

Whitepaper: Unveiling the Path to Double Materiality

14 June 2023 | Version 1

R.A.T.E. GmbH is a consulting boutique based in Frankfurt, Germany. Our team of experts specializes in the fields of sustainability, corporate communications, and reputation management. Under the corporate claim "The Rating Experts," we offer unique and valuable services to our international clients. These services include firstly Rankings, Ratings, and Awards Management: Here, the team helps companies effectively navigate the complex landscape of corporate rankings to enhance reputation, sharpen their positioning and mitigate risks. Secondly, the team conducts Sustainability Materiality Assessments: Here, R.A.T.E. supports clients in developing or adapting their materiality assessment approaches to be compliant with new regulations for Double Materiality while gaining valuable insights into stakeholder expectations.

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1. Overview

Beginning in 2024, large organizations within the European Union (“EU”) will be mandated to comply with the rules set forth by the new European Sustainability Reporting Standards (“ESRS”). Subsequently, the requirements will be extended to encompass all listed companies in the EU, along with private organizations that meet specific thresholds. However, the influence of this new regulation will extend beyond the EU, particularly impacting companies with subsidiaries operating within the EU.”

One key concept introduced in the ESRS is the Double Materiality (“double MA”) principle, which demands companies to enhance their materiality assessments (“MA”) by adopting a holistic perspective. In addition to considering risks and opportunities for the business (outside-in perspective), companies must also examine the impacts their value chains have on people and society (inside-out). While the ESRS features specific rules of how a MA should be conducted, it also leaves ample room for interpretation, requiring companies to tailor their approaches.

This research paper is the first in a series with which we aim to go on the same exciting journey as companies. Our goal is to monitor and assess how companies implement and embrace the new rules, with a particular focus on the crucial aspect of Double Materiality. While we understand that we are at an early stage, we also recognize that many companies have already started the transformation. Hence, this research paper is the first in an annual series to monitor the status of reporting in double materiality. Throughout this series, we will seek to answer essential questions such as:

1. Which companies already comply or are nearing compliance with the new ESRS rules for double materiality?
2. Who has discovered interesting or innovative methods for conducting research or visualizing the results?

While many companies that apply the conventional approach to MAs are relatively transparent in describing their process and methodology, the information regarding companies' efforts to comply with the ESRS is currently limited. For instance, some companies provide a list of the requirements they fulfill but then provide little explanation of how they arrived at their final list of material topics.

We are, however, optimistic that transparency will improve over time, particularly as the compliance deadline approaches. As companies strive to meet the full compliance requirements, we anticipate that we will be able to take a more insightful view behind the scenes. Against this background, this whitepaper is intended to provide insights and motivate companies in their efforts towards embracing the concept of double MA. It is important to note that the purpose of this whitepaper is not to pass judgment on any specific company but rather to explore and present examples that highlight the significance of double MA.

While we are confident that our research will provide valuable first insights, we would also like your help to make it as practical and useful for you as possible. Please get in touch with us if you have questions or suggestions for areas we could explore in future research.

Your input and engagement are greatly appreciated as we strive to continually enhance our understanding and support the evolving landscape of sustainability reporting.

2. Brief History of Materiality

The concept of materiality has its origins in financial reporting a century ago, where it was introduced to identify information that could have a significant effect on a firm's financial performance. The word "material" was first introduced in the U.S. Securities Act of 1933, and, at least since the 1940s, the SEC has defined "material information" in the context of financial statements as "those matters as to which an average prudent investor ought to be informed reasonably before purchasing the security registered.

For almost fifty years, the meaning of materiality for corporate disclosure was largely unquestioned. However, in the 1990s, the concept was challenged as new actors with interests in environmental and or social issues criticized the concept's focus on exclusively financial information to advocate for expanded corporate disclosure aimed at meeting the multifaceted and continually evolving demands of sustainability reporting.

With the founding of the Global Reporting Initiative ("GRI") in 1997 and the establishment of CDP (formerly "Carbon Disclosure Project") in 2000, a discussion of an alternative definition of Materiality started as these and other non-profit organizations began to build reporting frameworks for sustainability reporting around new definitions of reporting.

Yet, despite more than three decades of discourse, coupled with the development of numerous frameworks or guidelines, the concept of materiality remains complicated and nebulous. Many organizations grapple with the challenging task of effectively assessing and defining what materiality means in the context of their unique operations and sustainability impacts. One reason for this complexity is one of perspectives. A key question in determining materiality is "material to whom?" This question was generally straightforward in financial reporting, which was primarily tailored for capital market participants. However, in sustainability reporting, the audience extends beyond just investors to encompass a much wider group of stakeholders, from additional users of sustainability reports up to stakeholders affected by a company's business activities.

Hence until recently, the world of sustainability reporting was divided into two camps: One camp (incl. the Sustainability Accounting Standards Board and the International Integrated Reporting Council) argued that materiality in sustainability reporting should cater the needs of the capital market and should be focused on sustainability-related risks and opportunities for a company's business. The other camp (e.g. Global Reporting Initiative) argued that material topics should inform a wider set of stakeholders, thus representing an organization's most significant impacts on the economy, environment, and people.

Many companies tried to address both camps with MAs that measured the importance of a topic for the business but also integrated the views of stakeholders by conducting comprehensive surveys and interviews. Doing so, companies enjoyed considerable leeway in their approaches. While frameworks like GRI provided a valuable direction, they were not legally binding, leaving companies the discretion to adopt methods most aligned with their unique needs and circumstances.

This autonomy, however, led to a notable absence of consistency and comparability across MAs. With no mandatory definitive rules stipulating how to conduct these assessments, the methods employed by companies spanned a wide spectrum. At one end, some companies opted for simpler, cost-effective approaches, such as deciding material topics through internal workshops, while at the other end, some chose more extensive methodologies, engaging hundreds of stakeholders through surveys and interviews. To illustrate, a sustainability manager from a DAX company once said: “Why would we let our stakeholders decide about what is material for us and what is not”. As a result, some companies would completely internalize the MA, whereas others placed significant efforts to integrate external stakeholder perception.

The Corporate Sustainability Reporting Directive (“CSRD”) introduced by the EU, with its emphasis on double materiality, aims to reconcile the formerly competing perspectives by integrating both the investor-oriented approach advocated, for example by the SASB and the broader stakeholder perspective championed by, e.g. the GRI.”

CSRD is not the only effort to consolidate Environmental, Social, and Governance (“ESG”) international standards. The International Sustainability Standards Board (“ISSB”) Committee, established by the International Financial Reporting Standards (“IFRS”) in 2021, has developed its own global standards promoting a different approach to ESG reporting. Whereas ISSB standards are principles-based, with some room for flexibility for companies, and are climate-centric and strictly directed to investor protection, CSRD is more prescriptive, covers the full range of ESG topics beyond climate, and goes beyond investor protection.

3. The ESRS Double Materiality Concept

In 2019, the European Commission introduced the European Green Deal, outlining its vision to transform Europe into the world's first climate-neutral continent. This ambitious plan involves a range of policy initiatives and legislative acts to foster a green economy and channel public and private capital into sustainable business practices.

Legislative acts linked to the green deal, such as the EU Taxonomy and the CSRD aim at advancing the reliability and usefulness of sustainability information for investors. With the EU Taxonomy, regulators define clear criteria to determine which economic activities qualify as “sustainable,” providing a common framework for sustainable investment decisions. On the other hand, the CSRD represents a significant step forward by replacing the EU's existing Non-Financial Reporting Directive (“NFRD”). It introduces comprehensive ESG reporting requirements, specifically within a dedicated section of the management report. By consolidating and modernizing existing frameworks, the CSRD aims to enhance the breadth, depth, and consistency of ESG and sustainability reporting across the EU.

The ESRS represents a set of reporting standards that companies must adhere to as part of the CSRD. The development of the ESRS has been entrusted to the European Financial Reporting Advisory Group (“EFRAG”), appointed by the European Commission.

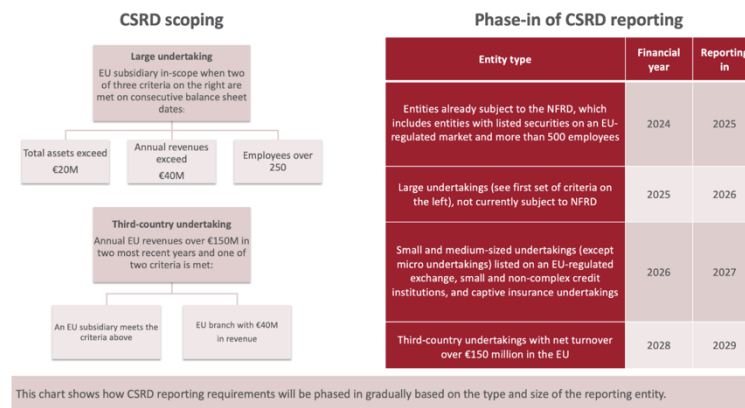


Figure 1: CSRD reporting requirements

On 15 November 2022, the EFRAG Sustainability Reporting Board approved in total 12 draft European Sustainability Reporting Standards (ESRS) including 2 general, 5 environmental, 4 social and 1 governance standards. These standards serve as guidelines for companies to align their reporting practices with the ESRS requirements.



* Regardless of materiality assessment results, CSRD requires disclosures against this topic

** Regardless of materiality assessment results, disclosure is required if EU entity has 250+ employees

Figure 2: ESRS reporting framework

One significant aspect emphasized by the ESRS is the principle of double materiality, which mandates that companies consider both financial materiality and impact materiality in their reporting. By incorporating the concept of double materiality, the ESRS aims to ensure that companies provide a comprehensive and balanced view of their sustainability performance.

