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Corporate Sustainability Reporting Directive (CSRD) & GS1 Standards

A collaborative approach to corporate ESG activities

White Paper

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Contributors

Name	Company/ GS1 Member Organisation
Theresa Jentsch	ALDI Einkauf SE & Co. oHG
Katharina Kücherer	ALDI Einkauf SE & Co. oHG
Lea Schmolke-Höhne	Dirk Rossmann GmbH
Dagmar Glatz	dm-drogerie markt GmbH + Co. KG
Tim-Philipp Bruns	EDEKA ZENTRALE Stiftung & Co. KG
Katharina Wolters	EDEKA ZENTRALE Stiftung & Co. KG
Stefanie Steffen	Globus Fachmärkte GmbH & Co. KG
Susanne Motsch	Globus Fachmärkte GmbH & Co. KG
Anna Klemmer	Henkel AG & Co. KGaA
Laura Friedrich	J. Bünting Beteiligungs AG
Michael Walter	Kaufland Stiftung GmbH & Co.KG
Michael Blust	MARKANT
Paul Iwanski	MARKANT
Alja Ladinek	MARKANT
Jürgen Matt	MARKANT
Carolina Müller	MARKANT
Marta Marth	Nestlé Deutschland AG
Andrea Schwalber	Nestlé Deutschland AG
Dr. Guido Pieroth	Procter & Gamble
Michael Georgiev	REWE Group
David Heulle	REWE Group
Bettina Waldau	REWE Group
Maren Bayer	Schwarz IT KG
Julian Ludwig	Werner & Mertz GmbH
Yannic von Raesfeld	Werner & Mertz GmbH
Robine Arnoys	GS1 BelgiLux
Etienne Pot	GS1 Europe
Svenja Barnstedt	GS1 Germany
Sarah Grede	GS1 Germany
Leonie Richter	GS1 Germany
Janneke van den Broek	GS1 Netherlands
Friso Wempe	GS1 Netherlands
Szymon Fojutowski	GS1 Poland
Olena Kobylchenko	GS1 Poland
Marta Szymborska	GS1 Poland
Marta Résio	GS1 Portugal

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1 Management summary

The Corporate Sustainability Reporting Directive (CSRD) is a central component of the EU's strategy to promote transparency and comparability of sustainability information. It builds on the Non-Financial Reporting Directive (NFRD) and expands its scope to include more companies and more detailed reporting requirements. This includes comprehensive reports on a variety of ESG factors such as greenhouse gas emissions, energy consumption, water usage, social and employee matters, human rights and issues of corruption and bribery.

A key aspect of the CSRD is effective data exchange along the whole value chain. Companies must not only collect and manage data within their own organisation, but also integrate information from their suppliers and other partners to obtain a complete picture of their sustainability performance. This involves implementing robust data collection processes, ensuring the accuracy and reliability of reported data through internal and external audits, and continuously improving data collection and reporting processes.

Data exchange across company boundaries is crucial to support ESG and set targets. GS1 standards provide a common language and framework for accurate and efficient data exchange along the value chain. This includes the key requirement of developing a common understanding of methodology and communication to ensure that data exchange in the value chain is as efficient and accurate as possible. By using GS1 standards, companies can improve the accuracy of their data, strengthen collaboration with their partners and ensure that their sustainability reports meet the requirements of the CSRD.

Another crucial requirement for the future implementation of data points with GS1 standards is ensuring scalability and leveraging synergy effects between regulatory requirements. Beyond the CSRD, various regulations under the EU Green Deal umbrella require data to be exchanged across the value chain. GS1 standards allow these data points to comply with multiple regulations simultaneously. The advantage is that data is generated once in a standardised format, exchanged once for multiple purposes, and can be utilised for multiple regulations. Based on that interoperable approach, it is possible for companies to maximise synergies and reduce excessive effort for companies that are subject to the reporting requirements.

This GS1 white paper is in the development phase. An essential next step is the development of an evaluation framework with criteria to create a common understanding and prioritisation of data points to be exchanged between the different value chain partners. This will be published in the next version of this GS1 white paper. This next version will also incorporate further practical experience.

2 Introduction: sustainability regulations in the European Union

The European Union's (EU) Green Deal, launched in December 2019, is the EU's roadmap to make its economy circular and climate-neutral by 2050. It aims to transform the EU into a modern, resource-efficient and competitive economy, ensuring no net emissions of greenhouse gases by 2050, economic growth decoupled from resource use, and no person or place left behind. This ambitious plan encompasses a wide range of regulations, such as the Corporate Sustainability Reporting Directive (CSRD), the EU Taxonomy, the Corporate Sustainability Due Diligence Directive (CSDDD), the EU Deforestation Regulation (EUDR), the Ecodesign for Sustainable Products Regulation (ESPR) and the Packaging and Packaging Waste Regulation (PPWR), covering initiatives from climate action and clean energy to sustainable industry and circular economy[1].

