

IMPEL "WASTE MANAGEMENT & CIRCULAR ECONOMY" PROJECT





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CIRCULAR INNOVATION AND SECONDARY RAW MATERIALS

CIRCULAR INNOVATIONS



A crucial element in the transition to the Circular Economy are the innovations at production and recycling facilities that aim at resource efficiency, the prevention of waste and the use of production residues or materials recovered from waste as <u>secondary raw materials</u>.

A <u>key condition</u> for making these circular innovations work is to better connect policy, law and regulation on the ground.

Secondary raw materials: Materials that can be used in a manufacturing process instead of or alongside virgin raw materials, e.g. by-products, end-of-waste.

CONNECT POLICY, LAW AND REGULATION ON THE GROUND

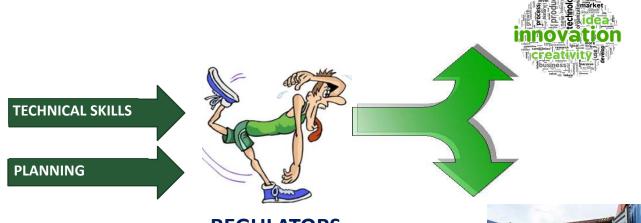


Regulators are asked to authorise or assess circular innovations

Businesses may not get the necessary regulatory certainty to give assurance to investors and manage financial risks. They may experience lack of support and engagement and lengthy decision making due to limited resources and competing priorities on the side of the regulators. And they may encounter obstacles when importing or exporting materials, because regulators as well as policymakers from different MS interpret and implement the EU waste legislation differently

Policy maker may help create favourable non-regulatory conditions, e.g. by enabling the right market conditions for secondary raw materials.

THE ROLE OF REGULATORS



PROMOTE ECOINNOVATION; MARKET FOR SECONDARY RAW MATERIAL

REGULATORS



NEW WASTE CRIMES.

COMPLIANCE

ASSESSMENT

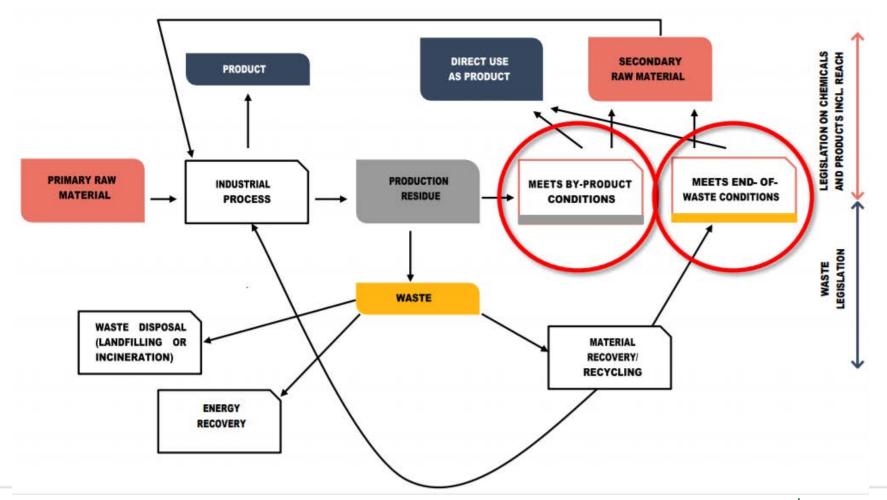
SECONDARY RAW MATERIALS

END OF WASTE AND BY-PRODUCTS

BY-PRODUCT: a production residue which meets the cumulative conditions/ criteria set out in the WFD and which is to be used as a secondary raw material or product and is not to be considered a waste.

END-OF-WASTE: a material recovered from waste, which meets the cumulative conditions and requirements set out in the WFD (or the detailed criteria) and which is to be used as a secondary raw material or product and no longer be considered to be a waste.





SECONDARY RAW MATERIALS: BARRIERS



Secondary raw materials face a number of challenges in competing with primary raw materials for reasons not only related to their safety, but also to their performance, availability and cost.

Preventing a mismatch between supply and demand of secondary raw materials and ensure the smooth expansion of the recycling sector in the EU (e.g. introducing requirements for recycled content).

