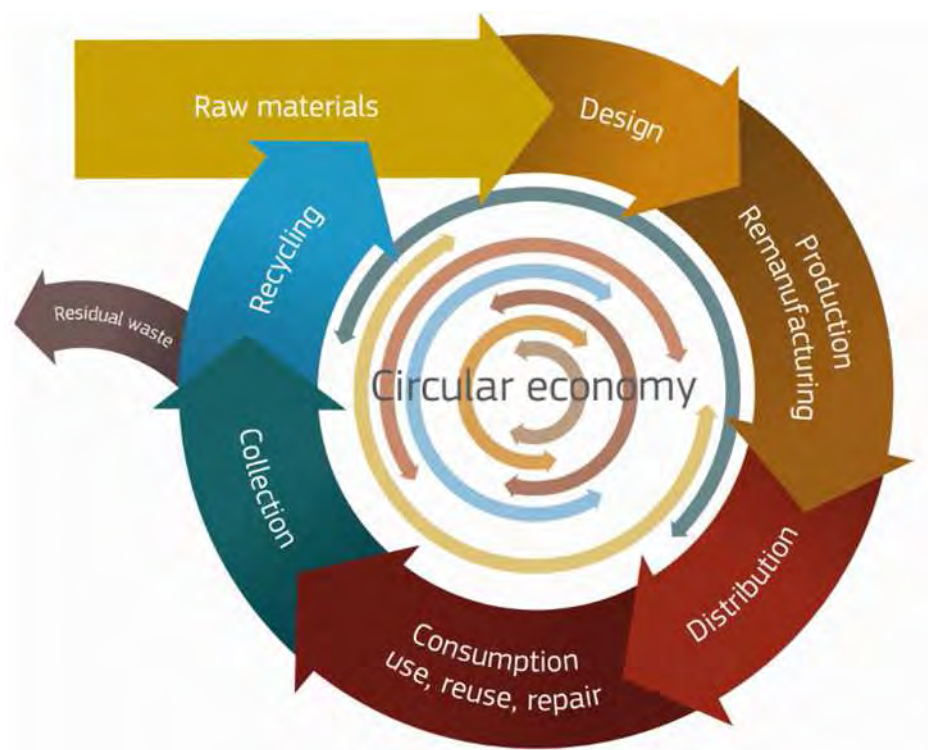
**Paola Migliorini**

**Team Leader Circular Economy  
European Commission  
DG Environment**