The EU Commission intends to revise several Green Deal regulations through an omnibus package aimed at reducing red tape while maintaining the EU's sustainability objectives. This initiative seeks to streamline reporting burdens across three regulations: the CSRD, CSDDD and EU Taxonomy. This initiative aims to utilise certain simplifications and synergies to reduce administrative burdens, though changes are not yet finalised and must be continuously monitored.

A crucial element and key component of the EU Green Deal is the Corporate Sustainability Reporting Directive (CSRD). The CSRD derives from the EU's efforts to encourage companies to be transparent about their environmental impact and sustainability practices, thereby also contributing to the EU's climate goals. This directive mandates detailed sustainability reporting on environmental, social and governance (ESG) aspects, ensuring that companies provide comprehensive and reliable information about their sustainability efforts.

By standardising sustainability reporting, the CSRD aims to provide investors and stakeholders with comparable and reliable data, fostering a more sustainable and resilient economy. The CSRD not only aligns with the objectives of the Green Deal, but also supports the EU's broader goals of promoting sustainable finance and responsible business conduct. It underscores the EU's commitment to integrating sustainability into the core of corporate strategy and decision-making, ensuring that businesses contribute to the transition towards a greener and more inclusive future.

3 Corporate Sustainability Reporting Directive (CSRD)

3.1 Overview

The CSRD builds upon the Non-Financial Reporting Directive (NFRD) and expands its scope to include more companies and more detailed reporting requirements. It aims to improve the former NFRD reporting by providing clearer and more consistent standards. The directive requires companies to report on their sustainability performance in a manner that is comparable, reliable and easily accessible to stakeholders.

The primary objective of the CSRD is to improve the quality and comparability of sustainability information disclosed by companies as well as to enhance transparency and accountability in corporate sustainability practices. This includes detailed reporting on a wide range of ESG factors, such as greenhouse gas emissions, energy consumption, water usage, social and employee matters, human rights, anti-corruption, and bribery issues. The CSRD mandates a comprehensive overview of a company's entire value chain, requiring detailed reporting on both upstream and downstream activities. Consequently, the value chain plays a crucial role in meeting CSRD requirements. For instance, companies need to make reasonable efforts to exchange primary data with suppliers, ensuring accurate reporting.

[1] Further developments are expected within the European legal framework. This leads to the fact that this guideline needs to be regularly reviewed and, if necessary, updated.

Companies are required to integrate sustainability reporting into their management reports and have the information audited by an independent assurance services provider. The CSRD also introduces digital tagging of reported information to facilitate its accessibility and usability. Compliance with the CSRD will be monitored by national competent authorities, ensuring that companies adhere to the reporting standards and contribute to the EU's sustainability objectives.

3.2 Implementation

The CSRD must be implemented into national law. This means that criteria may vary between countries. As of now, not all nations have implemented the regulation, so its final form remains uncertain. The thresholds for the CSRD under the omnibus package are still under discussion and have not yet been finalised.

While the CSRD encompasses various requirements for corporate sustainability reporting, the European Sustainability Reporting Standards (ESRS) play a crucial role in defining the specific disclosure expectations and ensuring consistency across companies. The European Financial Reporting Advisory Group (EFRAG) has been designated by the EU Commission as technical advisor for the development of the ESRS and thus plays a central role as an institution in the implementation of the CSRD.

The ESRS provide a comprehensive framework for companies to disclose their sustainability practices across the ESG areas.

The ESRS are organised into 12 standards, two cross-cutting and ten topical standards, ensuring that sustainability reporting is both comprehensive and focused.

The ESRS framework includes two cross-cutting standards, ESRS 1 and ESRS 2, which establish general requirements and disclosure expectations for companies. ESRS 1 outlines core principles such as double materiality, value chain integration and boundary setting. ESRS 2 focuses on general disclosures related to governance, strategy, impact management, and metrics and targets. Beyond these, there are ten topical standards that address specific aspects of ESG reporting, such as climate change, pollution, biodiversity and ecosystems, own workforce and business conduct.

