



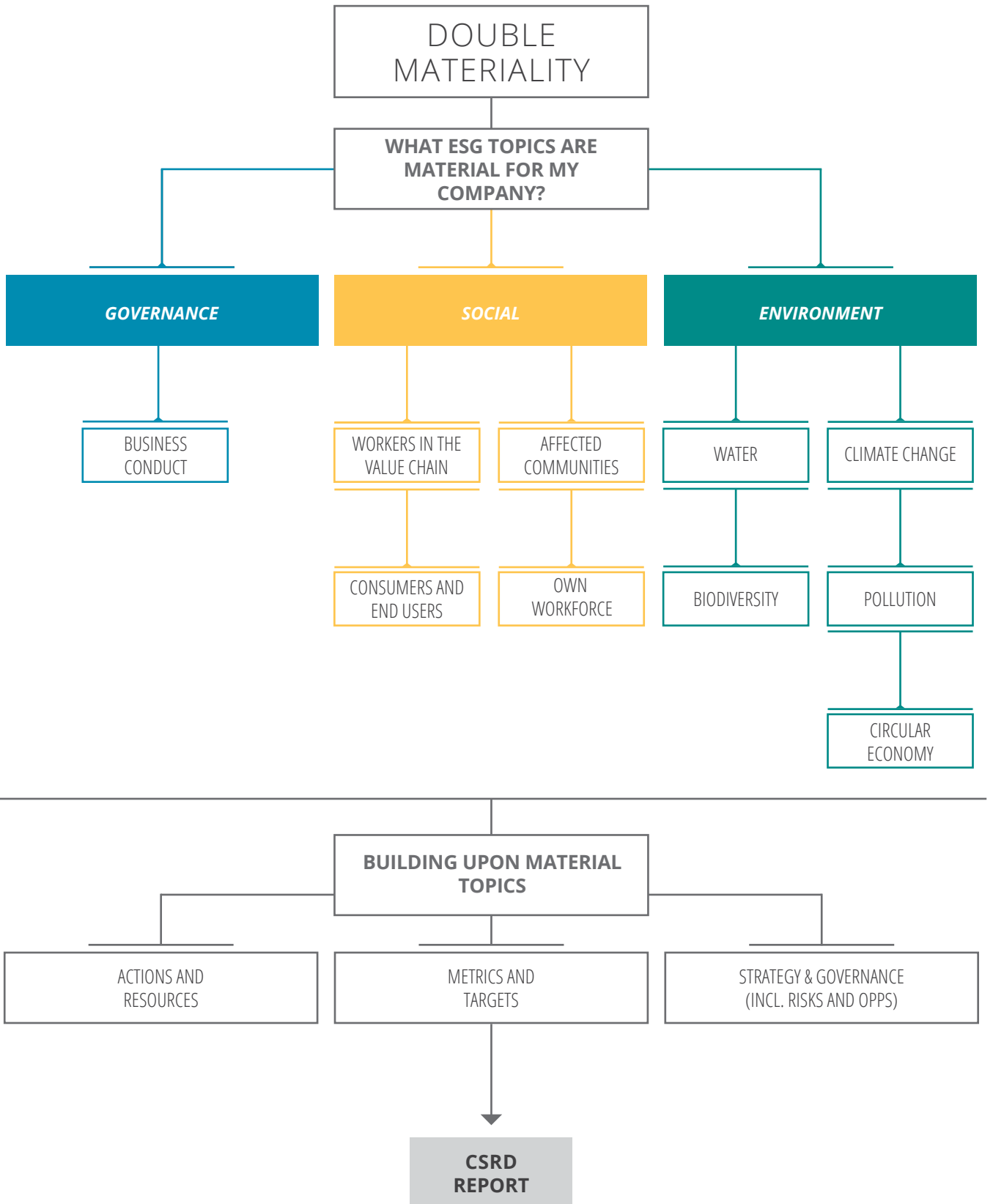
Resource use and circular economy [ESRS E5]

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INTRODUCTION – CSRD AND ESRS E5

The Corporate Sustainability Reporting Directive (CSRD), which came into effect in January 2023, is a directive of the European Union that aims to expand, improve, and harmonize the existing rules on sustainability reporting in the EU. Non-financial topics in the areas of environment, social affairs, and corporate governance are intended to become an integral part of the existing disclosure practices. This will elevate sustainability reporting to the same level as financial management reporting. The core standards of the CSRD comprise two cross-thematic and ten topic-specific standards in the areas of environment, social affairs and governance. They were adopted by the EU Commission in July 2023 as delegated acts. The sector-specific standards are currently still being coordinated (publication has been postponed until approx. 2026)¹.

