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Sustainability Disclosure Landscape Report for Risk Management

Insights from climate-focused case studies

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About the Risk Centre

Since 2017, UNEP FI's Climate Risk and the Taskforce on Climate-Related Disclosures (TCFD) programme has taken a leadership role in developing good practices to identify, measure, disclose, and manage climate risk in the financial sector. Working with over 100 banks, insurers, and various investors, the programme has created numerous tools, frameworks, and guides to accelerate the implementation of good practices, focusing on implementing the recommendations of the TCFD and covering topics such as legal risks, climate stress testing, climate scenarios, climate tools, and other related areas.

In 2024, UNEP FI launched its Risk Centre. The Risk Centre provides a resource tailored especially for risk managers, integrating all its existing climate and nature risk-related work programmes, tools, and peer learning opportunities for assessing and managing climate and nature risks. The Risk Centre also aims to cover other sustainability risks, such as pollution and social risks, fostering a holistic approach to sustainability. The Risk Centre consists of a technical programme facilitated by working groups with the aim of producing decision-useful resources for the finance sector, such as cutting-edge tools, guidance, and methodologies.

Learn more about the UNEP FI Risk Centre here.

Acronyms and abbreviations

AASB	Australian Accounting Standards Board
AASB S1	AASB S1 General Requirements for Disclosure of Sustainability-related Financial Information
AASB S2	AASB S2 Climate-related Disclosures
ASE	Amman Stock Exchange
ASIC	Australian Securities & Investment Commission
BCBS	Basel Committee on Banking Supervision
BEES	Biodiversity, ecosystems and ecosystem services
BRI	PT Bank Rakyat Indonesia (Persero) Tbk
BRSR	Business responsibility and sustainability report
Bursa Malaysia	Bursa Malaysia Securities Berhad (The Malaysian stock exchange)
CapEx	Capital expenditure
CBPS	Comissão de Valores Mobiliários (Brazilian Committee for Sustainability Pronouncements)
COP	Conference of the Parties
CSA	The Canadian Securities Administrators
CSDS	Canadian Sustainability Disclosure Standards
CSDS 1	CSDS 1 General Requirements for Disclosure of Sustainability-related Financial Information
CSDS 2	CSDS 2 Climate-related Disclosures
CSSB	The Canadian Sustainability Standards Board
CSRD	Corporate Sustainability Reporting Directive
CVM	Comissão de Valores Mobiliários (The Securities and Exchange Commission of Brazil)
EBA	European Banking Authority
EEA	European Economic Area
EFRAG	European Financial Reporting Advisory Group
EMEA	Europe, the Middle East and Africa
ESRS	European Sustainability Reporting Standards
EU	The European Union
FRAS	Financial Reporting & Assurance Standards Canada
FRC	Financial Reporting Council of Nigeria
FSB	Financial Stability Board

FSTB	Hong Kong Financial Services and the Treasury Bureau
FY	Financial year
GFANZ	The Glasgow Financial Alliance for Net Zero
GHG	Greenhouse gases
GICS	The Global Industry Classification Standard
GRI	Global Reporting Initiative
GSSB	Global Sustainability Standards Board
HKFRS	Hong Kong Financial Reporting Standard Sustainability Disclosure Standards
HKFRS S1	HKFRS S1 General Requirements for Disclosure of Sustainability-related Financial Information
HKFRS S2	HKFRS S2 Climate-related Disclosures
HKICPA	The Hong Kong Institute of Certified Public Accountants
IAI	Ikatan Akuntan Indonesia (The Institute of Indonesia Chartered Accountants)
ICAAP	Internal capital adequacy assessment process
IFRS S1	IFRS S1 General Requirements for Disclosure of Sustainability-related Financial Information
IFRS S2	IFRS S2 Climate-related Disclosures
ILAAP	Internal liquidity adequacy assessment process
IMF	International Monetary Fund
IOSCO	The International Organization of Securities Commissions
IRO	Impact, risk, and opportunity
ISP-CWP	Intergovernmental Science-Policy Panel on Chemicals, Waste and Pollution
ISSB	International Sustainability Standards Board
KGK	Kamu Gözetimi, Muhasebe ve Denetim Standartları Kurumu (Public Oversight Accounting and Auditing Standards Authority of Türkiye)
MOF	The Ministry of Finance of China
NBFI	Non-bank financial institution
NEIS	Normas Europeas de Información sobre Sostenibilidad
NGFS	Network for Greening the Financial System
OJK	Otoritas Jasa Keuangan
PACTA	Paris Agreement Capital Transition Assessment
PCAF	Partnership for Carbon Accounting Financials
PD	Probability of Default
PRB	Principles for Responsible Banking
SEBI	Securities and Exchange Board of India
SGX RegCo	The Singapore Exchange Regulation
SMEs	Small and medium-sized enterprises

