

ESRS E5
RESOURCE USE AND CIRCULAR ECONOMY

Table of contents

Objective

Interactions with other ESRS

Disclosure Requirements

ESRS 2 General disclosures

Impact, risk and opportunity management

Disclosure Requirement related to ESRS 2 IRO-1 – Description of the processes to identify and assess material resource use and circular economy-related impacts, risks and opportunities

Impact, risk and opportunity management

Disclosure Requirement E5-1 – Policies related to resource use and circular economy

Disclosure Requirement E5-2 – Actions and resources related to resource use and circular economy

Metrics and targets

Disclosure Requirement E5-3 – Targets related to resource use and circular economy

Disclosure Requirement E5-4 – Resource inflows

Disclosure Requirement E5-5 – Resource outflows

Products and materials

Waste

Disclosure Requirement E5-6 – Anticipated financial effects from resource use and circular economy-related impacts, risks and opportunities

Appendix A: Application Requirements

ESRS 2 General disclosures

Impact, risk and opportunity management

Disclosure requirement related to ESRS 2 IRO-1 – Description of the processes to identify and assess material resource use and circular economy-related impacts, risks and opportunities

Impact, risk and opportunity management

Disclosure Requirement E5-1 – Policies related to resource use and circular economy

Disclosure Requirement E5-2 – Actions and resources in relation to resource use and circular economy

Metrics and targets

Disclosure Requirement E5-3 - Targets related to resource use and circular economy

Disclosure Requirement E5-4 - Resource inflows

Disclosure Requirement E5-5 - Resource outflows

Disclosure Requirement E5-6 – Anticipated financial effects from resource use and circular economy-related impacts, risks and opportunities

Objective

1. The objective of this Standard is to specify Disclosure Requirements which will enable users of the **sustainability statement** to understand:
 - (a) how the undertaking affects resource use, including resource efficiency, avoiding the depletion of resources and the sustainable sourcing and use of renewable resources (referred to in this Standard as “resource use and circular economy”) in terms of material positive and negative actual or potential impacts;
 - (b) any **actions** taken, and the result of such actions, to prevent or mitigate actual or potential negative impacts arising from resource use, including its measures to help decoupling its economic growth from the use of materials, and to address risks and opportunities;
 - (c) the plans and capacity of the undertaking to adapt its strategy and business model inline with **circular economy principles** including but not limited to minimising **waste**, maintaining the value of products, materials and other resources at their highest value and enhancing their efficient use in production and consumption;
 - (d) the nature, type and extent of the undertaking’s material risks and opportunities related to the undertaking’s impacts and **dependencies**, arising from resource use and circular economy, and how the undertaking manages them; and
 - (e) the **financial effects** on the undertaking over the short-, medium- and long-term time horizons of material risks and opportunities arising from the undertaking’s impacts and dependencies on resource use and circular economy.
2. This Standard sets out Disclosure Requirements related to “resource use” and “circular economy” and in particular on:
 - (a) **resource inflows** including the circularity of material resource inflows, considering renewable and non-renewable resources; and
 - (b) **resource outflows** including information on products and materials; and
 - (c) **waste**.
3. **Circular economy** means an economic system in which the value of products, materials and other resources in the economy is maintained for as long as possible, enhancing their efficient use in production and consumption, thereby reducing the environmental impact of their use, minimising **waste** and the release of hazardous **substances** at all stages of their life cycle, including through the application of the **waste hierarchy**. The goal is to maximise and maintain the value of the technical and biological resources, products and materials by creating a system that allows for **durability**, optimal use or re-use, refurbishment, remanufacturing, **recycling** and nutrient cycling.
4. This Standard builds on relevant EU legislative frameworks and **policies** including the EU Circular Economy Action Plan, the Waste Framework directive and the EU industrial strategy.
5. To evaluate the transition from business as usual, meaning an economy in which finite resources are extracted to make products that are used and then thrown away (“take-make-waste”), to a circular economic system, this Standard relies on the identification of the physical flows of resources, materials and products used and generated by the undertaking through Disclosure Requirement E5-4 *Resource inflows* and Disclosure Requirement E5-5 *Resource outflows*.

