MOVECO Toolbox

EU legislation package on waste for the circular economy

DATE, PLACE, COUNTRY
NAME OF PRESENTER, ORGANIZATION





Aims of this tool

- Understand of EU legislative framework and basic requirements and how this effects national legislation
- Identify legal obligations stemming from waste legislation relevant for products and their waste streams under the scope of extended producer requirements and polluter pays principle
- Identify sources of information, consultancy and services
- Point out main differences, which could affect transitions between different national markets



Content

How European Union legislation works and its objectives – with emphasis on Environmental protection

Current legislation relevant to waste in relation to product and product component design with emphasis on regulated waste streams under the extended producer responsibility regime

Waste framework directive – basic elements

Packaging and packaging waste

Electronic and electrical equipment

Batteries and accumulators



The treaty: sustainable development

Environmental legislation was not amongst the initial priorities of the partnership but, over decades this legislation has evolved to ensure some of the world's highest environmental standards

The first Environmental Action Plan was adopted in 1972

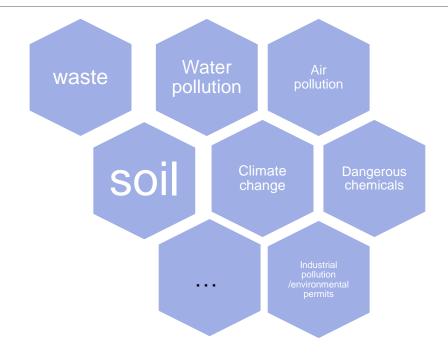
The Treaty on the Functioning of the European Union (TFEU)

Article 11 – internal market and the environment

Articles 191-193 – environmental objectives for sustainable development



Environmental policies



Waste to resource

Kerbside and end-of-pipe management



out of sight out of mind

Resource efficiency



more efficient processes - optimisation

Circular economy







Waste legislation evolvement

Before the mid -1970s' waste was considered primarily a local matter

In 1975 the Waste Framework Directive 75/442/EEC was adopted

Waste processessing: landfill, incineration...

Special waste streams

- Hazardous waste streams
- Waste oil
- Packaging and waste packaging
- Electronic and electrical equipment
- End of life vehicles
- Batteries and Accumulators
- •



Terminology in 1975

Council Directive 75/442/EEC of 15 July 1975 on waste

- (a) "waste" means any substance or object which the holder disposes of or is required to dispose of pursuant to the provisions of national law in force;
- (b) "disposal" means: the collection, sorting, transport and treatment of waste as well as its storage and tipping above or under ground,
- the transformation operations necessary for its re-use, recovery or recycling



Terminology in 2018

Waste means any substance or object which the holer discards or intends or is required to discard

Disposal means any operation which is not recovery even where the operation has as a secondary consequence the reclamation of substances or energy (Annex I of directive 2008/98/EC sets out a non-exhaustive list of disposal operations.)

Prevention

Re-use means any operation by which products or components that are not waste are used again for the same purpose for which they were conceived

Preparing for reuse means checking, cleaning or repairing reovery operation, by which products or components of products that have become waste are prepared so that they can be re-used without any other pre-processing



Terminology in 2018

Recycling means any recovrey operation by which waste materials are reprocessed into products, materials or substances whether for the original or other purposes. It includes the reprocessing of organic material but does **NOT** include energy recovery and the reprocessing into materials that are to be used as fuels or for backfilling operations

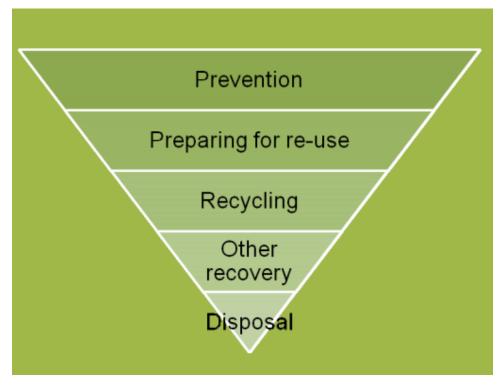
Recovery means any operation the pricipal result of which is waste serving a useful purpose by replacing other materails which would otherwise have been used to fulfil a particular function, or waste being prepared to fulfil that function, in the plant or in the wider economy (Annex II of directive 2008/98/EC sets out a non-exhaustive list of recovery operations.)