SSBJ	The Sustainability Standards Board of Japan
TCFD	Task Force on Climate-related Financial Disclosures
TISFD	Taskforce on Inequality and Social-related Financial Disclosures
TNFD	Taskforce on Nature-related Financial Disclosures
TPT	Transition Plan Taskforce
TSRS	The Türkiye Sustainability Reporting Standards
TSRS 1	TSRS 1 Sürdürülebilirlikle İlgili Finansal Bilgilerin Açıklanmasına İlişkin Genel Hükümler (General Requirements for Disclosure of Sustainability-related Financial Information)
TSRS 2	TSRS 2 İklimle İlgili Açıklamalar (Climate-Related Disclosures)
United Kingdom	United Kingdom of Great Britain and Northern Ireland
UK SRS	The United Kingdom Sustainability Reporting Standards
UNEP FI	United Nations Environment Programme Finance Initiative
UNEP-WCMC	United Nations Environment Programme World Conservation Monitoring Centre
US SEC	The United States of America Securities and Exchange Commission
VSME	Voluntary Sustainability Reporting Standard for SMEs

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Executive summary

High-quality and comprehensive disclosures on sustainability-related risks and opportunities are indispensable for organizations' risk management, as they provide the necessary information to evaluate exposure, allocate resources and align business strategies. They also support informed decision-making on financing, resilience, and risk mitigation. In addition, forward-looking data from disclosures could enable financial institutions to develop credible transition plans, which play an increasingly important role in enhancing financial stability, as recognized by the Financial Stability Board (FSB) (2025a).

As disclosure standards and regulatory expectations evolve, data gaps and methodological complexities could create challenges for companies in effectively disclosing sustainability-related risks and opportunities. For banks, effective disclosures involve not only meeting their own reporting obligations but also leveraging clients' disclosures to manage associated exposures.

This report addresses both dimensions by providing case studies from financial institutions and real-economy companies, with a primary focus on climate-related disclosures. It aims to facilitate the implementation of effective disclosures through providing insights across the following chapters:

- **Chapter 1** sets the context with an overview of key sustainability disclosure standards and frameworks. These include, amongst others: IFRS S1 General Requirements for Disclosure of Sustainability-related Financial Information (IFRS S1) and IFRS S2 Climate-related Disclosures (IFRS S2); the Task Force on Climate-related Financial Disclosures (TCFD) recommendations; the European Sustainability Reporting Standards (ESRS); and the Global Reporting Initiative (GRI) Standards. Particular attention is given to approaches to materiality and interoperability. Understanding these instruments supports the identification, assessment and management of sustainability-related risks and opportunities.
- **Chapter 2** highlights the integration of sustainability-related risk and opportunity disclosures into regulations and related guidance across jurisdictions. This chapter also finds that direct disclosures of quantified financial effects of climate change across financial position, financial performance, and cash flows—remain limited, echoing key disclosure gaps identified by the FSB (2024). To help illustrate how such disclosures could be approached in practice, the chapter presents examples of public disclosures that may inform efforts to address the Strategy and Risk Management pillars—among the least reported under the TCFD pillars—and the corresponding core content in IFRS S2, which incorporates these elements. These examples demonstrate how disclosed information could support the understanding and integration of climate-related risks into organizational risk management and strategic planning.