The aim of this policy brief as part of the CSRD publications is the elaboration of the standard ESRS E5 (resource use and circular economy). At its core, the standard describes how companies must disclose information about circular economy practices in their sustainability report. This includes information about the use of recycled materials, waste management, and efforts to reduce waste throughout the entire product lifecycle. Additionally, companies are required to disclose their strategy for transitioning to a circular economy and provide data on the environmental impacts of their circular economy practices.

¹ <https://www.drsc.de/news/verschiebung-bestimmter-esrs-drsc-briefing-paper-zur-csrd-fuer-drittstaatenunternehmen/>

OBJECTIVES AND CONTENT OF THE STANDARD

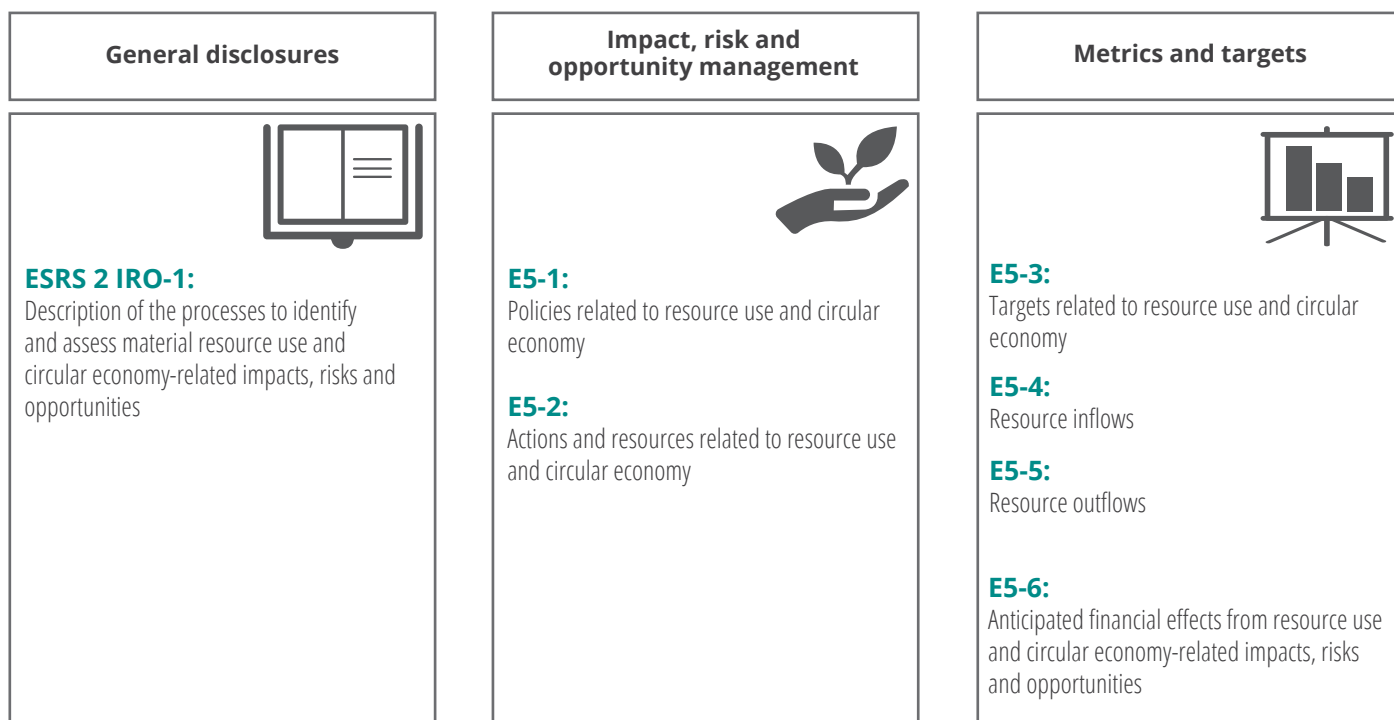
The main objectives of the standard **ESRS E5** revolve around **resource use and circular economy**, moving away from *"business as usual"* procedures of **take-make-waste economy concepts**. It aligns with the EU waste hierarchy and its strategy on circular economy.

