Circular economy: definition, importance and benefits

Repair, re-use and recycle!

The European Union produces more than 2.2 billion tonnes of waste every year. It is currently updating its legislation on waste management to promote a shift to a more sustainable model known as the circular economy.

But what exactly does the circular economy mean? And what would be the benefits?

What is the circular economy?

The circular economy is a model of production and consumption, which involves sharing, leasing, reusing, repairing, refurbishing and recycling existing materials and products as long as possible. In this way, the life cycle of products is extended.

In practice, it implies reducing waste to a minimum. When a product reaches the end of its life, its materials are kept within the economy wherever possible thanks to recycling. These can be productively used again and again, thereby creating further value.
This is a departure from the traditional, linear economic model, which is based on a take-make-consume-throw away pattern. This model relies on large quantities of cheap, easily accessible materials and energy.

Also part of this model is planned obsolescence, when a product has been designed to have a limited lifespan to encourage consumers to buy it again. The European Parliament has called for measures to tackle this practice.
Benefits: why do we need to switch to a circular economy?

To protect the environment
Reusing and recycling products would slow down the use of natural resources, reduce landscape and habitat disruption and help to limit biodiversity loss.

Another benefit from the circular economy is a reduction in total annual greenhouse gas emissions. According to the European Environment Agency, industrial processes and product use are responsible for 9.10% of greenhouse gas emissions in the EU, while the management of waste accounts for 3.32%.

Creating more efficient and sustainable products from the start would help to reduce energy and resource consumption, as it is estimated that more than 80% of a product's environmental impact is determined during the design phase.

A shift to more reliable products that can be reused, upgraded and repaired would reduce the amount of waste. Packaging is a growing issue and, on average, the average European generates nearly 180 kilos of packaging waste per year. The aim is to tackle excessive packaging and improve its design to promote reuse and recycling.

**Reduce raw material dependence**

The world's population is growing and with it the demand for raw materials. However, the supply of crucial raw materials is limited.

Finite supplies also means some EU countries are dependent on other countries for their raw materials. According to Eurostat, the EU imports about half of the raw materials it consumes.

The total value of trade (import plus exports) of raw materials between the EU and the rest of the world has almost tripled since 2002, with exports growing faster than imports. Regardless, the EU still imports more than it exports. In 2021, this resulted in a trade deficit of €35.5 billion.

Recycling raw materials mitigates the risks associated with supply, such as price volatility, availability and import dependency.

This especially applies to critical raw materials, needed for the production of technologies that are crucial for achieving climate goals, such as batteries and electric engines.

**Create jobs and save consumers money**
Moving towards a more circular economy could increase competitiveness, stimulate innovation, boost economic growth and create jobs (700,000 jobs in the EU alone by 2030).

Redesigning materials and products for circular use would also boost innovation across different sectors of the economy.

Consumers will be provided with more durable and innovative products that will increase the quality of life and save them money in the long term.

What is the EU doing to become a circular economy?

In March 2020, the European Commission presented the circular economy action plan, which aims to promote more sustainable product design, reduce waste and empower consumers, for example by creating right to repair. There is a focus on resource intensive sectors, such as electronics and ICT, plastics, textiles and construction.

In February 2021, the Parliament adopted a resolution on the new circular economy action plan demanding additional measures to achieve a carbon-neutral, environmentally sustainable, toxic-free and fully circular economy by 2050, including tighter recycling rules and binding targets for materials use and consumption by 2030.

In March 2022, the Commission released the first package of measures to speed up the transition towards a circular economy, as part of the circular economy action plan. The proposals include boosting sustainable products, empowering consumers for the green transition, reviewing construction product regulation, and creating a strategy on sustainable textiles.

In November 2022, the Commission proposed new EU-wide rules on packaging. It aims to reduce packaging waste and improve packaging design, with for example clear labelling to promote reuse and recycling; and calls for a transition to bio-based, biodegradable and compostable plastics.

Find out more
Circular economy action plan:
Infographic on the circular economy
Facebook interview with lead MEP Jan Huitema