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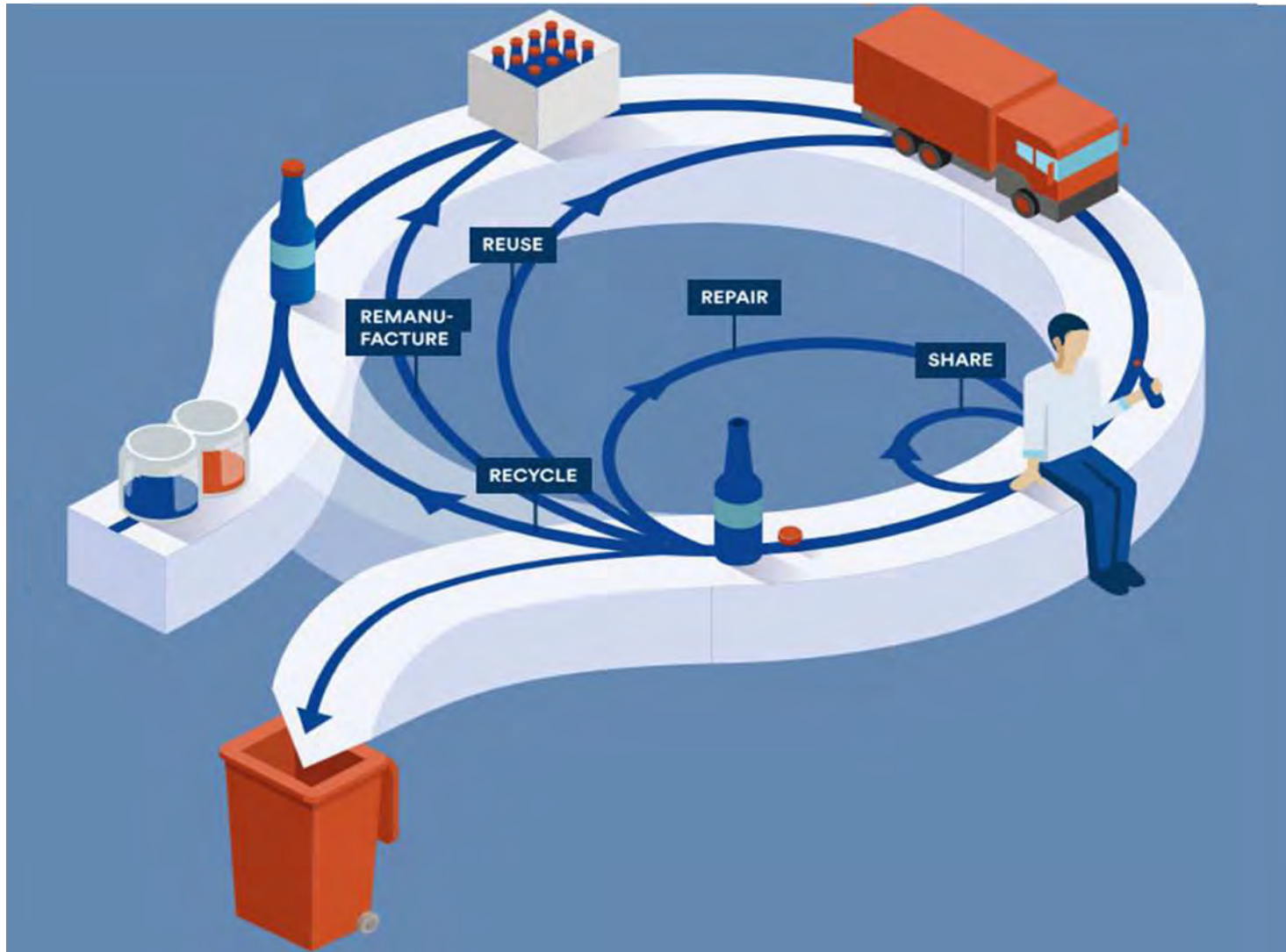
# What is Circular Economy?