- **Chapter 3** explores the key concepts of financial, impact, and double materiality, and how these are reflected in current disclosure practices. The examples illustrate how materiality assessments could serve as a foundation for prioritizing and managing sustainability-related risks. The chapter also discusses the potential benefits of considering impact materiality alongside financial materiality when conducting assessments. This integrated approach is important as it may enhance companies' ability to anticipate and respond to emerging sustainability-related risks and opportunities.

- **Chapter 4** aims to support transition plan disclosures, a critical element of sustainability-related reporting under IFRS S1 and S2, and ESRS. It begins with an overview of existing frameworks such as the Transition Plan Taskforce (TPT) and the Glasgow Financial Alliance for Net Zero (GFANZ), then presents disclosure examples structured around the five key elements of the TPT Disclosure Framework—namely: foundations, implementation strategy, engagement strategy, metrics and targets, and governance. These examples offer insights into how companies are developing and disclosing their climate transition plans, which contributes to resilience building and informed risk management.

- **Chapter 5** outlines key challenges hindering effective disclosures, including limited data availability and quality, difficulties in quantifying impacts, risks and opportunities, and managing diverse stakeholder expectations. It concludes that building capacity in data management, stakeholder engagement, and the quantification of risks, opportunities and impacts is essential—not only for enhancing sustainability disclosures, but also for strengthening the integration of sustainability-related risks into enterprise risk management.

This report is a key deliverable of the 2024 United Nations Environment Programme Finance Initiative (UNEP FI) Risk Centre Disclosures and Reporting Good Practices Working Group. It draws on desktop research of sustainability-related disclosures from both real-economy companies and financial institutions, coupled with analysis of key disclosure frameworks and standards. It also reflects and input by working group members as well as contributors, thus capturing collective expertise.

1. Essential sustainability-related disclosure standards and frameworks

Sustainability-related risks and opportunities—including those stemming from climate change—are widely recognized as drivers of both financial and non-financial risks that can significantly impact company performance. For instance, while many market participants agree that physical climate risks can lead to adverse economic outcomes (MSCI, 2025), transition risks have also been shown to negatively affect industry returns (Zhou *et al.*, 2025), with higher emissions linked to increased downside risks (Ilhan *et al.*, 2021).

Today, investors and companies increasingly acknowledge how sustainability-related risks and opportunities could shape business strategies and performance. At the same time, disclosure standards, frameworks, related regulatory requirements and guidance are helping companies approach and undertake their sustainability reporting. This chapter discusses several key sustainability-related disclosure standards and frameworks, including, amongst others:

- IFRS S1 and S2 developed by the International Sustainability Standards Board (ISSB);
- The TCFD framework, which has been integrated into IFRS S1 and S2;
- The ESRS in the European Union (EU), which are the mandatory reporting standards developed under the Corporate Sustainability Reporting Directive (CSRD) by the European Financial Reporting Advisory Group (EFRAG); and
- The GRI Standards developed by the Global Sustainability Standards Board (GSSB).

These standards and frameworks were selected for detailed coverage due to their growing uptake across jurisdictions (see Table 3 in 2.2 and Table 5 in Appendix), and because of their central role in enabling organizations to effectively communicate sustainability- and climate-related risks and opportunities. Each plays an essential role in building a more transparent and consistent sustainability-related disclosure landscape. Some of these sustainability disclosure frameworks can serve as reporting mechanisms to showcase implementation of the Principles for Responsible Banking (PRB), the world's foremost strategic sustainability framework aiming at helping banks align with sustainability goals and asking responsible banks to showcase transparency.

1.1 High-level Overview of Disclosure Requirements of IFRS S1 & S2 in comparison to TCFD Framework

The TCFD, established in 2015 by the FSB, provides a voluntary framework for climate-related financial disclosures. Its recommendations have been widely embedded in companies' disclosures and have informed regulatory disclosure requirements and guidance. The TCFD recommendations and recommended disclosures are organized around four pillars: governance; strategy; risk management; and metrics and targets (TCFD, 2017). IFRS S1: General Requirements for Disclosure of Sustainability-related Financial Information, which covers broader sustainability-related aspects other than climate (IFRS Foundation, 2023a) and IFRS S2: Climate-related Disclosures (IFRS Foundation, 2023b), issued by the ISSB in 2023, fully incorporate TCFD's recommendations while introducing more detailed and prescriptive requirements to enhance investor decision-making (IFRS Foundation, 2023c).

