

THE LEGAL CONCEPT OF WASTE

An obstacle for the transition to a circular economy (in the Brussels Capital Region)?

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1. CONTEXT OF THE RESEARCH

GOVERNANCE OF THE SUSTAINABLE ECONOMY TRANSITION: CHALLENGES OF EXNOVATION (GOSETE)



Main objective: to examine governance issues related to exnovation in the transition towards a sustainable economy

- **Exnovation:** processes of destabilization, decline and phasing-out of production and consumption modes that raise systemic sustainability problems
- Exploring **the other side** of sustainability transitions

Multi-disciplinary research: Transition studies / Sustainability assessment / Legal studies

Focus on Brussels Capital Region (BCR) and on three working areas:

- Mobility
- **Circular economy (CE)**
- Retail trade



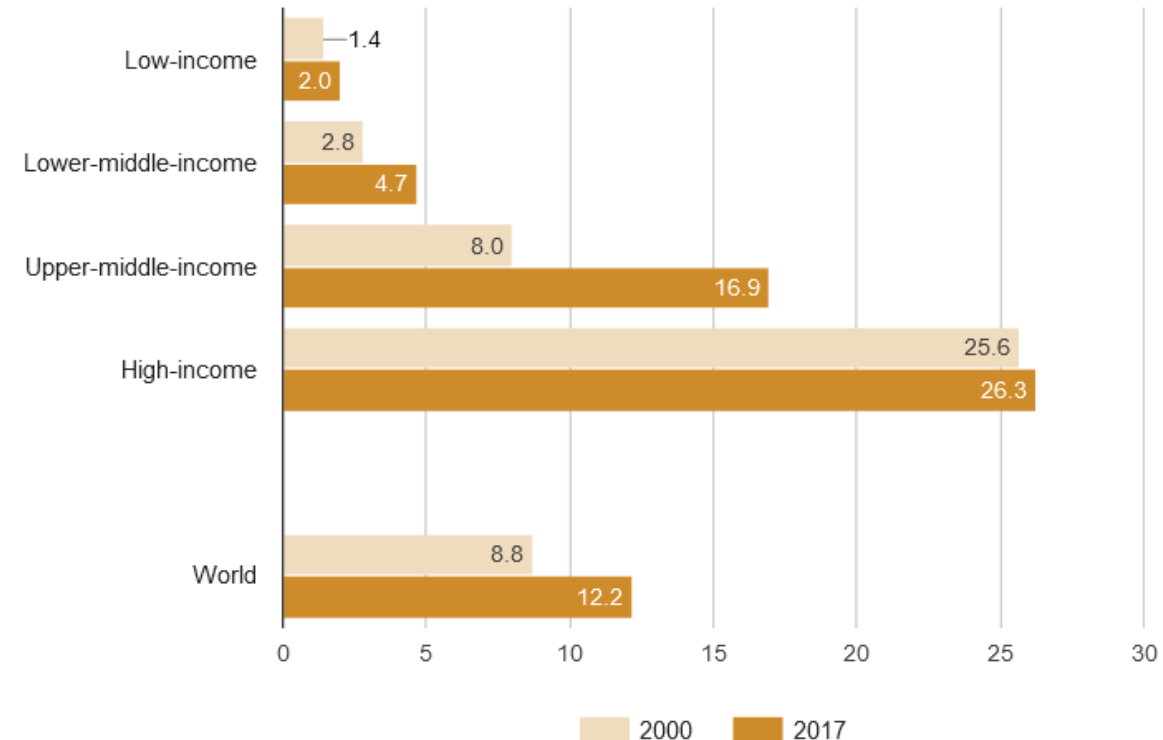
Is the legal notion of waste an obstacle or conducive to CE development?

2. WHY EXNOVATE THE LINEAR ECONOMY ?

- Our economies are still mainly linear, i.e. based on “extracting-manufacturing-consuming-discarding”
 - Resource extraction in a scarcity context
 - Environmental impacts linked to waste treatment and to extraction-production phases
- Disappointing ongoing dynamics:
 - Resource consumption: material footprint per capita continues **increasing** globally, but also in high-income countries
 - Waste production and recycling: progress until 2014-15, and now **stagnating** at the Brussel’s level
- A fundamental reshaping of the production and consumption patterns is urgently required

Linear economy → Circular economy

Material footprint per capita, 2000 and 2017 (metric tons per person)



<https://unstats.un.org/sdgs/report/2019/goal-12/>

3. LEGAL FRAMEWORK ON WASTE

STARTING POINT OF OUR RESEARCH

- Main features of circular economy:
 - An economic and industrial system in which finite raw material resources are not exhausted and in which residual materials are fully reused in the system.
 - Based on the premise of closed loops in which raw materials, components and products lose their value as little as possible
 - Examples:
 - A company (re-)using for its business activities materials ("waste") from private households, (food waste) from the catering industry. (Permafungi, Compost in City by Recyclo, ...)
- Most optimal use of resources?
 - Implies re-use of resources and materials / re-use of waste
 - May entail conflict with legal framework on waste, since this framework submits waste to specific rules regarding management of waste
- Volume in BCR: (only) 7,7% of the Brussels economy is circular (Towa, Zeller & Achten 2021)

