



Welcome to the 2nd stakeholder workshop for “Developing EU-wide End-of-Waste criteria for mineral construction and demolition waste (CDW)”



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We start at 9:30 sharp!

**Please log in, stating your
affiliation and your name.**

Example: "ORGANISATION - Name"

Agenda

Stakeholder workshop 11 June 2025 | CDW End-of-Waste

09:15 – 09:30	Opening of the meeting room and time allocated to log-in
09:30 – 09:35	Opening session
09:35 – 09:45	Session 1: Introduction
09:45 – 09:55	Session 2: Definition and background
09:55 – 10:50	Session 3: Draft proposal for EoW for mineral CDW: Part 1
10:50 – 11:05	Coffee break 
11:05 – 12:30	Session 4: Draft proposal for EoW for mineral CDW: Part 2
12:30 – 12:50	Session 5: Written stakeholder consultation
12:50 – 13:00	Closing session (10 min Q&A)



Please **mute** your microphone and **switch off** your video.



Developing EU-wide End-of-Waste criteria for mineral construction and demolition waste (CDW)

Second stakeholder workshop

Lukas Egle, Leonidas Milios, Jorge Cristobal Garcia, Hans Saveyn (DG JRC)

Vincenzo Gente, Christos Gaitanis (DG ENV)

Pieter Staelens, Kveta Kabatnikova (DG GROW)

Opening session

Housekeeping rules



- By default, please **mute** your microphone and **switch off** your video.



- Please write your questions and comments (relevant for each session) in the **chat-box**.
 - When given the floor, you can switch on your microphone and camera.
 - Please clearly state your name and affiliation the first time you are given the floor.
 - Please mute yourself (and switch off your camera again) after your intervention.




- Please note that the (Webex) meeting **will be recorded** to help prepare the **internal** meeting minutes, but **will not** be livestreamed or made publicly available for replay.



- The **slide-deck** will be shared after the meeting.

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Project team

JRC-Seville - Unit B5 (Circular Economy and Sustainable Industry)



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GROW H1 (Construction)



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Session 1

Introduction

EU regulatory framework on EoW

Waste Framework Directive (EC No 2008/98)

Article 6(1):

“[...] waste which has undergone a recycling or other recovery operation is considered to have ceased to be waste if it complies with the following conditions:

- a) the substance or object is to be used for **specific purposes**;*
- b) a **market or demand** exists for such a substance or object;*
- c) the substance or object fulfils the **technical requirements** for the specific purposes and meets the **existing legislation and standards** applicable to products; and*
- d) the use of the substance or object will not lead to overall adverse **environmental or human health impacts**”.*

*“When adopting those implementing acts, the Commission shall take account of the relevant **criteria established by Member States** in accordance with paragraph 3 and shall take as a **starting point the most stringent and environmentally protective of those criteria**”.*



Note Article 6(4) : The **national EoW criteria** are used as a reference and not the case-by-case decisions. Case-by-case decisions are not required to be notified to the Commission in accordance with Directive (EU) 2015/1535¹.

EU regulatory framework on EoW Waste Framework Directive (EC No 2008/98)

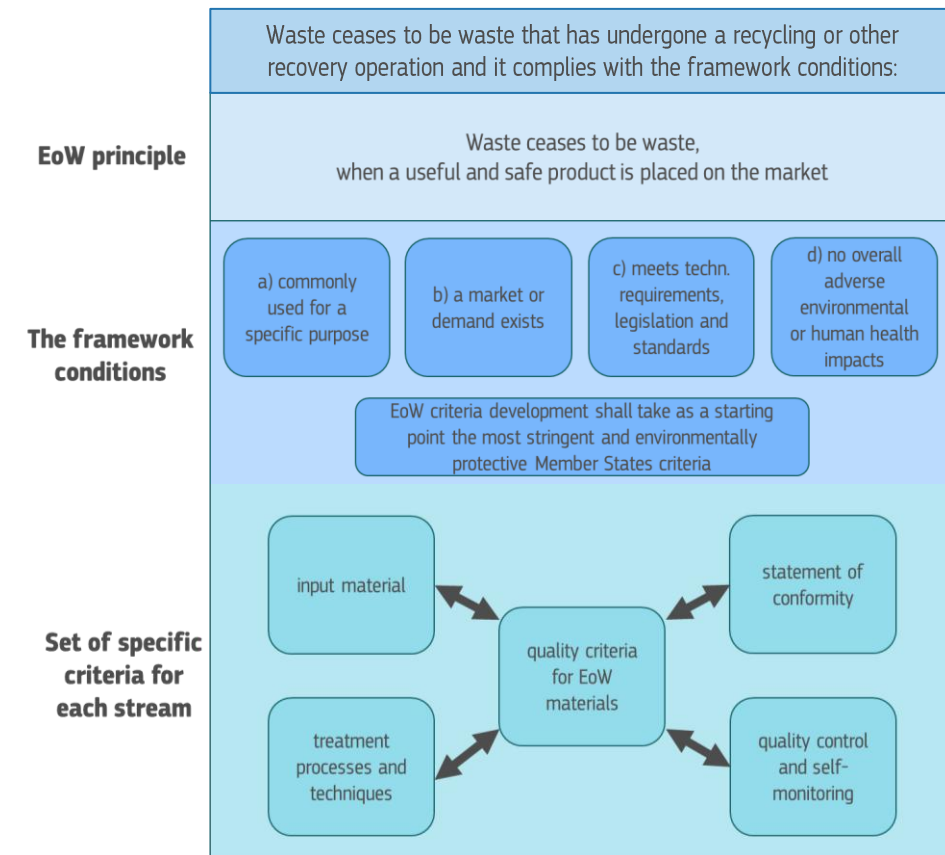
Article 6(2):

[...] the Commission shall adopt implementing acts in order to establish detailed criteria [...]

Those detailed criteria [...] shall include:

- a) permissible waste input material for the recovery operation;*
- b) allowed treatment processes and techniques;*
- c) 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;*
- d) 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*
- e) a requirement for a statement of conformity.”*

EoW methodology developed by the JRC in 2009¹, providing a comprehensive approach for the development of end-of-waste criteria.



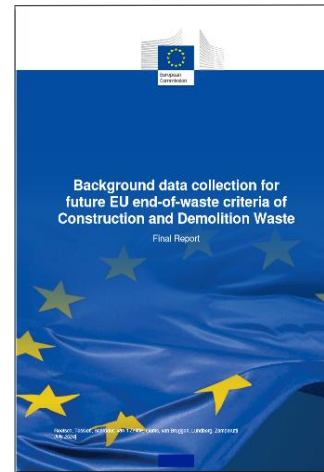
10 ¹ Delgado, L., Catarino, A. S., Eder, P., Litten, D., Luo, Z., & Villanueva, A. (2009). End of waste criteria, final report. In JRC Scientific and Technical Reports (Vol. 14, Issue 3). <https://doi.org/10.2791/28650>

Objectives and scope of this project

2022



2024



2024-26



Candidate streams proposed by stakeholders:

Waste/By-product category	Specific waste/by-product stream
Mineral fractions of construction and demolition waste	Recovered materials from construction and demolition waste: — Aggregates — Gypsum (plasterboard) — Mineral wool (man-made vitreous fibre)

Orveillon, G., Pierri, E., Egle, L., Gerbendahl, A., Wessman, P., Garcia John, E., & Saveyn, H. G. M. (2022). Scoping possible further EU-wide end-of-waste and by-product criteria (Issue arch). <https://doi.org/10.2760/067213>

Rank	CDW waste stream
Higher potential (Third tertile)	Aggregates
	Concrete
	Fired Clay
	Gypsum*
Average potential (Second tertile)	Asphalt
	Inert insulation
	Plastics foam insulation
	Rigid plastic
Lower potential (First tertile)	Wood
	Building products for re-use

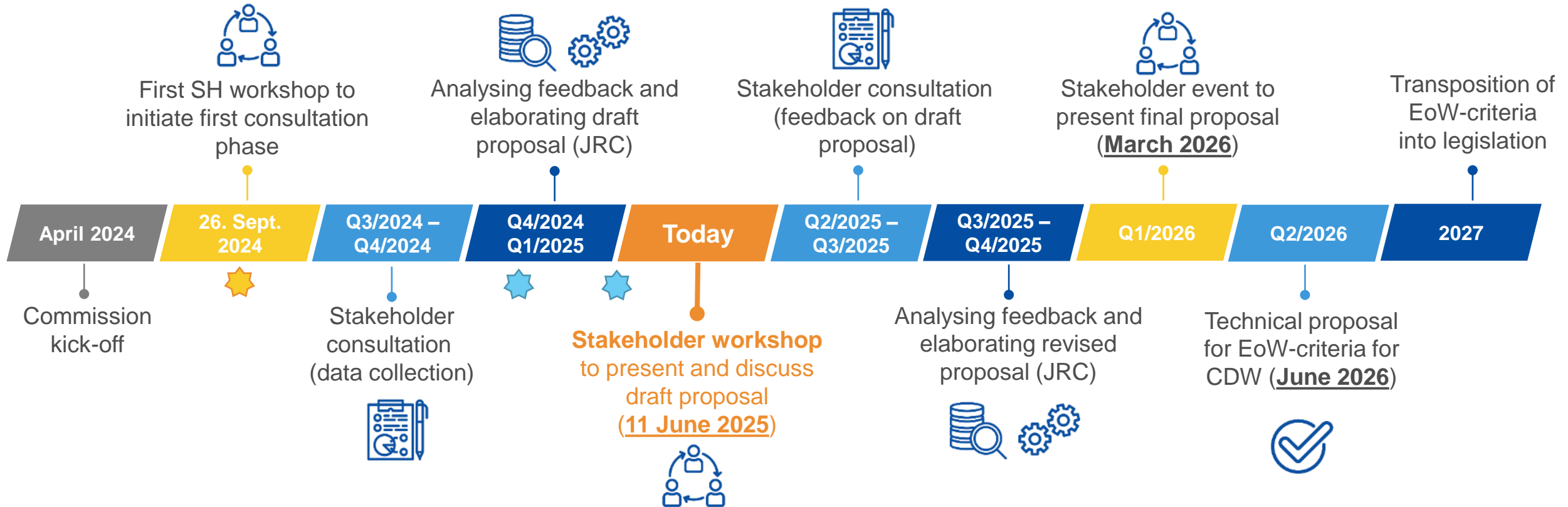
* the sensitivity analysis shows that the results for **gypsum** vary more compared to the other streams



TAUW 2024 Background Data Collection for Future EU End-of-Waste Criteria of Construction and Demolition Waste – GROW/2022/OP/0015. Deliverable 3 'Final Report on background data and information collected (Task 3)

Objectives and scope of this project


- Objective: Develop technical proposals for **EU-wide EoW criteria for mineral construction and demolition waste**.
- Methodology: the development of technical proposals is **data driven** and supported by **internal research, stakeholder consultations and plant visits**.
- Provide **consensus driven technical proposal** for transposition into legislation.

Project timeline and methodology



- 
 - Launch the project on the development of EU-wide EoW criteria for mineral CDW
 - Present and discuss the initial scope and possible point of EoW for recycling
- 
 - Bilateral meetings with SH
 - Site visits to sorting and recycling plants

Objectives of this workshop

- Present and discuss the **scope proposal**.
- Present and discuss **technical proposals** for end-of-waste criteria for mineral construction and demolition waste.
- Launch the **written stakeholder consultation** to gather feedback on the proposed criteria.
- Important: 
 - The objective of this workshop is **not to take any decisions** on the criteria. These will be made following the stakeholder consultation and careful examination of the opinions and supporting evidence submitted.
 - The JRC **does not plan any further consultation round** on the criteria, so stakeholders should submit all NEW evidence and argued opinions in this stakeholder consultation.

Q&A | Introduction



Session 2

Definitions and background information

Definitions

Mineral CDW and recycled aggregates

- **Mineral CDW:** waste generated from construction and demolition activities, which primarily consists of concrete, bricks, tiles, ceramics, and stones (WFD, Article 11(1)). Within the section scope we explain in detail which CDW fractions are considered as mineral CDW within this project.
- **Aggregates:** are defined as granular material used in construction (CEN/TC 154). Aggregates may be natural, manufactured or **recycled**.

Definitions

Contamination in recycled aggregates

- **Contaminants (general):** substances or materials present in CDW waste that are not targeted for its further recycling and which could pose a risk for human health and the environment (e.g. hazardous substances, substances of very high concern, persistent organic pollutants).
- **Asbestos:** various types of fibres such as amosite, chrysotile and crocidolite.
- **Physical impurities:** e.g. plastic, wood, metal, glass or even certain unwanted mineral CDW fractions.
- **Deleterious materials:** such as pyrite, clay, soil. They can negatively affect recycling process and quality of the output material and as a consequence the construction materials produced from RA.
- **Contaminants (environmental parameters):** elements (e.g. heavy metals, salts) or substances (e.g. organic pollutants) for which limit values are defined to reach EoW status.

Legislative aspects

Relevant waste and product legislation

- **Hazardousness classification of waste:** is laid down in Annex III to the **Waste Framework Directive** (EC) No 2008/98 and in the Annex to Commission Decision (EC) No 2000/532 on the **List of Waste**. Commission Notice 2018/C 124/01 on the classification of waste offers further guidance on the correct interpretation of the waste classification rules.
- **REACH Regulation** (EC No 1907/2006)
 - Lays down registration obligations for manufacturers or importers of substances above 1 ton/year.
 - Under REACH, obligations apply to both substances (as such or in mixtures) and substances contained within articles.
 - Recycled aggregates have to comply with REACH. The JRC is aware about the current discussion on recycled aggregates (article, substances/mixtures)
 - SVHC listed in Annex XIV require an authorisation to be placed on the market, pursuant to Article 56.

Legislative aspects

Relevant product legislation

- **POP Regulation (EU No 2019/1021)**
 - Article 3 prohibits the manufacturing, placing on the market and use of substances listed in Annexes I and II, unless covered by exemptions in Article 4.
- **Construction Product Regulation (EU No 305/2011 and Regulation (EU) No 2024/3110)**
 - Improve the functioning of the single market and the free movement of construction products in the EU.
 - Regulation sets out methods and criteria for assessing and expressing the performance of construction products and the conditions for the use of CE marking.
 - Product requirements for construction products need to be assessed according to harmonized EU standards or European assessment documents when no standard is available.

Environmental and human health impacts

Hazardous substances of concern

- Potential hazardous substances might occur in CDW due to primary (e.g. tar containing roofing) or secondary contamination (e.g. mineral oil spills on concrete floor, unclean separate demolition).
- Potential hazardous substances of concern in old constructions (non-exhaustive list):
 - Asbestos
 - Chlorofluorocarbons (CFCs)
 - Organic pollutants including POPs (e.g. PCB, PAH, Hydrocarbon (C₁₀-C₄₀), PCDD/PCDF, chlorinated paraffins, Bisphenol A)
 - Metals (e.g., As, Cd, Cr_{tot}, Cr_{VI}, Cu, Hg, Ni, Pb, Zn)
- These substances can accumulate in construction materials with recycled content or leach into soils and water bodies.