Below is a high-level comparison of IFRS S1 & S2 with the TCFD recommendations, structured by the TCFD pillars and corresponding IFRS S1 & S2 disclosure areas. This comparison provides foundational context for examining further developments in mandatory and voluntary environmental, social and governance (ESG) reporting standards discussed in the following chapters.

Table 1: High-level comparison of IFRS S1 & S2 with TCFD Recommendations by IFRS S1 & S2 Core Content/TCFD Pillars (UNEP FI, 2025)

TCFD Pillars/ IFRS S1 & S2 Core Content	TCFD Recommendations	IFRS S1 & S2 Requirements
Governance	Recommends disclosures of the organization's governance around climate-related risks and opportunities, including the board's oversight of climate-related risks and opportunities, management's role in assessing and managing these risks and opportunities.	Require disclosures of information to enable users of general-purpose financial reports to understand the governance processes, controls and procedures an entity uses to monitor, manage and oversee sustainability-related and climate-related risks and opportunities.
Strategy	Recommends disclosures of the actual and potential impacts of climate-related risks and opportunities on the organization's businesses, strategy, and financial planning where such information is material.	Require disclosures of information to enable users of general-purpose financial reports to understand an entity's strategy for managing sustainability- and climate-related risks and opportunities.

TCFD Pillars/ IFRS S1 & S2 Core Content	TCFD Recommendations	IFRS S1 & S2 Requirements
Risk Management	Recommends disclosures of how the organization identifies, assesses, and manages climate-related risks, including processes for identifying, assessing, and managing climate-related risks.	Require disclosures of information to enable users of general-purpose financial reports to understand an entity's processes to identify, assess, prioritize and monitor sustainability- and sustainability-related risks and opportunities, including whether and how those processes are integrated into and inform the entity's overall risk management process.
Metrics & Targets	Recommends disclosures of the metrics and targets used to assess and manage relevant climate-related risks and opportunities where such information is material.	Require disclosures of information to enable users of general-purpose financial reports to understand an entity's performance in relation to its sustainability- and climate-related risks and opportunities, including progress towards any targets the entity has set, and any targets it is required to meet by law or regulation.

While the IFRS Sustainability Disclosure Standards do not currently include topic-specific requirements for social and human rights or nature-related risks and opportunities, IFRS S1 does require disclosure of all sustainability-related risks and opportunities—including social and environmental matters—if they are financially material. This includes any issue that could reasonably be expected to affect the reporting entity's cash flows, access to finance, or cost of capital. In 2024, the ISSB announced the initiation of a research project focused on human capital (IFRS Foundation, 2025a) and another focused on biodiversity, ecosystems, and ecosystem services (BEES) as part of its 2024–2026 work plan (IFRS Foundation, 2025b). These projects aim to explore corporate disclosure requirements for risks and opportunities related to human capital and BEES, responding to investor demands for enhanced transparency on social and nature-related financial impacts. On 9 April 2025, the IFRS Foundation and the Taskforce on Nature-related Financial Disclosures (TNFD) formalized their collaboration to build upon the TNFD recommendations in the ongoing work of the ISSB, so as to enable nature-related financial disclosures by capital markets (IFRS Foundation, 2025c). To inform private sector companies assessing and reporting on their dependencies, impacts, risks, and opportunities related to nature and pollution, UNEP FI has published the Accountability for Nature Report in collaboration with the United Nations Environment Programme World Conservation Monitoring Centre (UNEP-WCMC).

Furthermore, the Taskforce on Inequality and Social-related Financial Disclosures (TISFD) aims to develop recommendations and guidance for businesses and financial institutions to understand and report on impacts, dependencies, risks, and opportunities related to people. Its first draft framework for inequality and social-related financial disclosures is set to be available in 2026.

1.2 High-level Overview of CSRD/ESRS and IFRS S1 & S2 by Key Aspects

Continuing from the discussion on IFRS S1 & S2 in 1.1, this sub-chapter provides a high-level overview of ESRS in relation to IFRS S1 & S2, focusing on their key aspects and differences. Understanding these relationships is crucial for financial institutions and companies in effectively implementing these standards.