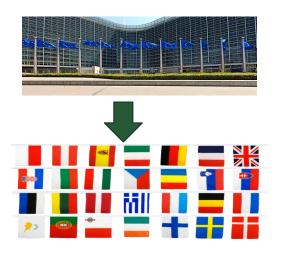
WHICH PROCEDURES FOR EOW STATUS ASSESSMENT ARE APPLIED IN MS?

Permit Assessment in the permitting process. Prescriptive approach Legal opinion Self assessment

Flexibility, quick process, operator and inspection system responsability

END OF WASTE CASE-BY-CASE

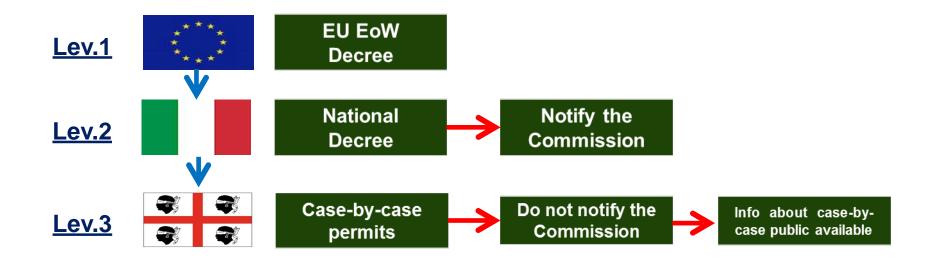
Where <u>criteria</u> have not been set at Union level under paragraph 2, Member States may establish <u>detailed</u> <u>criteria</u> on the application of the <u>conditions</u> laid down in paragraph 1 to certain types of waste.





Where <u>criteria</u> have not been set at either Union or national level under paragraph 2 or 3, respectively, a Member State may decide on a case-by-case basis, or take appropriate measures to verify, that certain waste has ceased to be waste on the basis of the <u>conditions</u> laid down in paragraph 1 and, where necessary, reflecting the requirements laid down in points (a) to (e) of paragraph 2, and taking into account limit values for pollutants and any possible adverse environmental and human health impacts.

EOW CRITERIA LEVELS OF APPLICATION



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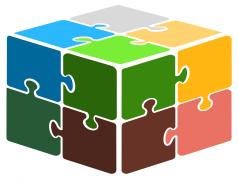
DILEMMA

WASTE OR PRODUCT?

New rules to tackle 'wild west' of plastic waste dumped on poorer countries

International convention to stop richer countries exporting contaminated material for recycling could mean a cleaner ocean in five years







End-of-Waste



By-products



Value, resource





Discard, Intention

A WASTE OR NOT A WASTE?











ITALIAN COURT



Sentenza TAR Toscana n.153/2023





Order of waste re-collection following communication from the Croatian destination authority, according to which the load of textiles (secondary raw material) should be classified as waste

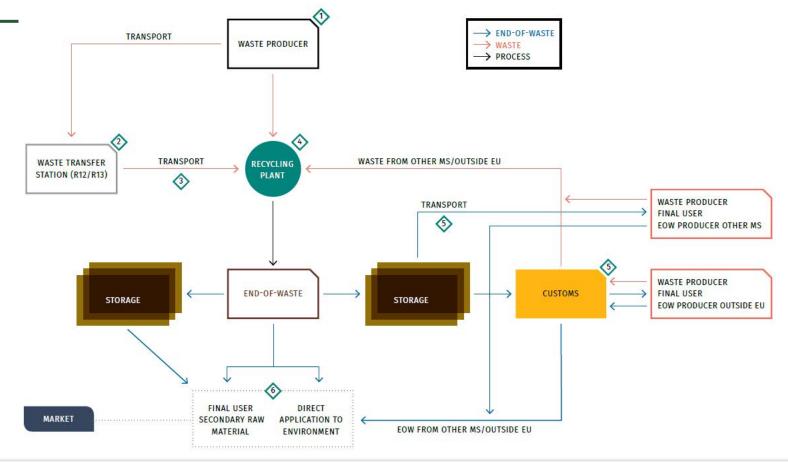
COOPERATION AMONG INSPECTION AUTHORITIES





- Compliance with Shipment of waste Regulation
- Cooperation with others inspection authorities (Custom, REACH inspectors)
- EoW origin and destination: contacts with extra EU Countries
- ☐ Technical dossier to check compliance with product standards (REACH: technical dossier of possible exemption)
- Combined technical training and Joint inspections
- Access to database
- Memorandum of Understanding and information exchange protocols