National CDW EoW criteria in Member States

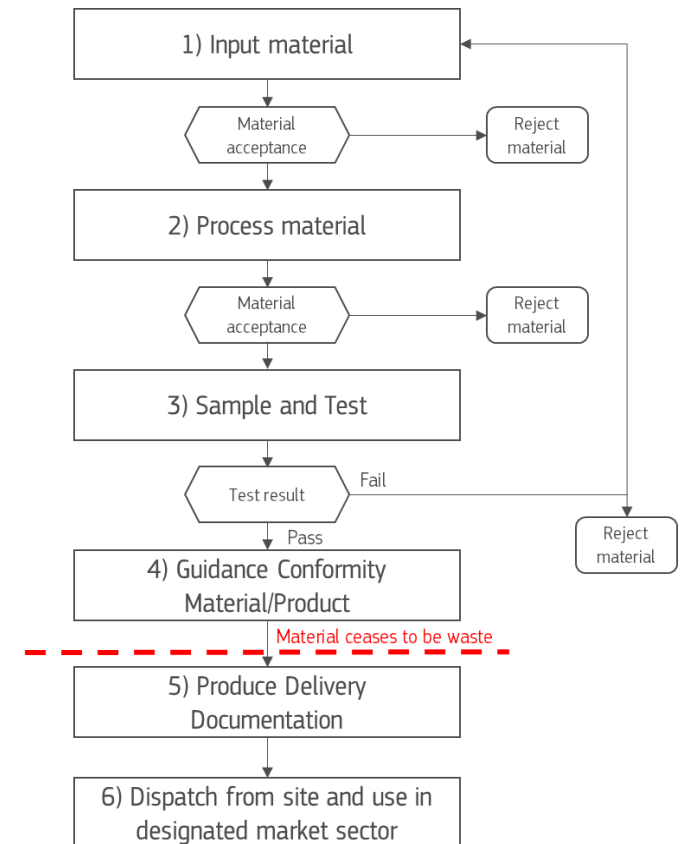
The following national and regional EoW criteria will be considered as a reference (*'...starting point the most stringent and environmentally protective...'*; WFD Article 6(4))

MS	Status
AT	Recycling Building Materials Ordinance BGBl. II Nr. 181/2015
BE-Fla.	Materials Decree 23.12.2011
BE-Wal.	Order of the Walloon Government: procedure for the removal of waste status. Decree 28.02.2019.
CZ	Decree No 273/2021 Coll. Decree on details of waste management (Section 83)
FI	Government Decree on End-of-Waste Criteria for Crushed Concrete (466/2022)
HR	Official Gazette 55/2023. Rules on the EoW status for RA and backfilling material: Annex I (3)
IE	Decision EoW-N001/2023 establishing criteria determining when RA ceases to be waste
IT	EoW of inert CDW and other inert waste of mineral origin; IT Ministerial Decree No. 127/2024
LT	Order No D1-92 amending order No D1-637 of the Minister for the environment.
NL	Regulation on RA from stony waste. Regulation No IENM / BSK-2015/18222 of February 5, 2015.

EoW drafts/proposal from **FR** (Draft decision: EoW criteria for aggregates produced from building waste and public works for road use and **DE** (Secondary Aggregate Directive BGBl. I Nr. 43 (2021) with last amendment by article 1 of BGBl. I Nr. 186 (2023) are also taken into account.

Voluntary industrial guidelines

- In the absence of EU-wide harmonised EoW-criteria, ‘*Aggregates Europe*’¹ developed guidance to set out the common requirements that will enable recycled materials (aggregates) to cease to be waste and hence meet the relevant product standards.
- Important: This guidance is voluntary and producers and users are not obliged to conform with the defined criteria.



¹UEPG (2022). UEPG Guidance - End of Waste Criteria For Recycled Aggregates From Construction & Demolition Waste. European Aggregates Association. 1–24

Q&A | Definition and background information



Session 3

End-of-waste criteria (Part 1)

Scope and system boundaries

Recycling and re-use

Arguments from first proposal:

- CDW recycling covers currently the largest mass flow, while the (preparing for) re-use of building products was ranked in the lowest priority group¹.
- Main reason being ranked last is that (preparing for) re-use is mainly **limited to fire clay bricks** and the amount that is negligible compared to the total recycled mineral CDW fractions.

SH feedback and national EoW screening:

- Majority of stakeholders **agreed** to the development of EU-wide EoW criteria exclusively for recycling
- Arguments to include re-use: 1) re-use consists a more preferable option according to the waste hierarchy; 2) focus on re-use will be particularly relevant in relation to the new provisions covering used products in the Construction Products Regulation; 3) narrow focus on recycling EoW criteria could hinder the emergence of new ideas and practices.
- No Member State with national EoW criteria for re-use.

JRC proposal 'old':

EoW criteria shall **exclusively be developed for recycling of mineral CDW.**



JRC proposal 'new':

EoW criteria shall **exclusively be developed for recycling of mineral CDW.**

Recycled aggregates

Arguments from first proposal:

- Typical output from mineral CDW recycling are aggregates.
- Aggregates are classified as fine aggregates (0.063–4 mm; sand) and coarse aggregate (>4–63 mm; gravel). Fines (< 0.063 mm; clays and silts) are **not considered as targeted aggregates** in this work.
- With particle size 0.063–90 mm, the most common used aggregate sizes are covered.

SH feedback and national EoW screening:

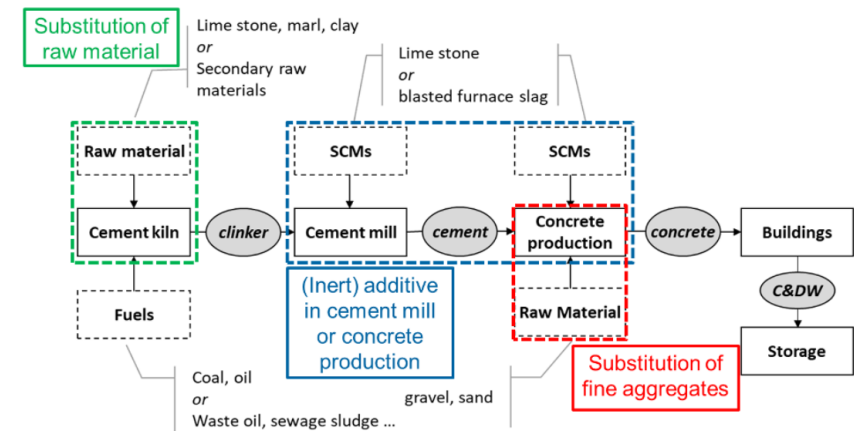
- In practice, particle size is given as 0/2 or 0/8 mm, thus remove lower limit value 0.063 mm.
- Aggregates used for unbound applications can be bigger than 90 mm.
- The scope should be extended to fines, e.g. for use in the cement industry (see IT EoW criteria).

	SH-1a		SH-2a		SH-3a	SH-4a	SH-5a	SH-6a	SH-7a	SH-8a
Inputa	CDW-not-specifia		Concrete, mixed-stones, railway-ballast, stony-fraction-from-washing-soils/mineral-wastea	Concrete, mixed-stonesa	-a	-a	-a	Concrete, mixed-mineral-CDWa	CDW-not-specifia	CDW-not-specifia
Treatmenta	-a		Wet-treatmenta	Dry-sievinga	-a	-a	-a	-a	-a	-a
Outputa	Not-specifia		Not-specifia	Not-specifia	RCA, RAA, RMA ⁴⁵ a	-a	RCA, RMAa	Not-spec.a	Not-spec.a	Not-spec.a
Particle-size-of-output-aggregatesa	<0.063-mm	2/6-mm	<0.063-mm-(fines/filter-cake)a	0/0.5-mm ²⁶ a	0-4-mm	0/4-mm	0/2-mm ²⁶ a	0/6-mm	0/8-mm	0/40-mm
	0/1-mm	4/8-mm	0/2-mm	0/2-mm	0-16-mm	0/10-mm	0/4-mm	0/30-mm	8/45-mm	40/50-mm
	0/4-mm	4/12-mm	0/4-mm	0/6-mm	0-20-mm	0/20-mm	4/12-mm	0/80-mm	45/120-mm	a
	0/8-mm	4/120-mm	2/4-mm	0/20-mm	4-8-mm	0/30-mm	12/22-mm	40/80-mm	a	a
	0/12-mm	6/12-mm	2/8-mm	0/40-mm	8-16-mm	0/32-mm	20/40-mm	a	a	a
	0/16-mm	8/16-mm	4/6-mm	20/40-mm	16-32-mm	0/63-mm	40/63-mm	a	a	a
	0/20-mm	10/20-mm	6/14-mm	a	32-63-mm	0/80-mm	a	a	a	a
	0/22-mm	11/22-mm	6/20-mm	a	or customised-combinationsa	4/20-mm	a	a	a	a
	0/32-mm	11/32-mm	8/45-mm	a	a	8/12-mm	a	a	a	a
	0/40-mm	16/32-mm	14/22-mm	a	a	10/30-mm	a	a	a	a
	0/45-mm	20/32-mm	45/120-mm	a	a	30/70-mm	a	a	a	a
	0/63-mm	32/63-mm	a	a	a	40/80-mm	a	a	a	a
	0/90-mm	40/120-mm	a	a	a	70/100-mm	a	a	a	a
	a	800-1000-mm	a	a	a	a	a	a	a	a

Data: Summary of first SH consultation

Excuse: Fines for cement production

- Crushed fines can be used in the **cement kiln** (substitute of raw material) or in the **cement mill** (additive).
- Standard exist: EN 197-6 Part 6: Cement with recycled building materials (recycled concrete fines).
- New standard is expected for 2027.
- Individual SH were consulted on current situation for the use of fines.
- Result: Very small quantities are currently used for cement production, and if so, then only fines from clean concrete waste.
- JRC conclusion: Due to the negligible quantities that are currently used, limitation to concrete fines, missing industrial specifications and the fact that an inclusion in the scope would require the development of separate criteria especially for limit values, the JRC refrains from having fines as majority material under scope.



Source: Stuerwald et al. 2022 Use of recycled concrete fines in cement and as aggregate

Recycled aggregates

JRC proposal 'old':

The output material of a recycling process should be **recycled aggregates** with a **particle size ranging from 0.063–90 mm**.

≠

JRC proposal 'new':

The output material of a recycling process ~~should~~ **shall be fine or coarse grained mineral recycled aggregates with a maximal particle size of 125 mm with a particle size ranging from 0.063–90 mm.**

The output material that consists mainly of particles with a size smaller than 0.063 mm (recycled fines) is not under scope¹.

¹However, recycled fines are allowed as a constituent part of recycled aggregates (i.e. aggregates composed of a mixture of fine and coarse aggregates with a continuous particle size distribution such as 0/4 mm).

Hazardous and POP containing CDW

Arguments from first proposal:

- The WFD sets minimum recovery target of 70 % for **non-hazardous CDW** by 2020.
- Only a small percentage of total CDW fraction is considered as hazardous.
- An exclusion of hazardous and POP containing CDW fractions helps to develop less stringent output material requirements, as clean input materials are used for recycling. This helps to reduce administrative burden and analytical costs.

JRC proposal: The exclusion of mineral CDW classified as hazardous and CDW with POP concentrations above the limit values pursuant to Annex IV to Regulation (EU) (No 2019/1021) **shall be defined as a requirement in the input material criteria (see criteria 1.3)**

CDW fractions under scope

Arguments from first proposal

- **Mineral CDW fractions** (concrete, fired clay, bricks, stones and mixtures thereof) account for around 80 % of generated CDW in the EU (excl. soil, track ballast, dredging spoils, asphalt).
- Great extent of mineral CDW fractions is not collected separately (mixture).
- Other potentially inert/mineral CDW fractions were investigated (e.g. **inert insulation (mineral and rock wool), gypsum plasterboards, glass, track ballast**).

JRC proposal 'old':

The following **source-separated non-hazardous mineral CDW and mixtures thereof shall be** under scope:

- concrete (pure and reinforced concrete);
- fired clay (e.g. bricks and tiles, also with rests of mortar);
- ceramics (e.g. glazed and unglazed, such as wall & floor tiles, bricks & roof tiles, refractories, sanitary ware);
- stones and boulders (e.g. armour stones);
- mixtures of the above mentioned mineral CDW.

CDW fractions under scope

SH feedback and national EoW screening

- **General:**
 - No comment on exclusion of proposed input material, except one stakeholder expressing their view to exclude fired clay bricks and tiles (without providing any further explanation).
 - SH question the need to define the allowed input material in such detail as most important are the properties of the output material.
 - Aggregates recovery is a quality-monitored process with different European standards applying to the output depending on the use of the recycled aggregates.
 - Furthermore, treatment technologies are advancing, thus limitation of the input material does not consider technical progress.