1) Impact Materiality:

Any sustainability aspect is deemed material if it has the potential for significant positive or negative impacts on business performance or the aspect itself. These impacts can extend to the supply chain, even without direct contact or engagement. This implies that material topics can extend beyond a company's direct sphere of influence and encompass areas controlled by its suppliers and/or their suppliers.

Determining materiality involves assessing two factors:

- Severity of the impact:** Considering the scale, scope, and irreversibility of the impact.

- b) Significance of the impact: Combining the severity with the likelihood of the impact occurring.

For severe human rights impacts, the severity takes precedence over likelihood. Even if there is a low probability of human rights violations, the issue is considered material due to the precautionary approach adopted by the European Sustainability Reporting Standards.

2) Financial Materiality:

This concept focuses on sustainability matters that impact future cash flows or enterprise value. It encompasses impairments to assets and liabilities and factors influencing enterprise value creation, such as the six capitals in the “Integrated Reporting <IR>” framework.

ESG factors can affect a company's financials through their impact on resource use, quality, pricing, and access, as well as the relationships crucial for business operations. When assessing financial materiality, the likelihood of an issue occurring and the magnitude of its financial impact are prioritized. Environmental and social materiality, in contrast, focus on aspects related to company impacts on or from the environment and social spheres.

Double materiality¹

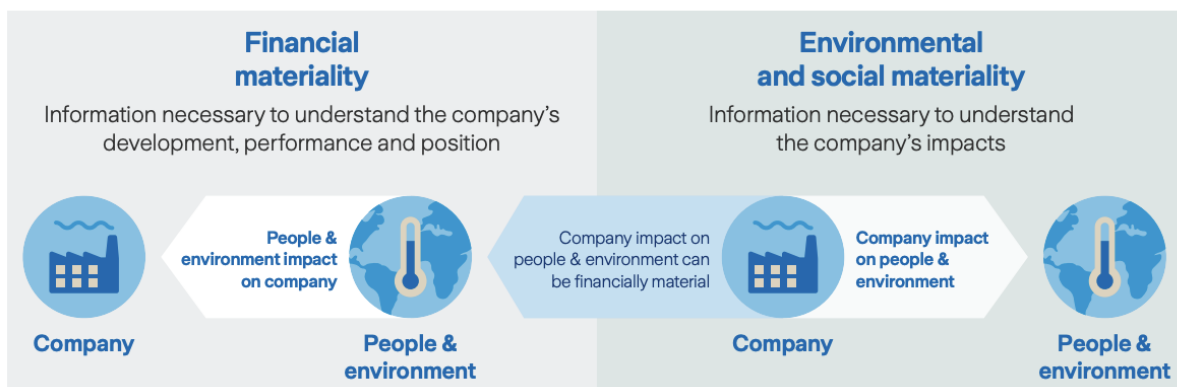


Figure 3: Zurich Insurance Visualization of the double materiality concept

In general, the ESRS differentiates between two groups of stakeholders:

- Stakeholders whose interests are (or could be) affected by a company's activities and value chain
- Users of sustainability statements such as investors or business partners, trade unions and social partners, civil society and NGOs, analysts and academics

In both areas, topic identification and topic assessment, ESRS highlighted the importance of engagement with the first group in particular.

While the ESRS provides specific rules and guidelines for sustainability reporting, it also leaves considerable room for interpretation, which can contribute to ongoing confusion. One example is the absence of clear guidance regarding thresholds for materiality, which results in a degree of arbitrariness and potential inconsistency in determining materiality.

Another source of confusion is the term "financial materiality" as it conflicts with materiality processes in financial reporting. To mitigate potential risks, some companies choose to avoid using the term "financial materiality" and instead use alternative terms like "outside-in perspective." Others address the issue by including disclaimers that clarify the divergence in the usage of the term "material."

For example, Johnson & Johnson provides a disclaimer in their MA explicitly explaining how their terminology should be understood. "Materiality, as defined in the PTA (Priority Topic Assessment), is strictly in the context of ESG. The Securities and Exchange Commission utilizes the U.S. securities law's definition of materiality, which indicates that a fact is material if there is a "substantial likelihood that the disclosure of the omitted fact would have been viewed by the reasonable investor as having significantly altered the 'total mix' of information made available."

4. Research Approach

4.1. Scope and Methodology

Our analysis focuses on companies from Germany, Switzerland, the United Kingdom, and the United States. This selection of countries allows us to examine the current state of double materiality reporting within different contexts. Specifically, we look at companies within the EU (Germany), countries outside the EU but within Europe (Switzerland and the UK), and countries outside of Europe (US). This selection of countries enables us to explore the similarities and differences in how companies within and outside the EU are approaching compliance with the forthcoming ESRs/CSRD regulation. It is intriguing to observe whether and how EU and non-EU companies are taking the necessary steps to comply with the regulation and begin experimenting with implementing its requirements, despite the varying timelines for adoption. In each defined country, we have chosen the 15 largest companies by market capitalization, resulting in a total of 60 companies that have been thoroughly examined.

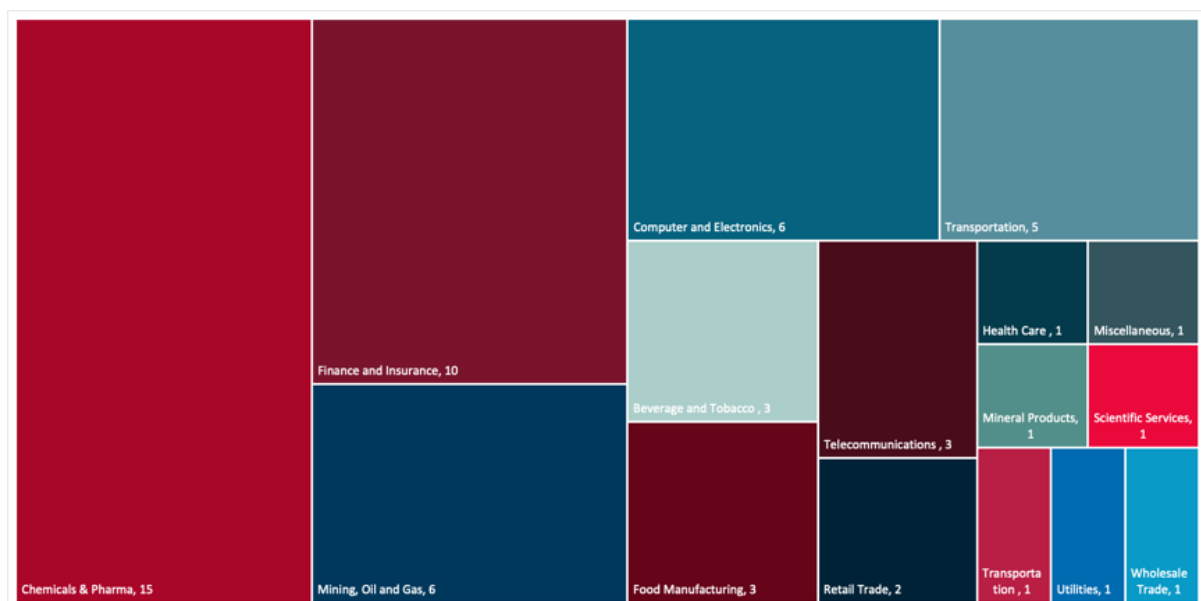


Figure 4: Industry distribution

As companies disseminate information about their MAs in various formats, our analysis encompasses a wide range of reports, including standalone MA reports, sustainability reports, annual reports, strategy reports, ESG/CSR reports, and dedicated webpages related to MAs.

To conduct our analysis, we considered the most recent publication available from each company, ensuring that we captured the most up-to-date information. We also considered whether the company had published a comprehensive MA report earlier. The timeframe for our analysis spanned from 2019 (the year of the CSRD announcement) to May 2023, excluding reports published before and after this timeframe.

Using an iterative approach, we identified over 20 metrics to compare the different approaches employed by companies. While not all of these metrics produced meaningful results today, they might become relevant in the near future when more double materiality reports are being published. These metrics encompassed a wide range of aspects, including adherence to standards, frequency of MAs, methods for identifying material topics, stakeholder engagement practices, and more.

The primary objective of this report is to provide a comprehensive overview of interesting and noteworthy examples in the field of double materiality reporting. While we may use the term "best practice" throughout the report, it is important to acknowledge the current lack of comprehensive interpretation guidelines for the ESRS. As a result, determining a definitive standard for best practices is challenging.

Therefore, the term "best practice" in this report is used in an aspirational sense, highlighting methodologies and approaches that demonstrate promise and alignment with the objectives of the ESRS. These examples represent leading practices within the current landscape of double materiality reporting.

As further information becomes available, including the release of interpretation guidelines, a clearer understanding of best practices will emerge. This will enable a more conclusive determination of the methodologies that can be considered best practices within the context of double materiality reporting.

4.2.Challenges

Analyzing materiality approaches poses challenges due to the substantial variations in transparency observed among different companies. While some companies provide highly detailed information in their standalone reports, others offer much more concise disclosures. Some companies even choose not to disclose any specifics about their MA processes (e.g. Apple and McDonald's). Also, the level of granularity in published results can differ significantly. Some companies may only present a list of material topics without providing further elaboration or contextual information (e.g., BASF).

Our analysis indicates that eleven of the companies analyzed have published standalone reports specifically dedicated to their materiality assessments (e.g. Sika Group). These reports are typically released when companies conduct a full analysis rather than a refreshment of the results. Standalone reports are valuable sources of information as they provide detailed insights into the methodology employed and include additional findings from stakeholder engagement processes. They offer interested stakeholders a

comprehensive understanding of the materiality assessment, its outcomes, and the company's sustainability priorities.

5. Double Materiality in Corporate Reporting

5.1. Sustainability Reporting Frameworks

Before exploring the details provided by companies regarding their MAs, our initial step was to identify the reporting frameworks these companies claimed to be complying with.