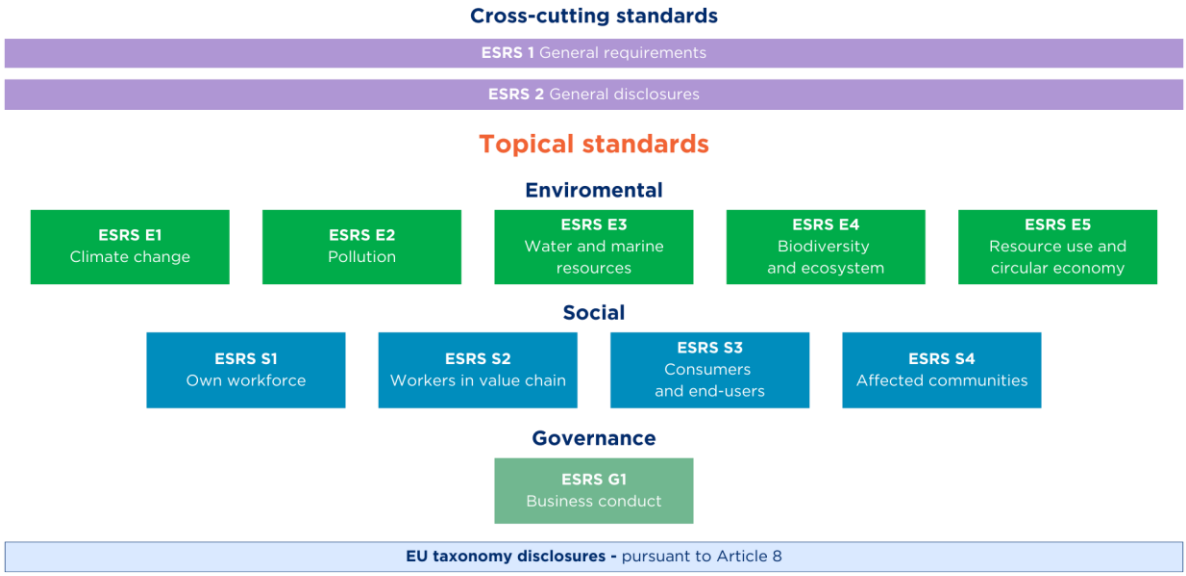

Figure 1: Overview of ESRS (European Sustainability Regulation Standard)

Conducting a double materiality assessment is mandatory under the CSRD. Companies reporting on sustainability must evaluate the relevance of a sustainability matter from two perspectives: impact materiality and financial materiality. Impact materiality, also known as the inside-out view,

considers how organisations affect people and the environment. Financial materiality, or the outside-in view, examines how sustainability-related developments and events create new risks and opportunities for organisations. Under the double materiality perspective, a sustainability matter can be material from either an impact or financial point of view, or both. This process involves evaluating sustainability issues based on their impacts, risks and opportunities (IROs). It begins with creating a CSRD longlist of potential sustainability topics that could affect an organisation or be impacted by it. For each topic on the longlist, the potential impacts (positive and negative), risks and opportunities must be identified. Next, both the impact materiality and financial materiality of all topics need to be assessed. Finally, a threshold for what is considered material should be set, ensuring that both impact and financial materiality are considered.

Once the material IROs have been identified, companies develop targeted measures to address them as part of their sustainability strategy. These measures may include initiatives to mitigate negative impacts, capitalise on opportunities and manage risks effectively. As a result, companies must disclose not only the metrics and targets set for each sustainability measure, but also a comprehensive sustainability strategy. This strategy should outline their long-term goals, targets and action plans for achieving these goals. By integrating the findings of the double materiality analysis into their strategic planning, companies can enhance their sustainability performance, ensure compliance with regulatory requirements and meet stakeholder expectations. Importantly, companies are only required to report on the data points that have been identified as material through this process, ensuring that their sustainability reports are focused and relevant. This approach not only supports transparency and accountability, but also drives long-term value creation and resilience.

This enhanced transparency is expected to drive greater accountability and encourage businesses to integrate sustainability considerations into their strategic and operational decisions. Ultimately, the widespread availability of reliable sustainability data will foster a more sustainable and resilient market, aligning economic activities with the broader goals of environmental protection and social responsibility.

The CSRD sets a new benchmark for a significant number of companies across the EU, mandating comprehensive reporting on their climate and environmental impacts (see References – *European Commission*). Companies need to be compliant with CSRD legislation, otherwise their local authorities could take measures to force them to comply, which could even lead to severe penalties.