CDW fractions under scope

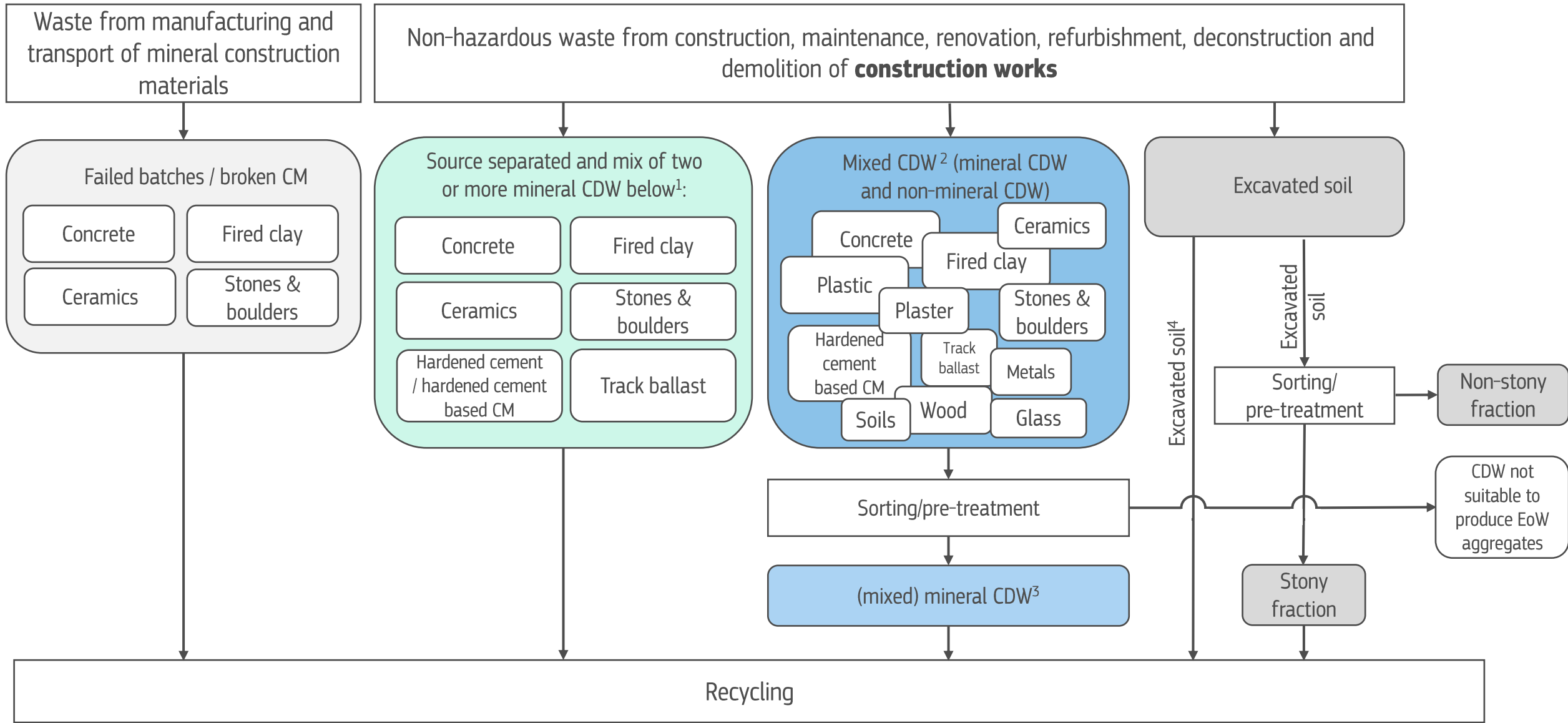
SH feedback and national EoW screening

- **Fraction that should be included under scope**
 - **Track ballast:** have similar properties as layers from streets.
 - **Ground excavation:** Urgent need: > 50 % of all CDW streams consists of soil excavation. This waste stream is easy to treat and produce recycled material, comparable with recycled C&D materials. The excavated soil material is also necessary for improving recycled aggregates, e.g. for a better screening line or improving frost resistance. It is comparable with mineral raw material sources (quarries, gravel pits).
 - **Gypsum:** is a mineral waste and often used in buildings. Source separated fractions can be recycled to nearly 100%.

CDW fractions under scope

SH feedback and national EoW screening

- **Mixed CDW:**
 - The majority of the stakeholders support the JRC proposal **not to extend the scope to mixed CDW** (mix of mineral and other CDW including e.g. plastics, wood, metals etc.).
 - SH not fully agreeing, have based their argumentation on the following aspects:
 - Potentially, a significant source is excluded when source separated demolition is not possible or feasible.
 - Current treatment processes (incl. sorting), allow the separation of mixed CDW. The only criteria should be that the mineral content must be greater than the non-mineral content.
 - Techniques for sorting non-mineral CDW fractions are available and will be increasingly used. Advanced technologies such as e.g. air flow separation can effectively separate mineral and non-mineral components.
 - Many modern construction materials, such as bricks filled with insulation, cannot be separated directly on-site. These mixed materials inevitably end up in recycling facilities.
 - Focus shall be on the output material, not the input materials.



¹ may contain **incidental quantities** of physical impurities such as soils, glass, wood, plastics, rubber, metal

² contains **relevant quantities** of physical impurities due to intentional mixing

³ (mixed) mineral CDW with properties to **achieve output quality requirements**

⁴ excavated soil mainly consisting of mineral fractions (e.g. sand, gravel, stones, rocks) suitable for recycling

Sources of mineral CDW under scope

Arguments from first proposal

- Certain sources of CDW could be restricted to avoid negative impacts.
- A list with examples for restricted source was shared (e.g. CDW from the (petro-)chemical - or extractive industry, selected CDW from power plants).

SH feedback and national EoW screening

- Add manufacturing waste (e.g. failed batches, broken finalised products) → Clean waste streams, separated at source and are already used by recyclers.
- Only a couple stakeholder support that **no restrictions** are needed.
- Recycled aggregates have to fulfil clear technical requirements (e.g. EU product standards). Thus, recycler apply strict CDW acceptance and no additional requirements shall be applied.
- CDW from nuclear power plants: a distinction should be made between components of nuclear power plants that are potentially radioactive and those that are not (e.g. offices).
- National EoW: MS do not limit of source; some MS allow 'stony' waste from other sources than C&D, e.g. from garden & park waste (incl. cemetery) (FR, IE, UEPG) and also manufacturing waste (IE, IT).

Sources of mineral CDW under scope

JRC proposal 'old':

Non-hazardous mineral CDW from construction work, including buildings and civil engineering works, from **all economic activity sectors** shall be allowed as input to reach EoW.

Furthermore, **mineral CDW generated at every stage of the life cycle of a building and civil engineering work**, including construction, maintenance, renovation, refurbishment, deconstruction and demolition shall be under scope.



JRC proposal 'new':

Non-hazardous waste from the production of mineral construction materials and non-hazardous mineral CDW generated at every stage of the life cycle of a building and civil engineering work, including construction, maintenance, renovation, refurbishment, deconstruction and demolition shall be under scope.

Non-hazardous mineral CDW from all economic activity sectors shall be allowed as input to reach EoW.

Recycling technologies under scope

SH feedback and national EoW screening

- The two aspects highlighted by SH were:
 - 1) Important to leave room for recycler to plan and adapt their plant depending on the type and quality of input material available and output material demanded by the market.
 - 2) Leave room for innovation of new technologies.
- National and industry EoW criteria **do not define or restrict recycling technologies** to be used for CDW recycling.

JRC proposal 'old':

JRC proposes a technology neutral approach and to include all recycling technologies under scope.

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JRC proposal 'new':

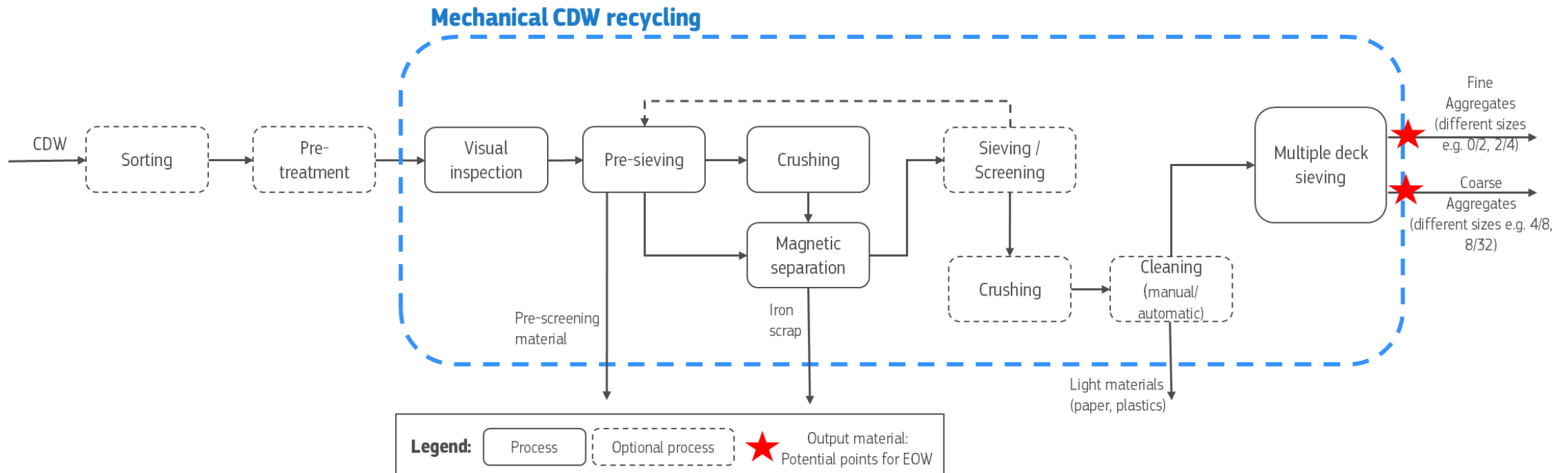
JRC proposes a technology neutral approach and to **include all mechanical recycling technologies under scope.**

Point of EoW

SH feedback and national EoW screening

- **Majority of the SH agree** to set the point of EoW **after a recycling operation is completed** and the material has **reached the form of an aggregate**.
- In accordance with the WFD and UEPG guidelines, the EoW status should only be granted to materials that have undergone treatment through a **qualified recycling process**, followed by rigorous quality assurance measures.
- Some SH argue that in certain cases, EoW status could be attained earlier, such as **after source separation at the CD site** for specific fractions like aggregates that can be used without further treatment.
- Some SH argue that EoW status should only be achieved when a RA is **finally used for a specific purpose** (e.g. in the mixture of concrete or as road base). This ensures quality assurance, regulatory compliance, and responsible utilisation.
- **Flexible Point of EoW:** EoW status can be achieved whenever the formed aggregates from CDW meet the physical, chemical and technical requirements for re-use in specific applications. It is not always necessary to extensively treat CDW waste to achieve safe and good quality aggregates.

Point of End-of-Waste



JRC proposal 'new':

The EoW status should be granted after a recycling operation has been **completed**, at the point at which the output material is in the form of **recycled aggregates**.

Intended use

First JRC proposal

- EoW status can only be achieved if the recycled aggregates **are again used in construction works** (construction material for buildings and other infrastructure).
- The use the recycled aggregates for purpose such as reclamation in excavated areas or for engineering purposes in landscaping (see definition of backfilling in WFD) is not considered as intended use to reach EoW.

SH feedback and national EoW screening

- SH are **divided** about the proposed intended use. About **half of SH agree** with the JRC proposal and the rest propose **additional or different intended uses**.
- SH emphasis **on landscaping and backfilling applications** due to common practice in many MS. Argument: Geotechnical and chemical criteria are laid down in standards.
- Other uses: Raw material for cement industry and geopolymers; additives for substrates for green roofs (e.g. drainage systems, water filtration); tennis courts and plant substrate.
- **National EoW**: IT: RA for environmental restoration, filling, backfilling, fines for cement production. IR: intended uses are e.g. temporary or permanent areas of hard-standings or groundcover, general fill in uses (void filling, raising ground levels, berm construction, piling mats).

Backfilling WFD vs construction works

Waste Framework Directive:

Article 3, 17a: *'Backfilling means any recovery operation where suitable non-hazardous waste is used for purposes of **reclamation in excavated areas** or for **engineering purposes in landscaping**.*

Typical backfilling operations include e.g.

- reclamation of quarries or pits,
- rehabilitation of mining areas,
- landfill rehabilitation,
- construction of landscaping heaps,
- reclamation of industrial sites

Can only be done with **WASTE** materials and is **NO recycling** operation !

Construction works typical terminology:

In construction, "backfilling" is often used to refer to a **crucial process** that involves **the strategic placement** and **compaction** of soil or other materials in **excavated areas**. Purposes:

- structural support
- drainage improvement
- aesthetic and functional restoration:

Typical "backfilling" operations include e.g.

- trench "backfilling"
- foundation "backfilling"
- road base construction as a base course for lineal infrastructure
- retaining wall "backfilling" and embankment construction to providing a stable slope.

Point of EoW and intended use

1) The JRC proposes that EoW status can only be achieved after sorting, pre-treatment and recycling of the mineral CDW fraction **under scope have been completed**.

2) EoW status is granted at the moment at which the **output material of the recycling operation**

- is a recycled aggregate **ready for use for unbound application or ready for use in bound construction materials**;
- unbound and bound recycled aggregates are exclusively used for **construction works** (buildings and other infrastructure)*;
- complies with Regulation (EC) No 1907/2006 (REACH) and Regulation (EC) No 2019/1021 (POP)
- complies with Regulation (EU) No 305/2011 and Regulation No 2024/3110 (CPR);
- complies with the full set of EoW criteria.

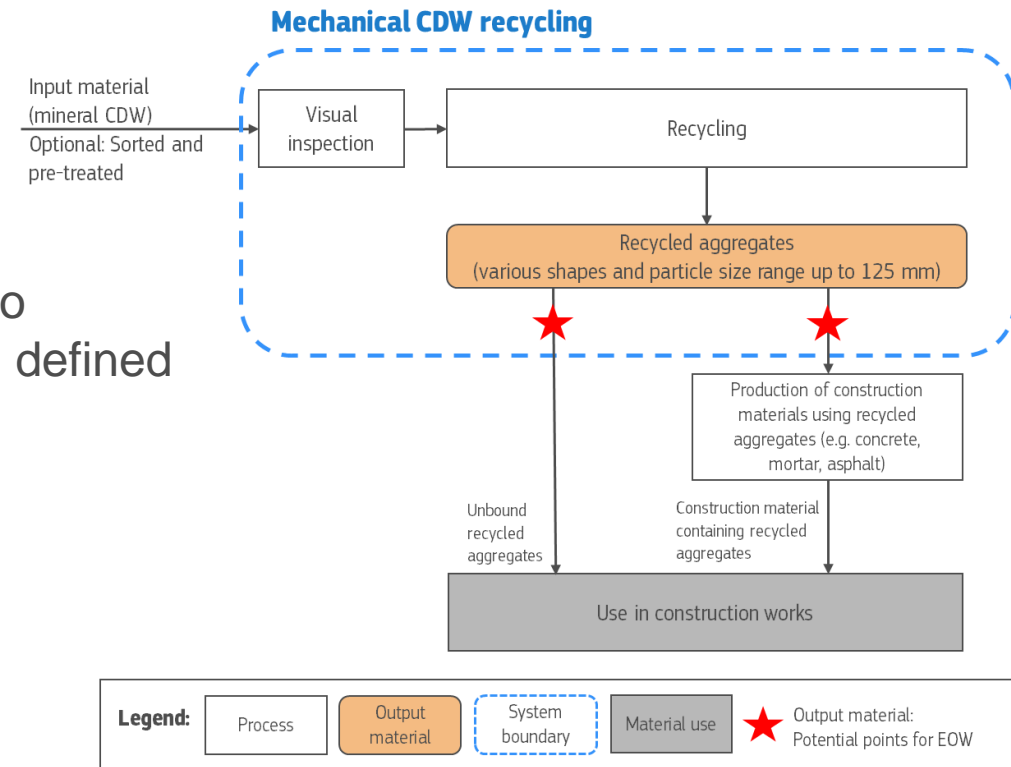
*This includes the use of recycled aggregates as (back)filling material, when (back)filling fulfils a **certain technical purpose** (e.g. levelling, structural such as load distribution, reduction of settlement and shifting, drainage).