In line with our expectations, none of the analyzed companies explicitly state full compliance with the European Sustainability Reporting Standards (ESRS) at this time. However, seven companies have declared they are already engaging in preparatory exercises or 'dry runs' to gear up for the forthcoming ESRS, with the majority of these based in Germany (4), trailed by the UK (2) and Switzerland (1). Notably, none of the U.S.-based companies included in our analysis have publicly disclosed any initiatives aimed at preparing for ESRS.

In its sustainability report, Deutsche Telekom states: “[we] *have addressed the coming requirements of the CSRD in the reporting year, so that we can prepare our reporting for this in good time.*” Other companies explicitly signaled their preparations for the ESRS include Bayer, BMW, Airbus, and Richemont.

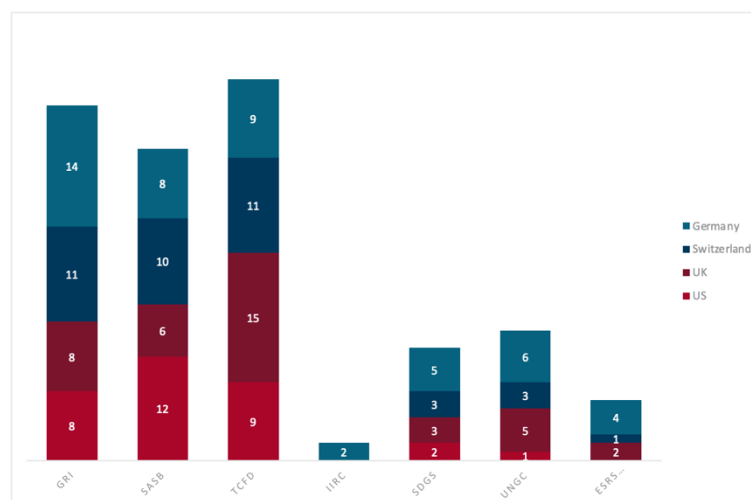


Figure 5: Sustainability related frameworks mentioned in corporate reports

GRI, SASB, and TCFD continue to be the frameworks most often mentioned in sustainability reports. In total, 68% of companies assert compliance with GRI, with German companies leading the pack (14). In addition, several other frameworks and standards were acknowledged in the reports, including IIRC, various ISO Standards, and national frameworks such as the CSR RUG in Germany. Six German companies, including Mercedes-Benz and Allianz, have indicated their adherence to the CSR Directive Implementation Act “CSR-RUG”.

In our analysis, we identified two companies that explicitly referenced the International Integrated Reporting Council (IIRC) without explicitly stating full compliance. BASF's 2022 annual report acknowledges the incorporation of elements from the IIRC framework in

their reporting practices. Allianz, on the other hand, indicated that they are currently assessing the option of adopting Integrated Reporting.

We also observed that various ISO standards were cited in corporate reports. For example, ISO 26000:2010, which provides guidance on social responsibility, and ISO 14063:2013, which focuses on the communication of greenhouse gas information.

In addition to reporting frameworks that shape how companies conduct MAs, we also explored the mention of other prominent frameworks in the context of MAs. A quarter of the companies refer to the UN Global Compact (“UNGC”) in their MA process, e.g. Swiss Re.

Furthermore, our analysis showed that while many companies utilize the SDGs as a framework to link strategic activities, 13 companies (21%) referred to the SDGs in the context of their MAs. The role of the SDG in the MA section varies (Figure 6). Eight companies reported on using the SDGs as a source for identifying material topics. Five companies used a table to map the SDGs against material topics at the end of the MA process. Among the analyzed companies, 47 do not report on the SDGs in the context of MAs.

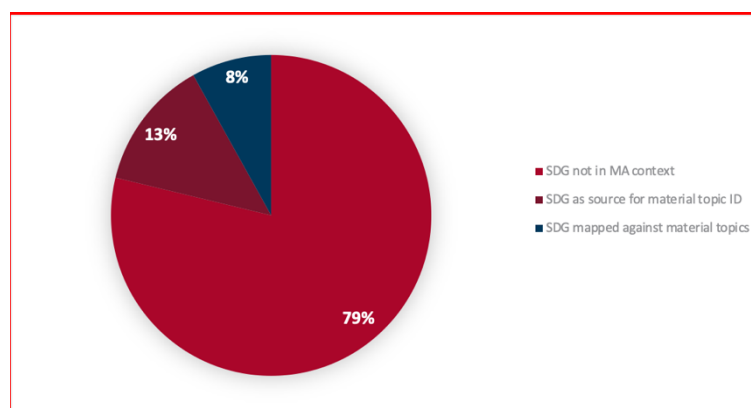


Figure 6: SDGs in materiality assessments

Again, Swiss Re is one of the companies that explicitly mentioned the use of the SDGs as a source for identifying material topics. In contrast, Givaudan (Figure 31) incorporated the SDGs at the end of their MA process by mapping them to their material topics in a table, showcasing the alignment between their identified priorities and the SDGs.

The five companies that map their material topics to the SDGs sometimes break them down further into categories. For example, Siemens chooses to map the material topics to SDGs in 2 dimensions, shared value and responsibility, which resemble positive and negative impacts (Figure 7). The shared-value dimension maps those material topics and related SDGs through which Siemens can benefit society, create added value with its activities, products, and services and capture business opportunities. The responsibility dimension highlights those material topics and related SDGs on which the company wants to minimize its negative impacts.

	Sustainability topics	SDGs	Strategic priorities	DEGREE
Shared value	Climate protection ¹	7 9 11 12 13	🌱 🌍	🌱 ECARBONIZATION
	Sustainable product design and life-cycle management ¹	6 7 9 11 12 13 14 15	🌱 🌍	🌱 RESOURCE EFFICIENCY
	Innovation and business model ²	8 9 11 12 13 14 15	🌱 🌍	🌱 ECARBONIZATION 🌱 RESOURCE EFFICIENCY
	Partner management and collaboration ²	7 8 9 11 12 13 16 17	🌱 🌍	🌱 ECARBONIZATION 🌱 GOVERNANCE
	Responsible governance ²	8 12 16 17	🌱 🌍	🌱 GOVERNANCE
	Future of work ²	3 4 5 8 10 11	🌱 🌍	🌱 QUILTY 🌱 EMPLOYABILITY
	Sustainable handling of natural resources and material efficiency ²	6 7 9 11 12 13 14 15	🌱 🌍	🌱 RESOURCE EFFICIENCY
	Social and ecological standards in the supply chain ¹	8 12 16 17	🌱 🌍	🌱 GOVERNANCE
	Cybersecurity and data management ²	5 8 10 16 17	🌱 🌍	🌱 THICS
	Employee health and safety ²	3 4 8 10	🌱 🌍	🌱 EMPLOYABILITY
Responsibility	Diversity, equity & inclusion ²	3 4 5 8 10 11	🌱 🌍	🌱 QUILTY
	Customer safety and product quality ²	8 12 16 17	🌱 🌍	🌱 GOVERNANCE
	Corporate governance and sustainability leadership ²	8 12 16 17	🌱 🌍	🌱 GOVERNANCE
	ESG risk management ²	5 8 10 12 16 17	🌱 🌍	🌱 GOVERNANCE 🌱 THICS
	Compliance management ²	5 8 10 12 16 17	🌱 🌍	🌱 GOVERNANCE 🌱 THICS

¹ Top 3 material sustainability topics.
² 12 additional material sustainability topics.
 Result of the assessment of organizational impacts (inside-out, i.e., on the environment and society), stakeholder relevance and business criticality (outside-in)

🌱 TECHNOLOGY WITH PURPOSE
 🌱 STRENGTHENING AND EMPOWERING PEOPLE
 🌱 CUSTOMER VALUE
 🌱 GROWTH MINDSET
 🌱 DEFINITION OF THE MATERIAL TOPICS – BUNDLED ACCORDING TO SHARED VALUE AND RESPONSIBILITY

Figure 7: Siemens materiality table 2022

5.1.1. How often companies update their materiality assessments

The frequency at which companies conduct and report their MAs varies significantly, as different reporting cycles are adapted. Some companies opt for longer cycles, conducting full MAs every several years while incorporating regular interim reviews or refreshers to keep the list of material topics up to date.

Companies argue that material topics are at a high level and do not undergo significant changes over time. Furthermore, they emphasize that addressing material issues requires a considerable amount of time and effort.

In our analysis, the most extended cycle for a thorough MA report was observed to be six years (Walmart). Another company with a rather long update cycle is Siemens (every five years). Conversely, some companies choose shorter cycles, conducting thorough assessments every two years, for example, Nestlé.



Figure 8: Novartis MA Update Cycle

During interim reviews, companies often streamline the materiality assessment process to make it more cost-efficient and straightforward. This usually involves focusing on a limited number of steps from the original process. Companies may start with the same list of material topics, eliminating desk research or reducing the extent of engagement with external stakeholders. Instead, they may rely on internal topic experts for input and insights.

In our research, nine companies explicitly indicated that they conducted refresher of their MAs in between their full assessment cycles. However, most companies do not clearly distinguish between an update and a full assessment, which limits the value of the assessment and its outcomes in our eyes.

An example of best practice is seen in BP, which provides a clear differentiation between the steps involved in conducting a full MA versus conducting refreshments. BP emphasizes that it focuses only on two specific steps (Step 2 and Step 5) during the interim year validation process (Figure 9).