3. LEGAL FRAMEWORK ON WASTE

A COMBINATION OF EU AND NATIONAL LAWS

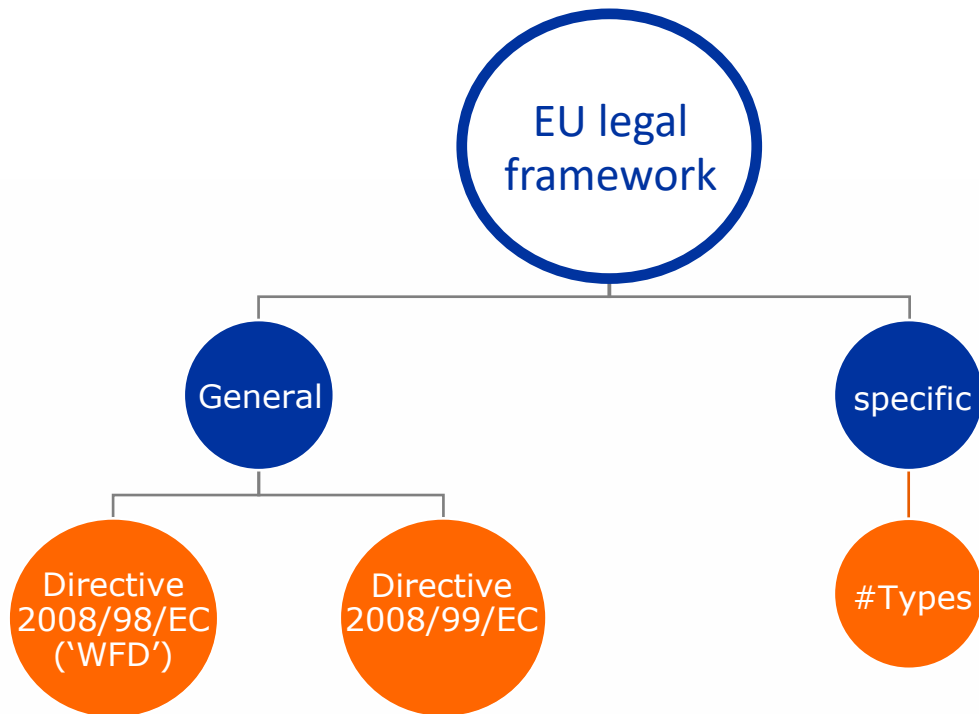
Legal Framework is complex & quite technical

Consists of 2 levels (EU + MS)

- TFEU => shared competence EU/MS (environment).
 - EU initiative may limit national / local initiatives
 - Type of legal instrument? (Directive / regulation)
 - Content (maximum vs. minimum harmonisation; options for / delegations to MS)
- Transposition by Member States of Directives (to be interpreted in conformity with the directives)

3. LEGAL FRAMEWORK ON WASTE

A COMBINATION OF EU AND NATIONAL LAWS



- Evolution of the rationale:
 - WFD 2006 reviewed and recasted 2008
 - Amendment 2018
 - Recital 1 and 2

*"(1) **Waste management in the Union should be improved and transformed into sustainable material management**, with a view to protecting, preserving and improving the quality of the environment, protecting human health, **ensuring prudent, efficient and rational utilisation of natural resources, promoting the principles of the circular economy, enhancing the use of renewable energy, increasing energy efficiency**, reducing the dependence of the Union on imported resources, providing new economic opportunities and contributing to long-term competitiveness. In order to make the economy truly circular, it is necessary to take additional measures on sustainable production and consumption, by focusing on the whole life cycle of products in a way that preserves resources and closes the loop. The more efficient use of resources would also bring substantial net savings for Union businesses, public authorities and consumers, while reducing total annual greenhouse gas emissions."*

*"(2) **Improving the efficiency of resource use and ensuring that waste is valued as a resource can contribute** to reducing the Union's dependence on the import of raw materials **and facilitate the transition to more sustainable material management and to a circular economy model**. That transition should contribute to the smart, sustainable and inclusive growth goals set out in the Europe 2020 strategy and create important opportunities for local economies and stakeholders, while helping to increase synergies between the circular economy and energy, climate, agriculture, industry and research policies as well as bringing benefits to the environment in terms of greenhouse gas emission savings and to the economy."*

3. LEGAL FRAMEWORK ON WASTE

MEMBER STATES LEVEL

- Specific situation for Belgium => additional layer of complexity
 - Federal State
 - Federated entities
 - Regions
 - Communities
 - Transfer of powers to federated entities by specific law
 - Cooperation for certain aspects

- Regions are competent for a.o. the policy domain **“Environment”**
- Exception: Federal state remains competent to determine product norms.
 - = mandatory requirements a product should comply with when it is introduced on the market, in order to protect the environment.
- When the BCR wishes to enact rules to implement its sustainable waste policy it can do so as long as such rules do not concern product norms.
 - Environmental requirements by a product to be reintroduced on market **NOT POSSIBLE** after having been considered waste.
 - **BCR can however restrict / ban usage of the product (cfr. LEZ-zone)**