The overarching objective of the standard is to specify disclosure requirements on material impacts, risks, and opportunities that arise from resource use and circular economy, as well as related policies, actions, and financial implications.

The main objectives of the disclosure requirements include:

- **material impacts of resource use** (actual and potential, positive and negative);
- actions taken (and their results) to **prevent, mitigate or remediate** actual or potential negative material impacts arising from resource use and circular economy;
- plans and capacities to adapt **strategies and business models** in line with **circular economy principles** and the **waste hierarchy**;
- **nature, type and extent** of the material risks and opportunities related to impact and dependencies, arising from resource use and circular economy, and how the undertaking manages them; and
- short-, medium- and long-term **financial effects**

Like other ESRS standards, ESRS E5 can be divided into three pillars, each featuring separate disclosure requirements.

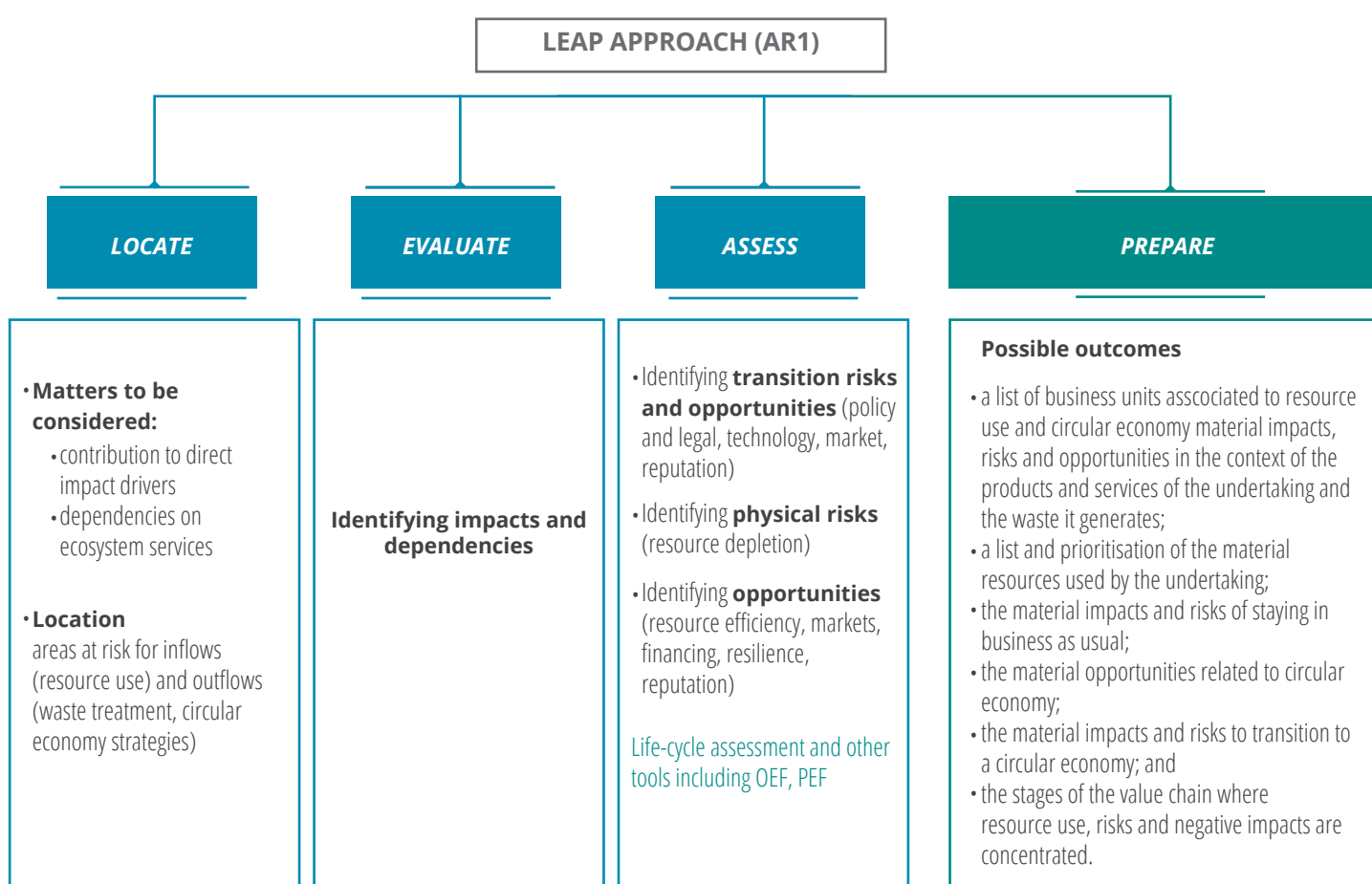


Graphic 2, ©adelphi

GENERAL DISCLOSURES

Like many other standards, ESRS E5 should be understood and read in conjunction with [ESRS 1](#) dealing with general requirements and [ESRS 2](#), in particular its disclosure requirement IRO-1. This requirement specifies how to describe the process to identify and assess the material