Step 1 Setting parameters We determined the materiality of bp's key issues using three parameters: importance, impact and influence. Each parameter included clearly defined criteria to enhance the rigour and robustness of the process and to eliminate subjectivity as much as possible. <ul style="list-style-type: none"> Importance: the importance of each issue to key internal and external stakeholders. Impact: the impact of each issue on bp's future business. Influence: bp's ability to influence and drive change regarding each issue. We collaborated closely with our risk team at this stage of the assessment to define the impact criteria and thresholds, as well as throughout the process.	Step 2 Identifying issues We carried out a horizon-scanning exercise to identify a list of issues for stakeholders to consider and prioritize. We reviewed and considered: relevant ESG frameworks and standards (including Global Reporting Initiative (GRI), SASB and TCFD); current relevant legislation; global, market and industry-specific trends; existing bp processes, policies and documentation, including bp's risk processes; topics discussed in the media and across our industry. In 2022 we refreshed our research phase to identify new and emerging topics. As well as the key research areas listed above, we conducted a review of topics considered material by our peers. The outcome of this research was used to draw up a shortlist of topics, which was considered against the list of material topics from 2021. All of these topics remained prevalent in the 2022 research.	Step 3 Determining the importance of key issues Using our prioritization criteria, we conducted interviews and facilitated an online survey with key external stakeholders and bp employees to gather their perspectives on the importance of bp's key issues. Participants came from: investor companies, academia, NGOs, industry associations, government, bp partners and service providers. In addition, we used several internal consumer research documents to gauge the sustainability priorities of our customers and consumers.	Step 4 Determining the impact and influence of key issues We ran a survey to gather feedback from senior employees across bp on the impact and influence of each issue, using our prioritization criteria. To ensure a balanced and representative viewpoint, we engaged with individuals working across many different geographies and in various functions. Again, our risk team was closely involved.	Step 5 Analyzing and validating We used qualitative analysis to extract the key themes before consolidating them to create a list of our top material issues. We tested and validated the final results with a working group from across bp, including experts in human rights, social performance and environment, risk and measurement. In 2022 our validation process included a survey of internal stakeholders, representing a variety of business groups in bp, to gather views on the topics highlighted in step 2. We asked for feedback on the shortlisted issues to find out if the 2021 material topics were still relevant for bp, and the significance of sustainability topics for bp over the next 2-3 years. The survey results were analysed and followed by an internal workshop to check and challenge the findings and validate any changes to our material topics list for 2022.	Step 6 Ongoing engagement The process of engaging doesn't stop with our materiality research. We continue to gather feedback from our stakeholders and will use this to inform our next materiality assessment.
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Figure 9: BP material refreshment reporting

ESRS requires updates in line with the reporting cycle but does not differentiate between full cycles and updates. We anticipate that companies will continue to adopt different cycles based on their specific needs and requirements. Some steps, like stakeholder engagement, may not be necessary on an annual basis, enabling companies to alternate between full cycles and updates as appropriate.

5.2. Transition to Double Materiality Assessments

Next, we aimed to assess the extent to which companies are incorporating double MAs and whether their approaches are already ESRS compliant.

Our research shows that the majority of companies (31) still leverages conventional forms of conducting MAs. These usually focus on a comprehensive analysis of risks and opportunities for the company, which is then combined with various forms to measure stakeholder perception. As a result, companies usually publish a four-by-four matrix indicating the topics that are important from an internal and/or and external perspective.

However, we also identified a great number of companies who are already conducting forms of a double materiality or state that they consider key concepts of it, one being the measurement of impacts caused by the company's business activities and its value chain on people and the environment. Overall, we identified the following four groups of companies:

1. **Conventionalists:** This group comprises companies that adhere to a conventional materiality assessment approach as described earlier.
2. **Integrators:** Companies in this category combine a conventional materiality assessments with additional elements that focus on the impact of their business on people and the environment. This may involve separate tables with impact rankings (e.g., J&J) or an additional layer in the Materiality Matrix (e.g., Porsche).
3. **Limited Disclosers:** Companies in this group claim to conduct a double materiality assessment but provide little details about their methodology and results. Often, they only disclose the final list of material topics without additional supporting measures (e.g., Salesforce or BASF).
4. **Trailblazers:** Companies in this category (e.g., Richemont) actively embrace a double materiality approach that closely aligns with ESRS requirements. They consider both the impacts on their business and the impacts on people and the environment. These companies provide comprehensive information about the results of their analysis, such as publishing a materiality matrix that clearly illustrates the varying impacts across each topic.

Figure 10 below illustrates the distribution of companies across these categories, providing a visual representation of the varying approaches to materiality assessments.

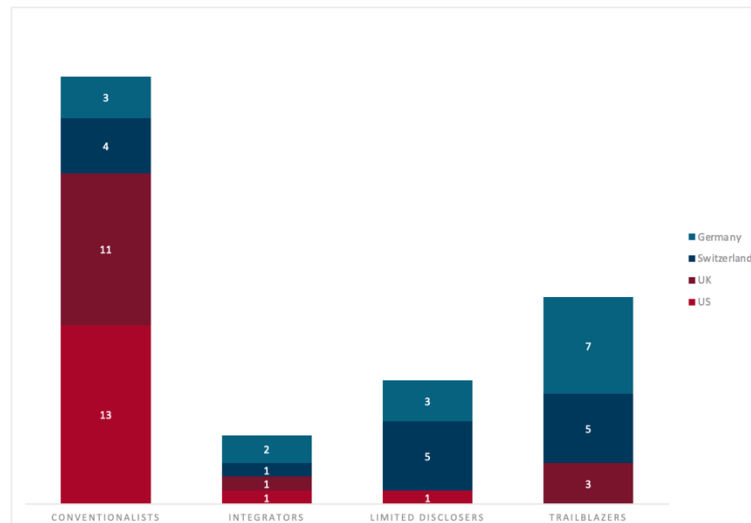


Figure 10: Companies stating to assess materiality based on double MA concept

Based on our analysis, we have observed that 29 companies have implemented some form of double materiality assessment, taking into account impacts on both the business and by the business. Of these companies, 14 explicitly indicated their adoption of a double materiality approach in their assessments. It is worth noting that many of these companies are based in Switzerland, including Novartis, Richemont, and Zurich Insurance.

Evaluating the compliance of double materiality assessments with ESRS requirements is challenging due to the lack of transparency of companies about their processes and ongoing adjustments to the requirements by regulators. The evolving nature of the ESRS and the absence of comprehensive guidance make it challenging to determine the extent to which companies are fully compliant. EFRAG's work on implementation support and forthcoming guidance on the double materiality assessment will contribute to clarifying expectations.

However, in our analysis of publicly available information, we observed that most companies still need to make changes to achieve full compliance with double materiality reporting. One criterion we examined is the ESRS definition of "Severity of the impact" in impact materiality, which takes into account the scale, scope, and irremediable nature of the impact. Among the 29 companies that published various forms of double materiality, only three (SAP, BASF, and Airbus) stated that they assessed these aspects in their process description. However, none of these companies have shared the outcomes or findings of their assessments.

Overall, it seems that companies have tackled the issue of assessing financial materiality much better than the area of "impact materiality," despite the fact that the ESRS definition of impact materiality is very close to what companies are used to due to the GRI standards.

We assume that there are several reasons for this. First and foremost, companies have a vested interest in assessing risks and opportunities that can significantly impact their performance. This intrinsic motivation has led companies to develop extensive experience and establish robust systems and processes in conducting such assessments. On the other hand, measuring the impact of the organization's business and value chain on society and the environment often deals with aspects of a company's business that were formally accepted as "collateral" and managed by society rather than the companies themselves. For example, the question of how much carbon dioxide a company emits by

itself and through its value chain has only become relevant since the turn of the century with the foundation of GRI and CDP. Before, it was completely irrelevant in the context of corporate reporting.

One notable example illustrating the transition from a conventional MA to a double materiality approach is Richemont. In 2019, the company measured the two dimensions "Impact on the business" and "Importance to Stakeholders" to identify material topics.

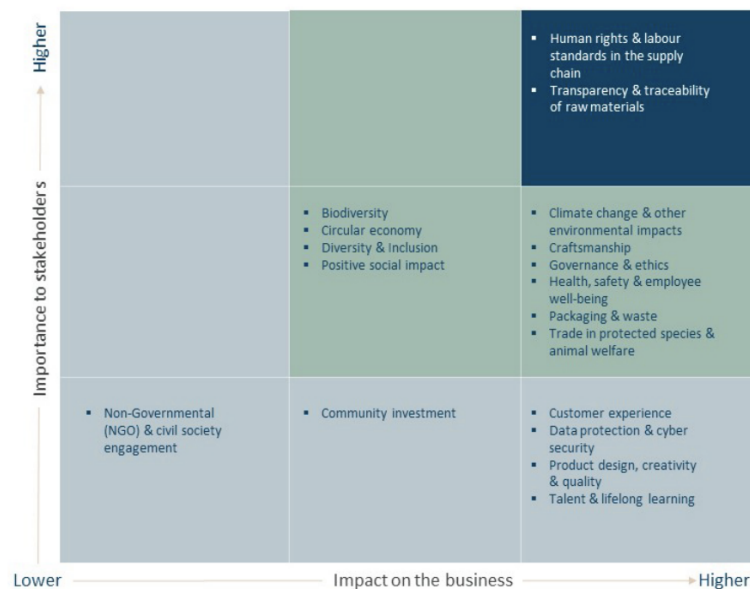


Figure 11: Richemont materiality matrix 2019

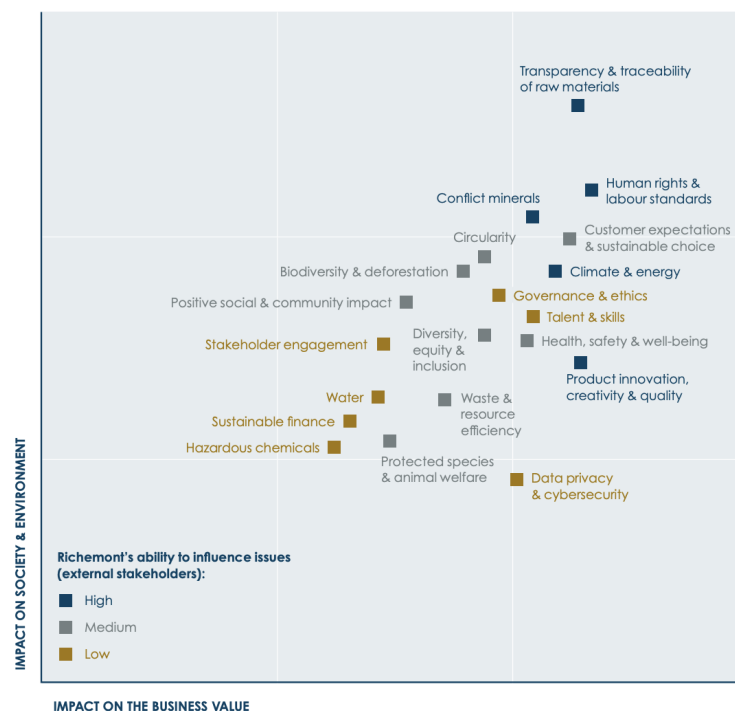


Figure 12: Richemont materiality matrix 2021/2022

In 2021/22, while the first indicator remained under a slightly modified name as "Impact on the business value," the company defined a new process replacing "Importance to

