

## RESOURCE EFFICIENCY AND THE CIRCULAR ECONOMY

Past and current patterns of resource use have led to high pollution levels, environmental degradation and the depletion of natural resources. EU waste policy has traditionally focused on environmentally sustainable waste management. The [Roadmap to a Resource Efficient Europe](#) and the [Circular Economy Package](#) laid the foundations for transforming the EU's economy into a sustainable one by 2050. Under the European Green Deal, the Circular Economy Action Plan provides a future-oriented agenda for a cleaner, more competitive EU.

### LEGAL BASIS

Articles 191-193 of the Treaty on the Functioning of the European Union (TFEU).

### OBJECTIVES AND ACHIEVEMENTS

All products have a natural basis. The EU's economy is highly dependent on natural resources. If current patterns of consumption and production are maintained, the degradation and depletion of natural resources will continue, as will waste generation. The scale of our current resource use is such that it is jeopardising the chances of future generations – and developing countries – of having access to their fair share of scarce resources. Rational utilisation of natural resources was one of the earliest environmental concerns underpinning the first European Treaties.

#### A. Resource efficiency

The 2011 Roadmap to a Resource Efficient Europe was part of the resource efficiency flagship initiative of the Europe 2020 strategy. It supported the shift towards sustainable growth via a resource-efficient, low-carbon economy and outlined the structural and technological changes needed by 2050, including milestones to be reached by 2020. It proposed ways to increase resource productivity and decouple economic growth from resource use and its environmental impact.

#### B. Waste management and prevention

The 2008 [Waste Framework Directive](#) aimed to reform and simplify EU policy by introducing a new framework and setting new targets, with a focus on waste prevention. The Waste Shipment Regulation ([\(EC\) No 1013/2006](#)) laid down rules for waste shipments both within the EU and between the EU and non-EU countries, with the specific aim of improving environmental protection. It covered the shipment of practically all types of waste (with the exception of radioactive material) by road, rail, sea and air. Regulation [\(EU\) No 660/2014](#) strengthened the inspection provisions with more stringent requirements for national inspections and planning.

### C. Production- and waste-stream-specific laws

[Directive 2000/53/EC](#) aimed to reduce waste from end-of-life vehicles (ELVs) and their components. It also encourages manufacturers and importers to limit the use of hazardous substances and to develop the integration of recycled materials.

The main objective of the Ship Recycling Regulation ([\(EU\) No 1257/2013](#)) was to prevent, reduce and eliminate accidents, injuries and other adverse effects on human health and the environment resulting from the recycling and treatment of EU ships, in particular with a view to ensuring that hazardous waste from such ship recycling is subject to environmentally sound management.

Directive 2002/96/EC, as amended by [Directive 2012/19/EU](#) aimed to protect soil, water and air through better and reduced disposal of waste electrical and electronic equipment (WEEE). Directive 2002/95/EC, repealed by [Directive 2011/65/EU](#), on the restriction of the use of certain hazardous substances in electrical and electronic equipment (RoHS), adopted in parallel to the WEEE Directive, aimed to protect the environment and human health by restricting the use of lead, mercury, cadmium, chromium and brominated flame retardants in such equipment. The implementation of the WEEE and RoHS Directives in the Member States proved difficult, with only one third of all electrical and electronic waste being collected and properly treated.

[Directive 2006/66/EC](#) on batteries, accumulators and waste batteries and accumulators aimed to improve the waste management and environmental performance of such items by establishing rules for their collection, recycling, treatment and disposal. The directive also set limit values for certain hazardous substances (in particular mercury and cadmium) in batteries and accumulators. In accordance with [Council Directive 2013/59/Euratom](#) on radioactive waste and substances, each Member State had to make it compulsory to report activities that involve a hazard arising from ionising radiation. Shipments of radioactive waste are covered by [Council Regulation \(Euratom\) No 1493/93](#) and [Council Directive 2006/117/Euratom](#).