The following table compares the approaches between ESRS, and the ISSB Standards by key aspects. Despite the fact that the two approaches differ in certain aspects, they are highly interoperable between themselves and with other key frameworks and standards, such as the GRI Standards (see Box 1).

Table 2: High-level overview of CSRD/ESRS & IFRS S1 S2 by key aspects (UNEP FI, 2025)

Aspects	CSRD—European Sustainability Reporting Standards (ESRS)	IFRS S1 & S2—ISSB Sustainability Standards
Materiality approach	**Double materiality:** Companies must report sustainability matters that are material from either an *impact perspective* or *financial perspective*. In other words, report sustainability-related impacts if material to stakeholders or the environment, even if not financially significant to the company.	**Single (financial) materiality:** Sustainability-related risks and opportunities that can reasonably be expected to affect the company's financial position must be disclosed. Impacts are considered only insofar as they can reasonably be expected to affect a company's financial position, such as through the creation of financial risks or opportunities for the firm, targeting primary users (e.g. investors, creditors).
Stakeholder focus	**Multi-stakeholder:** Reports are aimed at investors *and* a broad range of stakeholders (regulators, civil society, employees, etc.). ESRS explicitly acknowledges stakeholders like workers, communities, consumers, and requires disclosures of how the interests of these groups are considered.	**Investor-centric:** IFRS S1/S2 target the *primary users* of general-purpose financial reporting, that is, investors, lenders, creditors.

Aspects	CSRD—European Sustainability Reporting Standards (ESRS)	IFRS S1 & S2—ISSB Sustainability Standards
Scope of topics	Covers a wide range of **ESG topics** via 12 standards: ▪ ESRS 1 General Requirements ▪ ESRS 2 General Disclosures, ▪ E1 Climate Change ▪ E2 Pollution ▪ E3 Water and Marine Resources ▪ E4 Biodiversity and Ecosystems ▪ E5 Circular Economy ▪ S1 Own Workforce ▪ S2 Workers in the Value Chain ▪ S3 Affected Communities ▪ S4 Consumers and End-users ▪ G1 Business Conduct	IFRS S1 includes general requirements for disclosures of **sustainability-related financial information**. On the other hand, IFRS S2 requires companies to disclose information about **climate-related risks and opportunities** that could reasonably be expected to affect their cash flow, their access to finance, or their cost of capital over the short, medium, or long term.
Location of disclosures	A "**sustainability statement**" within the **management report** is required.	Although IFRS S1 and IFRS S2 require that information is presented in **general-purpose financial reports**, the Standards do not further specify a location because they are designed to cater to different regulatory requirements globally. In jurisdictions that do not specify a location to present sustainability-related financial information, **preparers are responsible for deciding the best location** for providing their disclosures, as per §60 of IFRS S1.
Sector specific standards	Sector specific standards were being developed by EFRAG up until the new mandate of the EU Commission and the release of the Simplification Omnibus (see Table 5). As with ESRS Set 1, the Sector Specific standards were being designed together with GRI to guarantee interoperability between the two standards. The Simplification Omnibus has removed the requirement for EFRAG to create new Sector-Specific Standards. However, it is still discussing whether EFRAG will publish any sector-specific guidance or content following the omnibus process.	ISSB has incorporated the SASB Standards and recommends users of its sustainability standards to complement their sustainability statements with sector-specific information through the SASB Standards. SASB Standards have been developed with a regional focus on North America and are now being updated by ISSB as part of its continued development of sustainability standards. The current BEES project, looking at nature-related risks will also impact the enhancement SASB Standards.

It is worth highlighting that although the PRB is a strategic framework rather than a disclosure standard, it is inherently focused on impact materiality. In this sense, for early-mover banks committing to the PRB on a voluntary basis, it therefore offers a competitive advantage in terms of raligning with emerging regulatory expectations that incorporate impact and double materiality considerations. In addition, it provides them with a suite of support materials (the UNEP FI Impact Protocol and impact tools) to assist them in conducting materiality assessments. Plus, it supplies them with the UNEP FI Human Rights Toolkit to support them with assessing the materiality of a negative impact.