Interactions with other ESRS

6. Resource use is a major driver of other environmental impacts such as climate change, **pollution**, water and **marine resources** and biodiversity. A **circular economy** is a system that tends towards sustainable use of resources in extraction, processing, production, consumption and management of **waste**. Such system brings multiple environmental benefits, in particular, the reduction of material and energy consumption and **emissions** into the air (greenhouse gas emissions or other pollution), the limitation of **water withdrawals** and **discharges** and the **regeneration** of nature limiting the impact on biodiversity.

7. To provide a comprehensive overview of which other environmental matters could be material to resource use and circular economy, relevant disclosure requirements are covered in other environmental ESRS as follows:
 - (a) ESRS E1 *Climate change*, which addresses, in particular, GHG **emissions** and energy resources (energy consumption);
 - (b) ESRS E2 *Pollution*, which addresses, in particular, emissions to water, air and **soils** as well as **substances of concern**;
 - (c) ESRS E3 *Water and marine resources*, which addresses, in particular, water resource (water consumption) and marine resources; and
 - (d) ESRS E4 *Biodiversity and ecosystems*, which addresses, in particular, ecosystems and species and raw materials.
8. The undertaking's impacts related to resource use and circular economy, in particular impacts related to **waste**, can affect people and communities. Material negative impacts on **affected communities** from resource use and **circular economy** attributable to the undertaking are covered in ESRS S3 *Affected communities*. The efficient and circular use of resources also benefits competitiveness and economic wellbeing
9. This Standard should be read in conjunction with ESRS 1 *General requirements* and ESRS 2 *General disclosures*.

Disclosure Requirements

ESRS 2 General disclosures

10. The requirements of this section should be read in conjunction with and reported alongside the disclosures required by ESRS 2 chapter 4 *Impact, risk and opportunity management*.

Impact, risk and opportunity management

Disclosure Requirement related to ESRS 2 IRO-1 – Description of the processes to identify and assess material resource use and circular economy-related impacts, risks and opportunities

11. The undertaking shall describe the process to identify material **impacts, risks** and **opportunities** related to resource use and circular economy, in particular regarding **resource inflows, resource outflows** and **waste**, and shall provide information on:
 - (a) the methodologies, assumptions and tools used to screen its assets and activities in order to identify its actual and potential **impacts, risks** and **opportunities** in its own operations and value chain;
 - (b) the interconnection between risks and opportunities arising from impacts and **dependencies**;
 - (c) the process for conducting consultations, in particular, with affected communities.

Impact, risk and opportunity management

Disclosure Requirement E5-1 – Policies related to resource use and circular economy

12. The undertaking shall describe its policies to address the management of its material **impacts, risks** and **opportunities** related to resource use and circular economy.
13. The objective of this Disclosure Requirement is to enable an understanding of the extent to which the undertaking has **policies** that address the identification, assessment, management and/or

remediation of its material **impacts, risks** and **opportunities** related to resource use and **circular economy**.

14. The disclosure required by paragraph 12 shall contain the information on the **policies** the undertaking has in place to manage its material **impacts, risks** and **opportunities** related to resource use and **circular economy** in accordance with ESRS2 MDR-P *Policies adopted to manage material sustainability matters*.
15. In the summary, the undertaking shall indicate whether and how its **policies** address the following matters where material:
 - (a) transitioning away from use of virgin resources, including relative increases in use of secondary (recycled) resources;
 - (b) sustainable sourcing and use of renewable resources.
16. Policies shall address material impacts, risks and opportunities in its own operations and along the upstream and downstream value chain.