Stakeholders" with "Impact on Society & Environment." Additionally, the company introduced a new element to the matrix, indicating the level of influence the company holds over each topic. Despite the fact that companies are deemed responsible for the value chain they build, pointing out that certain issues, especially when they are further away in the value chain, might be more difficult to tackle as the company's own operations do not directly cause them.

5.2.1. Examples for Conventionalists

In the following section, we provide examples of companies that published “conventional” materiality assessment matrixes.

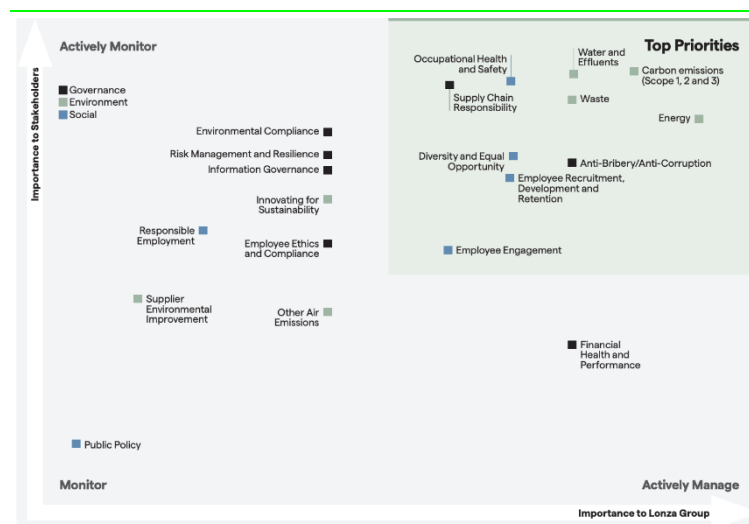


Figure 13: Lonza Group materiality matrix 2021

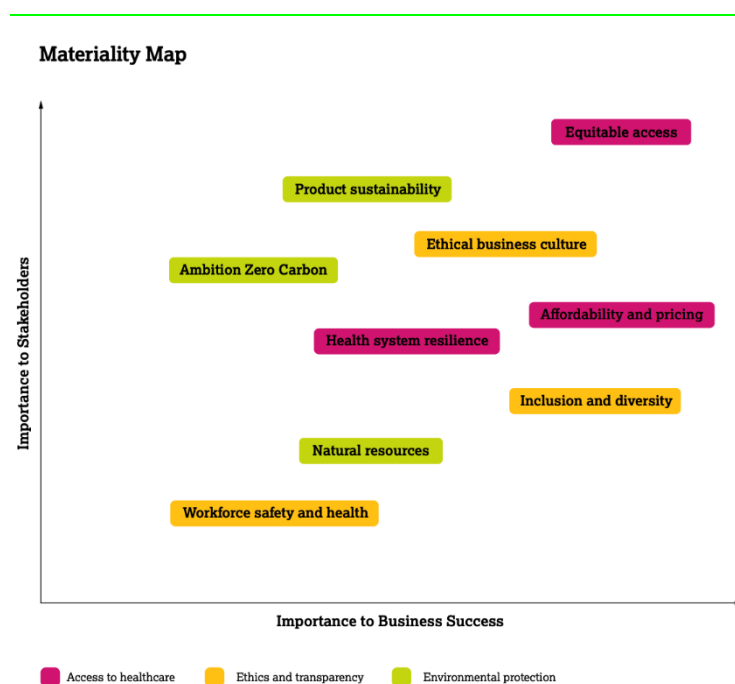


Figure 14: AstraZeneca materiality matrix 2021/2022

5.2.2. Examples for Integrators

The category of 'integrators' include those companies that report a conventional materiality matrix but do include additional elements that focus on the impact of their business on people and the environment.

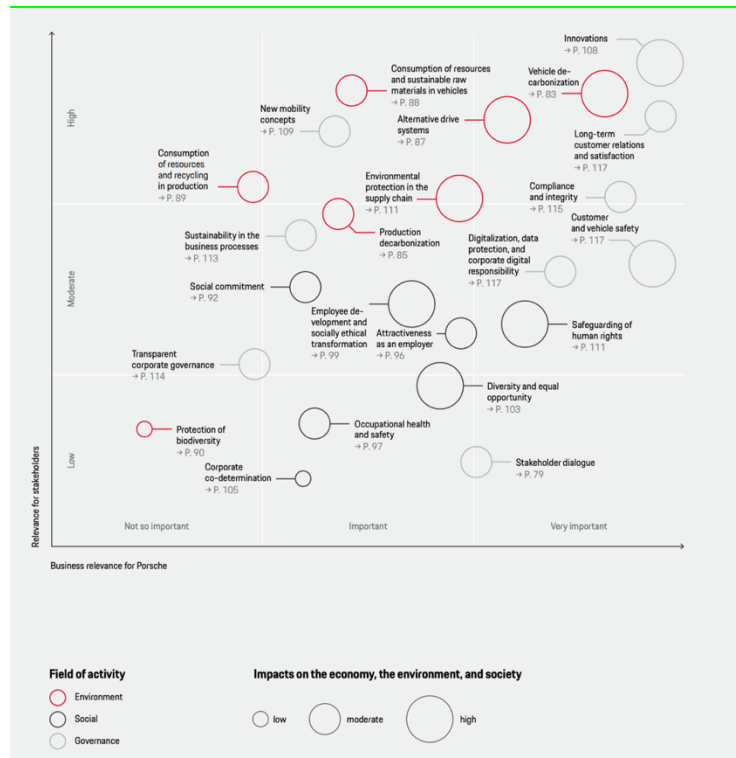


Figure 15: Porsche materiality matrix 2021

Materiality matrix

Materiality matrix showing the priority of issues in terms of the view of the business and the view of stakeholders:



Figure 16: Reckitt Benckiser materiality matrix 2021

Table 1: Impact on People and Society Rating Results
(incorporates views from both internal and external stakeholders)

Ranking	Topic
1	Consumer Health & Patient Safety
2	Access
3	Advancing Public Health
4	Product Quality
5	Environmental Impact on Human Health
6	Human Rights
7	Diversity, Equity & Inclusion
8	Ethics & Compliance
9	Climate Change
10	R&D & Innovation Investment
11	Bioethics
12	Community Economic Impact
13	Cybersecurity & Data Privacy

Figure 17: J&J impact table 2021

5.2.3. Examples for Limited Disclosers

Companies in this group claim to conduct a double materiality assessment but provide limited details about their methodology and results. Examples for limited disclosers are Salesforce and BASF. To illustrate, Salesforce indicates to measure both the impact to the environment and society and the impact to enterprise value, hereby satisfying both sides of the double materiality approach. However, in reporting the results, they chose to publish only the final list of material topics in a table, without providing further indication as to what the relative impact- versus financial materiality of the topics is (Figure 18). Another company example is BASF which has an extensive methodology on which impact metrics it measured, but then continues to only list the material topics in-text.

Environment	Social	Governance
<ul style="list-style-type: none"> • Climate Change & Energy Use • Sustainable Real Estate • Waste & Use of Resources • Water Management 	<ul style="list-style-type: none"> • Community Impact • Diversity, Equity & Inclusion • Employee Health, Safety & Wellbeing • Human Rights • Talent Attraction, Retention & Development 	<ul style="list-style-type: none"> • Data Privacy & Security • ESG Risk Management • Public Policy & Advocacy • Responsible Governance • Responsible & Sustainable Technologies • Supply Chain Management

Figure 18: Salesforce list of material topics FY2022

5.2.4. Examples for Trailblazers

Companies in this category (e.g., Richemont) actively embrace a double materiality approach that seems more closely aligned with ESRS requirements.