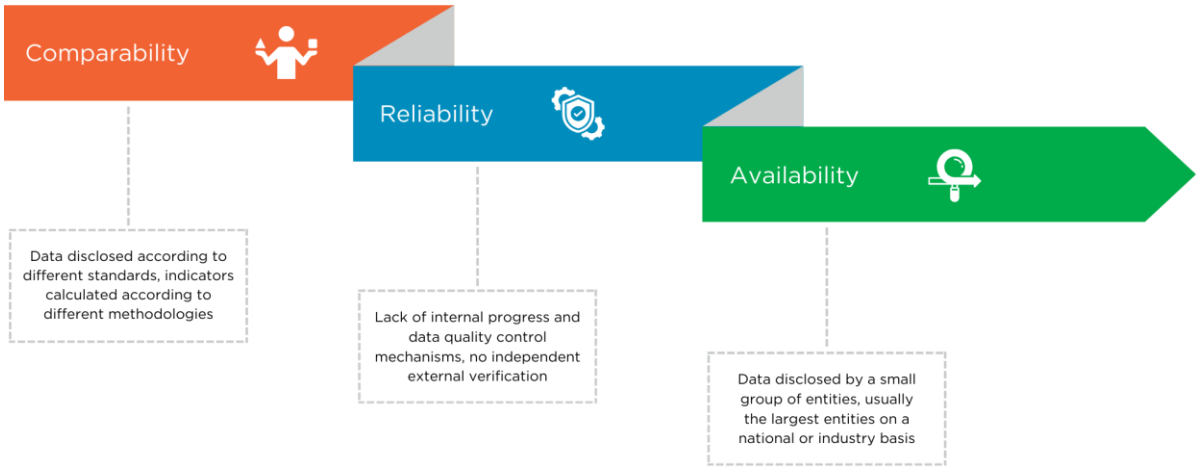

Figure 2: The way forward with CSRD

4 CSRD and GS1 Standards

Having established an understanding of the relevance and activities needed to meet the requirements, it is now important to understand where GS1 standards can add value for companies in the context of the CSRD and ESG.

4.1 Data handling, gathering and processing needs

The results of the double materiality analysis determine which topics are included in the sustainability reports according to the ESRS. It should be noted that the ESRS and the resulting data points leave a lot of room for interpretation. While the process is specific to each company, it is also expected that there will be similarities in double materiality within an industry sector such as the FMCG industry. Based on the outcomes of the analysis, a company needs to define and report a sustainability strategy including targets, metrics and action plans related to ESG topics, as well as the relevant measures and actions.

To develop ESG targets and fulfil relevant reporting obligations, companies must consider not only their own production and services, but also their entire value chain. While companies often already hold quite a lot of the necessary data within their own organisation, which needs to be collected and managed regularly, they also rely on information from their value chain to publish reliable and comprehensive sustainability data. This can be the case for information on manufacturing or other life cycle phases, both at the product level and the company level. This means that companies need to collect and integrate data from various actors along the value chain to obtain a complete picture of their sustainability performance – upstream and downstream.

Gathering data to also track progress towards achieving the set targets on a regular basis is a key element of the CSRD.

Collecting and integrating necessary data from various actors along the value chain is a complex process. While data exchange is essential for companies to comply with the directive, it is not a direct regulatory requirement of the CSRD. Instead, it arises from the need for corporate responsibility within the value chain, aiming to foster sustainable and future-oriented business practices efficiently and cost-effectively. A company needs to make reasonable efforts to exchange the necessary information with the respective value chain, allowing the incorporation of primary data and avoiding reliance on secondary data.

Therefore, companies as operators must ensure that the data included in their sustainability reports is accurate, reliable and verifiable.

This involves:

- Data collection: Implementing robust data collection processes to gather relevant information from across the whole value chain.
- Data verification: Establishing robust internal control mechanisms to ensure the accuracy and completeness of reported data. This includes regular internal audits and data validation processes. Additionally, having external auditors or verification bodies audit the reported data further enhances the credibility and reliability of the information.
- Continuous improvement: Regularly reviewing and updating data collection and reporting processes to enhance data quality and reliability.

To effectively track and report on relevant ESG targets and strategies, companies must gather and manage a substantial amount of data.

4.2 Benefits of using GS1 Standards for the implementation of ESG strategies

The required transparency can be achieved in a more effective and efficient way if companies work together. Only through collaboration with suppliers and other partners will companies ensure and maintain high data quality.

Especially when it comes to product-related information, a common approach for data capturing, transfer and data calculation in value chains is needed. In this context, ESRS requirements need to be interpreted uniformly across companies. For the information to be meaningful, standardised

definitions, measurement and calculation procedures are also required to ensure comparability. The inclusion of data from the value chain and cooperation with suppliers are key, as well as the basis for contributing to and achieving a company's ESG strategies and objectives.

GS1 standards form the basis for this and help as a common language in the value chain. GS1 standards enable data exchange across company boundaries. Due to the large amount of data, a high degree of digitalisation and automation is needed to support compliance and efficiency in value chains.

Effective ESG data management is therefore crucial for fulfilling the requirements of the CSRD, and GS1 standards can significantly help in this process by providing a common language and framework for accurate and efficient data exchange across the value chain:

- ✓ Efficient data sharing: GS1 standards facilitate the seamless exchange of data between trading partners, ensuring that all parties have access to the same accurate and up-to-date information. This also includes the need for standardised data attributes and code lists, which improve collaboration and help companies meet the reporting requirements of the CSRD.
- ✓ Improved data accuracy: By using GS1 standards, companies can reduce the risk of errors and ensure that their data is accurate and reliable. This is crucial for producing credible sustainability reports.
- ✓ Operational efficiency: GS1 standards streamline data capture and sharing processes, reducing the administrative burden on companies and allowing them to focus on their core business activities.