Point of EoW and intended use

3) Considering that the shape and size of the incoming mineral CDW is modified based on the specific requirements of the intended use, the point of EoW is not linked to a specific particle shape, texture or size range, with the exception that the size of the particles do not exceed 125 mm.

4) It is pointed out that the user of the output material will have to handle it as waste, if

- it is discarded;
- it is intended for any other purpose than incorporating into **construction work**, such as for backfilling operations as defined in the WFD (Article 3,17a).



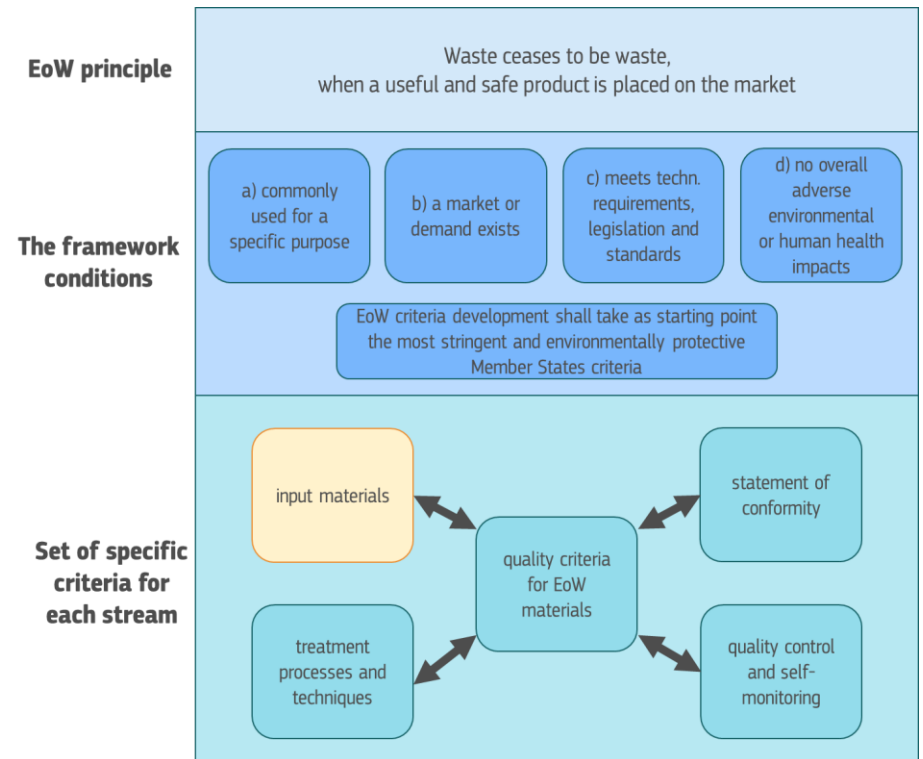
Q&A | Scope - Discussion



Input material

Requirements on input materials

Approach: imposing limitations or defining conditional requirements for specific input materials that could disrupt the recycling process or could compromise the quality of the output material.



Criterion 1.1

JRC assessment

Hazardous and POP containing mineral CDW

- Stakeholders: majority of the SHs argue that contaminated materials should always be excluded from the material cycle and harmful effects of CDW on the environmental and human health must be avoided at all costs; a market can only be built, if there is trust in the recycled products; the customer must be sure of the high environmental quality of the product bought; the **treatment of CDW with hazardous properties is not common** in the CDW recycling industry (dominant mechanical recycling); only a few stakeholders have mentioned processes of decontamination for CDW (e.g. washing steps, thermal treatment to destroy tar or even asbestos).
- JRC assessment: hazardous waste is only a small part of all CDW; exclusion of hazardous CDW has only a minor impact on the recycling rate; importance of clean circular economy; national EoW regulation **allow only non-hazardous waste codes or restrict hazardous CDW and some also POPs** (e.g. AT).

Criterion 1.1

JRC proposal

Proposed end-of-waste criteria	Proposed self-monitoring requirements
<p>Mineral CDW classified as hazardous waste (Annex III of the Directive (EC) No 2008/98 (WFD)) shall not be used as input.</p> <p>Mineral CDW containing POP concentrations above the limit values pursuant to Annex IV to Regulation (EU) No 2019/1021100 on persistent organic pollutants (POPs) shall not be used as input.</p>	<p>Acceptance control by visual and organoleptic inspection and analysis of accompanying documentation of all incoming waste received shall be carried out by qualified staff who are trained on how to recognise input materials restricted under this criterion.</p> <p>The operator of the treatment facility shall apply appropriate control measures to detect hazardous waste and other substances restricted under the POP Regulations. The control measures shall be documented under the quality management system.</p> <p>The operator of the treatment facility shall keep track of the mineral CDW used as input material (date of receipt, supplier, origin, type and quantity) and the CDW streams that have been rejected (date of rejection, supplier, origin, type, quantity and reason for rejection). The data shall be recorded under the quality management system.</p>

Criterion 1.2

JRC assessment

Minimum requirements for input materials

- Stakeholders: source separated mineral CDW are the preferred input fractions due to its purity, albeit incidental quantities of physical impurities (such as soil, plastic, wood, metal, glass) may be present in the input material; also mixed CDW fractions have been reported by SHs as an important input fraction and obviously the presence of non-targeted mineral and non-mineral materials is much higher than in source separated CDW.
- JRC assessment: scope is extended to mixed CDW, CDW with physical impurities that cannot be used directly as an input material by the recycling operation; this CDW need to undergo sorting and/or appropriate pre-treatment.

Criterion 1.2

JRC proposal

Proposed end-of-waste criteria	Proposed self-monitoring requirements
<p>CDW and manufacturing waste from source separated collection or after sorting and pre-treatment shall only contain physical impurities (e.g. soil or parts of soils (peat, clay, silts, sand), wood, glass, plastics, rubber, metals) that can be removed by the recycling operation to an extent to fulfil the requirements of the output material.</p>	<p>Acceptance control by visual and organoleptic inspection and analysis of accompanying documentation of all incoming waste received shall be carried out by qualified staff who are trained on how to recognise input materials restricted under this criterion.</p> <p>The operator of the treatment facility shall apply appropriate control measures to physical impurities. The control measures shall be documented under the quality management system.</p> <p>The operator of the treatment facility shall keep track of the mineral CDW used as input material (date of receipt, supplier, origin, type and quantity) and the CDW streams that have been rejected (date of rejection, supplier, origin, type, quantity and reason for rejection). The data shall be recorded under the quality management system.</p>

Criterion 1.3

JRC assessment

Restrictions of input materials

- Stakeholders: provided certain wastes and substances that should be restricted.

- JRC assessment: Absolut restriction of waste being radioactive or suspected to be radioactive; CDW containing hazardous substances does not necessarily result in a hazardous classification if concentrations are below regulated thresholds; MS limit certain substances or waste fractions that should either be avoided as far as possible or even shall not be contained in the input to a recovery facility; deleterious materials can be considered deleterious under certain circumstances.

AT	IE	NL
In particular, contamination with the following substances or waste must be avoided as far as possible :	Wastes inputs shall not contain the following:	Input material to be processed into recycling aggregates does not contain the following substances and materials:
<ul style="list-style-type: none"> a) asbestos; b) artificial mineral fibres; c) (H)CFCs (e.g. in extruded polystyrene (XPS), polyurethane (PU)); d) PAHs (e.g. tar); e) PCBs; f) Phenols; g) mineral oil; h) gypsum; i) magnesite and cement-bonded wood wool insulation boards; j) cement-bonded wood chip concrete; k) fire protection boards and l) artificial marble. 	<ul style="list-style-type: none"> a) asbestos; b) epoxy resin; c) paint or other similar visible treatments; d) municipal waste; e) granulated tyre materials; f) bio-waste; g) waste originated from electrical and electronic equipment; h) persistent organic pollutants; i) coal tar; j) invasive species; k) waste generated arising from remediation of deleterious materials e.g. pyrite remediation, or defective concrete block remediation etc.; and l) any other substance or material identified as unsuitable by the Agency. 	<ul style="list-style-type: none"> a) asbestos and asbestos-containing or suspected asbestos-suspected materials; b) tar asphalt; c) roofing materials; d) domestic waste; e) gypsum, soil, soot and wood to an extent that could endanger the quality of recycling granules.

Criterion 1.3

JRC proposal

Proposed end-of-waste criteria

- 1) Mineral CDW to be used as input may originate from any source under scope.
- 2) The following CDW shall not be used as input material:
 - a) non-mineral CDW and mineral CDW fractions predominantly consisting of materials not under scope (e.g. gypsum, glass);
 - b) mineral CDW and manufacturing waste known or suspected to be radioactive or containing asbestos.
- 3) Mineral CDW shall not contain visually detectable:
 - a) artificial fibres (e.g. rock or glass wool);
 - b) mineral oil;
 - c) paint of similar visible treatments;
 - d) coal tar;
 - e) bitumen and;
 - f) deleterious constituents with adverse effect on the output material

Proposed self-monitoring requirements

The operator of the treatment facility shall define appropriate risk management measures to identify the restricted input materials.

The operator of the treatment shall further analyse (if needed) and evaluate the quantity and context in which deleterious constituents have adverse effect on the output material for a specific use, as well as document it in the quality management system.

Acceptance control by visual inspection and analysis of accompanying documentation of all incoming waste received shall be carried out by qualified staff who are trained on how to recognise input materials restricted under this criterion.

The operator of the treatment facility shall keep track of the mineral CDW used as input material (date of receipt, supplier, origin, type and quantity) and the CDW streams that have been rejected (date of rejection, supplier, origin, type, quantity and reason for rejection). The data shall be recorded under the quality management system.

Q&A | EoW criteria: Input material



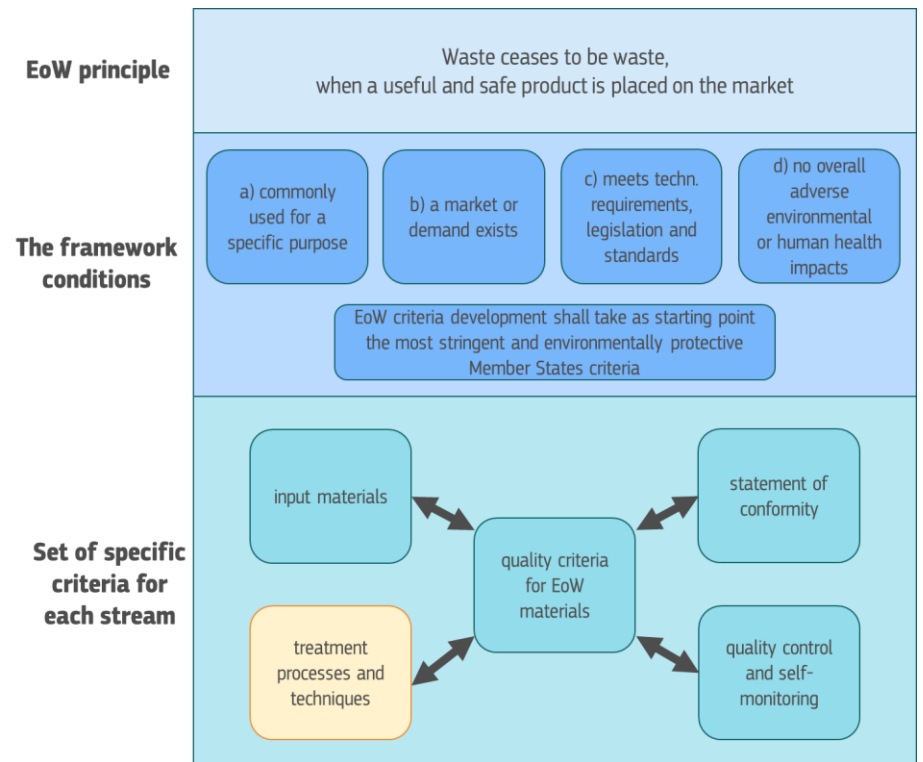
Coffee Break (15 min, until 11:20)



Processes and techniques

Requirements on processes and techniques

Approach: defining minimum treatment conditions to reach an output material with quality comparable to virgin material and suitable quality.



Criterion 2.1

JRC assessment

Storage of input and output materials

- Stakeholders: consistent emphasis on separating input materials to ensure better quality control and prevent contamination; importance of separate storage for different types of materials, particularly concrete waste, concrete waste with other mineral fractions (bricks, tiles, stones), and mixed CDW waste; materials that are suspected of containing hazardous substances (e.g. asbestos) are stored in separate and sealed area pending further analysis; references to Factory Production Control (FPC) systems, that different input and output materials must be stored separately to prevent contamination; mixing to 'dilute' contaminants must be avoided.
- JRC assessment: IT defines the separate storage of CDW that does not comply with the input criteria in a dedicated area, to prevent mixing with other waste not permitted as input material; separate storage is the best approach to ensures better quality control and to prevent contamination.

Criterion 2.1

JRC assessment

Storage of input and output materials

- Stakeholders: output materials are separately stored based on material type, different kind of recycled aggregates (e.g. asphalt, concrete, mixed), different quality specifications (e.g. granulometry, frost resistance classes), and intended uses and/or environmental classes; separate storage helps to maintain traceability and ensure quality compliance; different output materials with same technical requirements could be stored together; storage on even, stable and usually a non-permeable surface including water collecting system.
- JRC assessment: some MS (e.g. FI, IE and IT) demand a separate storage from output material compliant with EoW criteria and other output materials; IE limits the storage time to EoW output material to 24 month. After that, the recycled aggregates shall be deemed waste, unless re-testing demonstrates EoW compliance;

Criterion 2.1

JRC proposal

Proposed end-of-waste criteria	Proposed self-monitoring requirements
<p>Mineral CDW waste eligible to be used as input material shall, once received by the operator of the treatment facility, be stored separately from non-eligible input materials to avoid contamination.</p> <p>Output materials that comply with the EoW criteria shall be stored separately from any waste material not complying with the EoW criteria.</p> <p>The output material shall be stored and handled in such a way that it does not affect the material quality.</p>	<p>The procedures carried out to fulfil the storage requirements laid down in this criterion shall be documented under the quality management system.</p>

Criterion 2.2

JRC assessment

Treatment steps (sorting, pre-treatment, recycling)

- Stakeholders: **Sorting**: SH emphasize sorting as the first step in preparing the input material and mention typical steps such as manual- and mechanical sorting with excavators or shovels; visual inspection to remove undesired components like wood, plastic, metals. **Pre-treatment**: pre-crushing with pneumatic hammers, crushers, shares, or hydraulic breakers, to break down large pieces into smaller, manageable sizes; pre-treatment processes vary depending on the type of waste, the intended use and local regulations; some facilities do more extensive sorting or pre-crushing, while others may only handle minimal pre-treatment; advanced methods such as IR and density separation are also applied).
- JRC assessment: Applied sorting and pre-treatment steps depend on many factors (e.g. input material); any attempt to define a complete set of sorting and pre-treatment steps would be incomplete and would not do justice to possible changes due to innovation; reference to input material: *‘sorting and/or appropriate pre-treatment shall be applied to an extent that recovered (mixed) mineral CDW fraction can be used as input material to a recycling operation.’*

Criterion 2.2

JRC assessment

Treatment steps (sorting, pre-treatment, recycling)

- Stakeholders: SH were not consulted about criteria, but further research and plant visits indicated that the technologies used are generally similar across various regions and plants, with variations based on local requirements and material types.
- JRC assessment: actual recycling processes employed for mineral CDW often exhibit similarities; yet can vary significantly in response to differences in input material characteristics (e.g. source separated CDW, mixed mineral CDW) and market-specific requirements; **emphasis of EoW criteria** lies in **ensuring the quality of the output material**, rather than the source of the mineral CDW or the specific treatment processes and techniques employed.