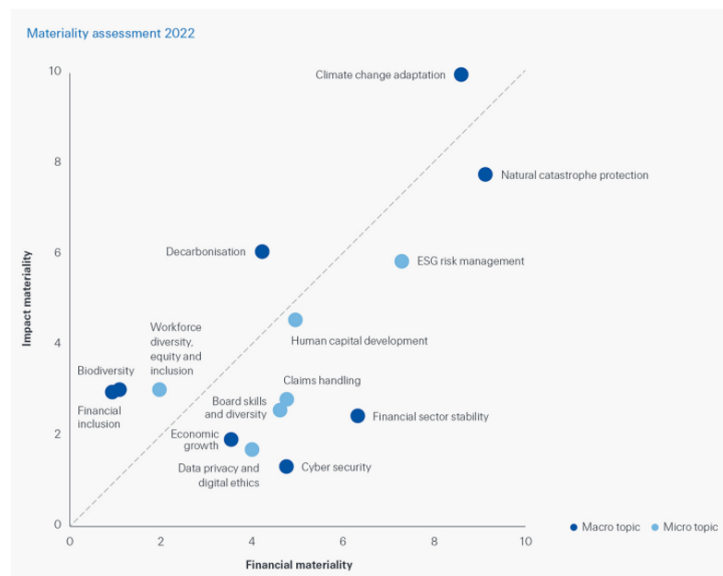


Figure 19: Swiss Re materiality matrix 2021

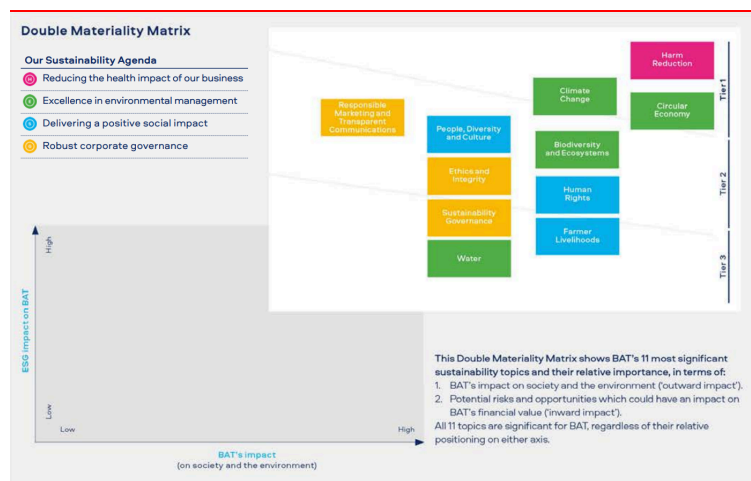


Figure 20: BAT materiality matrix 2022

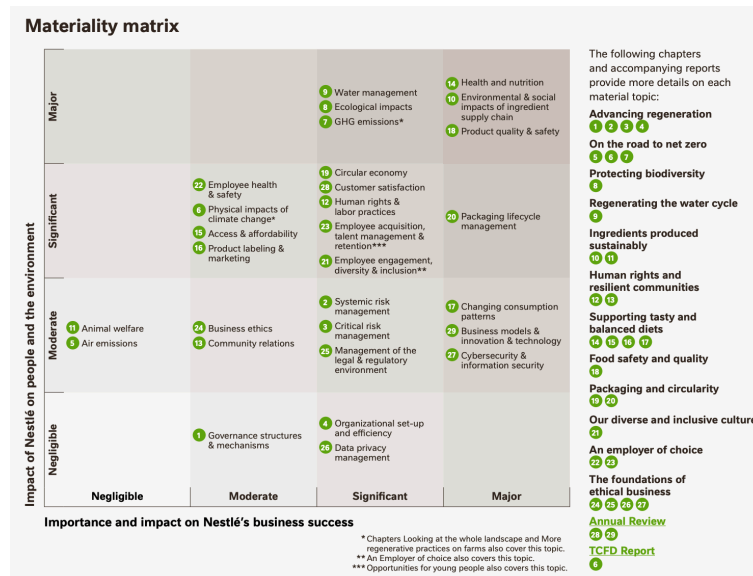


Figure 21: Nestlé materiality matrix 2022

5.3. Materiality Assessment Process

Many large companies, despite having the freedom to choose their own unique materiality assessment process, tend to follow similar steps in identifying material topics. These steps typically include 1) topic identification through desk research and, sometimes, some form of stakeholder engagement, 2) clearly defining and clustering topics 3) topic assessment including internal and/or external stakeholder surveys and interviews, 3) defining materiality thresholds, and 4) publishing the assessment results.

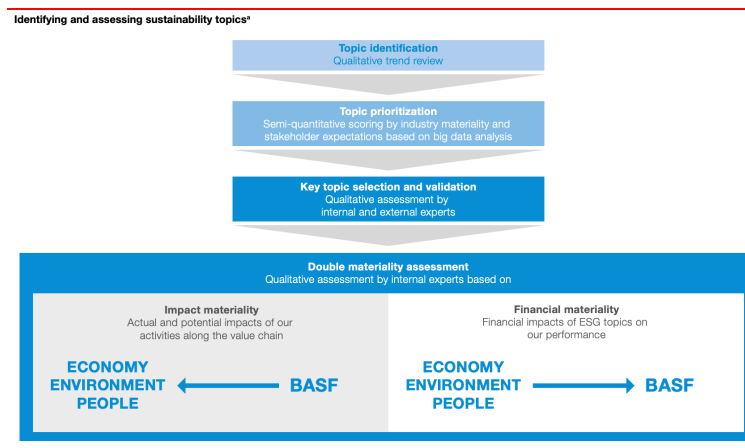


Figure 22: BASF MA process overview

In the category of integrators, we discovered intriguing strategies that combine the conventional materiality assessment approach with the new requirements of double materiality. These approaches provide companies with a way to build upon their existing processes rather than completely replacing them. An interesting example is Enel, who begins with the conventional materiality assessment (single materiality) and then incorporates additional steps to develop a double materiality assessment. This innovative approach allows companies to leverage their established practices while

integrating the necessary considerations for impact materiality into their assessment process.

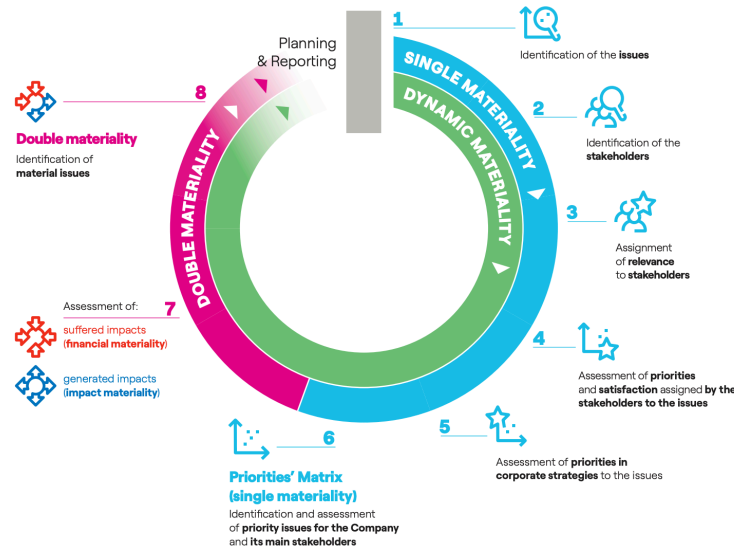


Figure 23: Enel MA process overview

5.3.1. Identifying relevant topics

Before assessing the materiality of sustainability topics, companies must first build a repository of relevant topics and clearly define these topics. This first step of a MA is crucial for all other steps that follow. To keep the processes manageable, many companies limit the number of topics and move additional items to the definition or a sub-topic level for which usually no data is being collected. Hence, it makes a difference how companies identify topics and how they decide about the topic hierarchy. Unfortunately, most companies do not provide detailed information about topics in their relevant landscape.

When assessing but also when communicating about double materiality, it is crucial to define topics in a way that accommodates both perspectives. This is because the impact pathways and considerations differ depending on whether we are examining the impact on the business or the impact of the business on society and the environment. Unfortunately, in our analysis, we did not come across a company that provided a comprehensive definition split in both perspectives.

Based on an analysis of the companies explaining their approach, the most prevalent method is desk research, with 40 companies reporting its usage. Desk research involves an extensive review of internal documents, frameworks, and standards. It also entails conducting peer analysis, industry analysis, media analysis, and examining regulatory and legislative information.

The second most widely adopted approach is **stakeholder engagement**, utilized by 34 companies. Stakeholder engagement involves gathering stakeholder input through surveys, interviews, dialogues, or meetings to identify material topics. The most popularly adopted method of stakeholder engagement for topic identification is through surveys, closely followed by interviews.

5.3.2. Stakeholder engagement

Companies engage with a diverse range of stakeholders as part of their MA process. The stakeholder groups most commonly mentioned by companies seem to be those that directly impact their business or share price, including investors, customers, employees, and suppliers.

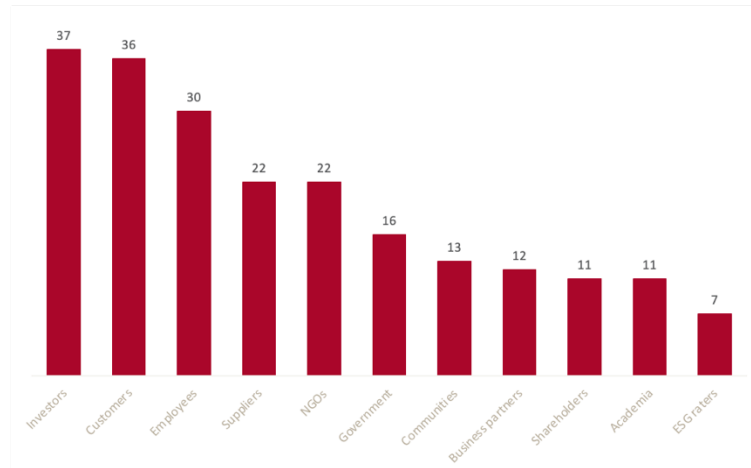


Figure 24: Stakeholders engaged with during MA process

Companies often rely on established engagement tools, such as employee surveys, customer feedback mechanisms, and questions asked at investor conferences, to assess stakeholder perspectives. However, it is important to ensure that these tools are not only used to confirm existing biases but are adaptable enough to capture new topics and gain deeper insights. Unfortunately, in our research, we did not find companies that explicitly explained how they tailored these engagement tools to gather relevant information specifically for the materiality assessment process.