The Packaging and Packaging Waste [Directive 94/62/EC](#) (PPWD) covers all packaging placed on the EU market and all packaging waste, whether it is used or released at industrial, commercial, office, shop, service, household or any other level. [Amending Directive 2004/12/EC](#) establishes criteria and clarifies the definition of 'packaging'. Moreover, [Directive \(EU\) 2015/720](#) amends the PPWD as regards reducing the consumption of lightweight plastic carrier bags, which easily escape waste management streams and accumulate in our environment, especially in the form of marine litter.

The Directive on the management of waste from extractive industries (the Mining Waste Directive, [2006/21/EC](#)) seeks to tackle the significant environmental and health risks associated with the volume and pollution potential of current and historical mining waste.

### D. Waste treatment and disposal

The progressive implementation of the Urban Waste Water Treatment Directive ([91/271/EEC](#)) in all the Member States increased the quantities of sewage sludge requiring disposal. The Landfill Directive ([1999/31/EC](#)) intends to prevent or reduce

the adverse effects of landfill on the environment, in particular on surface water, groundwater, soil and air, as well as on human health. Implementation has remained unsatisfactory, as not all of the provisions have been transposed in all the Member States and a large number of illegal landfills still exist.

[Directive 2010/75/EU](#) on industrial emissions lays down rules on integrated prevention and control of pollution arising from industrial activities, including the generation of waste and special provisions for waste incineration and co-incineration plants.

#### **E.** The 2018 Circular Economy Package

In December 2015, the Commission presented an action plan on the circular economy, as well as four legislative proposals amending the aforementioned legal acts: (a) the Waste Framework Directive; (b) the Landfill Directive; (c) the Packaging and Packaging Waste Directive; and (d) the directives on ELVs, on batteries and accumulators and waste batteries and accumulators, and on WEEE.

Adopted in May 2018, the four directives ([\(EU\) 2018/849](#), [\(EU\) 2018/850](#), [\(EU\) 2018/851](#) and [\(EU\) 2018/852](#)) incorporate, among other things, the following key elements:

- A common EU target to recycle 65% of municipal waste by 2035 (55% by 2025 and 60% by 2030);
- A common EU target to recycle 70% of packaging waste by 2030;
- A binding landfill target to reduce landfill to a maximum of 10% of municipal waste by 2035;
- A ban on the landfilling of separately collected waste, requiring separate collection for biowaste by 2023 and for textiles and hazardous waste from households by 2025.

#### **F.** Plastics in the circular economy

On 16 January 2018, the Commission published a communication laying out a [strategy for plastics in a circular economy](#). The strategy identifies key challenges, including the low reuse and recycling rates of plastic waste, the greenhouse gas emissions associated with plastics production and incineration, and the presence of plastic waste in the oceans. The Commission proposes that all plastic packaging should be designed to be recyclable or reusable by 2030. With a view to moving towards this target, the strategy presents a wide range of measures focusing on four areas: (1) improving the economics and quality of plastics recycling; (2) curbing plastic waste littering; (3) driving investment and innovation in the plastics value chain; and (4) harnessing global action.

As part of the strategy and following a Commission proposal of 28 May 2018, the Council and Parliament agreed to reduce plastic pollution by setting tough new restrictions on certain single-use plastic products ([Directive \(EU\) 2019/904](#)). Products banned in the EU include plastic cutlery, plastic plates and straws, food and beverage containers made of expanded polystyrene and cotton bud sticks made of plastic. From 2025 onwards, the Member States will have the binding target for all PET

beverage bottles to contain at least 25% recycled plastic. By 2030, all plastic bottles will have to be manufactured from at least 30% recycled material.

#### G. The new Circular Economy Action Plan under the European Green Deal

The [new Circular Economy Action Plan](#) for a cleaner and more competitive Europe was published on 11 March 2020 and is one of the cornerstones of the European Green Deal, the EU's new agenda for sustainable growth. It announced initiatives along the entire life cycle of products, targeting, for example, their design, promoting circular economy processes, fostering sustainable consumption, and aiming to ensure that the resources used are kept in the EU economy for as long as possible. In particular, the following rules have emerged.