impacts, risks and opportunities associated with resource use and circular economy, including screening methodologies, assumptions and tools; interconnections between risks and opportunities; and consultation processes. There is a clear link to the systematic and comprehensive **LEAP**² approach.



Graphic 3, inspired by the source: EFRAG

In conducting the material assessment, the standard refers to the potential usage of the LEAP approach, which consists of four phases: the **location** of own operations and the value chains that interfere with nature, the **evaluation** of impacts and dependencies on ecosystem services (potentially incorporating lifecycle assessment tools), the **assessment** of material risks and opportunities, and the **preparation** and

report of the materiality results. The understanding of resource use and circular economy aspects can sometimes pose challenges, particularly regarding dependencies on submaterials and resources, where the location becomes evidently crucial. Additionally, outputs play a relevant role when considering the location of waste treatment and other circular economy strategies.

² Locate, Evaluate, Assess and Prepare

IMPACTS, RISKS AND OPPORTUNITY MANAGEMENT

In this pillar, the standard specifies the reporting requirements and **minimum disclosure requirements** (MDR) for policies, actions and resources related to resource use and circular economy. In general, only such policies, actions and resources have to be disclosed that are associated with impacts, risks and opportunities of resource/material use and circular economy.

ESRS E5-1 Policies related to resource use and circular economy

The objective of this requirement is to explain to what extent and how the **policies** contribute to identifying, assessing, managing, and/or remedying impacts, risks and opportunities related to material resource use and circular economy along the entire value chain. The **ESRS 2 MDR-P** constitutes the basis for describing the policies and requires disclosure of key contents of policies, their scope of application and highest responsible management level, and if relevant related standards or initiatives, and stakeholder participation.

The standard itself shall require companies to report on **two aspects**. First, companies shall describe whether and how its policies facilitate the transition away from the use of virgin resources, including relative increases in use of secondary (**recycled**) resources. Second, they shall disclose policies on **sustainable sourcing** and the use of **renewable** resources.

ESRS E5-2 Actions and resources related to resource use and circular economy

The objective of this requirement is to clarify how the **actions** contribute to achieving objectives related to resource use and circular economy along the entire value chain. The **ESRS 2 MDR-A** constitutes the basis for describing the actions and requires disclosure of scope, extent

and timeline of key measures, including outcomes, and if applicable measures to support harmed actors and information on progress.

The standard itself may require companies to disclose information on **three** dimensions. First, the standard includes companies to specify whether and how their actions and resources are related to the use of **technical** and **biological materials** and **water**, for instance, raw materials and rare earths. Second, companies may need to clarify throughout the entire product value chain whether and how their actions and resources consider **elements of circular design**, such as durability and optimization of use, as well as higher aspects of reuse, repair, refurbishing, remanufacture, repurposing or recycling. Third, companies shall describe the actions that they take across the entire value chain such as the **application of circular business practices** (value retention, value maximization, end-of-life, system efficiency), as well as actions to prevent waste generation and the optimization of waste management.

METRICS AND TARGETS

In this pillar, the standard specifies the **quantitative information** on resource use and circular economy, resource inflows, resource outflows (including products and materials, and waste), and potential financial effects, risks and opportunities related to resource use and circular economy.

ESRS E5-3 Targets related to resource use and circular economy

The objective of this requirement is to facilitate the understanding of the company's **targets** for resource use and circular economy. The **ESRS 2 MDR-T** constitutes the basis for describing the actions and requires disclosure of information on several aspects that allow tracking effectiveness.

Three kinds of reporting requirements are distinguished. First, the standards shall specify the relation of targets to resource **inflows and outflows** and the layers of the **waste hierarchy**, namely whether and how they relate to:

- increases of circular product design and material use rate (including for instance design for durability, dismantling, reparability, recyclability etc.)
- minimization of virgin raw materials
- sustainable sourcing and use in line with the cascading principle of renewable resources
- waste management and proper waste treatment as well as other targets relating to resource use and circular economy

Second, the standard may require information on whether and how ecological and entity-specific thresholds were used in setting targets. If they were, detailed information on the **ecological** thresholds, including whether they are entity-specific, and the used methodology in determining them might be required. If the thresholds are entity-specific, it should also be described how they were established and who is responsible for compliance.