AT, CZ, HR, LT and NL do not specify any requirement on treatment steps. IE, FI: all treatment steps need to be completed and impurities are removed to an extent to fulfil the criteria in the dedicated legislation. IE lists possible treatment steps, however does not impose them as mandatory. IT defines minimum treatment steps with the option of further treatment steps.

Criterion 2.2

JRC assessment

Treatment steps (mixing and blending)

- Stakeholders: in practice, separately collected and thus cleaner mineral CDW are processed separately from e.g. mixed mineral CDW.
- JRC assessment: separate processing of cleaner mineral CDW was observed during plant visits; various mixed mineral CDW from different sources are processed together with the purpose of treatment optimisation.
- JRC opinion: intentional blending can be tolerated with the purpose of treatment optimisation, but not if done with the sole purpose of dilution; the treatment steps applied should be able to process the input material to such an extent that the product quality requirements are met; during the treatment of CDW, no mixing with natural aggregates shall be allowed, as the recycled aggregate shall comply with EoW requirements before mixing with natural aggregates.

Criterion 2.2

JRC proposal

Proposed end-of-waste criteria	Proposed self-monitoring requirements
<p>The recycling operation shall include all treatment steps needed to prepare the output material to be used for unbound application and ready for use in bound construction materials.</p> <p>The requirements on product quality shall be achieved by the waste input materials and the applied treatment steps and not by mixing with natural aggregates.</p>	<p>The sequence of sorting, pre-treatment and recycling steps shall be documented under the quality management system.</p>

Q&A | EoW criteria: Processes and techniques



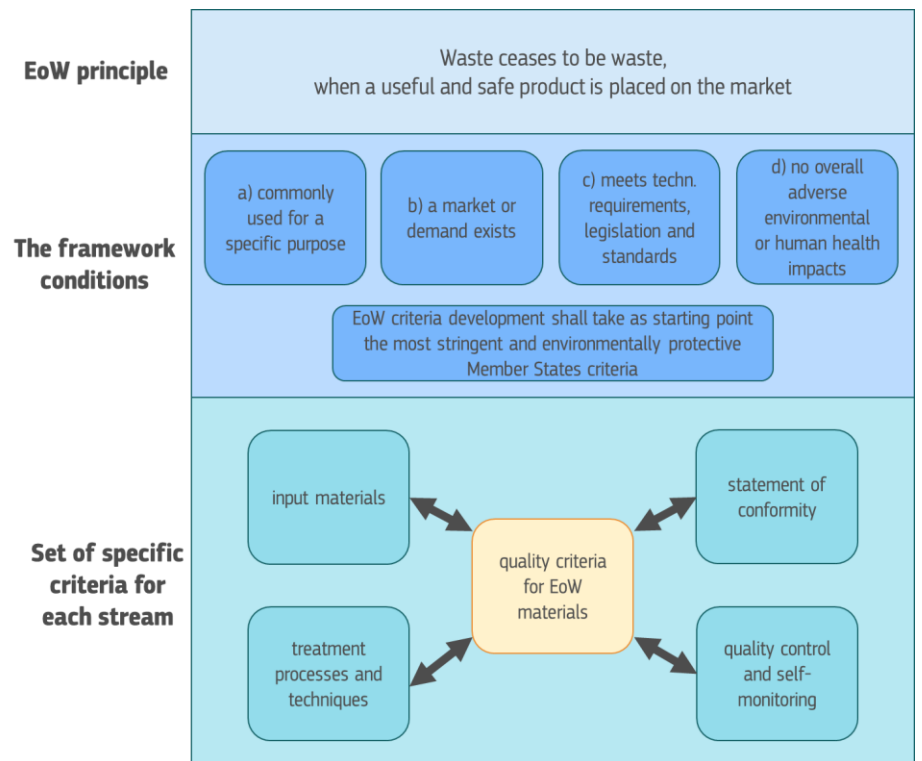
Session 4

End-of-waste criteria (Part 2)

Product quality

Requirements on product quality

Approach: defining technical and legal requirements the output material needs to comply with, to ensure it can be used to substitute primary raw materials without posing any risk to human health and the environment.



Criterion 3.1

JRC assessment

Compliance with legislation

- Stakeholders: Consider latest CPR (Regulation (EU) No 2024/3110), as well as Regulation (EU) No 305/2011 for the marketing of construction products (CE marking / CE conformity); REACH is not applicable for recycled mineral materials, as RA are “articles” and therefore not considered under REACH. RA are determined by shape and physical properties and not by chemical properties;

Certain legislation were only mentioned by single SHs: Ecodesign for Sustainable Products Regulation (ESPR; Regulation (EU) No 2024/1781); Energy Performance of Buildings Directive (EPBD; Directive (EU) No 2024/1275); Mutual recognition of goods (Regulation (EU) No 2019/515); Taxonomy Regulation (Regulation (EU) No 2020/852); Critical Raw Materials Act (Regulation (EU) No 2024/1252); European Waste Shipment Regulation (EVOA, Regulation (EU) No 2024/1157); Directive on Integrated Pollution Prevention and Control (IPPC; Directive (EC) No 2008/1).

Criterion 3.1

JRC assessment

Compliance with legislation

- JRC assessment:
 - **CLP**: To place a substances and mixtures on the market, they have to be classified, labelled and packed according to the CLP Regulation. To ensure a high level of protection of human health and the environment, RA placed on the market shall demonstrably fulfil not be classified as hazardous.
 - **REACH**: JRC is aware of the ongoing discussion to possibly subject RA to REACH. At the time the workshop there is no definite conclusion on this. Regardless, the JRC proposes that the output material should meet certain quality requirements on substances (including SVHC) set out in REACH. This is in line IE and LT.
 - **POPs Regulation**: This regulation restricts the use of POPs in both chemical products and articles and thus recycled aggregates shall comply. Single MS restrict certain POPs.
 - **CPR**: has been taken into account by the JRC from the very beginning (previous and latest version of CPR). Output material shall comply with CPR.
 - **Other legislations**: ESPR and other EU legislation mentioned only once by stakeholders are considered not relevant for EoW criteria.

Criterion 3.1

JRC proposal

Proposed end-of-waste criteria

The output materials from the recycling process shall demonstrably fulfil the following legal requirements:

- (a) the output material resulting from the recycling operation shall not be classified as hazardous pursuant to Article 3 of and Annex I to Regulation (EC) No 1272/2008 (CLP);
- (b) substances on their own or in mixtures, resulting from the recycling operation comply with Regulation (EC) No 1907/2006 (REACH), including but not limited to compliance with Article 56 setting out authorisation provisions for uses of substances listed in Annex XIV to REACH and for their placing on the market as well as the conditions laid down in Article 67 for the manufacture, placing on the market and use of substances restricted in Annex XVII to REACH;
- (c) substances on their own or in mixtures, resulting from the recycling operation meet the provisions limiting the manufacturing, placing on the market and use of persistent organic pollutants (POPs) pursuant to Article 3 of and Annex I to Regulation (EU) No 2019/1021;
- (d) When placed on the market, the obligations in relation to the output material under Regulation (EU) No 305/2011 or Regulation (EU) 2024/3110 (CPR), whichever applies, are fulfilled

Proposed self-monitoring requirements

The assessment of compliance with Regulation (EC) No 1272/2008 (CLP), Regulation (EC) No 1907/2006 (REACH), Regulation (EU) No 2019/1021 (POPs) and Regulation (EU) No 305/2011 as well as Regulation (EU) No 2024/3110 (CPR) has to be concluded from a qualitative and quantitative characterisation of the output recycled aggregates in the consignment. Relevant exemptions laid down in the REACH, CLP and POP Regulations shall apply.

At appropriate intervals subject to review if significant changes in the operating process are made, representative samples of the output recycled aggregates shall be analysed to measure the concentration and nature of hazardous substances and substances restricted under the REACH and POP Regulations, as indicated in the criterion.

The appropriate frequencies of monitoring by sampling shall be established taking into account the following factors:

- (1) the expected pattern of variability of the output recycled aggregates composition (for example as shown by historical results);
- (2) the inherent risk of variability in the quality of the waste used as input for the recycling operation and any subsequent processing, for instance the higher average content of CDW containing hazardous substances and substances restricted under the REACH and POP Regulations;
- (3) the inherent precision of the monitoring method; and
- (4) the proximity of results to the concentration thresholds that render the material hazardous or restrict its commercialisation.

The procedure and method used to comply with requirements of the CLP, REACH, POP and CPR Regulations shall be documented under the quality management system.

Criterion 3.2

JRC assessment

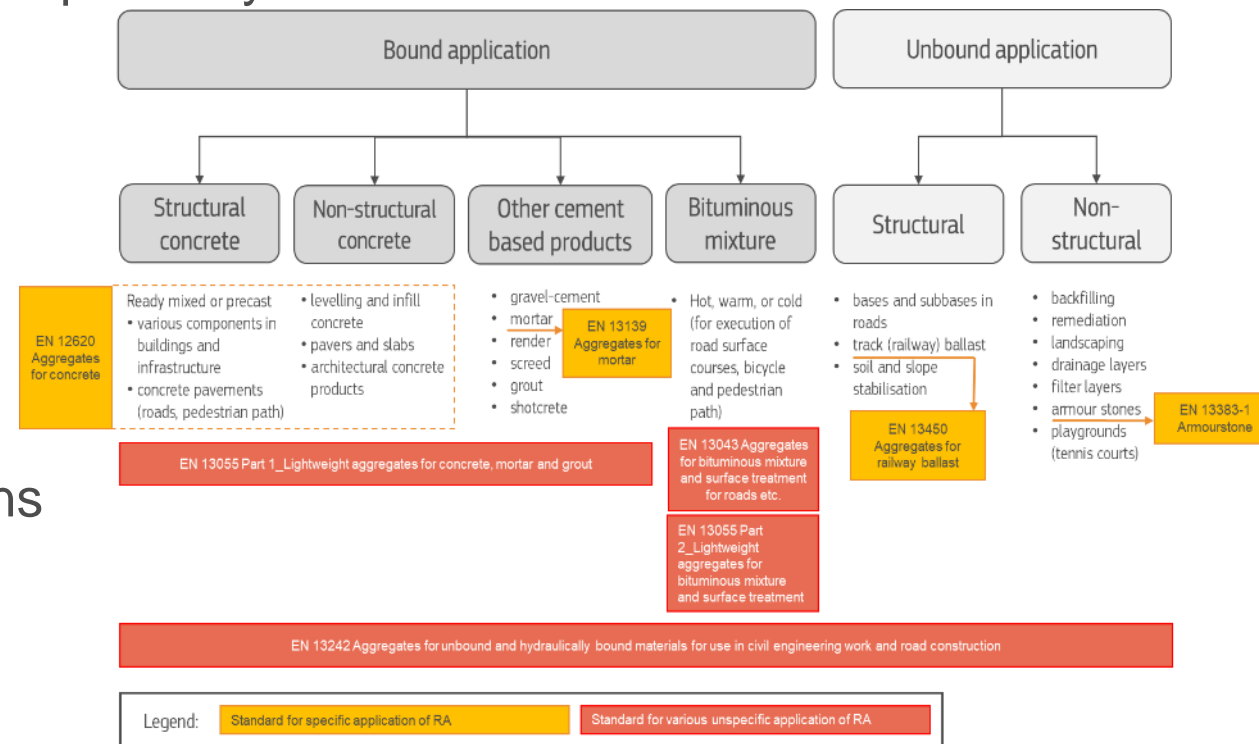
Compliance with standards, customer and industry specifications

- Stakeholders: the output material should comply with the performance criteria described in the relevant EN standards and specifications, appropriate to the intended use of the aggregate; RA are usually produced in accordance with EN 12620 and EN 13242, for concrete and unbound and hydraulically bound materials, respectively.

- JRC assessment: no certainty that the currently available standards do cover all the possible applications within the scope;

mandatory requirements on standards are complemented by industry specifications;

No reference to EN standards or specifications – it would inevitably be non-exhaustive; furthermore standards and specifications are subject to periodic updates.



Criterion 3.2

JRC proposal

Proposed end-of-waste criteria	Proposed self-monitoring requirements
<p>The output materials from the recycling process shall demonstrably fulfil all legal requirements and shall comply with customer specifications, industry specifications or technical standards for its intended specific use, including the cross-referenced standards.</p>	<p>Qualified staff shall verify that each batch in the consignment complies with the legal requirements and appropriate specifications or standards. The frequency of verification shall be defined in accordance with the characteristics of the CDW stream treated.</p>

Criterion 3.3

JRC assessment

Threshold for constituents and asbestos

- Stakeholders: constituent materials are an important quality parameter since their presence can affect the properties of RA for a specific use; the presence of materials classified as other materials (i.e. **X**) or floating materials (i.e. **FL**) is detrimental, since they are more porous, rougher and weaker than stone, and can affect the stiffness of the material;
- JRC assessment: the presence of bituminous materials, other materials (i.e. **X**) and floating materials (i.e. **FL**) requires certain attention for the development of EoW criteria; certain MS limit the presence of **FL** (<5 cm³/kg; AT*, FI, FR, IT) and **Rg+X** (<1 % by mass; AT, FI, FR, IE, IT, NL);

Asbestos and bituminous are not allowed as input material, thus JRC proposes strict approach in the output material; MS restrict **asbestos** by limiting as much as possible the possibility of its presence in the input material but also setting limit values (e.g. **100 mg/kg DM**; IT, NL); MS do not explicitly restrict **bituminous materials** (Rb), but following the strict approach JRC defines a limit of **< 0.1 % by mass**;

Self-monitoring requirement: sampling

JRC assessment

Sampling procedure – Frequency of sampling

- Stakeholders: sampling should be done according to applicable legislation and EN standards specific for recycled aggregates; SHs mentioned different frequencies based on production days (e.g. every 5 or 10 days, half-yearly or annually); for environmental chemical testing, SH sample depend on the produced volume or mass (e.g. every 3000 m³ or less, each batch or every 500, 1000, 2000 t, 3000 t produced).
- JRC assessment: Standards define testing intervals for recycled aggregates that are relevant for technical aspects; within standards, different sampling intervals are defined depending on the specific use of aggregates; different approaches on taking samples and definition of representative samples in MS; IE: each batch or every 2.000 t produced, whichever is lesser; IT: each batch; FI: every 10 000 tonnes or a crashing batch, whichever is the lesser.