Using GS1 standards provides a viable and foundational approach to addressing this complexity, emphasising the necessity of collaborative efforts. This not only helps companies in the implementation of the CSRD process, but also supports their broader sustainability targets. GS1 standards can form the basis for enabling data exchange and influence the process of accomplishing sustainability targets, demonstrating that this can only be achieved through cooperation and collaboration in the value chain. In this way, a long-term increase in sustainability performance within companies can be organised more effectively.

5 Impact of collaboration based on GS1 Standards

Achieving environmental, social and governance (ESG) targets requires a collaborative working model involving various actors in the value chain, including suppliers, brand owners and retailers. Collaborative efforts and co-development are indispensable. Each actor plays a crucial role in ensuring that sustainability goals are met, and the use of GS1 standards facilitates this process by enabling seamless data exchange and enhancing transparency.

Roles of different actors in an FMCG value chain

- Supplier: Suppliers are responsible for producing raw materials and components that are used for manufacturing the finished goods.
- Brand owner: Brand owners, or manufacturers, are responsible for transforming raw materials into finished products.
- Retailer: Retailers are responsible for delivering finished products to consumers.

Figure 3: Simplified value chain with different actors

Cross-company data exchange with GS1 Standards

Effective cross-company data exchange is essential for achieving ESG targets. It ensures that all actors in the value chain have access to accurate and up-to-date information about the sustainability attributes of products. This transparency enables better decision-making, enhances accountability and fosters trust among stakeholders.

- ✓ Transparency: Sharing data across companies ensures that all actors are aware of the sustainability practices and performance of their partners. This transparency helps identify areas for improvement.
- ✓ Accountability: Cross-company data exchange holds each actor accountable for their sustainability practices. It ensures that suppliers, brand owners and retailers are all working towards a common ESG transformation.
- ✓ Efficiency: Efficient data exchange reduces duplication of efforts and streamlines processes, making it easier to track and report on sustainability metrics.

GS1 standards are the most widely used system of business standards in the world – categorised into three dimensions: Identify, Capture and Share.

1. Identify: GS1 ID keys enable organisations to assign standard identifiers to products, documents, physical locations and more. Because GS1 ID keys are globally unique, they can be shared between organisations, increasing value chain visibility for trading partners. For instance, the Global Trade Item Number (GTIN) can be used by a company to uniquely identify its trade items.
2. Capture: These keys can be represented in data carriers, such as barcodes or EPC/RFID tags, to enable automatic data capture.
3. Share: They may also be used in electronic communications, improving speed and accuracy when sharing master data, transaction data and visibility data. Master data in cross-company data exchange – both at product and company level – is best practice to promote a collaborative approach and holistic ESG alignment on the market.
    - **Global Data Synchronisation Network (GDSN):** GDSN is a network of interoperable data pools that enables companies to share standardised product data, including clear definitions on attributes, with their trading partners.
    - **Web Vocabulary:** The GS1 Web Vocabulary (WebVoc) collects terms defined in various GS1 standards and data systems and made available for general use following Linked Data principles. It is an external extension to schema.org that allows further details about products, assets and other entities to be expressed using Linked Data technology.

This collaborative approach is crucial, bridging the gap between legal requirements and the need to manage them efficiently throughout the entire value chain. It is a good way to meet CSRD requirements efficiently – the foundation to overcoming environmental and social challenges and deriving value from sustainability. By ensuring that accurate and comprehensive information is shared across the value chain, companies can drive innovation in sustainability practices and enhance their operational efficiency. Additionally, this transparency builds trust with consumers and other stakeholders, demonstrating a commitment to responsible and ethical business practices.

6 Identification of key data points for data exchange

The overarching trigger for data points to be exchanged across companies on the basis of GS1 standards is the regulatory framework described in Section 3.

- Step 1: Companies evaluate the double materiality of a data point individually according to the EFRAG list:

  Determination of the totality of all possible data points to be reported within the CSRD using the publicly available list of data points and guidelines to support the implementation of the ESRS publicly provided by EFRAG.

- Step 2: The industry sector decides on the qualification of data points for the active and efficient management of the strategic ESG orientation of the FMCG industry:

  Data points that are relevant for cross-company data transfer. Especially those that are relevant due to a complexity measured by:

  - number of regulations and their respective synergy potential
  - number of methods concerned
  - dependencies on existing standards
  - international compatibility

  Data points that have an overlap in the materiality of many stakeholders

  Data points that can be structured in the context of GS1 standards

- Step 3: The appropriate GS1 standard in which the data point can then be exchanged depends in turn on the characteristics and requirements of the individual data point.