Third, it should be specified whether the targets set were **mandatory** or **voluntary**.

ESRS E5-4 Resource inflows

Resource flows are an essential element of any circular economy concept. The objective of this requirement is to provide **insights** into the resource use according to material impact, risks and opportunities.

The ESRS E5 therefore shall generally disclose information on resource inflows, namely a description of **material inflows** along the value chain covering products and materials, including packaging, as well as water and property, plant and equipment. This also includes methodological information on the calculation of the data and its sources (measurement or estimation).

Further information might be required if these inflows consist of materials with regard to their **sustainability**, e.g. electronics and ICT, batteries and vehicles, packaging, plastics, textiles, construction and buildings, and food, water and nutrients. In this case, **quantitative data** on the weight of resource inflows of the products and services needs to be disclosed, including:

- the overall total weight of resource inflows (technical & biological);
- the share of the total weight of biological materials (and biofuels used for non-energy purposes), which are sustainably sources (including the certification scheme & application of cascading principle);
- the absolute weight of non-virgin reused and recycled components, products and materials and their share of total weight of resource inflows.

ESRS E5-5 Resource outflows

This requirement covers products and materials, and waste, according to their impacts, risks and opportunities. Its objective is to shed light on the circularity of products and materials, and on waste management.

Products and materials

This requirement addresses **key outputs** of the production process and, similar to DR E5-4 on resource inflows. The description of products and materials needs to provide whether the design meets **circular economy principles**, such as **durability, reusability, reparability, disassembly, remanufacturing, refurbishment, recycling, biological recirculation** and **optimized use**. If these outflows are of product and therefore, of material matter, **two additional disclosure obligations** are added. First, information on the **reparability of products** (using an established rating system). Second, data on the **amount of recycled content** used in the products (and their packaging).

Waste

The disclosure requirements for waste is divided into **five dimensions**: information on **waste generation**, on recovery, on disposal, on composition of waste and on hazardous and radioactive waste. In case of waste generation, the total amount of waste needs to be reported in tons or kilograms. Information on **recovery and disposal** needs to specify their amount by recovery type (preparation for reuse, recycling, and other) or waste treatment type (incineration, landfilling, and other) with a breakdown between hazardous and non-hazardous waste. In case of **waste composition**, the relevant waste streams (e.g., electronic or food waste) and the materials in the waste (e.g., metals or plastics) shall be identified. When it comes to **hazardous and radioactive waste**, their total

amount shall be revealed. As described in the resource inflow section above, the contextual information on the underlying methodologies and assumptions used for calculating the data should be given as well. Finally, the disclosure requirement also includes **methodological information** on the calculation of the data and its sources (measurement or estimation).

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

The objective of this requirement is to create transparency regarding the financial effects, costs and benefits of material risks and opportunities associated with resource use and circular economy over the short-, medium- and long-term. The information provided for ESRS E5-6 is an addition to the current financial effects, reported in ESRS 2 (General disclosures).

Essentially, the disclosed information shall **quantify anticipated financial effects** in monetary terms and either the exact amount or a range. Where monetary quantification is not possible, a qualitative description is sufficient. Moreover, information shall be disclosed on the risks and opportunities and related effects that were considered and the likely time horizons in which they actualize. Methodologically, the assumptions on which the estimates are based on and their sources and levels of uncertainty may be disclosed under this requirement.

CONCLUDING RECOMMENDATIONS

In summary, ESRS E5 disclosure requirements call for companies to create **an understanding of the circularity of their inflows and outflows**, assess the associated impacts, risks and opportunities and develop policies, targets and actions accordingly.

Regardless, whether a company becomes subject to reporting requirements, it should **familiarize itself** with the ESRS standards **in a timely manner**. This also includes **smaller companies** that will only become subject to reporting at a later stage. It is important for sustainability reporting to be carried out in collaboration with all process owners within the company, ensuring that data is captured optimally and is continuously improved. Whether companies are just starting out or are more advanced, **time and resources can be saved** by engaging an **experienced partner** who can provide support in developing a CSRD-compliant **ESG strategy** and reporting.