Disclosure Requirement E5-2 – Actions and resources related to resource use and circular economy

17. **The undertaking shall disclose its resource use and circular economy actions and the resources allocated to their implementation.**
18. The objective of this Disclosure Requirement is to enable an understanding of the key **actions** taken and planned to achieve the resource use and circular economy-related **policy** objectives and **targets**.
19. The description of the resource use and circular economy-related **actions** and resources allocated shall follow the principles defined in ESRS 2 MDR-A *Actions and resources in relation to material sustainability matters*.
20. In addition to ESRS 2 MDR-A, the undertaking may specify whether and how an action and resources cover:
 - (a) higher levels of resource efficiency in use of technical and biological materials and water, particularly in relation to critical raw materials and rare earths as listed in the Raw Materials Information System;
 - (b) higher rates of use of secondary raw materials (recyclates);
 - (c) application of circular design, leading to increased product **durability** and optimization of use, and higher rates of: Reuse, Repair, Refurbishing, Remanufacture and Repurposing and Recycling.
 - (d) application of circular business practices such as (i) value retention **actions** (maintenance, repair, refurbishing, remanufacturing, component harvesting, upgrading and reverse logistics, closed loop systems, second-hand retailing), (ii) value maximisation actions (product-service systems, collaborative and sharing economy business models), (iii) end-of-life actions (**recycling**, upcycling, extended producer responsibility), and (iv) systems efficiency actions (industrial symbiosis);
 - (e) actions taken to prevent **waste** generation in the undertaking's upstream and downstream value chain
 - (f) Optimisation of **waste management** in line with the **waste hierarchy**.

Metrics and targets

Disclosure Requirement E5-3 – Targets related to resource use and circular economy

21. **The undertaking shall disclose the resource use and circular economy-related targets it has set.**

22. The objective of this Disclosure Requirement is to enable an understanding of the **targets** the undertaking has adopted to support its resource use and **circular economy policy** and to address its material impacts, risks and opportunities.
23. The description of the **targets** shall contain the information requirements defined in ESRS2 MDR-T *Tracking effectiveness of policies and actions through targets*.
24. The disclosure required by paragraph 21 shall indicate whether and how the undertaking's **targets** relate to **resource inflows** and **resource outflows**, including **waste** and products and materials, and, more specifically to:
 - (a) the increase of circular product design (including for instance design for **durability**, dismantling, reparability, recyclability etc);
 - (b) the increase of **circular material use rate**;
 - (c) the minimisation of virgin raw material;
 - (d) sustainable sourcing and use (in line with the cascading principle) of renewable resources;
 - (e) the **waste management**, including preparation for proper treatment; and
 - (f) other matters related to resource use or circular economy.
25. The undertaking shall specify to which layer of the **waste hierarchy** the target relates.
26. In addition to ESRS 2 MDR-T, the undertaking may specify whether **ecological thresholds** and entity-specific allocations were taken into consideration when setting **targets**. If so, the undertaking may specify:
 - (a) the ecological thresholds identified, and the methodology used to identify such thresholds;
 - (b) whether or not the thresholds are entity-specific and if so, how they were determined; and
 - (c) how responsibility for respecting identified ecological thresholds is allocated in the undertaking.
27. The undertaking shall specify as part of the contextual information, whether the **targets** it has set and presented are mandatory (based on legislation) or voluntary.

Disclosure Requirement E5-4 – Resource inflows

28. **The undertaking shall disclose information on its resource inflows related to its material impacts, risks and opportunities.**
29. The objective of this Disclosure Requirement is to enable an understanding of the resource use in the undertaking's own operations and value chain.
30. The disclosure required by paragraph 28 shall include a description of its **resource inflows** where material: products (including **packaging**) and materials (specifying critical raw materials and rare earths), water and property, plant and equipment used in the undertaking's own operations and along the value chain.
31. When an undertaking assesses that resource inflows is a material sustainability matter, it shall disclose the following information about the materials used to manufacture the undertaking's products and services during the reporting period, in tonnes or kilogrammes:
 - (a) the overall total weight of products and technical and biological materials used during the reporting period;
 - (b) the percentage of biological materials (and biofuels used for non-energy purposes) used to manufacture the undertaking's products and services (including **packaging**) that is sustainably sourced, with the information on the certification scheme used and on the application of the cascading principle; and
 - (c) the weight in both absolute value and percentage, of non-virgin reused or recycled components, intermediary products and materials used to manufacture the undertaking's products and services (including packaging).

32. The undertaking shall provide information on the methodologies used to calculate the data. It shall specify whether the data is sourced from direct measurement or estimations, and disclose the key assumptions used.