  It depends on the compatibility with GS1 standards (technical structurability) and the degree of standardisation maturity, indicating the extent of preparatory work already completed. A key requirement is to maximise the use of existing methods and standards in the development of attributes and code lists.

  In addition, the differentiation between product level (master data/transactional data) and company level is important for the respective GS1 standards mapping.

It is therefore a multi-stage process that ultimately makes a data point relevant for cross-company data exchange along the value chain.

The need to share information in value chains based on common data points using the GS1 standards is therefore not a direct regulatory requirement of the CSRD, but a consequence (business requirement) of the need to take on corporate responsibility and thus to shape sustainable business in a future-oriented and efficient (cost-reducing) manner.

6.1 List of identified key data points

Using the initial prioritisation and reference points, the data points in the following list have been identified as important and relevant for data exchange across the value chain. The level of data exchange can differ and change depending on the availability of sustainability data and the alignment between industry partners. This selection is preliminary and can be further refined and prioritised based on additional criteria introduced.

The following lists differentiate between data points mapped at product and company level:

Key data points for data exchange at product level

Data point no.	ESRS	Data point name	Data point short name	Definition
1	ESRS E1: Climate change	GHG emissions – by country, operating segments, economic activity, subsidiary, GHG category or source type	Product carbon footprint	Disaggregated GHG emissions per product as product carbon footprint (PCF) of its respective Scope 1, 2 and 3 GHG emissions (cradle to gate when leaving the company). For the PCF, CO_2eq per kg shall be used as the common unit of measurement.
2	ESRS E2: Pollution	Microplastics generated or used	Microplastics	Microplastics generated or used, that leave the undertaking's facilities as products, or as part of products or services. As 'microplastics' all synthetic polymer particles under 5 millimetres that are organic, insoluble and difficult to degrade are defined (based on ECHA/EU Commission).
3	ESRS E2: Pollution	Amount of generated or used substances of concern during production or that are procured	Substances of concern	Total amounts of substances of concern that leave the undertaking's facilities as products, or as part of products or services split into main hazard classes of substances of concern. As 'substance of concern', the following is defined: i. meets the criteria laid down in Article 57 and is identified in accordance with Article 59(1) of Regulation (EC) No 1907/2006 of the European Parliament and of the Council (35); ii. is classified in Part 3 of Annex VI to Regulation (EC) No 1272/2008 of the European Parliament and of the Council (36) iii. negatively affects the reuse and recycling of materials in the product in which it is present, as defined in relevant Union product-specific ecodesign requirements.

4	ESRS E5: Resource use and circular economy	Weight of products and technical and biological materials used during the reporting period	Weight of products and product packaging, differentiating between technical and biological materials	Overall total product weight and packaging weight, differentiating between technical and biological materials. Technical materials are generally not biodegradable and include all materials used in a technical process that are not of biological origin (e.g. metals, plastics). Biological materials are derived from, or produced by, biological organisms like plants, animals, bacteria, fungi and other life forms. These are also called biologically derived materials (e.g. wood, cotton, natural fibres and other organic materials).
5	ESRS E5: Resource use and circular economy	Weight of products and technical and biological materials used during the reporting period	Weight of transport packaging, differentiating between technical and biological materials	Overall total transport packaging weight, differentiating between technical and biological materials. Technical materials are generally not biodegradable and include all materials used in a technical process that are not of biological origin (e.g. metals, plastics). Biological materials are derived from, or produced by, biological organisms like plants, animals, bacteria, fungi and other life forms. These are also called biologically derived materials (e.g. wood, cotton, natural fibres and other organic materials).
6	ESRS E5: Resource use and circular economy	Percentage of biological materials (product and product packaging)	Percentage of biological materials used in products and product packaging	The percentage of biological materials (and biofuels used for non-energy purposes) used to manufacture the undertaking's products (including packaging) that is sustainably sourced, with information on the certification scheme used and on the application of the cascading principle. The declaration should refer to the actual certified portion and not an extension to the entire product (if the entire product is not certified). Any other interpretation is then up to the specific reporting company.
7	ESRS E5: Resource use and circular economy	Percentage of biological materials (transport packaging)	Percentage of biological materials used transport packaging	The percentage of biological materials (and biofuels used for non-energy purposes) used to manufacture the undertaking's products (including packaging) that is sustainably sourced, with information on the certification scheme used and on the application of the cascading principle. The declaration should refer to the actual certified portion and not an extension to the entire product (if the entire product is not certified). Any other interpretation is then up to the specific reporting company.
8	ESRS E5: Resource use and circular economy	Weight of secondary reused or recycled components, secondary intermediary products and secondary materials used to	Weight of secondary reused or recycled components, products and materials in products and product packaging	Absolute weight of secondary reused or recycled components, secondary intermediary products and secondary materials used to manufacture the undertaking's products and its packaging.