FURTHER INFORMATION

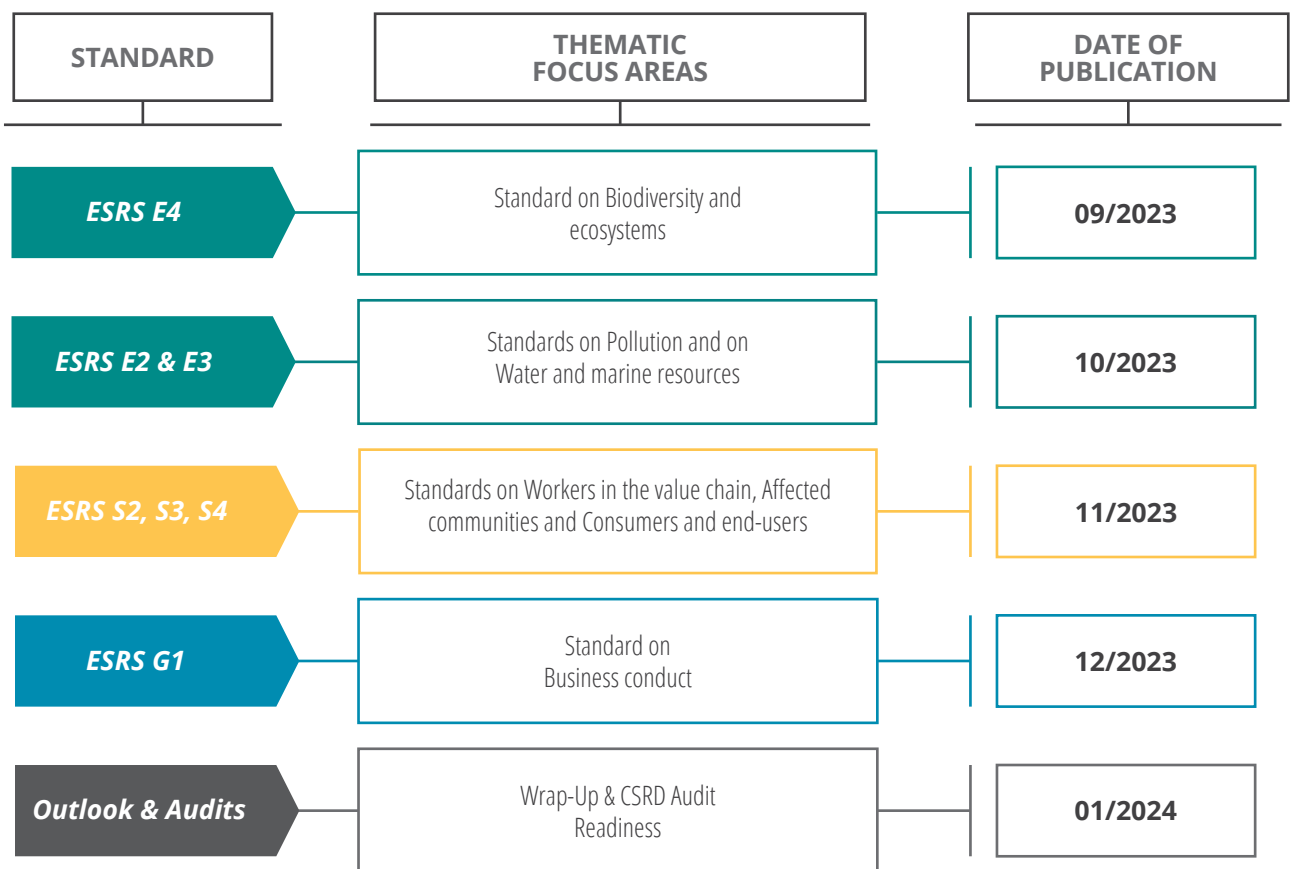
[Here](#) you can access the standard.

EFRAG has also published [explanatory videos](#) on the individual standards to give you a better insight into the subject matter.

OTHER PUBLICATIONS AND EVENTS

Subsequently, fact sheets and webinars are planned for all existing drafts of the cross-thematic, as well as the topic-specific core standards in the areas of environmental goals, social standards and governance.

To facilitate the introduction of companies to the topic of **sustainability reporting** according to CSRD, in addition to this fact sheet, **adelphi** is developing four further fact sheets on the sustainability reporting standards (ESRS) and **hosting webinars** accordingly. Further information can be found on our homepage at: www.csrd-support.de



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