JRC proposal:

Provide guidance in text and elaborate on minimum sampling procedure in self-monitoring requirements for the output material criteria that require sampling
(see criterion 3.3 and 3.4).

Self-monitoring requirement: sampling

JRC assessment

Sampling procedure - Representative sample

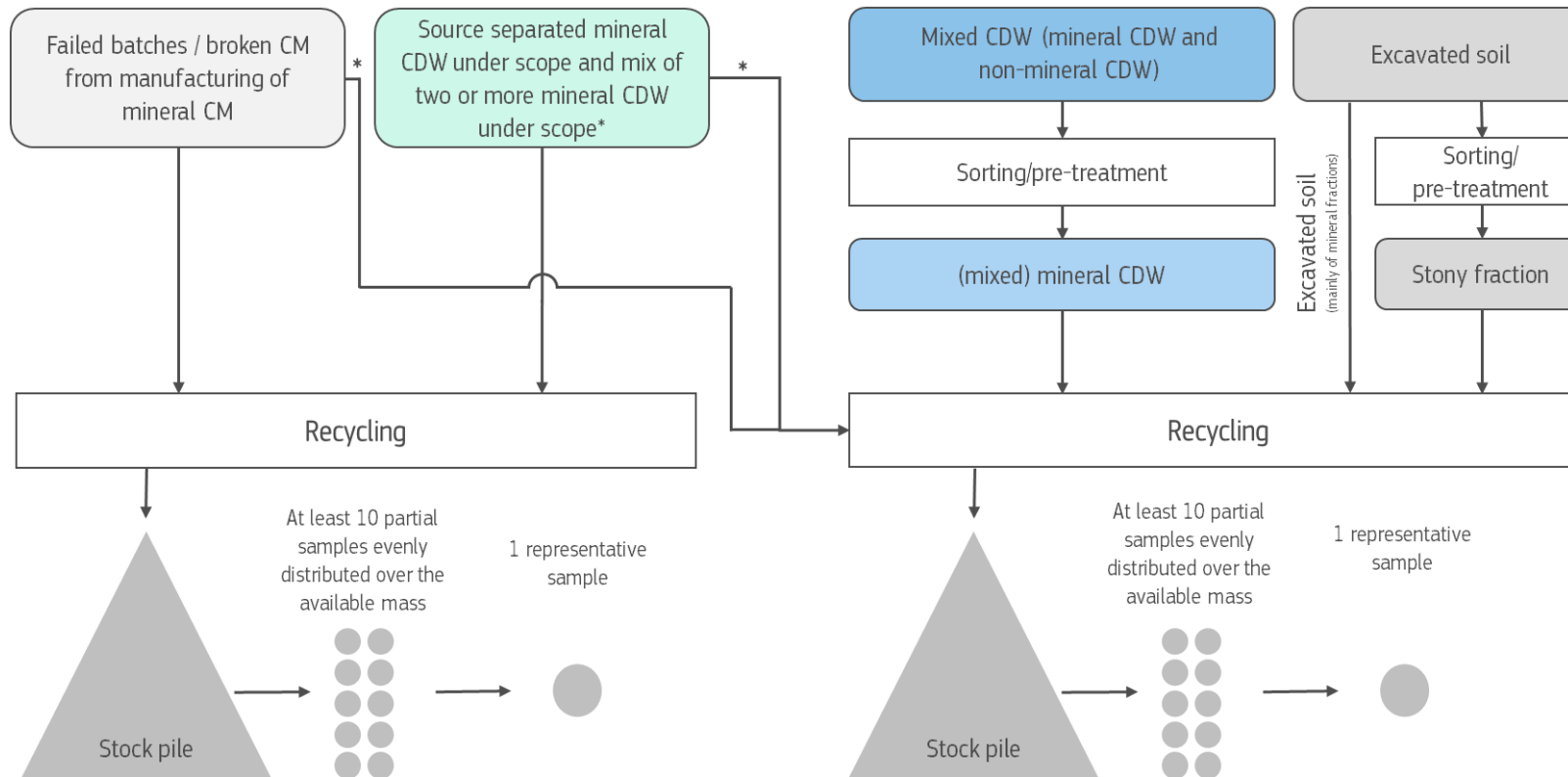
- Stakeholders: no SH consultation in first workshop
- JRC assessment: Standards such as EN 932-1 provide statistical methods. IT and NL refers to this standard for sampling recycled aggregates regarding technical characteristics. Different approaches in MS: a representative sample comprises of 3, 10 or 20 partial samples. The partial samples should be taken either from a produced batch or directly from the continuous production stream.

JRC proposal:

Provide guidance in text and elaborate on representative sample in self-monitoring requirements for the output material criteria that require sampling and a representative sample **(see criterion 3.3 and 3.4)**.

Self-monitoring requirement: sampling JRC proposal

(Minimum) sampling procedure and representative sample



One representative sample from each batch of the recycled aggregate produced, or every 5 000 t produced, whichever is the lesser.

One representative sample from each batch of the recycled aggregate produced, or every 2 000 t produced, whichever is the lesser.

* In case manufacturing waste and separate collected mineral CDW with lower risk of pollution are mixed with the input materials with higher risk of pollution, the sampling approach for input material with higher risk shall be applied.

Self-monitoring requirement: testing JRC assessment

Testing of representative samples: constituents and asbestos

- Stakeholders: Specific information was not requested in the SH consultation.
- JRC assessment:
 - For constituent materials: EN 933-1 classifies the constituents of an RA in terms of the mass proportion of the constituents.
 - For asbestos: several methods appear as possible – microscopic methods, hyperspectral imaging or even infrared. ISO 22262-1 specifies methods for sampling bulk materials and identification of asbestos in commercial bulk materials. ISO 22262-2 can be applied for industrial minerals and commercial products with mass fractions below 5%.

The JRC refrains from prescribing specific standards. Instead, the operator can freely choose which method to use to quantify asbestos, allowing for flexibility and adaptability to future updates and developments in standardisation.

Criterion 3.3

JRC proposal

Proposed end-of-waste criteria	Proposed self-monitoring requirements
<p>The output material shall comply with the following limit values:</p> <ul style="list-style-type: none">a) Asbestos: max. 100 mg/kg DMb) Floating materials (FL): $\leq 5 \text{ cm}^3/\text{kg}$;c) Glass and other materials (Rg+X): $\leq 1\%$ by mass;d) Bituminous material (Ra): $\leq 0.1\%$ by mass. <p>Compliance with output quality requirements shall be assessed no longer than 24 months prior to handing over the output material to the next holder.</p>	<p>For RA with a low risk of containing physical impurities, qualified staff shall take a representative sample from each batch, or every 5 000 t produced, whichever is the lesser.</p> <p>For RA with a high risk of containing physical impurities, qualified staff shall take a representative sample from each batch, or every 2 000 t produced, whichever is the lesser, is to be taken.</p> <p>A representative sample consists of 10 partial samples.</p> <p>Analysis have always to be performed by an accredited laboratory, using accredited test methods (where available).</p>

Criterion 3.4

JRC assessment

Threshold for contaminants (environmental parameters)

- Stakeholders: limits for possible environmental parameters are important. However, these do not appear in EN standards, but in legislation. There are no limit values set at EU level.
- JRC assessment:
 - A few MS have actually set (or proposed) environmental quality criteria for the use of RA in legislation (e.g. DE, SI (TECNALIA, 2021)), or even in national (AT, CZ, FI, FR, HR, IE, IT, NL) and regional (Basque Country (ES), Flanders (BE) and Wallonia (BE)) EoW legislation.
 - JRC proposed limits will be based on existing national EoW legislation that impose limit values for the use of RA (in the absent of a risk assessment at EU level). Most environmental quality criteria have been set using risk assessment models. However, some of them just followed the limit values for landfilling of inert waste.
 - The leaching-related criteria mainly include inorganic substances. These are complemented with limit values on total content of organic substances (since reliable leaching standards for organic substances have not yet been developed at EU level).

Criterion 3.4 Methodology

Leaching limit values

- Cluster datasets:
 - Group that includes bound uses and unbound-capped
 - Unbound uncapped (most restrictive one)
- Data cleaning:
 - One value per country when more than one data set is proposed
 - 90th percentile is calculated
 - When only one value per substance – a limit value is not proposed for that substance (exception for V and DOC in unbound uncapped)
 - When value for capped but not for uncapped – Value 5 times less

capped - beneath areas of hardstanding (e.g. hydraulically or bituminous bound layer), or whenever in areas of open ground below the aggregate there is a low permeability layer.

uncapped - without an overlying bound layer, or whenever in areas of open ground below the aggregate there is a high permeability subsoil.

17 datasets (10 countries)



Find detailed datasets in **Annex 18** of the draft technical proposal.

Proposal for leaching limit values 1/2

Parameter	JRC proposal		CINDERELA (TECNALIA, 2021)		EU Landfill (inert waste)
	Concrete, bound and unbound- capped	Unbound- uncapped	Unbound- capped	Unbound- uncapped	-
Arsenic (As)	0.9	0.5	0.9	0.5	0.5
Cadmium (Cd)	0.4	0.05	0.05	0.025	0.04
Chromium (Cr)	1.9	0.6	2	0.5	0.5
Copper (Cu)	15.4	6.9	3	0.5	2
Mercury (Hg)	0.1	0.01	0.01	0.005	0.01
Lead (Pb)	2.1	0.5	2.3	0.5	0.5
Nickel (Ni)	1	0.5	0.75	0.1	0.4
Zinc (Zn)	17.4	4.5	10	2	4
Antimony (Sb)	1.3	0.2	0.3	0.06	0.06
Molybdenum (Mo)	3.9	0.6	2.8	0.5	0.5
Vanadium (V)	2.4	1	-	-	-

Proposal for leaching limit values 2/2

Parameter	JRC proposal		CINDERELA (TECNALIA, 2021)		EU Landfill (inert waste)
	Concrete, bound and unbound- capped	Unbound- uncapped	Unbound- capped	Unbound- uncapped	-
Cobalt (Co)	2.1	0.4	-	-	-
Selenium (Se)	0.5	0.1	0.6	0.1	0.1
Barium (Ba)	29.4	23	25	5	20
Bromide (Br ⁻)	20	4	-	-	-
Fluorides (F ⁻)	56	12.1	55	10	10
Chlorides (Cl ⁻)	7750	944	5000	600	800
Sulphates (SO ₄ ²⁻)	9750	1270	6000	1000	1000
Cyanides (CN ⁻)	0.5	0.1	-	-	-
Ammonium (NH ₄ ⁺)	400	80	-	-	-
Nitrites (NO ₂ ⁻)	27	5.4	-	-	-
Dissolved Organic Carbon (DOC)	360	180	-	-	500

Criterion 3.4

Methodology

Total content

- Cluster datasets:
 - Unique group is done
- Data cleaning:
 - One value per country when more than one data set is proposed
 - 90th percentile is calculated
 - When only one value per substance – a limit value is not proposed for that substance

Find detailed datasets in **Annex 18** of the draft technical proposal.

Limitations

1. Recycling on **MSs conducted a risk assessment to propose the limit values**. However, generally, there is no information on the risk assessment model and the possible attenuations considered during the migration pathway.
2. **Restrictions on the use are different** across the different sets imposed in different MS and generally **not comparable**. Those restrictions have an influence on the strictness of values. More restrictions on uses usually lead to less strict values.
3. The **uses for which the RA are allowed are not very clear** in some cases and they might **differ from one Member State to the other**. Definitions are not harmonized.
4. **Some datasets are specific for input material** (e.g. concrete in Finland), and they might be different across the datasets. This might have an influence on the strictness of the limit values for certain substances. However, the risk assessment and thus the limit values should be independent of the nature of the source