Treatment means recovery or disposal operations, including preparation prior to recovery or disposal

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The waste hierarchy



Source picture: https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/69403/pb13530-waste-hierarchy-guidance.pdf



Terminology after 2018

...

Extended producer responsibility scheme means a set of measures taken by Member States to ensure that producers of products bear financial responsibility or financial and organisational responsibility for the management of the waste stage of a product's life cycle

Extended producer responsibility

Article 8

In order to strengthen the re-use and the prevention, recycling and other recovery of waste, Member States may take legislative or non-legislative measures to ensure that any natural or legal person who professionally develops, manufactures, processes, treats, sells or imports products has extended producer responsibility

Such measures may include an acceptance of returned products...



Product design for

Article 8

Member States may take appropriate measures to encourage the design of **products** and **components** to reduce environmental impacts and the generation of waste...

Measures shall encourage the development, production and marketing of **products** and components that are suitable for multiple use, that contain recycled materials, are technically durable and easily reparable that are after becoming waste, suitable for preparing for re-use, recycling in order to faciliate proper implementation of the waste hierarchy. The measures shall take into account the impact of products throughout theri life cycle, the waste hierarchy and where appropriate, the potential for multiple reclycling



Exchange of EPR information

Article 8

The Commission shall organise an exchange of information between Member States and the actors involved in extended producer responsibility schemes on the practical implementation of the general minimum requirements.

This includes, inter alia, exchange of information on best practices to ensure adequate governance, cross-border cooperation concerning extended producer responsibility schemes and a smooth functioning of the internal market, on the organisational features and the monitoring of organisations implementing extended producer responsibility obligations on behalf of producers of products, on the modulation of financial contributions, on the selection of waste management operators and on the prevention of littering.

Exchange of EPR information

Article 8

The Commission shall publish the results of the exchange of information and may provide guidelines on these and other relevant aspects. The Commission shall publish guidelines, in consultation with Member States, on cross-border cooperation concerning extended producer responsibility schemes and on the modulation of financial contributions ...

Exchange of EPR information

Article 8

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EPR schemes minimum requirements

Article 8a

Where extended producer responsibility schemes are established including pursuant to other legislative acts of the Union, Member States shall:

(a) define in a clear way the roles and responsibilities of all relevant actors involved, including producers of products placing products on the market of the Member State, organisations implementing extended producer responsibility obligations on their behalf, private or public waste operators, local authorities and, where appropriate, reuse and preparing for re-use operators and social economy enterprises;



PPW, WEEE, A&B, ELV...

8a

in line with the waste hierarchy, set waste management targets, aiming to attain at least the quantitative targets relevant for the extended producer responsibility scheme as laid down in the waste framework directive, the directive on packaging and packaging waste, the directive on waste electronic and electrical equipment, the end of life vehicle directive and the directive on batteries and accumulators and set other quantitative targets and/or qualitative objectives that are considered relevant for the extended producer responsibility scheme;

PPW, WEEE, A&B, ELV...

8a

- ensure that a reporting system is in place to gather data on the products placed on the market of the Member State by the producers of products subject to extended producer responsibility and data on the collection and treatment of waste resulting from those products specifying, where appropriate, the waste material flows, as well as other data relevant for the purposes;
- ensure equal treatment of producers of products regardless of their origin or size, without placing a disproportionate regulatory burden on producers, including small and medium-sized enterprises, of small quantities of products

Member States must

ensure that the waste holders targeted by the extended producer responsibility schemes established are informed about waste prevention measures, centres for reuse and preparing for re-use, take-back and collection systems, and the prevention of littering.

take measures to create incentives for the waste holders to assume their responsibility to deliver their waste into the separate collection systems in place, notably, where appropriate, through economic incentives or regulations