*Circular economy **keeps the added value in products** for as long as possible and **eliminate waste***

***It keep resources within the economy** when a product has reached the end of its life, so that they can be productively **used again and again** and hence create further value.*

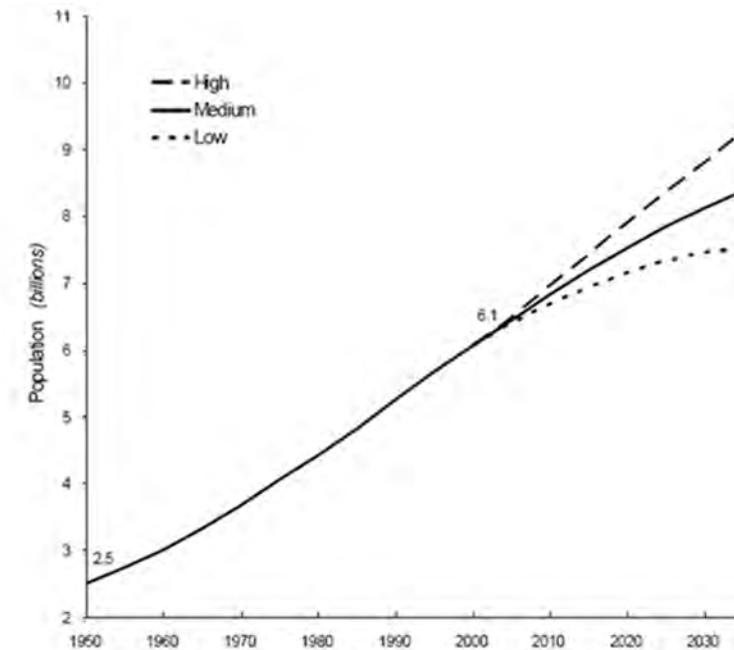
# Our vision





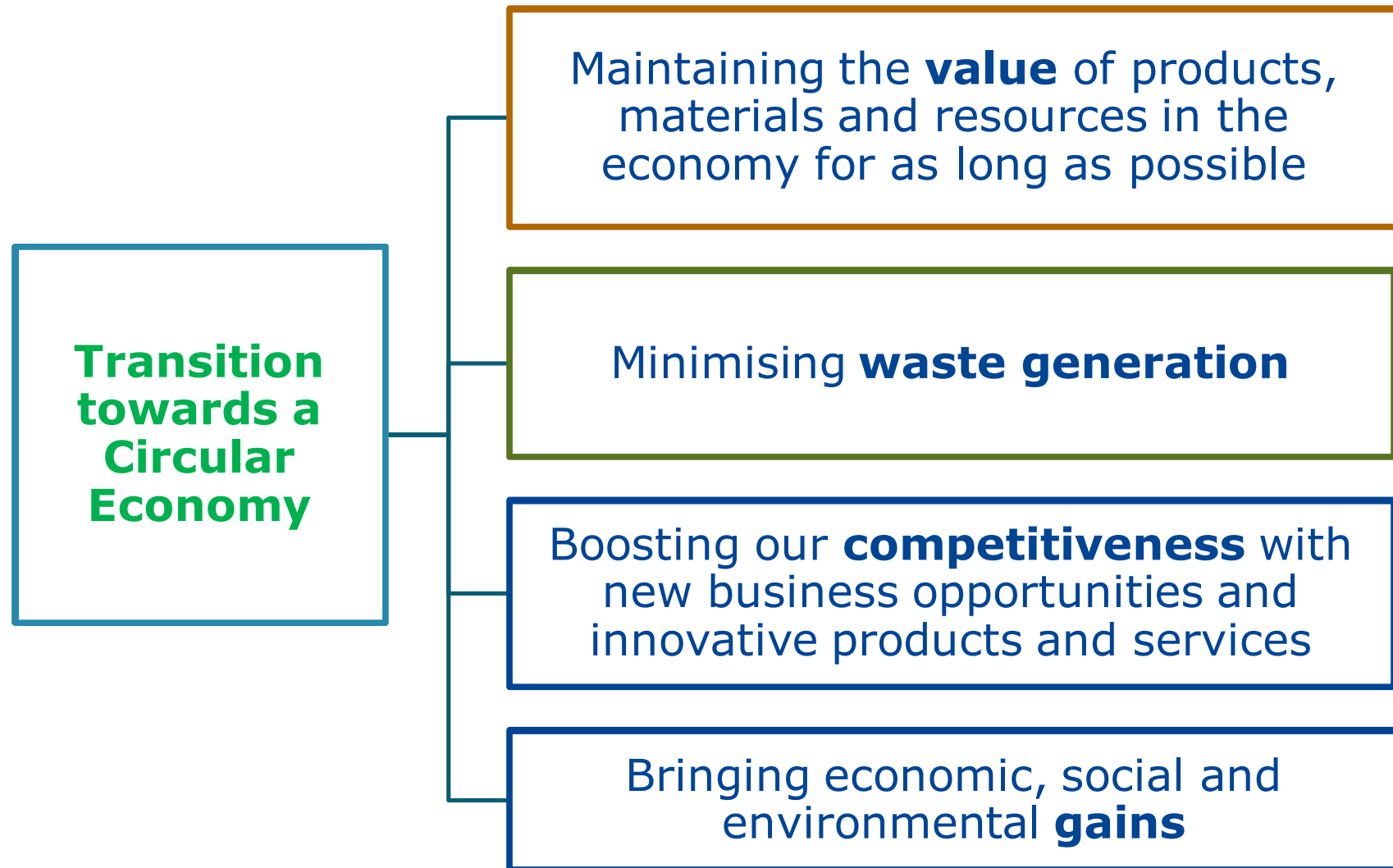
## Why do we need Circular Economy?

- **Environment:** inefficient use of resources has negative environmental impacts (greenhouse gas and other emissions, depletion of resources, impacts on landscape, water pollution, etc.)
- **Access to raw materials:** scarcity or depletion of resources + future trends
- **Societal pressures:** global middle class to double to nearly 5 billion by 2030, which will cause rise in consumption and increase pressure on resources