4. THE CONCEPT OF WASTE

QUALIFICATION

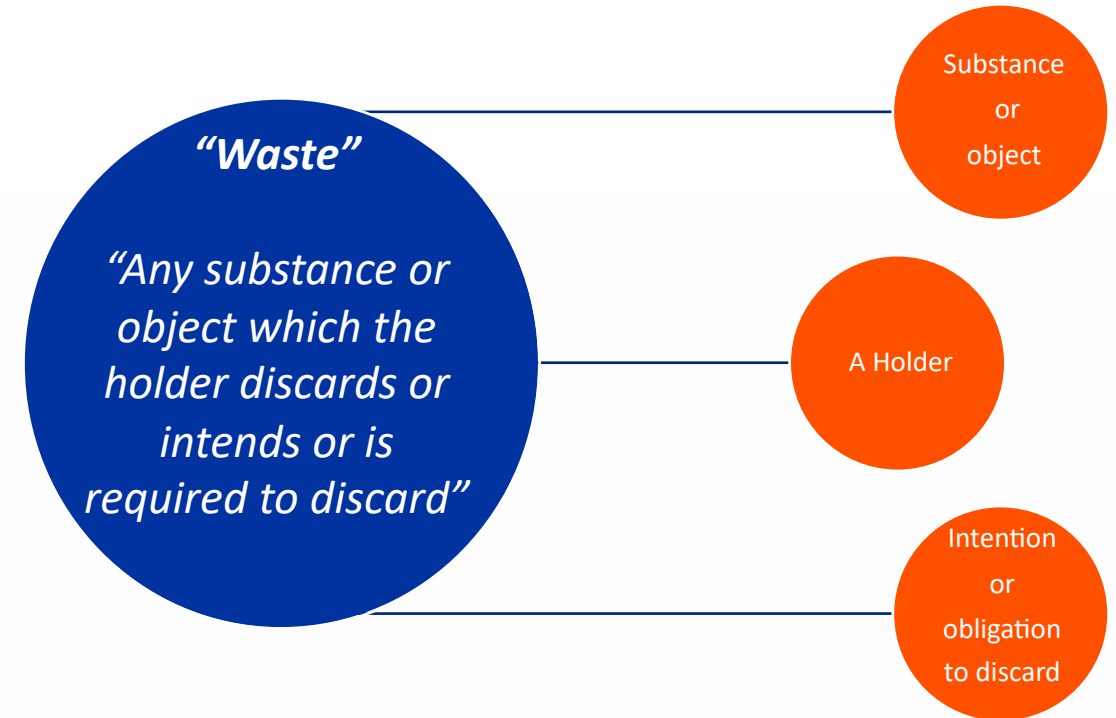
Constitutive elements

➤ Relevance of the qualification

- If object/substance = waste => specific regime applicable to waste is to be complied with (specific rules regarding waste transport, waste management, ...) => reuse is constrained (specific conditions, authorisations per type of activity)
- If object/substance ≠ not waste => falls outside of scope of the specific regime applicable to waste => no constraint imposed by legal framework on waste

➤ Methodology

- Starting point: legal definition of waste (BCR => Article 3, 1° of the Waste Ordinance = Article 3 (1) of the WFD.)
 - List of waste categories => exemplative
- By-product?
- End of waste status?



4. THE CONCEPT OF WASTE

ECJ CASE LAW

European Court of Justice has provided further guidance => relevant since BE law is transposition of WFD

- Qualification is to be done on a case-by-case basis
- Broad interpretation based on recitals WFD *“To minimise the negative effects of the generation and management of waste on human health and the environment”*
- Once the status of waste is obtained, it can only be lost through end-of-waste status
- Action of the holder is key => discarding or intention to discard (explicit or implicit)
 - A substance or object can be considered waste by a holder **although it still has a use-value** and is **perfectly functioning** for its intended purpose or **although somebody else then the holder would still want to use it**
 - If the object or substance in question is **no longer of any use to its holder**, it is likely to constitute a burden for that holder who will be inclined to discard it
 - Substance / material is to be considered waste as soon as there is a **risk that that holder will dispose of the object or substance in his or her possession in a way likely to cause harm to the environment**, particularly by dumping it or disposing of it in an uncontrolled manner.
 - ⇒ The economic value and the fact that it was proven that the material in question does not pose any real risk to human health and environment, are not relevant
 - ⇒ The intention of the holder and consideration that the object constitutes a burden (or not) is the decisive element

4. THE CONCEPT OF WASTE

ECJ CASE LAW

- But sometimes, intention is outweighed by other considerations
 - ***"It would not be justified at all to make goods, substances or products which the holder intends to exploit or market on economically advantageous terms in a subsequent recovery process subject to the requirements of Directive 2008/98, which seek to ensure that recovery and disposal operations will be carried out without endangering human health and without using processes or methods which could harm the environment. However, having regard to the requirement to interpret the concept of 'waste' widely, it is only situations in which the reuse of the goods or substance in question is not a mere possibility but a certainty that are envisaged."*** - (ECJ 14 October 2020, nr. C-629/19, Sappi Austria Produktions-GmbH & Co. KG, Wasserverband Region Gratkorn-Gratwein v Landeshauptmann von Steiermark, ECLI:EU:C:2020:824, par. 50; ECJ 4 July 2019, nr. C-624/17, Tronex, ECLI:EU:C:2019:564, par. 23 – 24)

(note: if the intention of re-exploitation is clear, how can it be waste?)