EPR schemes must

- (a) have a clearly defined geographical, product and material coverage without limiting those areas to those where the collection and management of waste are the most profitable;
- (b) provide an appropriate availability of waste collection systems within the areas referred to in point (a);
- (c) have the necessary financial means or financial and organisational means to meet its extended producer responsibility obligations;

EPR scheme costs

cover the following costs for the products that the producer puts on the market in the Member State concerned:

- costs of separate collection of waste and its subsequent transport and treatment, including treatment necessary to meet the Union waste management targets, taking into account the revenues from re-use, from sales of secondary raw material from its products and from unclaimed deposit fees;
- costs of providing adequate information to waste holders
- costs of data gathering and reporting.

Does not apply for WEEE, A&B or ELV



EPR scheme costs

in the case of collective fulfilment of extended producer responsibility obligations, are modulated, where possible, for individual products or groups of similar products, notably by taking into account their durability, reparability, re-usability and recyclability and the presence of hazardous substances, thereby taking a life-cycle approach and aligned with the requirements set by relevant Union law, and where available, based on harmonised criteria in order to ensure a smooth functioning of the internal market;

and

do not exceed the costs that are necessary to provide waste management services in a cost-efficient way. Such costs shall be established in a transparent way between the actors concerned

Prevention

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- encourage the design, manufacturing and use of products that are resource-efficient, durable (including in terms of life span and absence of planned obsolescence), reparable, re-usable and upgradable;
- target products containing critical raw materials to prevent that those materials become waste;
- •encourage the re-use of products and the setting up of systems promoting repair and re-use activities, including in particular for electrical and electronic equipment, textiles and furniture, as well as packaging and construction materials and product
- •encourage, as appropriate and without prejudice to intellectual property rights, the availability of spare parts, instruction manuals, technical information, or other instruments, equipment or software enabling the repair and re-use of products without compromising their quality and safety;...

Statutory targets in the WFD

Recycling targets for municipal waste:

By 2025	By 2030	By 2035
55%	60%	65%



Packaging and waste packaging

Directive on packaging and packaging waste 94/62/EC

'packaging' shall mean all products made of any materials of any nature to be used for the containment, protection, handling, delivery and presentation of goods, from raw materials to processed goods, from the producer to the user or the consumer. 'Nonreturnable' items used for the same purposes shall also be considered to constitute packaging

Packaging and waste packaging

"Packaging' consists only of:

- (a) sales packaging or primary packaging, i. e. packaging conceived so as to constitute a sales unit to the final user or consumer at the point of purchase;
- (b) grouped packaging or secondary packaging, i. e. packaging conceived so as to constitute at the point of purchase a grouping of a certain number of sales units whether the latter is sold as such to the final user or consumer or whether it serves only as a means to replenish the shelves at the point of sale; it can be removed from the product without affecting its characteristics;
- (c) transport packaging or tertiary packaging, i. e. packaging conceived so as to facilitate handling and transport of a number of sales units or grouped packagings in order to prevent physical handling and transport damage. Transport packaging does not include road, rail, ship and air containers.

PPW directive objective

Prevent impacts on the environment for all Member States and third countries (environmental objective); to this end it has provisions on re-use of packaging, prevention and recycling of packaging waste and other forms of packaging recovery as well as substance restrictions.

Ensure a good functioning of the Internal Market without imposing obstacles to trade and causing distortions and restriction of competition within the EU (internal market objective).

Lays down measures for preventing the production of packaging waste and, as additional fundamental principles, at reusing packaging, at recycling and other forms of recovering packaging waste and, therefore, at reducing the final disposal of such waste in order to contribute to the transition towards a circular economy

Packaging and waste packaging

packaging waste shall mean any packaging or packaging material covered by the definition of waste (any substance or object which the holer discards or intends or is required to discard)

reusable packaging shall mean packaging which has been conceived, designed and placed on the market to accomplish within its lifecycle multiple trips or rotations by being refilled or reused for the same purpose for which it was conceived

composite packaging shall mean packaging made of two or more layers of different materials which cannot be separated by hand and form a single integral unit, consisting of an inner receptacle and an outer enclosure, that it is filled, stored, transported and emptied as such;