		manufacture the undertaking's products and services (product and product packaging)		
9	ESRS E5: Resource use and circular economy	Weight of secondary reused or recycled components, secondary intermediary products and secondary materials used to manufacture the undertaking's products and services (transport packaging)	Weight of secondary reused or recycled components, products and materials in transport packaging	Absolute weight of secondary reused or recycled components, secondary intermediary products and secondary materials used to manufacture the undertaking's transport packaging.
10	ESRS E5: Resource use and circular economy	Expected durability of the products placed on the market, in relation to the industry average for each product group	Expected product durability	The expected durability of the product in relation to the industry average for each product group. Durability is defined as the ability of a product, component or material to remain functional and relevant when used as intended.
11	ESRS E5: Resource use and circular economy	Repairability of products	Product repairability	Repairability of the product means one or more actions carried out to return a defective product or waste to a condition where it fulfils its intended purpose, using an established rating system, where possible.
12	ESRS E5: Resource use and circular economy	Recyclable content in product packaging	Rate of recyclable content in product packaging	Rate of recyclable content in the product, defined as a numerator divided by the total weight of the product in the denominator. Recyclable content means the ability of materials to be collected, sorted and reused through appropriate processes to make product packaging.
13	ESRS E5: Resource use and circular economy	Recyclable content in transport packaging	Rate of recyclable content in transport packaging	Rate of recyclable content of a product's transport packaging, defined as a numerator divided by the total weight of the product in the denominator. Recyclable content refers to the ability of materials to be collected, sorted and reused through appropriate processes to make new products.

Key data points for data exchange at company level

Data point no.	ESRS	Data point name	Data point short name	Definition
14	ESRS E1: Climate change	Science-based GHG emission reduction target	GHG emission reduction target	Indication whether the GHG emission reduction targets are science-based and compatible with limiting global warming to 1.5° C, as well as which framework and methodology has been used to determine these targets, including whether they are derived using a sectoral decarbonisation pathway and if they are externally assured.
15	ESRS S2: Workers in the value chain	Undertaking has supplier code of conduct	Supplier code of conduct	The undertaking shall state whether it has a supplier code of conduct.

6.2 Potential of further selected data points examples

In the following, individual data points from the above list have been selected to illustrate the essential content and the necessary procedures for data exchange:

Data point no. 1: Product carbon footprint

1. **Context:** Companies need to disaggregate their calculated greenhouse gas emissions at the company level appropriately. This disaggregation can be by country, operating segments, economic activity, subsidiary, greenhouse gas type or source type. It can also include breaking down emissions at the product level, considering the life cycle stages of a product to create a comprehensive product carbon footprint (PCF). Under ESRS E1-6, the gross Scope 1, 2 and 3 emissions need to be disclosed. Concerning the PCF, the Scope 3.1 category for purchased goods and services (according to the Greenhous Gas Protocol) creates the connection to the value chain.
2. **Benefits for the value chain:** Reporting on the carbon footprint of products and standardising data exchange improves data quality, transparency, regulatory compliance and cost efficiency. A well-documented PCF enables companies to optimise product design and processes, yielding market and reputational benefits while aligning with global sustainability goals.
3. **Examples of strategies, measures and actions:** To enhance sustainability, the strategy involves establishing effective communication within the value chain to facilitate the necessary data exchange, particularly for capturing and reporting the PCF. This is supported by implementing robust data management systems for capturing, monitoring and reporting ESG data. Additionally, sustainability strategies and actions are regularly reviewed and updated based on reporting outcomes and stakeholder feedback, ensuring continuous improvement in environmental performance.
4. **Data collection and process design:** Companies need to collect data on greenhouse gas emissions, including the PCF, from their upstream value chain to ensure a complete and accurate calculation of their Scope 3 emissions. This comprehensive data collection is crucial for accurate reporting and effective sustainability management. The PCFs of the upstream value chain are incorporated into the corporate carbon footprint (CCF) of the reporting company, specifically in Scope 3.1 Purchased Goods and Services.
5. **Synergies for reporting / Connection to other regulations:**

   EU Taxonomy Regulation, Ecodesign Sustainable Product Regulation (ESPR), Carbon Border Adjustment Mechanism (CBAM), Corporate Sustainability Due Diligence Directive (CSDDD)
6. **GS1 standards:** *Link to GS1 Navigator*

Data point no. 8: Weight of secondary reused or recycled components, products and materials in products and product packaging