Disclosure Requirement E5-5 – Resource outflows

33. **The undertaking shall disclose information on its resource outflows, including waste, related to its material impacts, risks and opportunities.**
34. The objective of this Disclosure Requirement is to provide an understanding of:
- (a) how the undertaking contributes to the **circular economy** by i) designing products and materials in line with **circular economy principles** and ii) increasing or maximising the extent to which products, materials and **waste** processing are recirculated in practice after first use; and
 - (b) the undertaking's waste reduction and **waste management** strategy, the extent to which the undertaking knows how its pre-consumer waste is managed in its own activities.

Products and materials

35. The undertaking shall provide a description of the key products and materials that come out of the undertaking's production process and that are designed along circular principles, including **durability**, reusability, repairability, disassembly, remanufacturing, refurbishment, **recycling**, recirculation by the biological cycle, or optimisation of the use of the product or material through other circular business models.
36. Undertakings for which outflows are material shall disclose:
- (a) The expected **durability** of the products placed on the market by the undertaking, in relation to the industry average for each product group;
 - (b) The reparability products, using an established rating system, where possible;
 - (c) The rates of recycled content in products and their **packaging**.

Waste

37. The undertaking shall disclose the following information on its total amount of **waste** from its ownoperations, in tonnes or kilogrammes:
- (a) the total amount of waste generated ;
 - (b) the amount by weight diverted from disposal by **recovery** operation type and the total amount summing all three types, with a breakdown between **hazardous waste** and non-hazardous waste. The recovery operation types to be reported on are:
 - i. preparation for reuse;
 - ii. **recycling**; and
 - iii. other recovery operations;
 - (c) the amount by weight directed to disposal by waste treatment type and the total amount summing all three types, with a breakdown between **hazardous waste** and non-hazardous waste. The waste treatment types to be disclosed are:
 - i. **incineration**;
 - ii. landfill; and
 - iii. other disposal operations;
 - (d) the total amount and percentage of non-recycled waste¹.

¹ This information supports the information needs of financial market participants subject to Regulation (EU) 2019/2088 as reflecting an additional indicator related to principal adverse impacts as set out by indicator #13 in Table 2 of Annex 1 of the related Delegated Regulation with regard to disclosure rules on sustainable investments ("Non-recycled waste ratio").

38. When disclosing the composition of the **waste**, the undertaking shall specify:
- (a) the waste streams relevant to its sector or activities (e.g. tailings for the undertaking in the mining sector, electronic waste for the undertaking in the **consumer** electronics sector, or food waste for the undertaking in the agriculture or in the hospitality sector); and;
 - (b) the materials that are present in the waste (e.g. biomass, metals, non-metallic minerals, plastics, textiles, critical raw materials and rare earths).
39. The undertaking shall also disclose the total amount of **hazardous waste** and radioactive waste generated by the undertaking, where radioactive waste is defined in Article 3(7) of Council Directive 2011/70/Euratom².
40. The undertaking shall provide contextual information on the methodologies used to calculate the data and in particular the criteria and assumptions used to determine and classify products designed along circular principles under paragraph 35. It shall specify whether the data is sourced from direct measurement or estimations; and disclose the key assumptions used.

Disclosure Requirement E5-6 – Anticipated financial effects from material resource use and circular economy-related impacts, risks and opportunities

41. **The undertaking shall disclose the anticipated financial effects of material risks and opportunities arising from resource use and circular economy-related impacts.**
42. The information required by paragraph 41 is in addition the information on current financial effects on the entity's financial position, financial performance and cash flows for the reporting period required under ESRS 2 SBM-3 para 48 (d). The objective of this Disclosure Requirement is to provide an understanding of: period required under ESRS 2 SBM-3 para 48 (d). The objective of this Disclosure Requirement is to provide an understanding of:
- (a) **anticipated financial effects** due to material **risks** arising from material resource use and **circular economy**-related impacts and **dependencies** and how these risks have or could reasonably be expected to have) a material influence on the undertaking's financial position, financial performance performance, and cash flows over the short-, medium- and long-term; and
 - (b) anticipated financial effects due to material opportunities related to resource use and circular economy.
43. The disclosure shall include:
- (a) a quantification of the **anticipated financial effects** in monetary terms before considering resource use and circular economy-related actions, or where not possible with undue cost or effort, qualitative information. For **financial effects** arising from material opportunities, a quantification is not required if it would result in disclosure that does not meet the qualitative characteristics of information (see ESRS 1 Appendix C *Qualitative characteristics of information*);
 - (b) a description of the effects considered, the impacts and dependencies to which they relate and the time horizons in which they are likely to materialise;
 - (c) the critical assumptions used to quantify the **anticipated financial effects**, as well as the sources and level of uncertainty of those assumptions

