



## RESOURCE EFFICIENCY AND WASTE

Past and current patterns of resource use have led to high pollution levels, environmental degradation and the depletion of natural resources. The Roadmap to a Resource Efficient Europe and the Circular Economy Package should change this trend, by transforming the EU's economy into a sustainable one by 2050. EU waste policy has a long history and has traditionally focused on more environmentally sustainable waste management. The four legislative proposals on waste in the new Circular Economy Package will introduce new waste management targets regarding prevention, reuse, recycling and landfilling.

### LEGAL BASIS AND OBJECTIVES

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

### GENERAL BACKGROUND

All products have a natural basis. The European economy is highly dependent on natural resources. If current patterns 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. At present, approximately 16 tonnes of materials are used per capita each year in the EU, of which 10 tonnes go into material stock (infrastructure, housing, durable goods) and 6 tonnes leave the economy as waste. About one third of municipal waste is dumped in landfills and less than half is recycled or composted, with wide variations between Member States. Rational utilisation of natural resources was one of the earliest environmental concerns underpinning the first European Treaties. The Resource Efficiency Roadmap is among the key initiatives of the 7th Environment Action Programme (EAP). One of its main objectives is to unlock the EU's economic potential so that it can be more productive while using fewer resources and moving towards a circular economy.

#### A. Resource efficiency

The Roadmap to a Resource Efficient Europe ([COM\(2011\) 0571](#)) is part of the resource efficiency flagship initiative of the Europe 2020 strategy. It supports the shift towards sustainable growth via a resource-efficient, low-carbon economy. The roadmap takes into account the progress made on the 2005 Thematic Strategy on the Sustainable Use of Natural Resources ([COM\(2005\) 0670](#)) and the EU's Sustainable Development Strategy, and sets out a framework for the design and implementation of future action. It also outlines the structural and technological changes needed by 2050, including milestones to be reached by 2020. It proposes ways to increase resource productivity and decouple economic growth from resource use and its environmental impact.

## B. Waste management and prevention

The current Waste Framework Directive ([2008/98/EC](#)) follows on from the Thematic Strategy on the Prevention and Recycling of Waste ([COM\(2005\) 0666](#)), repealing the previous Waste Framework Directive (75/442/EEC, codified as 2006/12/EC), the Hazardous Waste Directive (91/689/EEC) and the Waste Oil Directive (75/439/EEC). It aims to reform and simplify EU policy by introducing a new framework and setting new targets, with a focus on prevention. It establishes basic concepts and definitions in the area of waste management, including definitions of waste, recycling and recovery.

The Waste Shipment Regulation ([\(EC\) No 1013/2006](#)) lays 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 covers the shipment of practically all types of waste (with the exception of radioactive material) by road, rail, sea and air. In particular, exports of hazardous waste to countries outside the OECD and exports of waste for disposal outside the EU/European Free Trade Association are prohibited. However, illegal waste shipments have remained a serious problem; the new Regulation ([\(EU\) No 660/2014](#)), amending Regulation (EC) No 1013/2006, therefore aims to ensure more uniform implementation of the Waste Shipment Regulation. The Regulation strengthens the inspection provisions of existing legislation, with stronger requirements for national inspections and planning.

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

End-of-life vehicles: Directive [2000/53/EC](#) aims to reduce waste from end-of-life vehicles (ELVs) and their components, for example by increasing the rate of reuse and recovery to 95% by 2015, and the rate of reuse and recycling to at least 85%. It also encourages manufacturers and importers to limit the use of hazardous substances and to develop the integration of recycled materials. An implementation report ([COM\(2009\) 0635](#)) shows that enforcing the ELV Directive has been problematic in many Member States, owing to gaps between the number of de-registered cars and the number of registered ELVs, and to illegal exports to developing countries.

The EU Ship Recycling Regulation ([\(EU\) No 1257/2013](#)) entered into force on 30 December 2013. Its main objective is 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. The regulation sets out a number of requirements for European ships, European ship-owners, ship recycling facilities willing to recycle European ships, and the relevant competent authorities or administrations.

Directive 2002/96/EC, as amended by [Directive 2008/34/EC](#), aims to protect soil, water and air through better and reduced disposal of waste electrical and electronic equipment (WEEE). Directive 2002/95/EC on the restriction of the use of certain hazardous substances in electrical and electronic equipment (RoHS), adopted in parallel to the WEEE Directive, aims 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 has proved difficult, with only one third of all electrical and electronic waste being collected and properly treated. Accordingly, a recast WEEE [Directive \(2012/19/EU\)](#) and RoHS [Directive \(2012/18/EU\)](#) were adopted in 2012 following a lengthy legislative process. The new Directives require the Member States to increase their collection of e-waste and to allow consumers to return appliances to any shop selling small electrical goods, without having to purchase new goods.