4. THE CONCEPT OF WASTE

ECJ CASE LAW

- Examples of qualification as waste
 - Waste-rock from granite quarrying constitutes waste. The mere fact that it was proven that the material in question did not pose any real risk to human health and environment, is not a relevant criterion in order to consider that a material is not waste. This because the waste-rock constitutes a “nuisance” and should be covered by the scope of the waste definition, if there’s no intention for use. – (ECJ 18 April 2002, nr. C-9/00, *Palin Granit*, ECLI:EU:C:2002:232)
 - Sewage sludge from wastewater from paper and pulp production was considered residue from wastewater treatment, regardless the fact that it was used, after mechanical dewatering in a waste incineration plant, for the purposes of energy recovery by generating steam in production process – (ECJ 14 October 2020, nr. C-629/19, *Sappi Austria Produktions-GmbH & Co. KG, Wasserverband Region Gratkorn-Gratwein v Landeshauptmann von Steiermark*, ECLI:EU:C:2020:824.)
 - Electric appliances which suffer defects that require repair, such that it cannot be used for its original purpose, because that appliance constitutes a burden for its holder and must thus be regarded as waste, in so far as there is no certainty that the holder will actually have it repaired because e.g. the holder sells or transfers those goods to a third party without first having ascertained their working condition. In order to prove that malfunctioning appliances do not constitute waste, the holder of the products in question should demonstrate not only that they can be reused, but that their reuse is certain, and to ensure that the prior inspections or repairs necessary to that end have been done. – (ECJ 4 July 2019, nr. C-624/17, *Tronex*, ECLI:EU:C:2019:564)
- Examples of qualification as non waste
 - Return of goods by consumers under guarantee provisions
 - Unpacked electronic appliances (new products still in working condition)

CONCLUSION REGARDING THE DEFINITION OF WASTE

Objects/substances **are only considered waste if they fall under the definition**

- Broad definition => broad scope
- Allows flexible interpretation
 - Broad interpretation applied by the European Court of Justice may still be an obstacle in the context of a circular economy
 - Evolutive interpretation based on the (added) second objective of the WFD “resource protection” could lead to an interpretation that is more in favor of circularity and increases the possibility of saving resources
 - Cfr. recital 6 of the WFD which stipulates that: “*waste policy should also aim at **reducing the use of resources** and favour the practical application of the waste hierarchy.*”
 - Cfr. recitals 7 and 8 of the WFD from which the objective of prioritizing **prevention of waste** and resource re-use can also be deducted
 - European Court of Justice should in its case-law regarding the WFD, also refer to this “second objective”
- Central to the definition should be the **action of the holder** => if reuse is clear this should allow for remaining out of scope
 - E.g. person explicitly stemming its household “residue” to a circular project instead of putting it in the garbage (compare with person bringing materials/textile to secondhand shop (“kringloopwinkels”))
- Need for adaptation of the definition?

4. THE CONCEPT OF WASTE

BY-PRODUCTS

- Under certain conditions the European Court of Justice case law stated that some residue materials were not to be considered as waste but as by-products
- This case-law is incorporated in **article 5 WFD** :
 - *"Member States shall take appropriate measures to ensure that a substance or object resulting from a production process the primary aim of which is not the production of that substance or object is considered not to be waste, but to be a by-product".*



To qualify as by-product 4 conditions must cumulatively be complied with:

- 1) further use is certain;
- 2) the substance or object can be used directly without any further processing other than normal industrial practice;
- 3) the substance or object is produced as an integral part of a production process; and
- 4) further use is lawful.

4. THE CONCEPT OF WASTE

BY-PRODUCTS

- Transposed for BCR:
 - Art. 8 Waste ordinance (Ordonnantie betreffende afvalstoffen/ Ordonnance relative aux déchets, 14 June 2012, Belgian State Gazette, 27 June 2012)
- Additional BP criteria may be adopted

Table 2: Identified national or regional guidance / criteria on BP status established in the MS (analysed for 25 out of 28 MS)

<i>Material streams covered</i>	<i>MS having established guidance / criteria</i>	<i>Relevant document</i>
<ul style="list-style-type: none"> • Biogas slurries (umbrella term for liquid and solid fermentation residues from separation) from biogas plants that only use renewable raw materials and not waste (renewable raw materials plants) • Iron scale (mill scaling arising from the manufacture of iron and steel) • FGD gypsum is gypsum which is obtained from exhaust from flue gas desulphurisation systems (abbreviation "FGD") • Sawdust or wood chips from clean, non-chemically treated wood from the processing (sawmill) are considered BP • Fly ash from coal-fired power plants 	AT	AT – Federal Waste Management Plan 2017 - Part 2 - Guidelines for the shipment of waste
<ul style="list-style-type: none"> • Sunflower husks • Wood 	BG	BG – Waste Management Act 2012 – Article 4
<ul style="list-style-type: none"> • Excavated soil • Stones 	IT, IE	IT – National Decree No 120 / 2017 IE - Guidance Note (not published yet)
<ul style="list-style-type: none"> • Wood fuel ash 	LT	LT – National Order No D1-14 / 2011
<ul style="list-style-type: none"> • Wood residues from wood processing and the production of panels and furniture • Residues of biomass of plant origin from the production and processing of pulp, paper and cardboard and from the production of food and beverages 	SI	SI – Decree on the emission of substances into the atmosphere from small and medium combustion plants 2013
<ul style="list-style-type: none"> • Residues of production of polymeric material used in the production of agricultural silage film and residues from agri-food industries • Polyurethane foam scrap 	ES	ES – Order APM/852/2019, Order APM/189/2018 and Order APM/397/2018
<ul style="list-style-type: none"> • Food BP 	BE ¹⁶	BE (Wallon) – Decree on Waste 1996
<ul style="list-style-type: none"> • Crude glycerine • Construction and demolition materials 	NL	NL – Regulation on BP criteria