² This information supports the information needs of financial market participants subject to Regulation (EU) 2019/2088 as reflecting a mandatory indicator related to principal adverse impacts as set out by indicator #9 in Table 1 of Annex 1 of the related Delegated Regulation with regard to disclosure rules on sustainable investments ("Hazardous waste and radioactive waste ratio").

Appendix A: Application Requirements

This appendix is an integral part of the ESRS E5. It supports the application of the disclosure requirements set out in this standard and has the same authority as the other parts of the standard.

ESRS 2 General disclosures

Impact, risk and opportunity management

Disclosure requirement related to ESRS 2 IRO-1 – Description of the processes to identify and assess material resource use and circular economy-related impacts, risks and opportunities

AR 1. When conducting a **materiality** assessment on environmental subtopics, the undertaking shall assess the materiality of resource use and circular economy in its own operations and its value chain, and may consider the four phases below, also known as the LEAP approach:

- (a) Phase 1: locate where in the undertaking's own operations and along the **value chain** the interface with nature takes place;
- (b) Phase 2: evaluate the **dependencies** and impacts;
- (c) Phase 3: assess the material risks and opportunities;
- (d) Phase 4: prepare and report the results of the materiality assessment.

AR 2. With regard to ESRS E5, phases 1 and 2 rely mainly on the **materiality** assessments conducted under ESRS E1 (including energy consumption), ESRS E2 (pollution), ESRS E3 (marine resources, water consumption) and ESRS E4 (biodiversity, ecosystems, raw materials). Indeed, **circular economy** eventually aims at reducing the environmental impact of the use of products, materials and other resources, minimizing **waste** and the release of hazardous **substances** and hence at reducing impacts on nature. This application requirement focuses mainly on the third phases of this LEAP approach, while the fourth phase addresses the outcome of the process.

AR 3. The process to assess the **materiality** of **impacts, dependencies, risks** and **opportunities** shall consider the provisions in ESRS 2 IRO-1 *Description of the processes to identify and assess material impacts, risks and opportunities* and IRO-2 *Disclosure Requirements in ESRS covered by the undertaking's sustainability statement*.

AR 4. The sub-topics related to resource use and **circular economy** covered by the **materiality** assessment include:

- (a) **resource inflows** including the circularity of material resource inflows, considering resource use optimisation, intensity of materials and products and renewable and non-renewable resources;
- (b) **resource outflows** related to products and services; and
- (c) **waste**, including **hazardous waste** and non-hazardous **waste management**.

AR 5. In Phase 2, the undertaking shall consider evaluating impacts and **dependencies** of inflows, outflows and **waste** based on the outcome of Phases 1 and 2 in other environmental standards and evaluating on their own the outflows and waste and their pressure on nature.

AR 6. In Phase 3, the undertaking shall consider assessing the material risks and opportunities by:

- (a) identifying **transition risks** and opportunities in its own operations and its **value chain**, including the risk of staying in a business-as-usual **scenario**:
 - i. **policy** and legal, e.g., bans on the extraction and use of non-renewable resources, regulations on **waste** treatment;
 - ii. technology, e.g., introduction on the market of new technologies to replace existing use of products and materials;