Recovery chain and possible inspection stages





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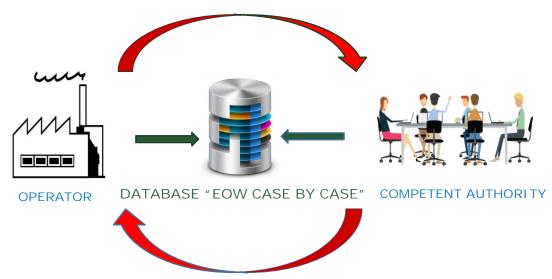
https://www.impel.eu/wp-content/uploads/2019/08/Guidance-Making-the-Circular-Economy-Work.pdf

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END-OF WASTE «CASE-BY-CASE» DATABASE

WHY A CASE-BY-CASE EOW DATABASE? PROMOTE A COMMON UNDERSTANDING

PERMITTING PROCESS/SELF ASSESSMENT: REMOVE UNCERTAINTIES



INSPECTION SYSTEM: CLEAR RULES, PREVENTING CRIMES, STRATEGY

WHY A CASE-BY-CASE EOW DATABASE

- 1. This tool aims at creating the structure of a voluntary database to help permit writers, inspectors and operators to find information on end-of waste case-by-case decisions or resulting from self-assessment verification.
- 2. The suggested database, which is not mandatory, is one of the possible tools to answer to the following indications of the WFD 2018 Article 6: "Member States may make information about case-by-case decisions and about the results of verification by competent authorities publicly available by electronic means".
- Actually, only national end-of-waste criteria issued in Member States are collected in the Technical Regulation Information System (TRLS) database, managed by DG GROW



EOW DATABASE ADVANTAGES



FND OF WASTF PASSPORT?

Voluntary document to facilitate the assessment of compliance with the EoW conditions when the product moves across the borders of MS.

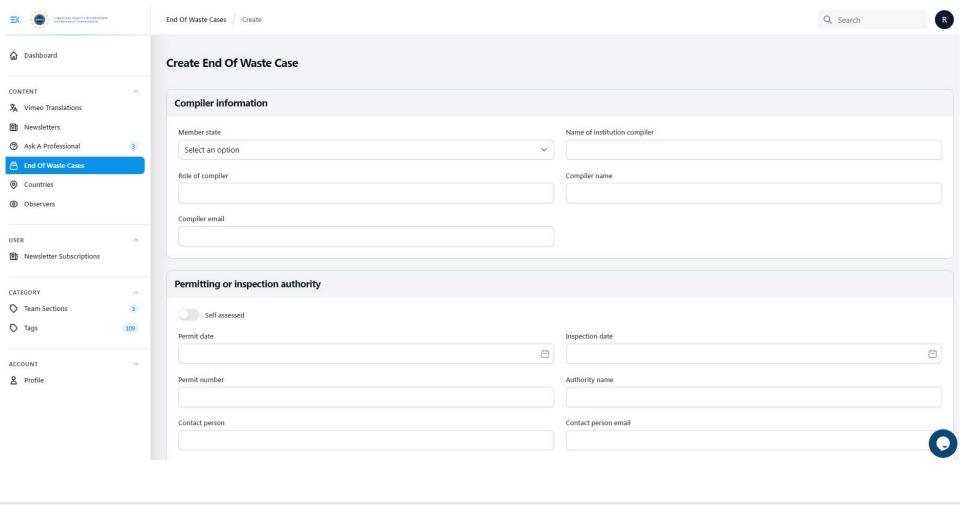
- To promote the exchange of information and encourage homogenization across Member States identifying common technical and environmental standards, making end-of-waste movements across the borders easier.
 - To help operators to find information such as standards and provisions set in other Member States for the same secondary raw material they would like to produce, in order to gather a comprehensive documentation when accessing a self assessment or permitting procedure
- To build trust on new products derived from recycling 3. of waste

EOW DATABASE STRUCTURE

The pieces of information requested are grouped in six clusters:

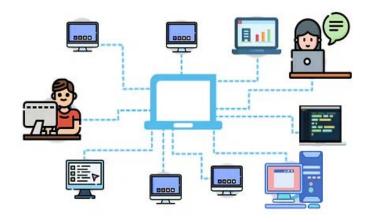
- Compiler information: This section is relative to whom is filling in the database; it may be useful if somebody wants to contact the compiler. All the fields are required.
- Permitting authority: This part is requested when the end-of-waste status is granted within a permit. It is not requested in case of operator self-assessment. Contact details of the permitting authority can be useful if asking for more information is needed.
- Recycling company: This part is optional; the data of the producer can be public available if included in a permit. In case of self assessment, it is up to the operator whether to publish the requested information or not.
- Input waste: It contains crucial information about provisions of the waste to be recycled.
- Treatment and final use: This section requires information about the recycling process, the destination market of the end-of-waste, the substance/material replaced by end-of-waste, etc.
- Environmental and technical standards: This section collects crucial data about technical standards required, environmental standards, REACH registration.





INFORMATIVE SECTIONS: CONTACTS

COMPILER	REQUIRED FIELD	1	Member State
	REQUIRED FIELD	2	Name of the Institution of the compiler
	REQUIRED FIELD	3	Role of the compiler
	REQUIRED FIELD	4	Compiler Name
	REQUIRED FIELD	5	Compiler email address
PERMITTING AUTHORITY (IF THE CASE)	REQUIRED FIELD	6	Permitting authority
	REQUIRED FIELD	7	Authorization number
	OPTIONAL FIELD	8	Contact person at the permitting authority
	OPTIONAL FIELD	9	Email of the contact person
RECYCLING	OPTIONAL FIELD	10	End-of-waste producer
	OPTIONAL FIELD	11	City
	OPTIONAL FIELD	12	Company email address
	OPTIONAL FIELD	13	Geographic coordinates
	OPTIONAL FIELD	14	Website



INPUT WASTE

INPUT WASTE	REQUIRED FIELD	15	Input waste (typology)
	REQUIRED FIELD	15bis	If other, which?
	REQUIRED FIELD	16	Max Incoming waste (t/y)
	REQUIRED FIELD	17	Temporary storage capacity (t)
	REQUIRED FIELD	18	Maximum storage time
	REQUIRED FIELD	19	Kind of industry/stream
	REQUIRED FIELD	19bis	If other, which?
	REQUIRED FIELD	20	EWC
	REQUIRED FIELD	21	Hazardousness
	REQUIRED FIELD	22	Input waste requirements
	REQUIRED FIELD	22bis	If other, which?
	REQUIRED FIELD	23	Frequency of the waste characterization



COMPLIANCE TO EOW CRITERIA (ART. 6.2 OF WFD)

•Permissible waste input material for the recovery operation

TREATMENT AND FINAL USE

TREATMENTS AND FINAL USE	REQUIRED FIELD	24	Recycling process
	REQUIRED FIELD	24bis	If other, which?
	REQUIRED FIELD	25	Destination market of the end-of-waste
	REQUIRED FIELD	26	Substance/material replaced by end-of-waste
	REQUIRED FIELD	27	Direct contact with the environment or consumption cycle
	REQUIRED FIELD	28	If other, which?
	REQUIRED FIELD	29	Re-use in another production cycle
	REQUIRED FIELD	30	If other, which?
	OPTIONAL FIELD	31	End-of-waste Storage – Quantity limit
	OPTIONAL FIELD	32	End-of-waste Storage – Time limit
	OPTIONAL FIELD	33	Transport system between recycler and final user



COMPLIANCE TO EOW CRITERIA (ART. 6.1 and 6.2 of WFD)

- •the substance or object is to be used for specific purposes;
- •a market or demand exists for such a substance or object;
- •allowed treatment processes and techniques

TECHNICAL & ENVIRONMENTAL STANDARDS

\RDS	REQUIRED FIELD	34	Compliance limits fixed for the use of the end- of-waste in the sector it is intended to be used
	REQUIRED FIELD	35	Technical standards (EPA, EN, ISO,) to be complied
AND,	REQUIRED FIELD	36	"Technical parameters" for which a limit is set
ENVIRONMENTAL AND TECHNICAL STANDARDS	REQUIRED FIELD	37	REACH/CE registration
	REQUIRED FIELD	38	Chemical analysis for conformity limits
	REQUIRED FIELD	38bis	Frequency
	REQUIRED FIELD	39	In the absence of chemical analysis, list the guarantees required to the company for the conformity of the EoW
	REQUIRED FIELD	40	Environmental standards to be complied with
	REQUIRED FIELD	41	"Environmental parameters" for which a limit is set
	REQUIRED FIELD	42	The use of the substance or object will not lead to overall adverse environmental or human health impacts