See WFD for the definitions of "waste", "waste management", "collection", "separate collection", "prevention", "reuse", "treatment", "recovery", "recycling", "disposal", and "extended producer responsibility scheme

PPW: preventive measures

Preventive measures may consist of national programmes, incentives through extended producer responsibility schemes to minimise the environmental impact of packaging, or similar actions adopted

Member States shall ensure that, by 31 December of 2024, extended producer responsibility schemes are established for all packaging



PPW: statutory targets

New recycling targets for packaging waste:

	By 2025	By 2030
All packaging	65%	70%
Plastic	50%	55%
Wood	25%	30%
Ferrous metals	70%	80%
Aluminium	50%	60%
Glass	70%	75%
Paper and cardboard	75%	85%

- Directive 2012/19/EU on waste electrical and electronic equipment (WEEE)
- •Directive 2011/65/EU on the restriction of the use of certain hazardous substances in electrical and electronic equipment (RoHS-2)
- RoHS-2 Directive amended with Directive (EU) 2017/2102.
- •Directive 2009/125/EC establishing a framework for the setting of eco-design requirements for energy-related products

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•Regulation (EU) 2017/1369 of the European Parliament and of the Council of 4 July 2017 setting a framework for energy labelling and repealing Directive 2010/30/EU



- •determines measures to protect the environment and human health by preventing or reducing the adverse impacts of the generation and management of waste from electrical and electronic equipment (WEEE).
- contains an indicative list of EEE, which fall into six different categories
- •Member states must encourage cooperation on product design between producers, recyclers and measures to promote design and production of EEE, notably in view of facilitating re-use, dismantling and recovery of WEEE, its components and materials. Eco-design requirements for reuse and treatment of WEEE must be applied
- •supports measures to achieve a high rate of separate collection. Collection and transport of separately collected WEEE must be carried out in a way that provide optimal conditions for preparing for reuse and recycling and prevent hazardous substances to spread to the environment

Applies extended producer responsibility for manufacturers

From 2019, the minimum collection rate to be achieved annually shall 65% of the average weight of EEE placed on the market in the three preceding years in the MS, or alternatively 85% of WEEE generated on the territory of the member state. Annex 5 determines minimum recovery targets for each category of WEEE.

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The Directive determines permit requirements for treatment facilities and requirements for WEEE shipments outside the respective MS.

Each member state must establish a register of producers, including producers supplying EEE by means of distance communication. Producers supplying EEE by means of distance communication must be registered in the MS they are selling to.

Producers must provide information for treatment facilities free of charge about preparation for re-use and treatment



RoHS: Restriction of Hazardous Substances

- •provides the framework for the gradual extension of the requirements to all electrical and electronic equipment (EEE), including cables and spare parts.
- •introduces restrictions of new substances and presents a methodology for the assessment of new hazardous substances in EEE with restrictions mainly based on waste-related criteria.
- •provides a review of the list of restricted substances, new substance restrictions and clearer, more transparent rules for granting, renewing or revoking exemptions, with the obligation of manufacturers to apply for exemptions and to carry out the necessary assessment.

RoHS: Restriction of Hazardous Substances

- Annex 2 to the directive sets limit values by weight for homogeneous materials for contents of Mercury (Hg:0.1%), Cadmium (Cd:0.01%), Lead (Pb:0,1%), Chromium VI (Cr6+: 0,1%), polybrominated biphenyls (PBB: 0.1%), and polybrominated diphenyl ethers (PBDE: 0.1%). Annex III contains a list of exemptions to this requirement.
- This amendment to the directive facilitates second-hand market operations (e.g. reselling) and repair of electrical and electronic equipment. It extends the lifetime of existing equipment, including costly medical devices, and boosting the repair and second hand market for certain types of equipment. It allows hospitals to buy and sell used medical devices also after 21 July 2019.

The directive provides consistent EU-wide rules for improving the environmental performance of products, such as household appliances, information and communication technologies or engineering.

It targets energy-related product meaning any good that has impact on energy consumption during use. It targets not only final products but also components and sub-assemblies intended to be incorporated into products.