Proposal for total content limit values

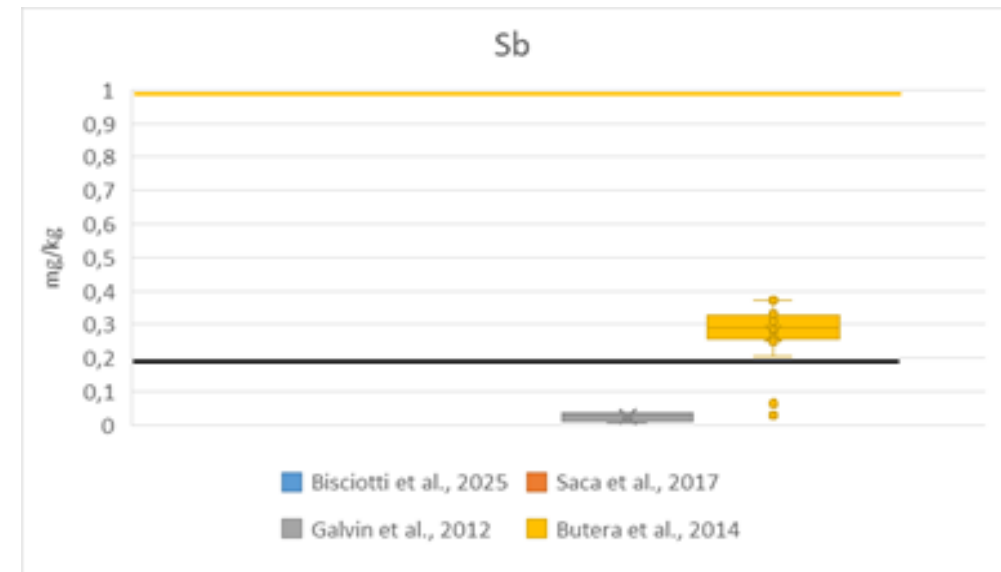
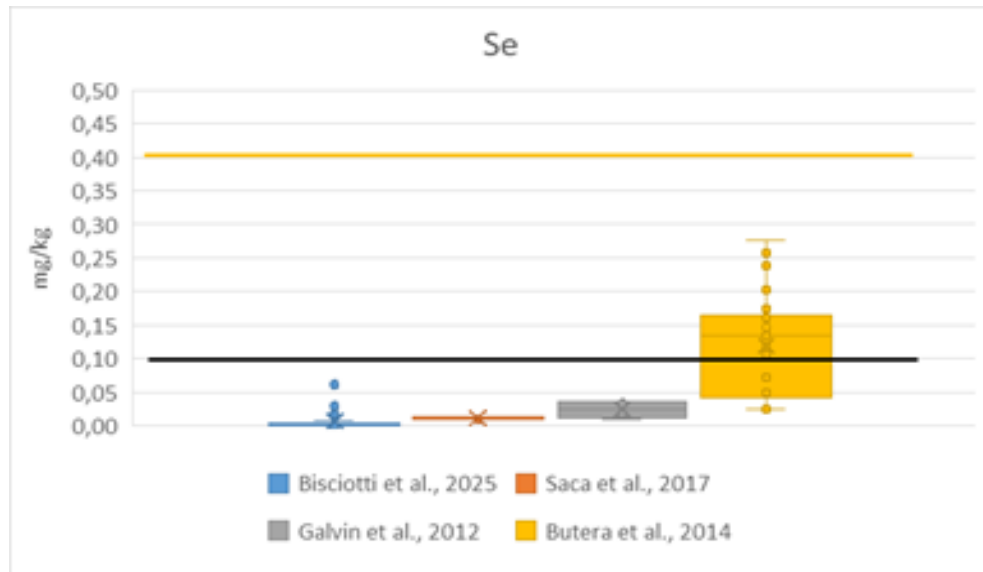
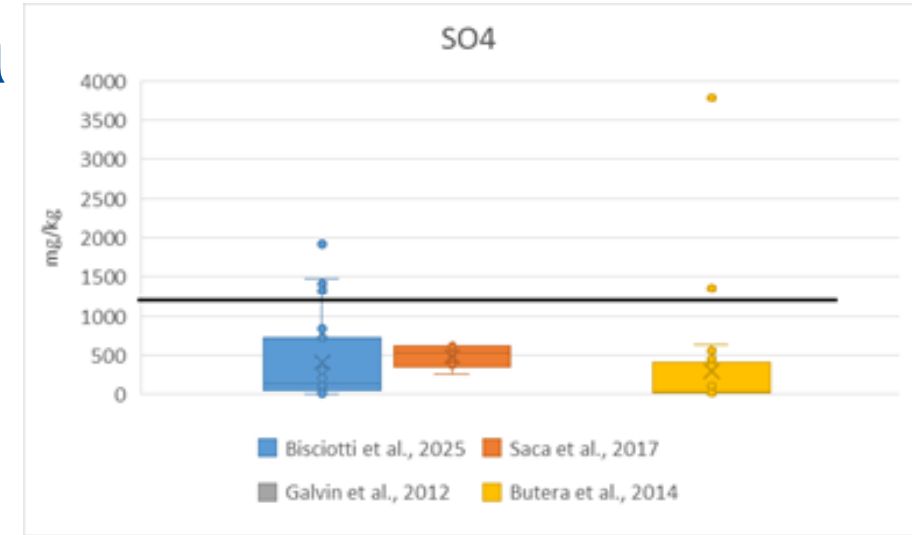
Parameter	Unit	JRC proposal	CINDERELA (Tecnalia, 2021)
Hydrocarbons (C10-C40)	mg/kg DM	825	-
PAHs (Polycyclic Aromatic Hydrocarbons)	mg/kg DM	50	16-50
BTEX (Benzene, toluene, ethylbenzene, xylenes)	mg/kg DM	44	6
PCBs (Polychlorinated biphenyls)	mg/kg DM	2	0.5-1
Phenol	mg/kg DM	37	-

Comparison with literature data

Reference	Number of samples analysed	Number of recycling plants	Number of substances analysed	Level of reporting detail	Country
(Butera et al., 2014)	33	11	16	Sample	DK
(Diotti et al., 2021)	-	3	28	Min-max-avg	IT
(Diotti et al., 2021)	12	2	25	Min-max-avg	IT
Galvin et al., 2012	4	2	12	Sample	ES
Saca et al., 2017	6	1	15	Sample	RU
Bisciotti et al., 2025	27	1	11	Sample	IT

Comparison with literature data

- Possible critical parameters:
 - Sulfates
 - Selenium
 - Antimony



Self-monitoring requirement: testing JRC assessment

Testing of representative samples: Environmental parameters - leaching

- Stakeholders: SH provided information about various standards for testing granular materials.
- JRC assessment: Different testing methods will lead to different results that might not be comparable; three main EN standards have been identified to characterise granular waste or construction products.
 - EN 12457: Characterisation of waste - Leaching - Compliance test for leaching of granular waste materials and sludges
 - EN 14405: Characterization of waste – Leaching behaviour test – Up-flow percolation test (under specified conditions)
 - EN 16637-3: Construction products – Assessment of release of dangerous substances – Part 3: Horizontal up-flow percolation test
- Even if several tests can be used for the same purpose, whenever there is discrepancy of compliance in the results, preference should be given to EN 16637; however, the JRC refrains from prescribing specific standards, due to of regular revisions; in order to achieve a certain harmonisation of the test methods applied, the JRC proposes principle testing conditions.

Self-monitoring requirement: testing JRC assessment

Testing of representative samples: Environmental parameters – total content

- Stakeholders: information on this matter was not requested in the SH consultation.
- JRC assessment: for the preparation methods, only IE defines methods on how to test the recycled aggregates. IE generally follows modified US EPA methods (e.g. USEPA 8270D v5:2014 for PCBs and PAHs). Then, the total content can be determined through chemical composition analysis, using different analytical techniques, e.g. mass spectrometry and gas chromatography.

JRC refrains from prescribing specific laboratory preparation and analysis methods for total content measurement. However, analysis have always to be performed by an accredited laboratory, using accredited test methods (where available).

Criterion 3.4

JRC proposal

Proposed end-of-waste criteria	Proposed self-monitoring requirements
<p>The output material shall comply with the limit values for:</p> <ul style="list-style-type: none"> a) leaching b) total content <p>Compliance with output quality requirements shall be assessed no longer than 24 months prior to handing over the output material to the next holder.</p>	<p>For RA with a low risk of containing substances with negative effects on the environment and human health, qualified staff shall take a representative sample from each batch, or every 5 000 t produced, whichever is the lesser.</p> <p>For RA with a high risk of containing substances with negative effects on the environment and human health, qualified staff shall take a representative sample from each batch, or every 2 000 t produced, whichever is the lesser.</p> <p>A representative sample consists of 10 partial samples.</p> <p>To determine the leaching behavior of the representative samples, the following principle testing condition shall apply:</p> <ul style="list-style-type: none"> – Test method: Horizontal up-flow percolation test; – Preparation of test sample: Test sample shall contain at least 45 % by mass of particles < 4 mm; – Liquid-to-solid ratio: L/S ratio = 10; – Hydraulic conductivity: >10⁻⁸ m/s. <p>Analysis has always to be performed by an accredited laboratory, using accredited test methods (where available).</p>

Criterion 3.5

JRC assessment

Restriction of application (environmental protection)

- Stakeholders: SHs didn't specify any restriction on the application of RA.
- JRC assessment: any contact with water increase the risk that unwanted substances enter into the environment or the human body: IT, LT do not set any specific restrictions for contact with water. AT allow the highest quality outputs (U-A) with the most stringent limit values, to come into contact with water bodies. NL and BE(Fla.) have modified values for certain contaminants when the use is in proximity with water. FI does not allow RA below the groundwater table, in case the groundwater is used for water supply, the distance needs to be permanently at least 2 meters; most stringent limitations in IE (e.g. within certain range of groundwater extraction, limiting areas of certain size)

Criterion 3.5

JRC proposal

Proposed end-of-waste criteria	Proposed self-monitoring requirements
<p>The output material shall not be used for applications:</p> <ul style="list-style-type: none">a) in contact with water intended for human consumption;b) in contact with groundwater or surface water;c) in areas with high probability of floods according to Article 6 (3c) of Directive EC No 2007/60 on the assessment and management of flood risks;d) in safeguard zones (zone 1) for the abstraction of drinking water according to Water Framework Directive (EC 2000/60; Article 7(3)).	<p>No self-monitoring requirements.</p>

Criterion 3.5

JRC assessment

Restriction of application (quality of construction material)

- Example: EoW Ireland

2.2 To safeguard structures, recycled aggregate that is produced in compliance with these criteria is not suitable for use:

- In structural concrete or mortar or other bound applications for structural use;
- in concrete blocks or other masonry other than those specified in 1.1 (ii) (c);
- in building structures, including beneath the structure or within its fabric, foundations, or curtilage (within 1m);
- footpaths adjacent to building structures;
- in civil engineering structures, excluding linear features, including beneath the structure or within its fabric, foundations or supports;
- as unbound granular fill (hardcore) for use under concrete floors and footpaths adjacent to building structures;
- any other restrictions as may be prescribed by the Agency.

The JRC proposes **not to restrict** the use of recycled aggregates to safeguard structures, as standards define technical quality parameters.

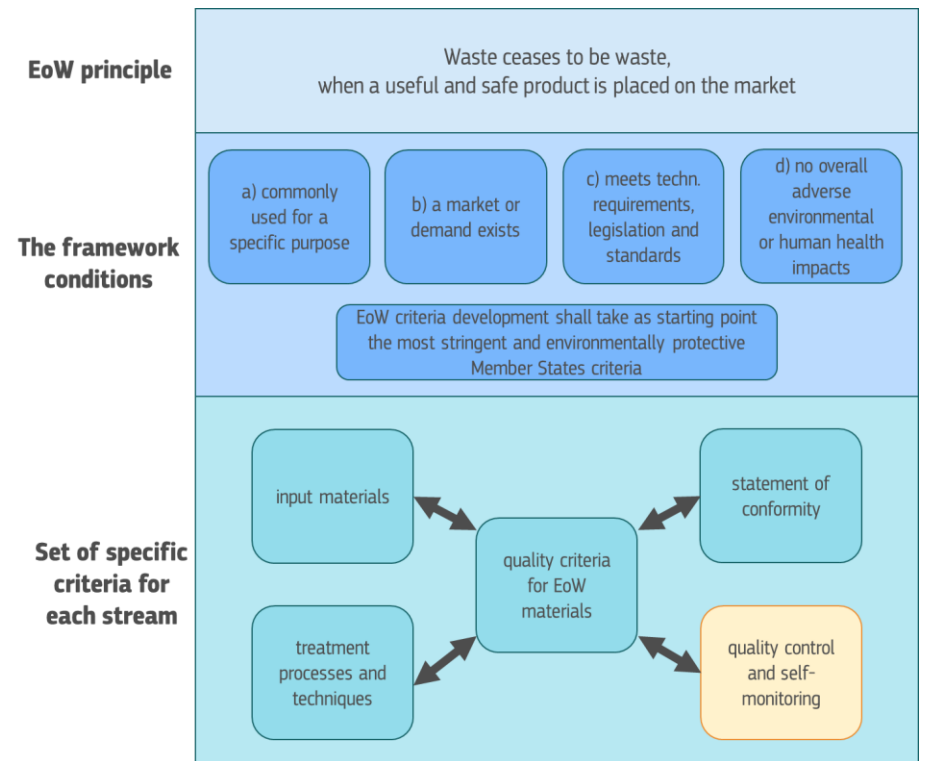
Q&A | EoW criteria: Product quality



Quality assurance

Requirements on quality assurance

Approach: defining a set of procedures to be covered in the quality management system and self-monitoring requirements for each criterion, to assure reliability of end-of-waste criteria and enhance verification of compliance.



Criterion 4.1

JRC assessment

Quality management system (QMS)

- Stakeholders: majority have a QMS in place and mostly in favour of a QMS to ensure the production of high-quality secondary raw materials; international standards such as EN ISO 9001 and EN ISO 14001 are in place; all stakeholders with a QMS in place, are certified and verified by a third party; SH highlight, that all products that fall under CPR and to which a harmonised standard applies, CE marking is mandatory; to CE mark a product, a QMS has to be in place covering aspects such as waste acceptance, waste treatment and quality control; with QMS for CE marking, an external audit is carried out once a year.

Criterion 4.1

JRC assessment

Quality management system (QMS)

- Consideration: Use the Factory Production Control (FPC) in two ways:
 - as a QMS for the manufacturer of construction products and
 - for treatment facilities to produce RA with EoW status.
- JRC assessment: deeper analysis revealed QMS elements considered in FPC are comprehensive, but are not completely suitable to demonstrate **compliance with the EoW criteria proposed by the JRC**; approach to develop specific EoW QMS; no mandatory application of ISO or industry standards to reduce possible financial burdens and avoid need for amendments; including self-monitoring requirements; include documented procedure from SH feedback, assessment of the existing EU-wide EoW criteria and current proposals for EoW criteria (e.g. plastics) and the screening of the national EoW criteria.

Criterion 4.1

JRC proposal (1/2)

Proposed Quality Assurance Systems

1. The operator of the treatment facility shall implement a quality management system suitable to demonstrate compliance with the end-of-waste criteria.
2. The quality management system shall include a set of documented procedures concerning each of the following aspects:
 - (a) monitoring of waste used as input material for the recycling operation and acceptance control (including risk management and control measures);
 - (b) monitoring of the treatment processes and techniques;
 - (c) monitoring of the quality of output material resulting from the recycling operation (including instructions for sampling and analysis and frequency of verification);
 - (d) collection and process of feedback from customers concerning the quality of the output material to improve the performance of the recycling operation;
 - (e) record-keeping of the results of monitoring conducted under points (a) to (c);
 - (f) record-keeping of the actions taken to improve the performance of the recycling operation, in the case of non-conformity with the end-of-waste criteria;
 - (g) review and improvement of the quality management system; and
 - (h) training of staff.
3. All documented procedures shall be maintained for a minimum of 5 years, which may include electronic records.
4. The quality management system shall also prescribe the specific self-monitoring requirements set out in the end-of-waste criteria for each criterion.
5. The quality management system shall be certified by one of the following:
 - a) a conformity assessment body which is accredited by an accreditation body successfully peer-evaluated for this activity by the body recognised in Article 14 of Regulation (EC) No 765/2008, or
 - b) by an environmental verifier which is accredited or licensed by an accreditation or licensing body, as defined respectively in Article 2(30) and 2(31) of Regulation (EC) No 1221/2009, which is also subject to peer-evaluation according to Article 31 of Regulation (EC) No 1221/2009. Verifiers who want to operate in third countries must obtain a specific accreditation or licence, in accordance with the specifications laid down in Regulation (EC) No 765/2008 or Regulation (EC) No 1221/2009, the latter together with Commission Decision (EU) No 2011/832, or
 - c) notified body that is notified to carry out the assessment and verifications according to the Regulation (EU) No 305/2011 or Regulation (EU) No 2024/3110 or the respective products covered by harmonised technical specification for aggregates cited under one of these regulations.

Criterion 4.1

Quality management system (QMS) and FPC (checked by NBs): comparison

- How the elements of QMS are aligned with the FPC required in standard?