Disposal of spent batteries and accumulators: Directive 2006/66/EC on batteries and accumulators and waste batteries and accumulators aims to improve the waste management and environmental performance of such items by establishing rules for their collection, recycling, treatment and disposal. The directive also sets limit values for certain hazardous substances (in particular mercury and cadmium) in batteries and accumulators. Amending Directive 2013/56/EC removed the exemption for button cells with a mercury content of no more than 2% by weight.

Radioactive waste and substances: in accordance with Directive 96/29/Euratom, each Member State must make it compulsory to report activities which involve a hazard arising from ionising radiation. In view of the possible dangers, in certain cases such activities are subject to prior authorisation, as decided by the Member State concerned. Shipments of radioactive waste are covered by Council Regulation (Euratom) No 1493/93 and [Council Directive 2006/117/Euratom](#).

Packaging and packaging waste: [Directive 94/62/EC](#) 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. The Directive requires the Member States to take measures to prevent the formation of packaging waste, and to develop packaging reuse systems. Amending Directive 2004/12/EC establishes criteria and clarifies the definition of ‘packaging’. Moreover, Directive [\(EU\) 2015/720](#) of 29 April 2015 amends Directive 94/62/EC as regards reducing the consumption of lightweight plastic carrier bags.

Waste from extractive industries: 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**

Use of sewage sludge in agriculture: the progressive implementation of the Urban Waste Water Treatment Directive (91/271/EEC) in all the Member States is increasing the quantities of sewage sludge requiring disposal. Council Directive 86/278/EEC regulates the use of sewage sludge in agriculture in order to protect the environment (in particular the soil) and human health from heavy metals and other contaminants.

Polychlorinated biphenyls (PCBs) and polychlorinated terphenyls (PCTs): Directive 96/59/EC approximates the Member States’ laws on the controlled disposal of PCBs and PCTs, the decontamination or disposal of equipment containing PCBs and/or the disposal of used PCBs in order to eliminate them completely. In addition, Regulation (EC) No 850/2004 on persistent organic pollutants covers PCBs.

The Landfill Directive ([1999/31/EC](#)) is intended 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. The Directive provides for a system of operating permits. The Member States must report to the Commission every three years on the implementation of the Directive. Implementation still remains 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 2000/76/EC on the incineration of waste aimed to prevent or reduce, as far as possible, air, water and soil pollution caused by the incineration or co-incineration of waste. As of November 2010, it was repealed by Directive 2010/75/EU on industrial emissions and related directives.

## **THE CIRCULAR ECONOMY PACKAGE**

In December 2015, the Commission presented an action plan on the circular economy, as well as four legislative proposals amending the following legal acts: (a) the Waste Framework Directive; (b) the Landfill Directive; (c) the Packaging and Packaging Waste Directive; and (d) the Directives on end-of-life vehicles, on batteries and accumulators and waste batteries and accumulators, and on waste electrical and electronic equipment (WEEE). Some of these proposals were prompted by legal obligations to review waste management targets. The Waste Framework Directive required the Commission to take the following measures by the end of 2014: review the 2020 targets on the reuse and recycling of household waste and on construction and demolition waste, set waste prevention objectives for 2020, and assess a number of measures, including extended producer responsibility schemes. The Landfill Directive required the Commission to review targets set therein by July 2014 and the Packaging Directive by the end of 2012.

The revised legislative proposals on waste set clear targets for waste reduction and establish an ambitious and credible long-term path for waste management and recycling. Key elements of the revised waste proposal include:

- A common EU target to recycle 65% of municipal waste by 2030;
- A common EU target to recycle 75% of packaging waste by 2030;
- A binding landfill target to reduce landfill to a maximum of 10% of municipal waste by 2030;
- A ban on the landfilling of separately collected waste;
- The promotion of economic instruments to discourage landfilling;
- Simplified and improved definitions and harmonised calculation methods for recycling rates throughout the EU;
- Concrete measures to promote re-use and stimulate industrial symbiosis — turning one industry's by-product into another industry's raw material;
- Economic incentives for producers to put greener products on the market and support recovery and recycling schemes (for packaging, batteries, electric and electronic equipment, and vehicles, for example).

## **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. Total life-cycle thinking should improve the use of secondary materials and create the right economic incentives for avoiding and reusing waste.

As co-legislator, Parliament debated the Circular Economy Package in the Committee on the Environment, Public Health and Food Safety (ENVI), tabling 2 000 amendments. Parliament's position was adopted in ENVI on 24 January 2017 and, without major changes, in plenary on 14 March 2017 by a large majority. The Package was referred back to ENVI for interinstitutional negotiations, which began on 30 May 2017 under the Maltese Presidency and are expected to be concluded under the Estonian Presidency.

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