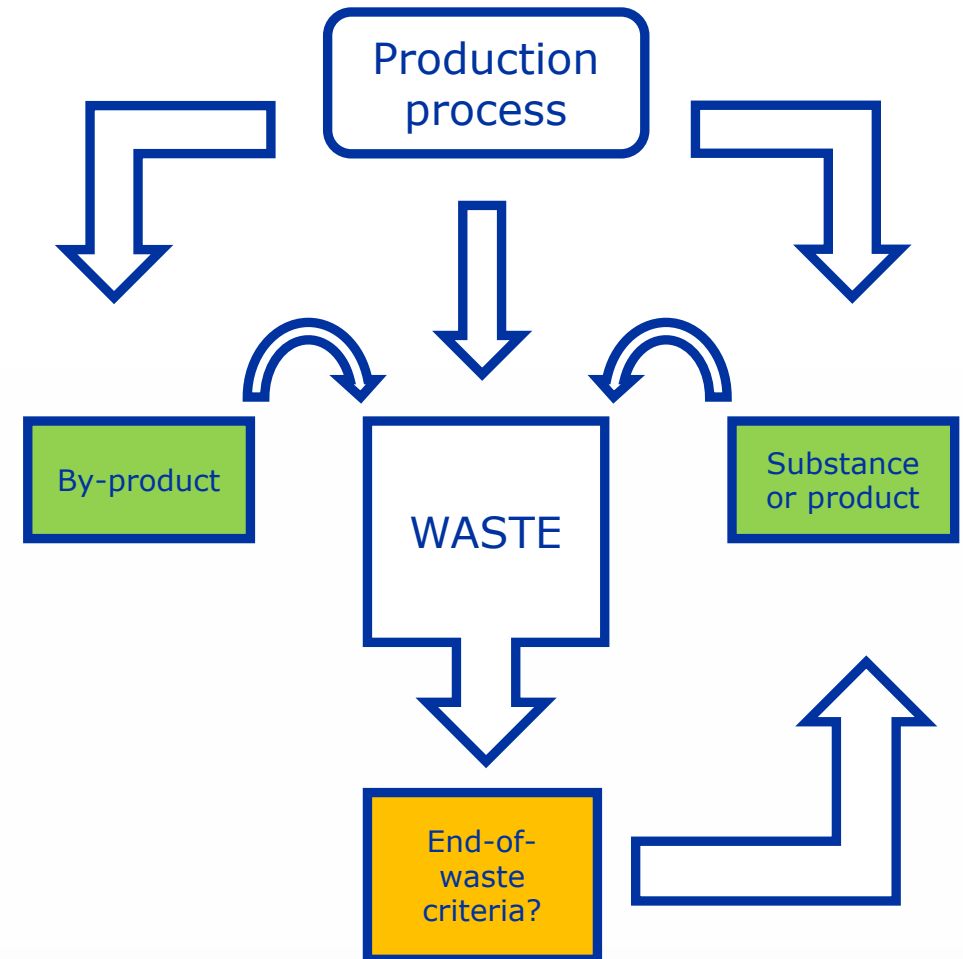
Source:

EUROPEAN COMMISSION: Study to assess member states practices on by-products (BP) and end-of waste (EOW), final report 2020.

4. THE CONCEPT OF WASTE

BY-PRODUCTS IN THE BCR

- Attention:
 - Products and by-products have the same status: materials are simply waste or not.
 - Not because it is a by-product that it will never be waste. If it is in practice discarded, it must be considered and treated as a waste.
 - Relates only to substances / materials produced in the context of production processes



CONCLUSION REGARDING BY-PRODUCTS

- Introduction of legal framework for by-products is a way forward in delimiting waste from non-waste and enabling the re-use of resources in the context of a circular economy
 - ⇒ All depends on the conditions / additional criteria to be taken into account for the qualification as by-product
 - ⇒ A too strict set of conditions / additional risks narrowing down again the application of these mechanisms.
- Fragmentation?

4. THE CONCEPT OF WASTE

END OF WASTE STATUS (EOW)

EU Level

- **Art 6 WFD**

- **Obligation** for MS **to take measures for allowing** EoW Status => waste which has undergone recycling or recovery operation, ceases to be waste.

- From waste to resource

- Compliance with 4 conditions

- 1) To be used for specific purpose;
- 2) Existing demand/market;
- 3) Fulfilment of the technical requirements for the specific purpose + compliance with existing legislation and standards applicable to products;
- 4) Use will not have an overall adverse environmental or human health impact.

- **Transposition for BCR**

- Art. 9 of the Waste Ordinance

4. THE CONCEPT OF WASTE

END OF WASTE STATUS (EOW)

- Member state may determine further criteria (if not yet harmonized at EU level)
- To avoid too much differentiation, the Commission shall monitor the **development of national end-of-waste criteria in Member States** and assess **the need to develop Union-wide criteria**. To that end, and where appropriate, the Commission shall adopt implementing acts in order to establish detailed criteria on the uniform application of the conditions.
- Those detailed criteria shall ensure a high level of protection of the environment and human health and facilitate the prudent and rational utilization of natural resources. They shall include:
 - permissible waste input material for the recovery operation;
 - allowed treatment processes and techniques;
 - quality criteria for end-of-waste materials resulting from the recovery operation in line with the applicable product standards, including limit values for pollutants where necessary;
 - requirements for management systems to demonstrate compliance with the end-of-waste criteria, including for quality control and self-monitoring, and accreditation, where appropriate; and
 - a requirement for a statement of conformity