- iii. market, e.g., shifting supply, demand and financing;
 - iv. reputation, e.g. changing societal, customer behaviors and perceptions.
- (b) identifying **physical risks** including depletion of stock and use of virgin and non- virgin renewable resources, and non-renewable resources;
- (c) identifying opportunities categorised by:
- i. resource efficiency: e.g., transition to more efficient services and processes requiring less resources, eco-design for **longevity**, repair, reuse, recycle, by- products, take-back systems, decoupling activity from extraction of materials, intensifying circular material use, creation of a system that allows for dematerialization (e.g., digitisation, improving utilization rates, weight reduction); practices to ensure products and materials are collected, sorted, and reused, repaired, refurbished, remanufactured;
 - ii. markets: e.g., demand for less resource-intense products and services, and new consumption models such as product-as-a-service, pay-per-use, sharing, leasing;
 - iii. financing: e.g., access to green funds, bonds or loans;
 - iv. resilience: e.g., diversification of resources and business activities (e.g., start a new business unit to recycle new materials), investing in green infrastructures, adopting **recycling** and circularity mechanisms that reduce the **dependencies**, capability of the undertaking to safeguard future stocks and flows of resources; and
 - v. reputation.

AR 7. The undertaking may consider the following methodologies to assess its impacts, risks and opportunities on its own operations and along its value chain: product including information provided by the EU Recommendation 2021/2279 on the use of the Environmental Footprint methods to measure and communicate the life cycle environmental performance of products and organizations (Annex I – Product Environmental Footprint; Annex III – Organisation Environmental Footprint) and Material Flow Analysis (MFA) from the European Environment Agency.

AR 8. When providing information on the outcome of the **materiality** assessment, the undertaking shall consider:

- (a) a list of business units associated to resource use and **circular economy** material impacts, risks and opportunities in the context of the products and services of the undertaking and the **waste** it generates;
- (b) a list and prioritisation of the material resources used by the undertaking;
- (c) the material impacts and risks of staying in business as usual;
- (d) the material opportunities related to a circular economy;
- (e) the material impacts and risks of a transition to a circular economy; and
- (f) the stages of the **value chain** where resource use, risks and negative impacts are concentrated.

Impact, risk and opportunity management

Disclosure Requirement E5-1 – Policies related to resource use and circular economy

AR 9. The policies described under this Disclosure Requirement may be integrated in broader environmental or sustainability policies covering different subtopics.

AR 10. When providing information on its policies, the undertaking shall consider whether and how its policies address:

- (a) the **waste hierarchy**: (a) prevention; (b) preparing for re-use; (c) **recycling**; (d) other **recovery**, e.g., energy recovery; and (e) disposal. In this context, the **waste** treatment cannot be considered as a recovery;
- (b) the prioritisation of the avoidance or minimisation waste (Re-use, Repair, Refurbish, Remanufacture and Repurpose) over waste treatment (Recycling). The concepts of eco-

design³, waste as a resource or post-consumer waste (at the end of a **consumer**-product lifecycle), should also be taken into consideration.

AR 11. When defining its policies, the undertaking may consider the Paper on “Categorisation system for the circular economy”⁴, which describes circular design and production models, circular use models, circular value **recovery** models and circular support along the principles of the nine **circular economy** “R” strategies or principles: refuse, rethink, reduce, re-use, repair, refurbish, remanufacture, repurpose and recycle.

Disclosure Requirement E5-2 – Actions and resources in relation to resource use and circular economy

AR 12. When providing information under paragraph 17 and considering that resources are shared and that **circular economy** strategies may require collective actions, the undertaking may specify the **actions** taken to engage with its upstream and downstream **value chain** and/or its local network on the development of collaborations or initiatives increasing the circularity of products and materials.

AR 13. In particular, the undertaking may specify the following:

- (a) how it contributes to circular economy, including for instance smart **waste** collection systems;
- (b) the other **stakeholders** involved in the collective **actions**: competitors, **suppliers**, retailers, customers, other business partners, local communities and authorities, government agencies;
- (c) a description of the organisation of the collaboration or initiative, including the specific contribution of the undertaking and the roles of the different stakeholders in the project.

AR 14. The **actions** may cover the undertaking’s own operations and/or the value chain.

Metrics and targets

Disclosure Requirement E5-3 - Targets related to resource use and circular economy

AR 15. If the undertaking refers to **ecological thresholds** to set **targets**, it may refer to the guidance provided by the Science-Based Targets Initiative for Nature (SBTN) [in its interim guidance](#) (Initial Guidance for Business, September 2020), or any other guidance with a scientifically acknowledged methodology that allows to set science-based targets by identifying ecological thresholds and, if applicable, organisation-specific allocations. Ecological thresholds can be local, national and/or global.