The PRB framework also includes governance, sustainability strategy and target setting as key elements of responsible banking. Furthermore, it is based on a multi-stakeholder approach, as reflected in Principle 4. Transparency is key to responsible banking. In this regard, the new PRB progress statement makes reference to the different disclosure frameworks highlighted that can be used to showcase alignment with the Principles.

1.3 High-level overview of other disclosure standards and frameworks that support risk management

The voluntary standards and frameworks[1] discussed below are internationally recognized instruments that play indispensable roles in supporting sustainability-related disclosures and risk management. These instruments have been widely used by organizations to address a broad set of sustainability-related topics, including human rights, biodiversity, and responsible business conduct.

Among the most widely used of these instruments are the GRI Standards. These offer a set of standards for sustainability disclosures grounded in impact materiality, i.e. the consideration of an organization's impacts on the economy, environment, and people (GRI, 2024). The GRI Standards provide universal standards applicable to all organizations, as well as topic-specific and sector-specific standards and guidance. In doing so, they support different organizations' systematic stakeholder engagement, materiality, and impact assessment.

On 26 June 2025, the GRI launched new standards—GRI 102: Climate Change, and GRI 103: Energy, which are designed for interoperability between key disclosure standards. Significantly, GRI has granted equivalence to IFRS S2 climate-related disclosures for Scope 1, Scope 2, and Scope 3 GHG emissions under GRI 102. This means that organizations reporting emissions in accordance with IFRS S2 can meet the equivalent GRI 102 requirements (GRI & IFRS Foundation, 2025). In addition, GRI is currently developing new sector standards for financial services, covering banking, insurance, and capital markets. These standards are designed to help financial institutions identify, manage, and disclose their most significant sector-specific impacts—such as on biodiversity and communities,

1 In the context of sustainability disclosures, frameworks refer to instruments that provide general principles, conceptual guidance, and structure for reporting (for example, the TCFD framework), whereas standards refer to those that set requirements on what and how to report (for example, IFRS S1 & S2, ESRS, and the GRI Standards).

and via portfolio-level climate exposures—while building on the universal GRI framework. The final sector standards are expected by Q2 2026, following a consultation process that ended in May 2025.

Despite adopting different approaches, including to materiality (see Figure 1; and Chapter 3 for details), the three standards have made significant progress towards achieving interoperability (EFRAG & GRI, 2023; EFRAG & IFRS Foundation, 2024; GRI & IFRS Foundation, 2024).