Table 3: Identified national guidance / criteria on EoW status established in the MS (analysed for 25 out of 28 MS)

End-of waste status foreseen on following waste/material streams	Examples of waste types serving as input material for the process (possibly limited to specific qualities)	MS having established guidance / criteria	Relevant document / Link
<ul style="list-style-type: none"> Construction materials, aggregates, building materials 	Electric furnace slag (except stainless steel slag); Blast furnace slag (including blast furnace lump slag); Converter slag; Building waste (not site waste); Roadway rubble; Excavation; Concrete rubble; Track gravel; Bitumen and Asphalt; Street cleaning waste (only stone chipping input); bricks; tiles, faience and ceramics; inert waste	AT, BG, HR, BE, UK, NL	<p>AT – Recycled Construction Materials Regulation (BGBl II Nr. 181/2015)</p> <p>BG – Ordinance for management of construction waste and recovery of recycled building materials (Decree No 267/2017)</p> <p>HR – Ordinance on BP and EoW status (OG No 117/14)</p> <p>BE (Wallon) – Decree</p> <p>BE (Flanders) – Order adopting regulation on the sustainable management of material cycles and waste (2012)</p> <p>NL – Regulation determining EoW status of recycling granulate (2015)</p> <p>UK (England, Wales, NI) – End of waste criteria for the production of aggregates from inert waste (2013)</p>
<ul style="list-style-type: none"> Waste wood 	Bark from machining and processing; Slabs; wood chips from untreated, clean, uncoated wood; Sawdust and wood shavings from untreated, clean, uncoated wood; Wood swarf and slurry; Chipboard waste; Wooden packaging and waste wood, uncontaminated; Building and demolition wood; Wood shavings, uncontaminated; Wood waste, organically treated (e. g. cured varnishes, organic coatings); Wood for recycling, quality assured; Wood packaging	AT, FR	<p>AT – Wood for Recycling Ordinance, (BGBl II Nr.160/2012)</p> <p>FR – Order on EoW for wood packaging shreds (2014)</p>
<ul style="list-style-type: none"> Substitute fuels, solid recovered fuels Processed used oils for use as fuel 	Not specified in detail (often indicated by negative list); Used oils, waste lubricating oils; Used cooking oil (By the Spanish Order APM/206/2018, waste which falls under the MARPOL scope, is issued (waste included in the International Agreement to prevent pollution from ships).	AT, IT, CZ, HR, FR, ES	<p>AT – Waste Incineration Ordinance (BGBl II Nr. 389/2002)</p> <p>IT – Ministerial Decree (No 22/2013)</p> <p>CZ – Regulation under legislative procedure</p> <p>ES – Order (APM/205/2018) on processed used oil</p> <p>HR – Ordinance on BP and EoW status (OG No 117/14)</p> <p>FR – Order on EoW for waste grease and used cooking oil for use as fuel in a combustion installation (2016)</p> <p>UK (England, Wales, NI) – End of waste criteria for the production and use of processed fuel oil from waste lubricating oils (2011)</p> <p>ES – Order APM/206/2018, type C MARPOL waste</p>
<ul style="list-style-type: none"> Compost Fermentation products, biogas digestate Fertiliser and soil improver 	Source separated bio-waste, bark and wood, uncontaminated, vegetable food residues, eggshells, fermentation residues from anaerobic treatment, Organic vegetable waste from garden & parks and other greens; Vegetable waste, from the preparation and consumption of food, Sewage sludge from municipal wastewater treatment	AT, BG, EE, CZ, SI, PT, HR, BE, UK	<p>AT – Ordinance on compost (BGBl II Nr. 292/2001)</p> <p>BG - Ordinance on separate collection of bio-waste and treatment of biodegradable waste (Decree No 20/2017)</p> <p>EE – Regulation on requirements for production of compost from biodegradable waste (No 7/2013)</p>

