

CIRCULAR ECONOMY - FACT SHEET

‘GOODS OF TODAY BECOME RESOURCES OF TOMORROW’



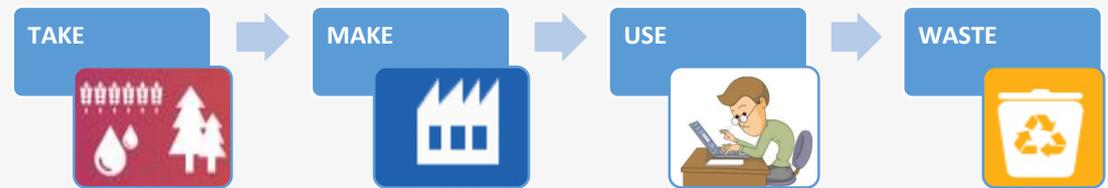
In recent years, the European Commission has intensified its efforts to foster economic, social and environmental prosperity by moving to a circular economy and society. A systemic approach to eco-innovation is intended to promote new modes of production and consumption, triggering a disruptive transformation for a resource efficient society.

In the Circular Economy, the product life cycle should be designed in such a way as to:

- Minimize the extraction of raw materials.
- Maintain the value of products, materials and resources for as long as possible, both in technical and biological cycles.
- Limit the generation of waste.

WHY the Circular Economy?

Currently, **our economy is linear** and relies mainly on raw materials, natural resources and fossil energy. In the linear economy, we take (extract) resources, make (produce) goods out of these resources, use the goods and ultimately dispose of them, generating enormous amounts of waste each year.¹



However, **natural resources are not limitless** and non-renewable, meaning that once we use them all, they are gone forever. In addition, raw materials are getting increasingly expensive and difficult to exploit. Coupled with the constantly growing population and increasing consumer demand, it is becoming clear that this system cannot work long-term. This is where the idea of circular economy comes in.

WHAT is the Circular Economy?

In contrast to the linear economy, the circular economy does not let products and their components end up in a landfill or incineration. Products, at the end of their lives, are full of resources and raw materials. In the Circular Economy, those resources are captured, recycled, refurbished and inserted back (as secondary raw material) in the manufacturing circuit. Rather than discarding goods we do not need anymore, we can re-use them as parts of new products, simultaneously making considerable economic and environmental savings.

To make such system work, it is essential that all economic actors, including consumers, are engaged at all stages of a product life: from the design (eco-design) to waste management through trade, consumption, repair and reuse.

Finally, the establishment and proper functioning of the market for secondary raw materials is also crucial – the Circular Economy will bring the expected benefits only if recycled and refurbished materials can be traded and re-used in new products. For example, this requires the establishment of new waste management practices, the creation of common quality (impurity) standards for certain secondary raw materials and the facilitation of their cross-border circulation.



¹ In 2010, total waste production in the EU was 2,5 billion tons, out of which only 36% was recycled.

Benefits of the Circular Economy:

- New business opportunities.
- Creation of new kinds of jobs and skills.
- Environment protection, Industrial innovation.

HOW does the EU support the Circular Economy?

To ensure that all market operators effectively cooperate in the whole life cycle (and beyond) of products, the Circular Economy needs a robust regulatory and policy framework in Europe. For this reason, the European Commission introduced **the Circular Economy Package**, which consists of two main components:

- **A revision of the existing legislation on waste**, including packaging waste, electronic waste, batteries, end-of-life vehicles and landfill, which sets high targets for waste reduction, waste management and recycling,
- **The EU Action Plan for Circular Economy**, which establishes a concrete programme of action with specific deadlines, covering the whole cycle from the product design to the market for secondary raw materials. The Action Plan identifies **five priority areas**: plastics, food waste, critical raw material, construction and demolition, and biomass and bio-based products.

What about the Circular Economy in HORIZON 2020?

The development of the Circular Economy requires relevant efforts in research and innovation as well as investments. From this perspective, Horizon 2020 is the perfect tool to provide incentives for the economic actors to develop and enhance the circular economy system.

This is where you can find the Circular Economy in Horizon 2020:



In addition, the Work Programme 2016-2017 on ‘Cross-cutting activities (Focus area)’ contains **the specific call ‘Industry 2020 in the circular economy’²**. The objectives of this call include a reduction of costs and emissions, a more efficient use of energy and resources, a cascade use of materials as well as pioneering new production and consumption patterns and related technological and non-technological solutions throughout value chains. **All kinds of innovation are funded**, including disruptive, technological, organizational, social, financial and regulatory innovation.

² Downloadable at the following link: http://ec.europa.eu/research/participants/data/ref/h2020/wp/2016_2017/main/h2020-wp1617-focus_en.pdf



TIPS FOR PROPOSAL WRITING



- ✚ In the 'Expected impact' section of the proposal template, describe how your project could possibly contribute to the development of the Circular Economy – **it will enhance the value of your proposal!** This is particularly relevant for Research and Innovation Actions (RIA) and Innovation Actions (IA) in calls on energy and raw materials
- ✚ The **European Efficiency Excellence Centre** advises and assists SMEs seeking to improve their resource efficiency performance directly and through a network of partners across the European regions.
- ✚ Adopt a trans-disciplinary perspective that integrates technology, business models and economic organisation, finance, governance and regulation as well as skills and social innovation. Therefore, try to build partnerships involving economic, industrial and research actors, public authorities and/or civil society.

WHERE to find more information?

EC website, DG Environment, Circular Economy Strategy:

http://ec.europa.eu/environment/circular-economy/index_en.htm

Horizon 2020:

<https://ec.europa.eu/programmes/horizon2020/>

Ellen MacArthur Foundation:

<http://www.ellenmacarthurfoundation.org/circular-economy>

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