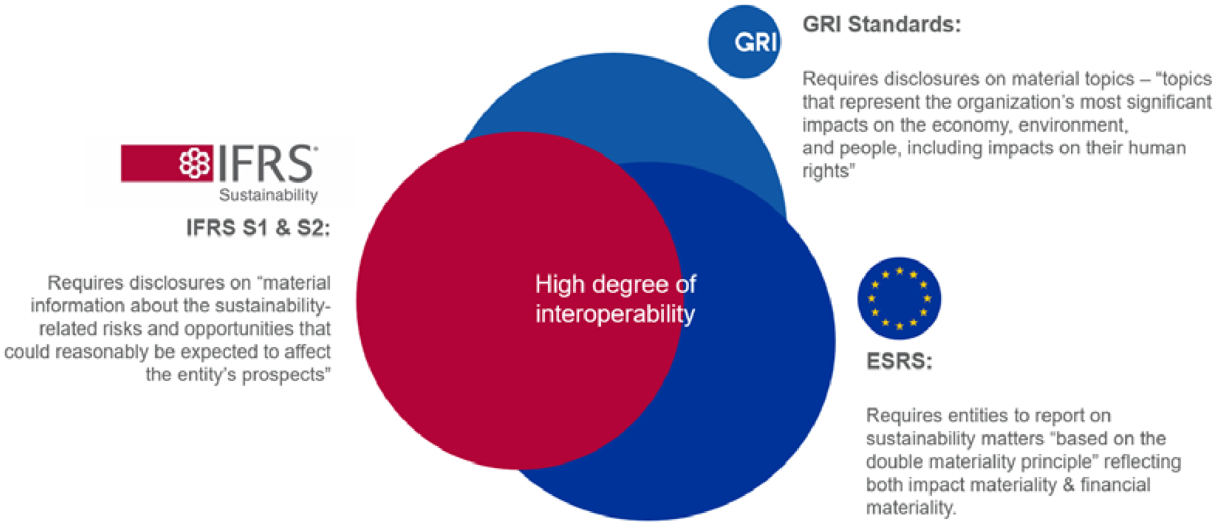


Figure 1: High degree of interoperability between IFRS S1 & S2, ESRS and the GRI Standards (UNEP FI, 2025)

In addition to these three sets of standards, CDP (formerly the Carbon Disclosure Project) offers a widely used voluntary environmental disclosure system for companies, cities, states, and regions. CDP questionnaires cover climate change, water security, and deforestation, and are designed to elicit decision-useful information for investors, customers, and other stakeholders. CDP's framework supports risk management by encouraging organizations to identify, assess, and disclose their environmental risks and opportunities—including those related to climate transition and physical impacts. CDP's alignment with TCFD recommendations has further strengthened its relevance to financial institutions, many of which use CDP responses to inform financed emissions assessments and climate-related portfolio risk analysis. CDP's disclosure system also contributes to interoperability efforts, with recent updates mapped against standards such as IFRS S2 and ESRS.

However, there are challenges in the practical application of these standards. For instance, multinational companies operating across jurisdictions are often required to use different sustainability reporting standards, due to local regulatory mandates. As a result, aligning disclosures across standards requires considerable effort to reconcile differences in materiality perspectives, required metrics, and disclosure formats. This alignment process could add complexity to data classification, internal governance, and reporting processes.

Reporting companies and financial institutions could leverage the following resources to support their implementation of these three disclosure standards:

Box 1: Resources for reporting companies and financial institutions to support interoperable disclosures (UNEP FI, 2025).

- ESRS-GRI Standards data point mapping provides for each ESRS data point the corresponding data point in the GRI Standards.
- ESRS-ISSB Standards Interoperability Guide, by the IFRS Foundation and EFRAG, provides a mapping to support entities in aligning their reporting under IFRS Sustainability Disclosure Standards and ESRS, ensuring consistency and comparability.
- GRI-ESRS interoperability index, by GRI and EFRAG illustrates the high commonality between the standards. Entities reporting under ESRS will be deemed reporting 'with reference' to the GRI Standards as a result.
- GRI-ISSB GHG emissions interoperability considerations, by GRI and the IFRS Foundation details the high degree of alignment between GRI 305: Emissions and IFRS S2 Climate-related Disclosures.
- CDP—ESRS E1 correspondence mapping, published by CDP and EFRAG, provides a detailed alignment between CDP's 2024 Climate Change Questionnaire and the ESRS E1 standard on climate change. This mapping enables entities to streamline reporting across both frameworks and supports greater interoperability in climate-related disclosures.

It is important to note that under the ESRS, the assessment of negative impacts is guided by due diligence processes established in international instruments such as the UN Guiding Principles on Business and Human Rights (UNGPs) and the OECD Guidelines for Multinational Enterprises (EFRAG, 2023). These instruments—and their relevance to sustainability disclosures—are outlined below, followed by an overview of two initiatives focused on improving disclosures related to social and nature-related risks.

The OECD Guidelines for Multinational Enterprises on Responsible Business Conduct and the associated OECD Due Diligence Guidance for Responsible Business Conduct are not disclosure frameworks but instruments that set out expectations for responsible business behaviour across a range of issues, including human rights, labour rights, and environmental impacts. They provide a risk-based due diligence framework, aligned with the UNGPs, for identifying, preventing, mitigating, and accounting for adverse impacts that may be linked to an enterprise's operations, products, or services through business relationships.

The Taskforce on Inequality and Social-related Financial Disclosures (TISFD), launched in 2024, is a global initiative developing guidance to help businesses and financial institutions identify and disclose their impacts, dependencies, risks, and opportunities related to people. Its goal is to promote business and financial practices that contribute to more equitable and resilient societies and economies.