The European Parliament and the Council adopted the new [Batteries Regulation](#) on 12 July 2023. This will minimise the environmental impact of the battery sector as it undergoes exponential growth in a context of new socio-economic conditions, technological developments, markets and battery usages.

In 2021, the EU introduced [amending provisions](#) on the shipment of plastic waste. In light of the increasing amount of waste shipped from EU to non-EU countries and in response to the call under the Circular Economy Action Plan to further tackle illegal waste shipments, a [new Regulation on waste shipments](#) was proposed by the Commission. Member States are called upon to ensure that the EU does not export its waste challenges to third countries and to facilitate shipments of waste for reuse and recycling in the EU. After the Council's adoption, a more efficient system is expected to be enforced. Waste shipments to OECD countries will be monitored and can be suspended if they generate serious environmental problems in the country of destination. Waste exports to non-OECD countries will be prohibited and only allowed if the countries concerned are able to manage the waste sustainably.

The Commission put forward a [proposal for a revision of the PPWD](#) on 30 November 2022. Its objective is to ensure that all packaging is reusable or recyclable by 2030, tackle over-packaging and reduce packaging waste. A [provisional agreement](#) was reached between Parliament and the Council on 4 March 2024 on this revision of the PPWD. The Commission also adopted the [communication on a policy framework on bio-based, biodegradable and compostable plastics](#).

European consumption of textiles has the fourth highest impact on the environment and climate change – after food, housing and mobility. On 30 March 2023, the Commission [published](#) the EU strategy for sustainable and circular textiles. This strategy sets out concrete actions to ensure that by 2030, textile products placed on the EU market are sustainable and recyclable, free of hazardous substances and that they respect social rights and the environment. The Commission went on to introduce a [proposal](#) to amend the Waste Framework Directive in July that year, with the aim of shifting the responsibility for the entire life cycle of textile products to manufacturers and of preventing food waste generation.

In July 2023, the Commission put forward a [proposal for a repealing regulation on end-of-life vehicles](#). This goes beyond the current Directive 2000/53/EC and lays down circularity requirements on vehicle design and production related to reusability, recyclability and recoverability.

## ROLE OF THE EUROPEAN PARLIAMENT

Parliament has repeatedly called for a new agenda for future European growth with resource efficiency at its core, which would require some radical changes in our production and consumption patterns. Following the Commission's strategy for plastics in a circular economy of January 2018, Parliament adopted [a resolution on this strategy in September 2018](#), which urged the Commission, among other things, to consider introducing requirements for minimum recycled content for specific plastic products placed on the EU market. It advocated creating a genuine single market for recycled plastics, proposed measures to tackle marine litter, and requested a ban on micro-plastics in cosmetics and cleaning products by 2020.

Parliament's [resolution of 15 January 2020 on the European Green Deal](#) called for an ambitious new circular economy action plan, with the aim of reducing the total environmental and resource footprint of EU production and consumption while providing strong incentives for innovation, sustainable business and markets for climate-neutral and non-toxic circular products. It highlighted the strong synergies between climate action and the circular economy, and called for the establishment of an EU-level target for resource efficiency.

On 17 January 2023, Parliament adopted its negotiating position for talks with EU governments on the [new law to revise EU procedures and control measures for waste shipments](#). The revised legislation should better protect the environment and human health, while taking full advantage of the opportunities provided by waste to achieve the EU's goal of a circular and zero-pollution economy. Parliament called for the creation of an EU risk-based targeting mechanism to guide EU countries that carry out inspections to prevent and detect illegal shipments of waste.

For more information on this topic, please visit the Committee on the Environment, Public Health and Food Safety's [website](#).

Georgios Amanatidis / Zuzanna Wala  
04/2024