QMS aspect	Related clause of EN 12620:2002+A1:2008
• (a) monitoring of waste used as input material for the recycling operation and acceptance control (including risk management and control measures);	H.3.1, or H.3.1. H4
(b) monitoring of the treatment processes and techniques;	H.3 or H.4
(c) monitoring of the quality of output material resulting from the recycling operation (including instructions for sampling and analysis and frequency of verification);	H.5.3
(d) collection and process of feedback from customers concerning the quality of the output material to improve the performance of the recycling operation;	H.7
(e) record-keeping of the results of monitoring conducted under points (a) to (c);	H.6
(f) record-keeping of the actions taken to improve the performance of the recycling operation, in the case of non-conformity with the end-of-waste criteria;	H.7
(g) review and improvement of the quality management system; and	H.2.3.
(h) training of staff	H.10

Criterion 4.1

Possible recognition of the Notified Bodies

Advantages:

- Notified Bodies can operate across the EU
- Clear system of requirements
- In practice often the “EoW” and “Product” is certified by the same legal entity
- Simplification and streamlining of the applicable legal framework

Please give us your feedback in the EU survey.

Criterion 4.1

JRC proposal (2/2)

Proposed end-of-waste criteria

6. The importer of recycled aggregates resulting as output of treatment facilities based in **third countries shall require third-country suppliers to implement a quality management** system which complies with the requirements of points 1 to 4 of this criterion and which has been verified by an independent external verifier.
7. A **conformity assessment body**, as defined in Regulation (EC) No 765/2008, which has obtained accreditation in accordance with that Regulation, or an **environmental verifier**, as defined in Article 2(20)(b) of Regulation (EC) No 1221/2009, which is accredited or licensed in accordance with that Regulation, shall verify that the quality management system fulfils the requirements on quality assurance procedures. The verification shall be carried out every 3 years.
8. Only verifiers with the following scopes of accreditation or licence based on the NACE Codes as specified in Regulation (EC) No 1893/2006 are regarded as having sufficient specific experience to perform the verification mentioned in this Regulation:
- NACE Code 23 (Manufacture of other non-metallic mineral products); or
 - NACE Code 38 (Waste collection, treatment and disposal activities; material recovery); or
 - NACE Code 41 (Construction of buildings); or
 - NACE Code 42 (Civil engineering); or
 - NACE Code 43 (Specialised construction activities including for example 43.1 - Demolition and site preparation).
9. The operator of the treatment facility shall give **competent authorities**, as defined in Article 2(26) of Regulation (EC) No 1221/2009, access to the quality management system upon request.

Criterion 4.1

JRC assessment

Quality management system (QMS)

Consideration: The EoW QMS criteria (see Criterion 4.1) could be integrated into the FPC elements under the CPR and must be implemented by manufacturers. Recycled aggregates would be **covered by assessment and verification system 2+** (requires certification by a notified body). The notified bodies would do the equivalent check as you propose within the QMS certification (yearly). This would mean that points 5, 7 and 8 of criterion 4.1 in Table 24 would be covered by FPC's assessment and verification system.

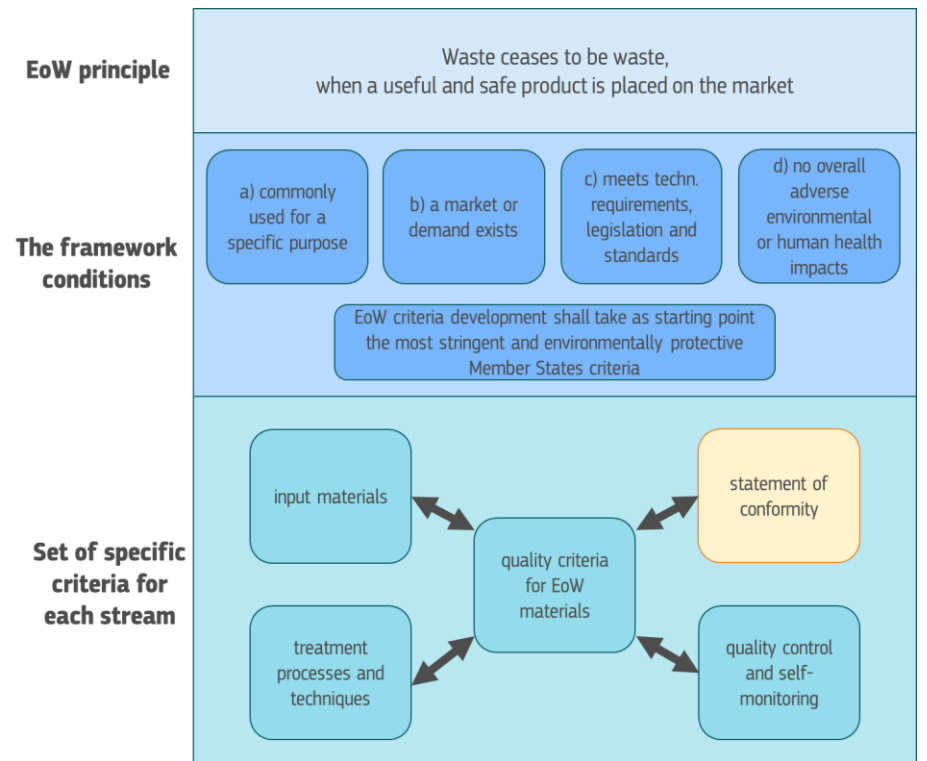
Q&A | EoW criteria: Quality assurance



Provision of information

Requirements on provision of information

Approach: prescribing a requirement to issue a statement of conformity, to certify that the EoW consignment meets the EoW criteria, to minimise the risk that EoW materials are diverted to other uses than the intended ones.



Criterion 5.1

JRC assessment

Provision of information

- Stakeholders: all SH agree that specific requirements on provision on information (e.g. statement of conformity, declaration of origin) have to be fulfilled when shipping the output materials from a recycling plant to the next holder; a statement of conformity should include all elements in accordance with EN 12620 and EN 13242 as well as the declaration of performance defined by the CPR.
- JRC assessment: most MS with national EoW criteria require the producer of the recycled EoW aggregates to issue a statement of conformity and retain a copy of the statement of conformity for 3 (LT), 5 (NL) or 10 years (FI) after its date of issue; MS with national EoW provide templates with certain elements for statement of conformity (basis for JRC proposal).

Criterion 5.1

JRC proposal

Proposed end-of-waste criteria

The producer or the importer shall issue, for **each consignment** of output material complying with end-of-waste criteria, a **statement of conformity** as set out in the template.

The producer or the importer shall **transmit** the statement of conformity to the **next holder** of the consignment. They shall **retain a copy** of the statement of conformity **for at least 3 years** after its date of issue and shall make it available to competent authorities upon request.

The statement of conformity is preferably issued in electronic form.

Statement of conformity

JRC proposal (1/2)

Statement of conformity

1. Unique identification code of the consignment:
Producer/importer of the recycled aggregates:
Name:
Address:
Contact person:
Tel.:
E-mail:
2. Quantity of the consignment in tonnes:
3. a) Name or code of the recycled aggregates in accordance with a customer specification, an industry specification or standard:
b) Main technical provisions of the customer specification, industry specification or standard, including compliance with end-of-waste product quality requirements on limit values defined in criterion 3.3 and 3.4 for the different intended uses:
4. The recycled aggregates consignment complies with a customer specification, industry specification or a standard referred to in point 3.
5. The recycled aggregates consignment meets the criteria on input materials (1.1, 1.2 and 1.3), on treatment processes and techniques (2.1 and 2.2), and on product quality (3.1, 3.2, 3.3, 3.4 and 3.5).
6. The recycled aggregates in this consignment are not classified as hazardous pursuant to Article 3 of and Annex I to Regulation (EC) No 1272/2008 (CLP);
The substances contained within the material in this consignment comply with Regulation (EC) No 1907/2006 (REACH), including but not limited to compliance with Article 56 setting out authorisation provisions for uses of substances listed in Annex XIV to REACH and for their placing on the market as well as the conditions laid down in Article 67 for the manufacture, placing on the market and use of substances restricted in Annex XVII to REACH;
The substances contained within the material in this consignment meet the provisions limiting the manufacturing, placing on the market and use of persistent organic pollutants (POPs) pursuant to Article 3 of and Annex I to Regulation (EU) No 2019/1021; and
When placed on the market, the obligations in relation to the output material under Regulation (EU) No 305/2011 or Regulation (EU) 2024/3110 (CPR), whichever applies, are fulfilled.

Statement of conformity

JRC proposal (2/2)

Statement of conformity

- | | |
|----|---|
| 7. | The producer applies a quality management system verified by an accredited conformity assessment body or by an environmental verifier or, where CDW which has ceased to be waste is imported into the customs territory of the European Union, by an independent external verifier. |
| 8. | The material in this consignment is intended to be used exclusively for unbound and bound construction works. It must not be used for backfilling according to Article 11(2) of the WFD or any other purpose. Where these conditions are not met, the user of the material shall handle it as waste and shall inform the producer, for the purpose of maintaining and reporting correct information on end-of-waste volumes. |
| 9. | The material in this consignment shall not be used for applications <ul style="list-style-type: none">• in contact with water intended for human consumption;• in contact with groundwater or surface water;• in areas with high probability of floods according to Article 6 (3c) of Directive EC No 2007/60 on the assessment and management of flood risks;• and in safeguard zones (zone 1) for the abstraction of drinking water according to Water Framework Directive (EC 2000/60; Article 7(3)). |
| 10 | Declaration of the producer/importer of the recycled aggregates:
I certify that the above information is complete and correct to the best of my knowledge:
Name:
Date:
Signature: |

Q&A | EoW criteria: Provision of information



Session 5

Written stakeholder consultation

Written stakeholder consultation

Deadline for feedback: 11 August 2025

- Provide answers to the questions raised in the **EU-survey**. Please always provide a NEW argumentation to support your statements, as JRC has already assessed many arguments in the background paper.
- Provide **analytic data for recycled aggregates** using the Excel template and upload the Excel file at the **end of the EU-survey**.
- Optional: provide direct feedback to the **background paper** using the Word template and upload the Word file at the **end of the EU-survey**.
- Please coordinate internally and provide one consolidated feedback per organisation and be reminded that there is no point in submitting surveys from members or sister organisations with the same input.
- For general questions please contact the JRC via functional mailbox:

JRC-END-OF-WASTE@ec.europa.eu (subject: **CDW EOW**)



https://ec.europa.eu/eusurvey/runner/CDW_EoW_2nd_Consultation

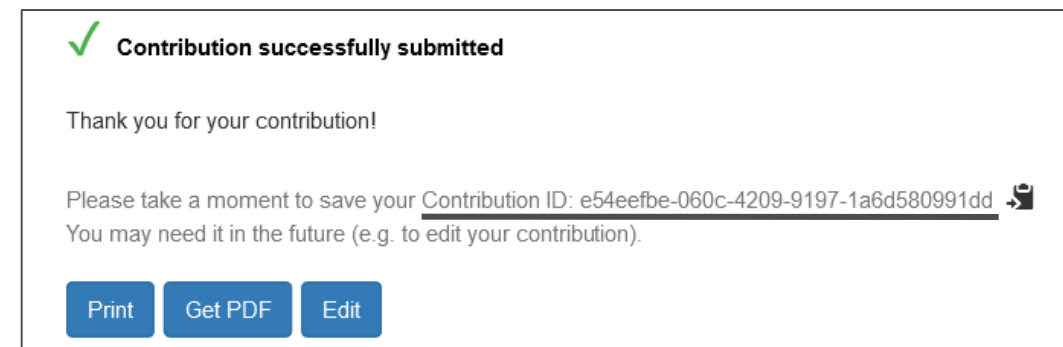
Password: jrc-cdw2025

In case you would like to have a pdf version before filling out the survey (e.g. for consultation of your members), you can create a dummy submission and save the result as pdf as follows:

- Step 1: Go to last section of the survey and press.



- Step 2: You receive an information that your **contribution is successfully submitted** and you also get a **Contribution ID** to make future edits.

A white rectangular box with a green checkmark icon at the top left. The text inside reads: "Contribution successfully submitted", "Thank you for your contribution!", and "Please take a moment to save your Contribution ID: e54eefbe-060c-4209-9197-1a6d580991dd" followed by a copy icon. Below the text are three blue buttons: "Print", "Get PDF", and "Edit".

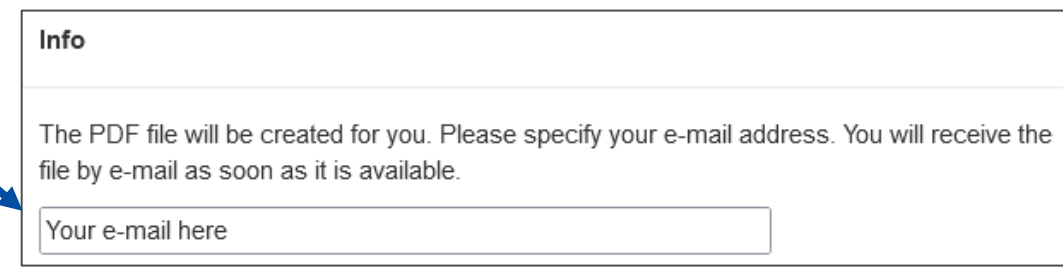
✓ **Contribution successfully submitted**

Thank you for your contribution!

Please take a moment to save your Contribution ID: e54eefbe-060c-4209-9197-1a6d580991dd 📄
You may need it in the future (e.g. to edit your contribution).

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- Step 4: Insert your mail in the pop up.
- Step 5: You receive an e-mail with the PDF to e.g. distribute internally or translate into other languages.

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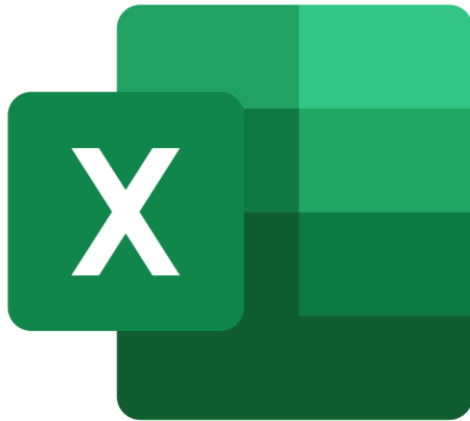
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Written stakeholder consultation

Providing **analytic data for the recycled aggregates** using the Excel file



JRC_CDW-EOW_Analytic data RA_XX

XX – organisation name or abbreviation

Direct feedback on the **background paper** using the Word template



JRC_CDW-EOW_Template Feedback_XX

XX – organisation name or abbreviation

Both documents, please upload at the **end of the EU-survey** in the dedicated “upload” section (Section 4).

Q&A | Stakeholder consultation



Closing session

Next actions by JRC and tentative timeline

- Slides will be sent out in the upcoming weeks.
- JRC will analyse stakeholder feedback and develop final proposal.
- The final proposal will be presented and discussed at the planned stakeholder event in March 2026.



Q&A | Closing session



Keep in touch

Contact:

JRC-END-OF-WASTE@ec.europa.eu

Subject: CDW EOW

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Thank you



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