*Estimated world population and projections*







# Circular Economy and Green Growth

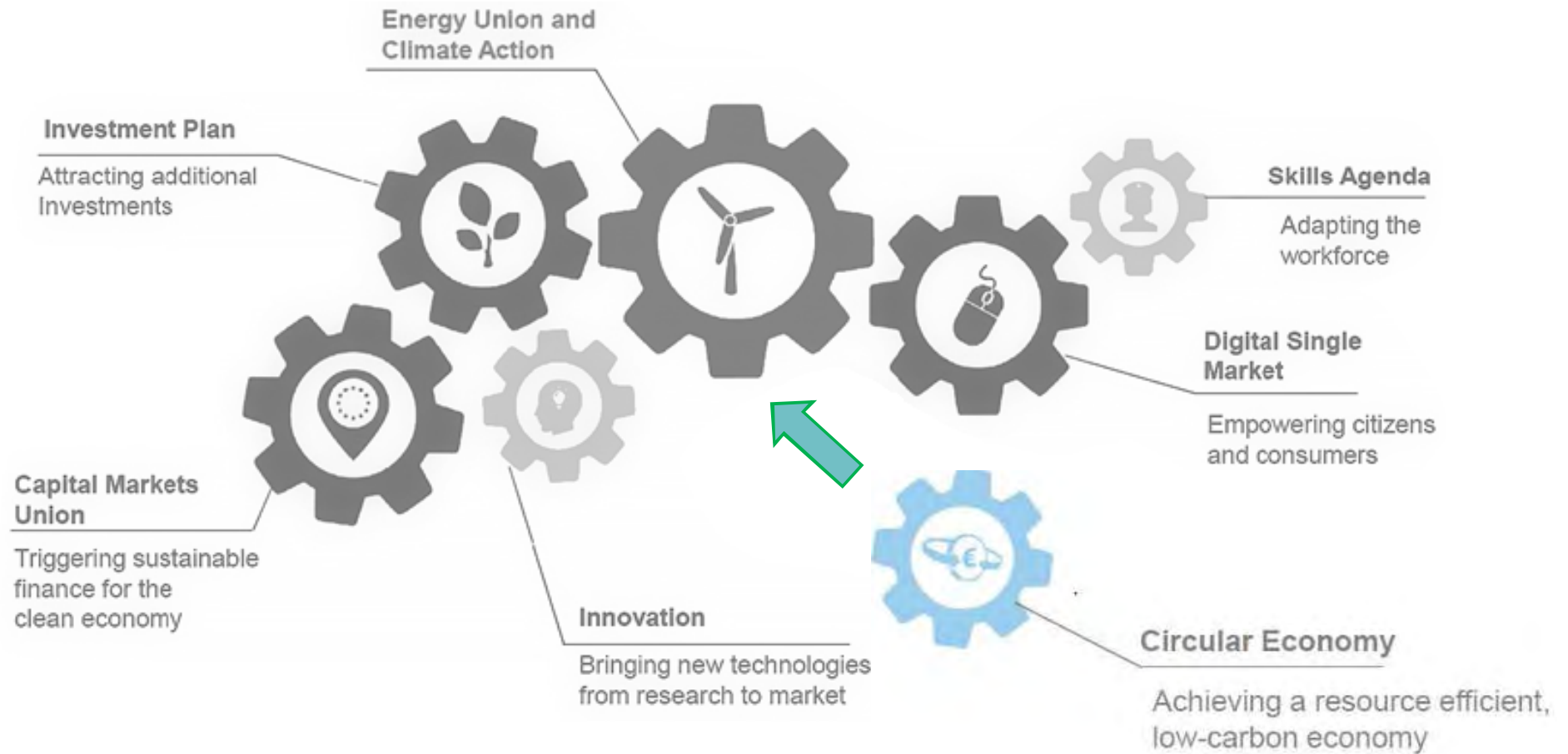
- ✓ **Costs:** net savings of €600 billion, or 8% of annual turnover while reducing greenhouse gas emissions by 2-4%
- ✓ **Jobs:** Increasing resource productivity by 30% could create 2 million more jobs by 2030
- ✓ **CO2 emissions** - could drop as much as 48% by 2030 and 83% by 2050 compared with 2012 levels