Among the companies analyzed, surveys were the most frequently employed engagement tool, with 36 companies utilizing this method. Interviews were also a popular method used by 35 companies, and 17 companies indicated employing both tools. However, we believe that the actual number of companies utilizing both methods is likely to be higher, as both methods offer distinct advantages and disadvantages.

Surveys provide an easy and cost-efficient way to gather input from a large number of stakeholders. Still, they have limited efficacy in identifying new topics or understanding the underlying motivations behind stakeholder responses.

On the other hand, interviews enable companies to delve deeper into specific topics and explore stakeholder perspectives in greater detail. They are, however, much more cost- and resources-intensive, resulting in a smaller number of stakeholders being involved.

Despite this, our analysis found that most companies more often leverage surveys during the topic identification phase than interviews. We assume that for practical reasons most companies use the same survey for scoring and topic identification.

When examining the level of stakeholder involvement, it is worth noting that most companies that mentioned stakeholder engagement did not disclose specific details about the number of stakeholders involved in surveys and interviews. However, among the companies that did provide information, there was a significant variation in the numbers. For example, Mercedes Benz conducted surveys with approximately 15,000 stakeholders.

Most other companies reported significantly lower numbers of survey participants, such as Roche, with 600 survey participants. Our analysis showed an average of 3,889 surveys participants per company based on data from nine companies. The range varied from a low of 52 conducted by Swisscom to a high of 15,000 surveys conducted by Mercedes-Benz. In terms of interviews, the average was 80 interviews per company. The range spanned from a low of 13 interviews conducted by GSK to over 300 interviews conducted by ABB.

5.4. Artificial Intelligence Tools

AI-based technology enables companies to analyze vast amounts of stakeholder documents, including news articles, corporate reports, and NGO publications. Specialized software tools powered by Natural Language Processing (NLP) algorithms not only facilitate the identification of predefined topics but also offer an initial scoring of their importance from both the impact and financial materiality perspectives.

Despite the evident advantages that AI support offers, the number of companies mentioning its utilization remains relatively low. One reason for this phenomenon may be the perception that AI-based tools still operate as black boxes that lack the necessary features to explain their outcomes. In addition, the tools mainly measure the frequency of predefined topics assuming a solid correlation with importance/impact.

Among the companies analyzed, eight of them have indicated their utilization of AI solutions to aid in identifying material topics. Notably, six of these companies specifically mentioned the adoption of Datamaran, while information regarding other competing AI solutions was not provided. It is reasonable to expect that the number of companies leveraging AI will continue to increase as technology evolves and its capabilities expand.

However, despite the advancements in AI technology, we do not anticipate AI will replace stakeholder engagement in the near future, but it will be a complementary tool to facilitate desk research and identify stakeholders to engage with.

5.5. Reporting and Visualizing Results

Visualizations of materiality assessment results are important in enhancing the communication and understanding of a company's sustainability priorities. Ideally, they provide a clear and concise representation of the identified material topics, their significance, and the interrelationships between them.

While companies employ various ways to visually present the results of their materiality assessments, the dominating form of disclosure remains the materiality matrix, which 29 companies use.

Companies conducting a conventional materiality assessment usually use the term 'importance', when describing the axes of their matrix, e.g., Sika Group – Figure 25), or a combination of relevance to stakeholders and impact on the company (e.g., ABB). Other terms used in this context are internal stakeholders versus external stakeholders (Diageo), and impact on ABB versus relevance to the stakeholder (ABB).

MATERIALITY MATRIX 2022
ESGE MATERIAL TOPICS

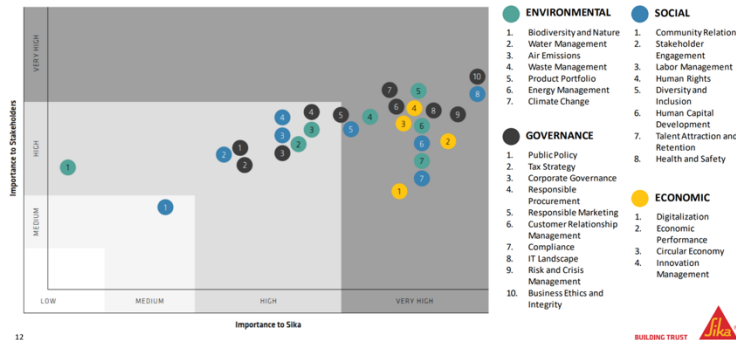


Figure 25: Sika Group materiality matrix 2022

Companies that publish a Double Materiality matrix have adopted various approaches to labeling the axes. For example, Swiss Re (Figure 21) labeled its axes as ‘financial materiality’ versus ‘impact materiality’. Alternatively, Mercedes-Benz uses the terms “outside-in versus inside-out” (Figure 27).

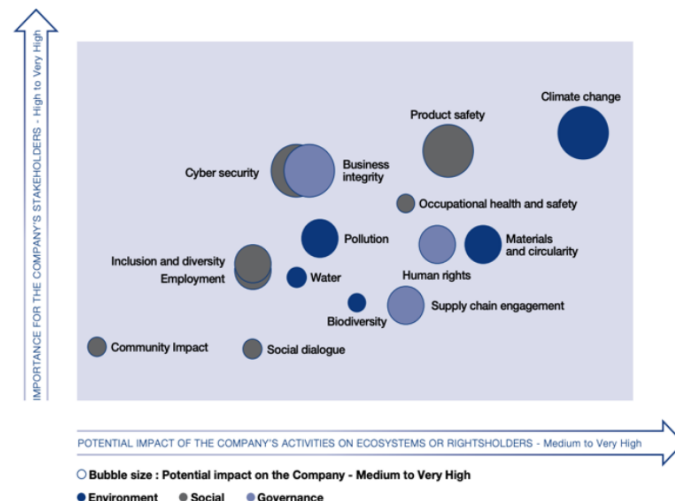
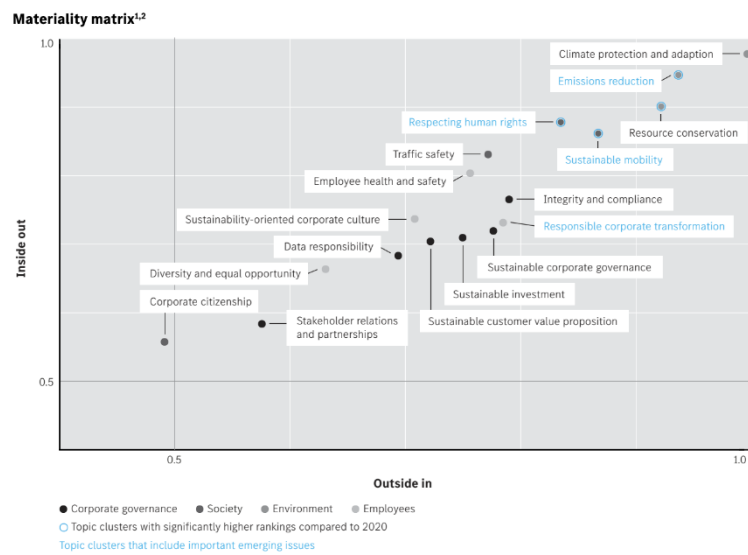


Figure 26: Airbus materiality matrix 2022



- 1 For readability, the graph shows a section of the materiality matrix.
 2 The marked lines on the x and y axes show the materiality threshold set by the Mercedes-Benz Group, above which topics for this Sustainability Report were classified as material.

Figure 27: Mercedes-Benz materiality matrix 2021/2022

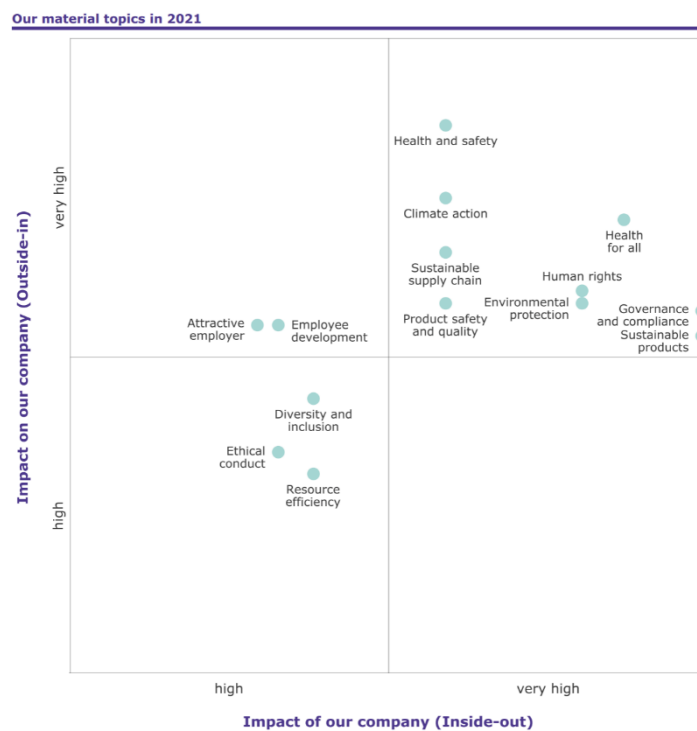


Figure 28: Merck KGaA materiality matrix 2021

Another example is the materiality matrix from PMI. Even though the company is not within the direct scope of this report, its previous materiality report was among the ones inspiring this research.