Eco-design is defined as the integration of environmental aspects into product design with the aim of improving the environmental performance of a product throughout its whole lifecycle.

•The Eco-design Directive is implemented through product-specific Regulations, directly applicable in all EU countries.



generic and specific eco-design requirements:

- •generic requirements are requirements originating from the environmental profile of the product without set limit values for particular environmental aspects,
- specific eco-design requirements are quantified requirements relating to a particular environmental aspect of a product, such as energy consumption during use, calculated for a given unit output performance.



The directive is complemented by Regulation (EU) 2017/1369 of the European Parliament and of the Council of 4 July 2017 setting a framework for energy labelling and repealing Directive 2010/30/EU.

Eco-design and Energy Labelling Regulations are complemented by harmonised European standards. These technical specifications indicate that a product complies with the mandatory requirements. Only then can the manufacturer affix the CE marking and sell it in the EU.

Products must comply with demands for CE marking. A CE marking must be affixed and an EC declaration of conformity must be issued.



Annex I: generic eco-design requirements:

- ease for reuse and recycling through the number of materials and components used,
- use of standard components,
- time necessary for disassembly,
- complexity of tools necessary for disassembly,
- •use of component and material coding standards for the identification of components and materials suitable for reuses and recycling (including marking of plastic parts in accordance with ISO standards),
- •use of easily recyclable materials, easy access to valuable and other recyclable components and materials;



Annex I: generic eco-design requirements:

- easy access to components and materials containing hazardous substances together with incorporation of used components,
- avoidance of hazardous substances detrimental to reuse and recycling,
- lifetime extension implementing availability of spare parts,
- modularity,
- upgradeability,
- reparability,
- •reference to chemical legislation with regard to hazardous substances; all of which resonate with the design requirements for transition towards a circular economy.

Directive 2006/66/EC on batteries and accumulators and waste batteries and accumulators and

Directive 2013/56/EU amending the Directive on batteries and accumulators,

- •prohibits the placing on the market of certain batteries and accumulators with a mercury or cadmium content above a fixed threshold. In addition, it promotes a high rate of collection and recycling of waste batteries and accumulators and improvement in the environmental performance of all involved in the life-cycle of batteries and accumulators, including their recycling and disposal.
- •applies to all types of batteries and accumulators, apart from those used in equipment to protect Member States' security or for military purposes, or in equipment designed to be sent into space



- contains provisions on:
 - the prohibition of hazardous materials used in batteries,
 - information to the end users (labelling of batteries),
 - collection targets and recycling rates and prohibition of the disposal in landfills or by incineration of waste industrial and automotive batteries,
 - "producer responsibility" obligations.



The directive refers to **Extended producer responsibility** in regard to waste management obligations. The producers have to bear the cost of collecting, treating and recycling industrial, automotive and portable batteries and accumulators, as well as the costs of campaigns to inform the public of these arrangements. Small producers may be exempted from this obligation if this does not impede the proper functioning of the collection and recycling schemes. All producers of batteries and accumulators have to be registered.

According to Directive 2013/56/EU amending the Directive on batteries and accumulators, it must be possible to **remove batteries and accumulators readily and safely**. Thus, appliances incorporating batteries and accumulators must be accompanied by instructions on how these can be safely removed by either the enduser or by independent qualified professionals.

Member States also have to ensure that batteries and accumulators that have been collected are **treated and recycled using best available techniques.** Energy recovery is not considered a recycling process.

End-users must receive information on several subjects and through different channels:

- •on the potential effects on the environment and human health of the substances used in batteries and accumulators, and on the collection and recycling arrangements at their disposal, through campaigns or directly by distributors;
- •on the capacity of the accumulator or the portable battery or on the presence of chemicals above a certain threshold, information will be given using visible, legible and indelible markings on batteries, accumulators and battery packs;
- •on the need to ensure separate collection for batteries or accumulators, the symbol of the crossed-out wheeled bin is to be used.

Contact

Contact details of the host organization (= MOVECO Partner)

This training was delivered by

Contact details of trainer