AR 16. When providing information on **targets**, the undertaking shall prioritise targets in absolute value.

AR 17. When providing information **targets** according to paragraph 24, the undertaking shall consider the production phase, the use phase, and the end of functional life of products and materials.

AR 18. When providing information on **targets** related to virgin renewable **raw material** under paragraph 24(c), the undertaking shall consider how those targets may impact **biodiversity loss**, also in light of ESRS E4.

AR 19. The undertaking may disclose other **targets** under paragraph 24(f) including in relation to sustainable sourcing. If so, the undertaking shall explain the definition of sustainable sourcing it has adopted and how it relates to the objective set out in paragraph 23.

AR 20. The **targets** may cover the undertaking’s own operations and/or the value chain.

Disclosure Requirement E5-4 - Resource inflows

AR 21. **Resource inflows** may cover the following categories: IT equipment, textiles, furniture, buildings, heavy machinery, mid-weight machinery, light machinery, heavy transport, mid-weight transport, light transport and warehousing equipment. With regard to materials, resource inflow indicators include raw materials, **associated process materials**, and semi-manufactured goods or parts.

³ As established by the Directive 2009/125/EC.

⁴ [Categorisation system for the circular economy - Publications Office of the EU \(europa.eu\)](#)

- AR 22. When the undertaking is subject to paragraph 31, it may also provide transparency on the materials that are sourced from **by-products/waste** stream (e.g., offcuts of a material that has not previously been in a product).
- AR 23. The denominator of the percentage indicator required under paragraphs 31(b) and 31(c) is the overall total weight of materials used during the reporting period.
- AR 24. The reported usage data are to reflect the material in its original state, and not to be presented with further data manipulation, such as reporting it as “dry weight”.
- AR 25. In cases where there is an overlap between categories of reused, recycled, the undertaking shall specify how double counting was avoided and the choices that were made.

Disclosure Requirement E5-5 - Resource outflows

- AR 26. Products and materials information to be provided under paragraph 35 refers to all materials and products that come out of the undertaking’s production process and that a company puts on the market (including **packaging**).
- AR 27. When compiling the rate, the undertaking shall use as denominator the overall total weight of materials used during the reporting period.
- AR 28. The undertaking may disclose its engagement in product end-of-life **waste management**, for example through extended producer responsibility schemes or take-back schemes.
- AR 29. Type of **waste** is to be understood as **hazardous waste** or non-hazardous waste. Some specific waste, such as radioactive waste, may also be presented as a separate type.
- AR 30. When considering the **waste** streams relevant to its sectors or activities, the undertaking may consider the list of waste descriptions from the European Waste Catalogue.
- AR 31. Examples of other types of **recovery** operations under paragraph 37(b)iii may be found in Annex II of the Waste framework directive.
- AR 32. Examples of other types of disposal operations under paragraph 37(c)iii may be found in Annex I of the Waste framework directive (dumping, open burning, or deep well injection for example).
- AR 33. When providing contextual information under paragraph 40 the undertaking may:
 - (a) explain the reasons for high weights of **waste** directed to disposal (e.g., local regulations that prohibit landfill of specific types of waste);
 - (b) describe sector practices, sector standards, or external regulations that mandate a specific disposal operation; and
 - (c) specify whether the data has been modelled or sourced from direct measurements, such as waste transfer notes from contracted waste collectors.

Disclosure Requirement E5-6 – Anticipated financial effects from material resource use and circular economy-related impacts, risks and opportunities

- AR 34. When providing information under paragraph 42(b), the undertaking may illustrate and describe how it intends to strengthen value retention.
- AR 35. The undertaking may include an assessment of its related products and services at risk over the short-, medium- and long-term time horizons, explaining how these are defined, how financial amounts are estimated, and which critical assumptions are made.
- AR 36. The quantification of the **anticipated financial effects** in monetary terms under paragraph 43(a) may be a range.