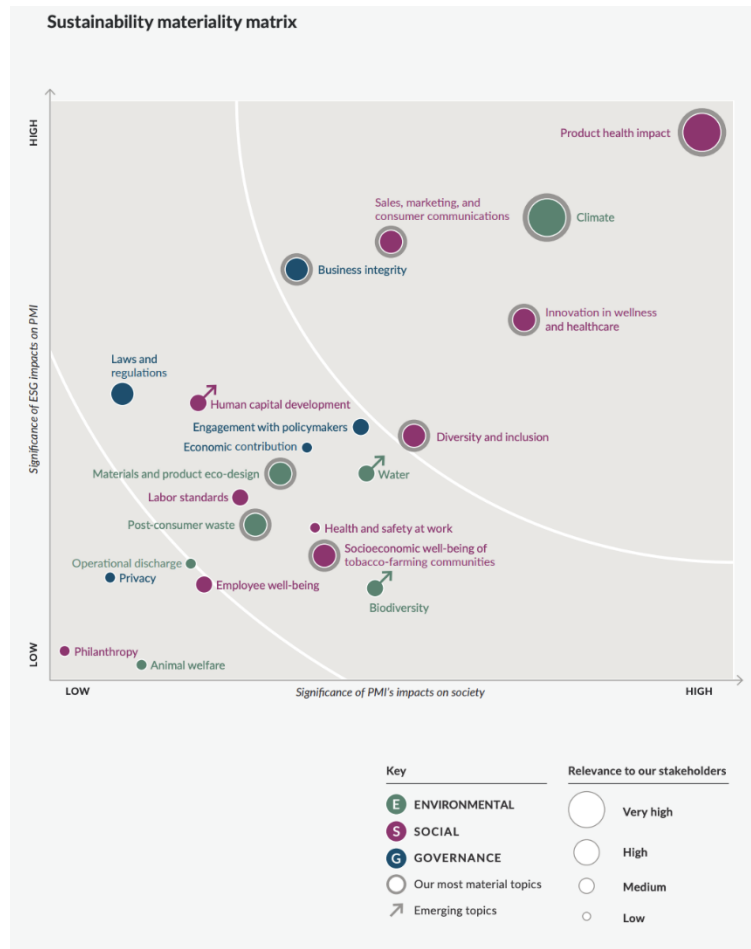


Figure 29: Philip Morris International materiality matrix 2021

In addition to the typical materiality matrixes, some companies employ another visualization method. A noteworthy approach from a company that is not within the scope of our research but interesting enough to mention, is Philips' approach to visualizing their material topics. In their 2022 MA, Philips indicated to first have conducted a conventional MA, after which they decided to also conduct a preliminary double MA in preparation for the ESRS/CSRD. Figure 30 below provides a detailed assessment of how much the material topics matter from a financial and impact materiality perspective.

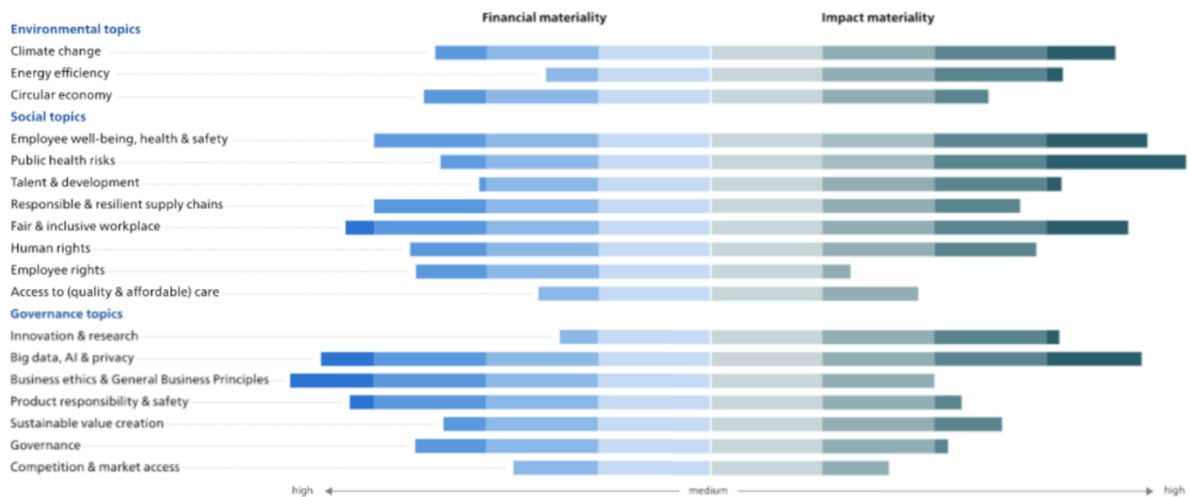


Figure 30: Philips materiality topic ranking 2022

Various companies decide to report their material topics in a simple table or list. Givaudan falls into the category of reporting its material topics in a table, but a rather extensive one. Givaudan's table provides information on how the material topics are linked to the equivalent GRI topics, strategic pillars, UN Global Compact Principles and the SDGs.

Material topic	Equivalent GRI topic	Creations pillar	Nature pillar	People pillar	Communities pillar	UNGC Principles	SDGs mapping
Biodiversity	GRI 304: Biodiversity		✓		✓	Principle 7, 8, 9	   
Climate change	GRI 302: Energy GRI 305: Emissions		✓			Principle 7, 8, 9	  
Consumer health & wellbeing		✓					   
Diversity, inclusion & people development	GRI 202: Market presence GRI 401: Employment GRI 404: Training and education GRI 405: Diversity and equal opportunity GRI 406: Non-discrimination			✓		Principle 6	  
Economic performance	GRI 201: Economic performance GRI 204: Procurement practices	✓	✓	✓	✓		  

Figure 31: Givaudan part of the material topic table 2022

6. Conclusion and Remarks

In the midst of a transformative period in sustainability reporting, companies face a significant challenge as they prepare for the implementation of the ESRS/CSRD. While many large companies already have established reliable materiality assessment processes that can be adjusted to the new regulation, smaller companies may need to build their structures from scratch.

Building and conducting materiality processes takes time. While the ESRS/CSRD will not become mandatory until 2025 (reporting year 2024), some proactive companies, predominantly from within the EU, have already taken the initiative to test and apply the new rules. These companies recognize the importance of early preparation in conducting their materiality assessments and adjusting their processes to ensure compliance with the upcoming regulations. However, the majority of companies, both within and outside the EU, have not yet started or disclosed their intention or progress in adapting their processes.

Here are a few high-level recommendations to consider when embarking on the journey to double materiality:

1. **Start early:** There might still be a lot of time until the ESRS becomes mandatory for your organization. However, building, testing, and implementing materiality assessment processes takes time. We recommend to begin the process early to allow for thorough development and refinement.
2. **Familiarize yourself with the ESRS standards:** A comprehensive understanding of the standards and their requirements for double materiality reporting is imperative; especially the first two. All material is public and usually understandable, you do not need to be a lawyer but if you have access to one, knowing the ESRS standards will help you to ask the right question.
3. **Monitor further regulatory developments:** Stay updated on regulatory developments and any new guidance related to double materiality reporting. Keep an eye out for any new information or clarifications that will be released, particularly throughout 2023.
4. **Define actions you can start immediately with:** Regardless of how your new processes will look like, you will need a good understanding of your value chain and a repository or well-defined topics and stakeholders linked to them to prepare the stakeholder engagement. These steps can be started immediately or run in parallel with the development of internal processes.
5. **Seek external expertise and collaboration:** Consider partnering with sustainability experts, consultants, or industry peers to gain insights and share best practices in double materiality reporting. Engage in industry initiatives and platforms to collaborate on addressing common challenges.

We find ourselves at the beginning of an exciting journey towards double materiality reporting. As companies and regulators navigate this new landscape, it is evident that there is still much to learn for both sides. The evolving nature of the regulations and the ongoing development of guidance means that we can anticipate the release of more information and clarifications in the coming months and years.

This whitepaper serves as a starting point offering an initial glimpse into how big companies are approaching double materiality reporting. While there may be limited information available in certain areas, it is expected that the number of companies reporting on their unique approaches to implementing the regulation will increase significantly in the near future. This will provide a broader understanding of the diverse strategies and methodologies being employed to address the requirements of double materiality.

To further contribute to this evolving field, we plan to conduct additional research next year, aiming to assess the progress made and showcase interesting examples and best practices that can serve as valuable insights for others in their own journey towards double materiality reporting.

Abbreviations

CSRD	Corporate Sustainability Reporting Directive
Double MA	Double Materiality Assessment
EFRAG	European Financial Reporting Advisory Group
ERM	Enterprise Risk Management
ESRS	European Sustainable Reporting Standards
EU	European Union
GRI	Global Reporting Initiative
IIRC	International Integrated Reporting Council
MA	Materiality Assessment
NFRD	Non-Financial Reporting Directive
SASB	Sustainability Accounting Standards Board
SDGs	Sustainable Development Goals
TCFD	Task Force on Climate Related Financial Disclosures
UNGC	United Nations Global Compact

Full List of Companies included in our research

Germany	Switzerland	United Kingdom	United States
Airbus	ABB (Anglo American	Apple
Allianz	Alcon	AstraZeneca	Chevron
BASF	Givaudan	BP	Cisco
Bayer	Holcim	BAT	Coca-Cola
BMW	Lonza Group	Diageo	Home Depot
Deutsche Post	Nestle	GlaxoSmithKline	Johnson & Johnson
Deutsche Telekom	Novartis	Glencore	JP Morgan Chase
Infineon	Partners Group	HSBC	McDonalds
Mercedes-Benz	Richemont	LSE	Merck & Co
Merck KgaA	Roche	National Grid	Microsoft
Porsche	Sika Group	Reckitt Benckiser	Procter & Gamble
SAP	Swiss Re	RELX	Salesforce
Siemens	Swisscom	Rio Tinto	UnitedHealth Group
Siemens Healthineers	UBS	Shell	Visa
Volkswagen	Zurich Insurance	Unilever	Walmart