European  
Commission







# 4 Key areas of action    5 Priority sectors



# Circular Economy Action Plan



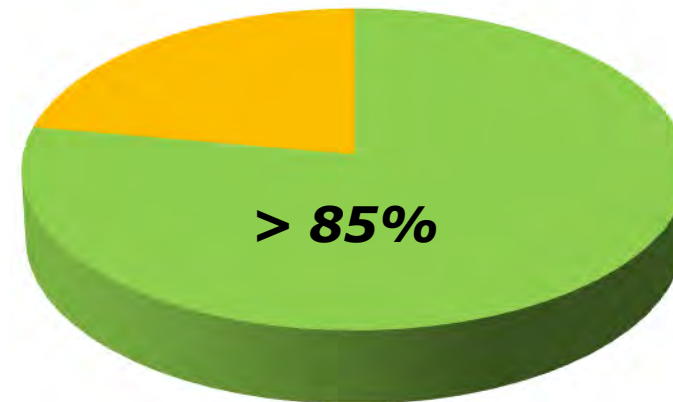
European Commission

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.	2018
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	2018
Establishing an open, pan-European network of technological infrastructures for SMEs to integrate advanced manufacturing technologies into their production processes	2016
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	2018
<b>Consumption</b>	
Better enforcement of existing guarantees on tangible products, accompanied by a reflection on improvements (upcoming Commission proposal for online sales of goods, and Pledge 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 harmonised requirements on repair information provision in the context of Eco-design	2018
REPFIT of Coolabel, to be followed by actions to enhance its effectiveness	2016
Assessment of the possibility of an independent testing programme on planned obsolescence	2018
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, extended: integration of circular economy requirements, support to higher uptake including through training schemes, reinforcing its use in Commission procurement and EU funds	2016 onwards
<b>Waste management</b>	
Revised legislative proposal on waste	Dec 2015
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-recycling streams	2016 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
<b>Market for secondary raw materials</b>	
Development of quality standards for secondary raw materials (in particular for plastics)	2016 onwards
Proposal for a revised fertilisers 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
<b>Sectional action</b>	
<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
<b>Food waste</b>	
Development of a common methodology and indicators to measure food waste	2016
Stakeholders platform to examine how to achieve SDG5 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
<b>Critical raw materials</b>	
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
<b>Construction and demolition</b>	
Re-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
<b>Biomass and bio-based materials</b>	
Guidance and dissemination of best practice on the cascading use of biomass and support to innovation in this domain through Horizon 2020	2018-2019
Ensuring coherence and synergies with the circular economy when examining the sustainability of bioenergy under the Energy Union	2018
Assessment of the contribution of the 2012 Bio-economy Strategy to the circular economy and possible review	2018
<b>Innovation and investments</b>	
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 flow 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



54 actions covering the whole cycle



■ Actions delivered

■ Work started

Upcoming: Circular Economy Implementation Report

# Production and Products

- Embed circularity in the design of new products and the materials they are made of
- Deal with current and future materials which are not circular



**Ecodesign Working Plan 2016-2019**  
**BREFs - industrial sectors**

# Consumption

- Helping consumers and public authorities choose sustainable products and services
- Providing reliable, standardised and comparable information to enable optimisation of policy and investment decisions

- <http://ec.europa.eu/environment/ecolabel/facts-and-figures.html>



## EMAS – EU Ecolabel Refit



# Waste Management

- Guided by SDG 12, stipulating that by 2020 we should :
  - achieve the environmentally sound management of chemicals and all wastes throughout their life cycle
  - significantly reduce their release to air, water and soil in order to minimize their adverse impacts on human health and the environment



## Legislative proposals on waste



## **The Waste Package**



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

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



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

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



## Secondary Raw Materials

- Better understanding of the uses of recycled materials
- Clearer definition of the requirements they have to meet in order to be reprocessed into secondary raw materials that are
  - of comparable quality to virgin materials and
  - can replace them at a reasonable cost and with the lowest possible use of resources (energy, water, etc.).



**Revised fertilisers regulation**  
**Guidance for water planning**

## Measuring progress at EU and national level in the transition to a circular economy

### 1/ EU SELF-SUFFICIENCY FOR RAW MATERIALS

The share of a selection of key materials (including critical raw materials) used in the EU that are produced within the EU

### 2/ GREEN PUBLIC PROCUREMENT

The share of major public procurements in the EU that include environmental requirements

### 3 A-C/ WASTE GENERATION

Generation of municipal waste per capita; total waste generation (excluding major mineral waste) per GDP unit and in relation to domestic material consumption

### 4/ FOOD WASTE

Amount of food waste generated

### 7A-B/ CONTRIBUTION OF RECYCLED MATERIALS TO RAW MATERIALS DEMAND

Secondary raw materials' share of overall materials demand – for specific materials and for the whole economy

### 8/ TRADE IN RECYCLABLE RAW MATERIALS

Imports and exports of selected recyclable raw materials



### 5A-B/ OVERALL RECYCLING RATES

Recycling rate of municipal waste and of all waste except major mineral waste

### 6A-F/ RECYCLING RATES FOR SPECIFIC WASTE STREAMS

Recycling rate of overall packaging waste, plastic packaging, wood packaging, waste electrical and electronic equipment, recycled biowaste per capita and recovery rate of construction and demolition waste

### 9A-C/ PRIVATE INVESTMENTS, JOBS AND GROSS VALUE ADDED

Private investments, number of persons employed and gross value added in the circular economy sectors

### 10/ PATENTS

Number of patents related to waste management and recycling





#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*



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



## A long term commitment



**Jyrki Katainen** @jyrkikatainen · 18 mag

I believe that #CircularEconomy is one of the biggest global megatrends. You can compare it e.g. to digitalisation & globalisation. The more we can create new business models and recycle raw materials, the more added value stays in Europe.



Retweeted 16 times



**Frans Timmermans** @TimmermansEU - Jun 15

We need to mainstream the #CircularEconomy in everything we do - energy, internal market, infrastructure, #EFSI, structural funds...

→ Circular Economy 2.0





***Learn more about the circular economy***

**[http://ec.europa.eu/environment/circular-economy/index\\_en.htm](http://ec.europa.eu/environment/circular-economy/index_en.htm)**