End-of waste status foreseen on following waste/material streams	Examples of waste types serving as input material for the process (possibly limited to specific qualities)	MS having established guidance / criteria	Relevant document / Link
	plants		<p>EE – Regulation on requirements for biogas digestate generated from biodegradable waste (No 12/2016)</p> <p>CZ – Decree in management of biodegradable waste (No 341/2008)</p> <p>PT – Legislation (No 103/2015)</p> <p>HR – Ordinance on BP and EoW status (OG No 117/14)</p> <p>BE (Flanders) – Order adopting regulation on the sustainable management of material cycles and waste (2012)</p> <p>SI – Decree on the treatment of biodegradable waste and the use of compost or digestate</p> <p>UK (England, Wales, NI) – End of waste criteria for the production and use of quality compost from source-segregated biodegradable waste (2012)</p> <p>UK (England, Wales, NI) – End of waste criteria for the production and use of quality outputs from anaerobic digestion of source-segregated biodegradable waste (2014)</p>
<ul style="list-style-type: none"> Biochar, drying products or ashes 	Sewage sludge from municipal waste water treatment plants; treated ash from the incineration of poultry litter, feathers and straw	EE, UK	<p>EE – Regulation on requirements for manufacturing of products from sewage sludge (No 24/2017)</p> <p>UK (England, Wales, NI) – End of waste criteria for the production and use of treated ash from the incineration of poultry litter, feathers and straw (2012)</p>
<ul style="list-style-type: none"> Fuel additive from oil shale mining waste and tailings 	Oil shale and the stone material accompanying oil shale	EE	<p>EE – Regulation on requirements for the production of a Fuel Additive from Oil Shale Mining Wastes and Tailings (No 60/2015)</p>
<ul style="list-style-type: none"> Tyre chips added to the shale oil production process Tyre-derived rubber materials 	Scrap tyres	EE, PT, UK	<p>EE – Regulation on requirements for tyre chips added to the shale oil production process (No 40/2018)</p> <p>PT – Legislation (No 20/2018)</p> <p>UK (England, Wales, NI) – End of waste criteria for the production and use of tyre-derived rubber materials (2014)</p>
<ul style="list-style-type: none"> Reclaimed asphalt pavement 	Bitumen, Asphalt	IT, CZ	<p>IT – Ministerial Decree (No 69/2018)</p> <p>CZ – Regulation under legislative procedure</p>
<ul style="list-style-type: none"> Dredging materials 	Dredging materials	IT	<p>IT – Legislative Decree (No 152/2006)</p>
<ul style="list-style-type: none"> Used absorbent products for personal care 	Used absorbent products for personal care (nappies)	IT	<p>IT – Regulation laying down standards governing EoW status of absorbent hygiene products (PAPs) pursuant to Article 184-ter, subparagraph 2 of Legislative Decree No 152 of 3 April 2006.</p>
<ul style="list-style-type: none"> Recovered plastics, namely flakes, agglomerates and granules 	Waste plastics	PT	<p>PT – Legislation (No 245/2017)</p>
<ul style="list-style-type: none"> Paper Soil 	Waste paper, cardboard Not specified in detail (often indicated by negative list)	BE BE	<p>BE (Wallon) – Decree</p> <p>BE (Flanders) – Order adopting regulation on the sustainable management of material cycles and waste (2012)</p>

End-of waste status foreseen on following waste/material streams	Examples of waste types serving as input material for the process (possibly limited to specific qualities)	MS having established guidance / criteria	Relevant document / Link
<ul style="list-style-type: none"> Biomethane from waste 	Biomethane from landfill gas and anaerobic digestion (AD)	UK	<p>UK (England, Wales, NI) – End of waste criteria for the production and use of Biomethane from landfill gas and anaerobic digestion (AD) biogases (2014)</p>
<ul style="list-style-type: none"> Flat glass 	Waste glass	UK	<p>UK (England, Wales, NI) – End of waste criteria for the production of processed cullet from waste flat glass (2014)</p>
<ul style="list-style-type: none"> Aggregate from waste steel slag 	Waste steel slag	UK	<p>UK (England, Wales, NI) – Aggregate from waste steel slag: quality protocol (2016)</p>
<ul style="list-style-type: none"> Biodiesel 	Not specified in detail	UK	<p>UK (England, Wales, NI) – Biodiesel: quality protocol (2015)</p>
<ul style="list-style-type: none"> Gypsum 	Waste plasterboard	UK	<p>UK (England, Wales, NI) – Recycled gypsum from waste plasterboard: quality protocol (2015)</p>
<ul style="list-style-type: none"> Non-packaging plastics 	Non-packaging plastics	UK	<p>UK (England, Wales, NI) – Non-packaging plastics: quality protocol (2016)</p>
<ul style="list-style-type: none"> Pulverised fuel ash (PFA) and furnace bottom ash (FBA) 	Non-packaging plastics	UK	<p>UK (England, Wales, NI) – End of waste criteria for the production of pulverised fuel ash (PFA) and furnace bottom ash (FBA) for use in bound and grout applications in specified construction and manufacturing uses (2010)</p>
<ul style="list-style-type: none"> Distillation residues of used oils 	Used oils	FR	<p>FR – Order on EoW for distillation residues of used oils for use as a plasticizer for bitumen in the manufacture of roof waterproofing membranes (2017)</p>
<ul style="list-style-type: none"> Re-used objects 	Cartridges, packaging, vacuum pressure containers, tyres, waste electrical and electronic equipment, textiles, waste furniture components	FR	<p>FR – Order on EoW for objects and chemicals that have been prepared for reuse (2018)</p>
<ul style="list-style-type: none"> Cut wiping cloths 	Used textiles	FR	<p>FR – Order on EoW for cut wiping cloths made from used textiles for use as rags (2019)</p>
<ul style="list-style-type: none"> Specific chemicals 	Used chemicals	FR	<p>FR – Order on EoW for chemicals or objects that have been regenerated (2019)</p>

Source:
EUROPEAN COMMISSION: Study to assess member states practices on by-products (BP) and end-of waste (EOW), final report 2020.

