



European
Commission

Circular Economy

Contributing to the
Agenda 2030-SCP





Creating jobs and boosting GDP

Achieve higher levels of **economic productivity** through diversification, technological upgrading and innovation, including through a focus on high-value added and labour-intensive sectors

Improve progressively, through 2030, global resource efficiency in consumption and production and endeavour **to decouple economic growth from environmental degradation**, in accordance with the 10-year framework of programmes on sustainable consumption and production, with developed countries taking the lead



Improving environmental quality for citizens

Increase **water-use efficiency** to address water scarcity. Reduce pollution, halving the proportion of untreated wastewater and **substantially increasing recycling and safe reuse** globally

By 2025, prevent and significantly **reduce marine pollution** of all kinds, in particular from land-based activities, including marine debris and nutrient pollution

Deforestation and desertification – caused by human activities and **climate change** – pose major challenges to sustainable development and have affected the lives and livelihoods of millions of people in the fight against poverty.



Ensuring responsible consumption and production patterns

Promote resource and energy efficiency, sustainable infrastructure, and providing access to basic services, green and decent jobs and a better quality of life for all.

Achieve the environmentally **sound management of chemicals** and all **wastes** throughout their life cycle and significantly reduce their release to air, water and soil in order to minimize their adverse impacts on human health and the environment



Circular Economy Package



Implementation since December 2015...

Actions	Timetable
Production	
Emphasis on circular economy aspects in future product requirements under the Ecodesign directive	2016 onwards
Ecodesign work plan 2015-2017 and request to European standardisation organisations to develop standards on material efficiency for setting future Ecodesign 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

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 Ecodesign	2018
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	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: 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
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	2016 onwards
Stepping up enforcement of revised Waste Shipment regulation	2016 onwards
Promotion of industry-led voluntary certification of treatment facilities for key waste/recyclable streams	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 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

Sectorial action	
Plastics	
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 landfill	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 the 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 Bioeconomy 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 the 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

Monitoring	
Development of a monitoring framework for the circular economy	2017



Ecodesign Working Plan 2016-2019 BREFs - industrial sectors



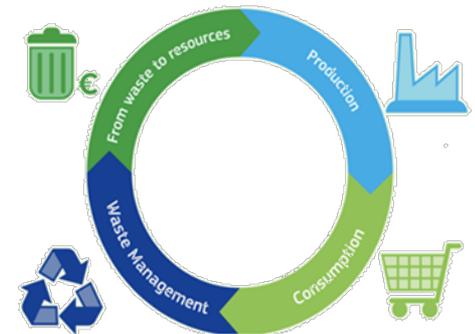
EMAS – EU Ecolabel Refit False Green Claims – On-line sales of goods



Legislative proposals on waste



Revised fertilisers regulation Guidance for water planning



Initiatives in the pipeline

Actions	Timetable
Production	
Emphasis on circular economy aspects in future product requirements under the Ecodesign directive.	2016 onwards
Ecodesign work plan 2015-2017 and request to European standardisation organisations to develop standards on material efficiency for setting future Ecodesign 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

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 Ecodesign	2018
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	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: 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
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/recyclable streams	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 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

Sectorial action	
Plastics	
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 landfill	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 Bioeconomy 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 the 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

Monitoring	
Development of a monitoring framework for the circular economy	2017

EU-wide minimum requirements for urban waste water reuse for agriculture irrigation

Address water scarcity



* Encourage efficient, safe and cost-effective water re-use



* Increase the recycling of nutrients contained in waste water in agriculture



* Contribute to growth and jobs creation by stimulating innovative technologies and water infrastructure

Plastics Strategy

Improve economics and
quality of plastic recycling

Reduce plastic waste
and littering



Investment and innovation

International challenge



Actions

to encourage the
use of recycled
plastic



Stronger incentives

to collect, sort and
recycle all plastics



Better design

of plastics for less toxicity,
more durability and
easier recycling



More information

to raise awareness and
encourage responsible
behaviour

Interface Chemicals - Products - Waste Legislations

Increase **safety**

Facilitate **recycling**

Improve **uptake** of
secondary raw materials

4 obstacles

- **Insufficient information** about substances of concern
- **Presence** of substances of concern in recycled materials
- **Uncertainties** about how materials can cease to be waste
- **Difficulties** in applying EU waste classification



Monitoring Framework

Assess the progress in the EU and its Member States



Applicable to materials, products and services

EEA, Eurostat and MSs

Circular economy contributing to SDGs, indicators consistency

Circular Production and Consumption

12 RESPONSIBLE
CONSUMPTION
AND PRODUCTION



If the global population reaches 9.6 billion by 2050, the equivalent of almost three planets will be required to sustain current lifestyles





Circular products

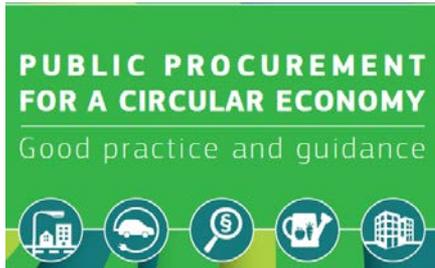
Embed circularity in the design of new products and the materials they are made of

Deal with current and future materials which are not circular

Ecodesign Working Plan 2016-2019

- Durability
- Reparability
- Recyclability

Green Public Procurement under the CE Action Plan



Circular economy aspects in criteria-setting

Support a greater **uptake of GPP criteria by public authorities**, e.g. by training

Commission to lead by example - in its own procurement, and by reinforcing the use of GPP in EU funding

EU Ecolabel: unique tool for a Circular Economy

saving resources
sustainable sourcing
reduction of dangerous
substances



reliable
easy to recognise
enables consumers to
make conscious
choices, without
compromising on the
quality of products

high quality
recyclates

durable
easy to dismantle and
recycle
limited packaging



EMAS

**VERIFIED
ENVIRONMENTAL
MANAGEMENT**

EMAS: circular organisations

Performance

Systematic improvement of performance against significant environmental aspects.

Credibility

Verification by an independent and accredited third party

Transparency

Transparent reporting based on defined indicators



Product/Organisation Environmental Footprint (PEF/OEF)

improve the availability of clear, reliable and comparable information on the environmental performance of products and organisations



Potential use of Consumer Footprint

- support the **end-consumer** in reaching a more **sustainable consumption**
- support **institutions** in monitoring the consumers' shift to a more sustainable lifestyle and **develop of better consumption-focused policies**
- encourage **companies** that operate across borders **to produce and promote more sustainable goods and services** (by stimulating comparable consumer information and communication practices across markets)

Consumer Footprint - links to 10YFP CI-SCP

- **10YFP CI-SCP co-leads, MAC members, partners and their respective networks the 10YFP CIP – expertise**
- potential collaboration with members of **10YFP-SLE**
- allows for **better coordination**
- offers a **platform for discussion among stakeholders** on global principles and targeted mobilisation of resources
- **prevents duplicated effort** or conflicting approaches

More to come in 2018 and beyond

- Options for a more sustainable Product Policy Framework
- Follow up to the Product/Organisational Environmental Footprint
- Circular economy 2.0



European
Commission

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)