COMPLIANCE TO EOW CRITERIA (ART. 6.1 and 6.2 of WFD)

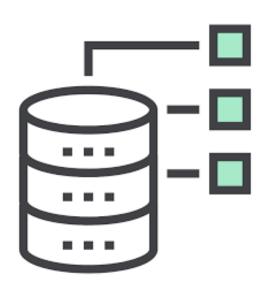
- •The substance or object fulfils the technical requirements for the specific purposes and meets the existing legislation and standards applicable to products;
- •The use of the substance or object will not lead to overall adverse environmental or human health impacts
- •Quality criteria for end-of-waste materials resulting from the recovery operation in line with the applicable product standards, including limit values for pollutants where necessary

EOW DATABASE & EOW PASSPORT

What information may be used to substantiate that a material meets the conditions and (where necessary) requirements set out in Article 6 WFD.

DIRECTIVE PROVISIONS	GUIDANCE ON F	PROVIDING INFORMATION TO DEMONSTRATE	VOLUNTARY END-OF	VOLUNTARY END-OF-WASTE PASSPORT	
	REQUESTED INFORMATION	INDICATIVE CONTENTS	REFERENCE		
Conditions (Art 6 Paragraph 1 WFD 2018)				General information about the operator, the Authority which assessed or which verified the end-of-waste status (if not only self assessed).	What end-of-waste assessment procedure has been followed and date of decision/assessment Prior decision (permit, legal opinion, statement). Self assessment Verification after self assessment:
a. the substance or object is to be used for specific purposes	Definition of the use	1. Description of the intended use (process, function). 2. Description of the substituted virgin material. 3. Description of the product (end-of-waste) performances, showing, if possible, a comparison with the non virgin substituted material or with a non waste comparator (see also condition c). 4. In case of experimental end-of-waste (eco-innovative case) description of the potential use, proposing also the expected performance.	See for example Section 3.3 of this Tool, Part A (England) See for example Section 3.6 of this Tool, Part A (NL) Tool, Part A (NL)	Short Description of the intended use.	

LEVELS OF ACCESS



1) FEEDING THE DATABASE

Public Administrations

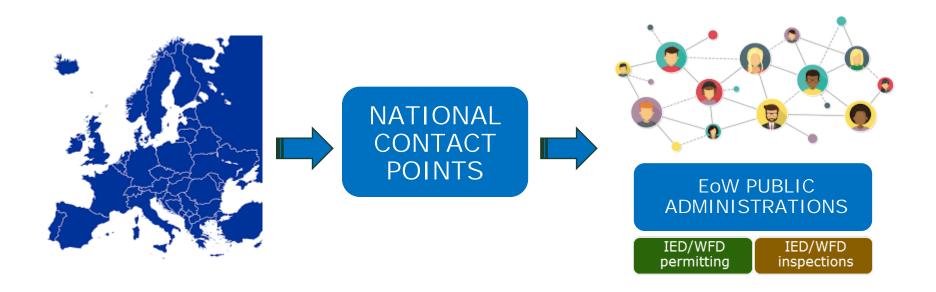
APPROVING CASES

IMPEL moderators

3) VISIT THE DATABASE

Public (operators, NGO's ecc.)

NETWORKING



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ENDORSEMENT OF EU COMMISSION



2022: Meeting between the European Commission, DG Environment, and the IMPEL Network to exchange information on the IMPEL project Waste management and Circular Economy and relevant Commission developments concerning circular economy

- DG ENV expressed interest in the development of the End of Waste case-by-case Database and can support it by different communication tools.
- ☐ It was suggested by DG ENV to widen the scope of the Database to include End-of-Waste National Decrees, as looking for data in the TRIX Database is not immediate and gathering all pieces of information related to End-of-Waste in a stand-alone tool can be helpful.
- ☐ It was also mentioned the interest to build a similar Database on By-products.
- IMPEL pointed out the need of a strong communication campaign to push Member States and authorities to use the Database.

NEXT STEPS

• Finalizing the Manual for user Front-End refinement • Upload in the IMPEL website Administrative structure Communication strategy

Grazie



► Website: https://www.impel.eu/guidance-making-the-circular-economy-work-launched/