4. THE CONCEPT OF WASTE

EOW PRACTICAL APPLICATION EU / BCR

EU

- EU currently established EOW for 3 waste streams:
 - Iron, steel and aluminium scrap (Council Regulation (EU) nr. 333/2011)
 - Glass cullet (Commission Regulation (EU) nr. 1179/2012)
 - Copper scrap (Commission Regulation (EU) nr. 715/2013)

BCR

- No general additional criteria have been adopted for waste streams
 - Waste treatment facility + permit system
 - ⇒ Waste treatment that is not covered by a permit cannot be considered a valorisation (EOW) operation.
 - ⇒ The processed waste then retains its status as waste
- License mechanism on “case-by-case basis”
- Only 4 waste treatment facilities have been granted a license for obtaining end-of-waste status and this only for the following waste streams:
 - Copper (EU EOW criteria) - BRUSSELS RECYCLING METAL
 - Green waste, garden waste, biodegradable kitchen and canteen waste (BCR EOW criteria) - PERMAFUNGI
 - Non-tarred asphalt - Stony fraction of construction and demolition waste (BCR EOW criteria) - VIABUILD BETON EN ASFALT
 - Unpolluted sandy soil with crushed stone and/or asphalt - Pieces of bluestone (BCR EOW criteria) - WEGENIS- EN RIOLERINGSWERKEN DE DENDER
- Interviews with some pioneer projects indicate that the temporary nature of these permits is also considered an administrative burden - RECYCLO

4. THE CONCEPT OF WASTE

END OF WASTE STATUS (EOW)

- EOW implementation results (EU)
 - Implementation of Article 6 of the WFD → All BE regions ✓

- MS can further develop EOW criteria for waste streams
- Within the EU MS there is a wide range of national EOW noticeable

} **FRAGMENTATION**

Table 1: Transposition of Article 5 and Article 6 of the WFD (analysed for 25 out of 28 MS)

No.	Member State	Article 5 word-by-word (full meaning)	Article 5 with identified explanations	Article 6 word-by-word (full meaning)	Article 6 with identified explanations	Main legal document, transposing Article 5 and Article 6 of the European Commission Waste Framework Directive (possibly amended)	English translation available? (Y-Yes / N-No) ¹
1	AT – Austria	X		X		Waste Management Act 2002	(Y)
2_1	BE – Walloon region	X ²		X ²		Decree on Waste 1996	N
2_2	BE – Flanders region	X ²		X ²		Materials Decree 2011	Y
2_3	BE – Brussels region	X ²		X ²		Ordinance on Waste 2012	N

Source table 1:
EUROPEAN COMMISSION: Study to assess member states practices on by-products (BP) and end-of waste (EOW), final report 2020.

CONCLUSION REGARDING EOW

- Need for EU harmonization (already existing for iron, steel, aluminium scrap; glass cullet and copper scrap)
- Risk of differentiation between MS and within MS (e.g. BE)
 - ⇒ legal burden for transport/trading cross region /cross border
- Although there is a broad spectrum of waste streams where End-of waste status is foreseen, albeit in different MS, there is still room for improvement in BE and the BCR.
- The differences between MS are remarkable, some MS indicate not to establish national or regional EOW criteria at all.
 - MS that explicitly stated that (currently) no national/regional EoW criteria are existing and that they do not intend to establish any of those criteria in the near future: Denmark, Sweden, Poland, Slovak Republic, Cyprus, Luxembourg, Romania

5. MAIN CONCLUSIONS

1/ Legal framework **is particularly complex and technical**

=> barrier for development of circular business activities

2/ Conclusions regarding waste / by product / End of Waste

➤ **Waste**

- Objects/substances **are only considered waste if they fall under the definition**
- Definition allows flexible interpretation
 - => second WFD objective: “resource protection” could be taken into account
- Explicit intention

➤ **By products / End of waste**

- Introduction of legal framework for by-products (and end of waste status) is a way forward in delimiting waste from non-waste and enabling the re-use of resources in the context of a circular economy, but
 - Criteria need to be further developed
 - ⇒ all depends on the conditions to be taken into account for the qualification as by-product (and for the end-of-waste status). A too strict set of conditions risks narrowing down again the application of these mechanisms.
 - Fragmentation => harmonised approach is required
 - Cost & burden of administrative & recovery processes

3/ Increased initiative / role of public authorities?

4/ BCR license mechanism, compatible with Service Directive

5. MAIN CONCLUSIONS

Hickel, Less is more. How degrowth can save the world, Windmill books 2021, p. 158-159 :

"Yes, we should absolutely aspire to a more circular economy. But the idea that recycling will save capitalism doesn't hold water. First, most of our material use cannot be recycled. Forty-four per cent of it is food and energy inputs, which become irreversibly degraded as we use them. Twenty-seven per cent is net addition to stocks of buildings and infrastructure. Another big chunk is waste from mining. In the end, only a small fraction of our total material use has circular potential. Even if we recycled all of it, economic growth would keep driving total resource use up. In any case, we're moving in the wrong direction: recycling rates have been declining over time, not improving. In 2018, the global economy achieved a recycling rate of 9,1%. Two years later it was down to 8,6%. This isn't because our recycling systems are getting worse. It's because growth in total material demand is outstripping our gains in recycling. Once again, it's not our technology that's the problem – it's growth.

But there's an even more fundamental problem with the idea of a 'green growth' circular economy. Even if we were able to recycle 100% of materials, that would pose a problem for the prospect of GDP growth. Growth tends to require an 'outside': an external source from which to extract value for free, or as close to free as possible. In a circular economy, the cost of materials is internalised. That's good from the perspective of ecology, but bad from the perspective of capital accumulation. Recycling costs money, and the cost of paying for recycled materials makes it more difficult to generate ever-rising surplus. And the pinch gets tighter over time: materials degrade each time you recycle them, so you need ever-rising energy inputs – and ever-rising cost – in order to maintain their quality."

It's the legal definition of waste the problem?

Or is it the willingness to release business activity from the capitalistic premise of growth?

THANK YOU FOR YOUR ATTENTION! HAPPY TO TAKE YOUR QUESTIONS

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