1. **Context:** Companies need to report the weight of secondary reused or recycled components, products and materials used in their products and product packaging. This metric helps in assessing the extent to which companies are incorporating circular economy principles by reusing and recycling materials, thereby reducing waste and conserving resources.
2. **Benefits for the value chain:** Reporting the weight of secondary reused or recycled materials enhances transparency and supports the transition to a circular economy. It helps companies to reduce their environmental impact, lower raw material costs and improve resource efficiency. Additionally, it can lead to enhanced brand reputation, regulatory compliance and alignment with consumer demand for sustainable products.
3. **Examples of strategies, measures and actions:** To increase the use of secondary reused or recycled materials, companies can implement the following strategies:
   - Product redesign: Redesign products and packaging to maximise the use of secondary materials without compromising quality or performance.

- Material recovery programmes: Establish programmes to recover and recycle materials from end-of-life products and packaging.
- Supplier partnerships: Collaborate with suppliers to source high-quality recycled materials and ensure their consistent availability.

4. **Data collection and process design:** Companies need to collect data on the weight of secondary reused or recycled components, products and materials used in their products and packaging. This involves tracking the sourcing, usage and recycling of these materials throughout the value chain. Accurate data collection is essential for reporting and for making informed decisions about material selection and product design. The weight of secondary materials used should be integrated into the overall sustainability reporting framework, contributing to the company's environmental performance metrics.
5. **Synergies for reporting / Connection to other regulations**:

   EU Taxonomy Regulation, Ecodesign Sustainable Product Regulation (ESPR), Packaging and Packaging Waste Regulation (PPWR)
6. **GS1 standards (packaging):** *Link to GS1 Navigator*

Data point no. 12: Rate of recyclable content in product packaging

1. **Context:** Companies need to report the rate of recyclable content in their product packaging. This metric measures the percentage of packaging materials that can be recycled, reflecting the company's commitment to sustainability and waste reduction.
2. **Benefits for the value chain:** Reporting the rate of recyclable content in product packaging enhances transparency and supports the shift towards more circular packaging solutions. It helps companies to reduce their environmental impact, comply with regulatory requirements and meet consumer expectations for eco-friendly packaging. Additionally, it can lead to cost savings, improved brand reputation and alignment with global sustainability goals.
3. **Examples of strategies, measures and actions:** To increase the rate of recyclable content in product packaging, companies can implement the following strategies:
   - Design for recycling: Design packaging that is easy to recycle, with clear labelling and minimal use of non-recyclable components.
4. **Data collection and process design:** Companies need to collect data on the types and quantities of recyclable materials used in their product packaging. This involves tracking the sourcing, usage and recycling of these materials throughout the value chain. Accurate data collection is essential for reporting and for making informed decisions about packaging design. The rate of recyclable content should be integrated into the overall sustainability reporting framework, contributing to the company's environmental performance metrics.
5. **Synergies for reporting / Connection to other regulations:**

   EU Taxonomy Regulation, Ecodesign Sustainable Product Regulation (ESPR), Packaging and Packaging Waste Regulation (PPWR)
6. **GS1 standards (packaging):** *Link to GS1 Navigator*

GS1 standards ensure scalability and leverage synergy effects between different regulatory requirements. Beyond the CSRD, various regulations under the EU Green Deal umbrella require data to be exchanged across the value chain. GS1 standards allow these data points to comply with multiple regulations simultaneously. The advantage is that data is generated once in a standardised format, exchanged once for multiple purposes and can be utilised for multiple regulations. Based on that interoperable approach, companies can maximise synergies and minimise the excessive effort required to meet reporting requirements.

The above examples clearly show the efficiency potential associated with GS1 standards. For this reason, the further development of GS1 standards is a prerequisite for active and efficient ESG management – the key success factor to support the transformation to a circular economy and climate neutrality.

References

European Commission. (n.d.). *Corporate sustainability reporting*.

- *https://finance.ec.europa.eu/capital-markets-union-and-financial-markets/company-reporting-and-auditing/company-reporting/corporate-sustainability-reporting_en*
- *Commission simplifies rules on sustainability and EU investments*

EFRAG (2023) *IG 3: List of ESRS datapoints*.

- *https://www.efrag.org/Assets/Download?assetUrl=%2Fsites%2Fwebpublishing%2FSiteAssets%2FEFRAG%20IG%203%20List%20of%20ESRS%20Data%20Points%20-%20Explanatory%20Note.pdf*
- *https://efrag.sharefile.com/share/view/s1a12c193b86d406e90b1bcd7b6bb8f6f/fo37c90b-9d9b-4432-a76b-27760cfcc01b*

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GS1 in Europe

Galerie Ravenstein 4 box 10,
1000 Brussels – Belgium
E contactus@gs1eu.org

www.gs1.eu