The Taskforce on Nature-related Financial Disclosures (TNFD) has developed a framework for organizations to identify and disclose nature-related dependencies, impacts, risks, and opportunities. Launched in 2023, the TNFD framework aims to support the integration of nature into risk management and strategic decision-making processes, with reference to biodiversity loss and ecosystem degradation as financially material issues.

The UN Guiding Principles on Business and Human Rights (UNGPs) provide guidance for preventing and addressing adverse human rights impacts connected to business activities. Built around the three pillars of “Protect, Respect and Remedy”, they define the undertaking of human rights due diligence and the provision of access to remedy for affected stakeholders as core responsibilities of corporations. The UNGPs are incorporated in the OECD Guidelines for Multinational Enterprises.

2. Jurisdictional uptake on sustainability-related disclosure requirements and disclosure case studies

This chapter examines how jurisdictions are incorporating sustainability-related disclosure requirements into their regulatory frameworks, standards and guidance. It summarizes key developments across regions and presents an overview of disclosure requirements that are aligned or interoperable with these standards.

The chapter also presents case studies from financial institutions and real-economy companies, focusing on climate-related disclosures under the Strategy and Risk Management TCFD pillars—areas within the TCFD framework identified as the least reported (see Figure 2). These examples illustrate current practices in disclosing the financial effects of climate-related risks, climate resilience, and information about climate-related opportunities. In doing so, the chapter highlights how climate considerations are being integrated into risk management processes and long-term strategic planning.

2.1 IFRS S1 & S2 as the global baseline for sustainability-related disclosures

The IFRS Sustainability Disclosure Standards are emerging as a global baseline for corporate sustainability reporting. Developed by the ISSB, the standards build on and consolidate the foundational work initiated by the TCFD.

The launch of the inaugural standards—IFRS S1 and S2—has received broad international recognition and support. Notably, in July 2023, the International Organization of Securities Commissions (IOSCO) endorsed the ISSB Standards, encouraging jurisdictions to consider their adoption and use as a basis for regulatory frameworks (IFRS Foundation, 2023d). This was followed by early signs of market uptake: between October 2023 and March 2024, more than 1,000 companies referenced the ISSB Standards in their sustainability reports (IFRS Foundation, 2024b).

2.2 Overview of jurisdictional uptake of sustainability-related disclosure requirements

According to the IFRS Foundation survey for national standard-setters and regulators on the adoption of ISSB Standards in February 2025 (IFRS Foundation, 2025d), 49 jurisdictions from Asia-Oceania, Europe Middle East and Africa (EMEA), the EU/ European Economic Area (EEA), and the Americas have either introduced or intend to introduce sustainability-related disclosure requirements into their regulatory frameworks. Of these, 47 jurisdictions have already adopted or plan to adopt or otherwise use ISSB Standards. Additionally, nearly two-thirds (32 jurisdictions) have either completed or are in the final stages of completing their regulatory processes.

Understanding the resources available in different regions helps companies navigate jurisdictional expectations and align their sustainability disclosures with applicable requirements. Table 3 summarizes notable examples of sustainability-related disclosure requirements and guidance that have either incorporated IFRS S1 and S2 or are highly interoperable with the Standards. For further details, please refer to Table 5 in Appendix. The tables do not provide a complete overview of all sustainability-related disclosure requirements and related guidelines. Instead, they highlight key developments that are informed by or highly interoperable with IFRS S1 and S2, as identified and compiled by the author between December 2024 and June 2025.

Table 3: Summary Table—Non-exhaustive examples of jurisdictional uptake of sustainability-related disclosure requirements and guidance informed by and/or interoperable with IFRS S1 & S2, by region (UNEP FI, 2025)

Jurisdiction	Name of the regulations/guidance/ rules	Mandatory/voluntary	Effective dates	Affected entities
Australia	Australian Accounting Standards Board (AASB)'s AASB S1 and AASB S2 (based on IFRS S1 & S2)	AASB S1 is voluntary whereas AASB S2 is mandatory for certain entities	Commencement dates range from 2025 to 2027	Entities that are required to prepare a sustainability report containing climate-related financial information under Chapter 2M of Corporations Act 2001
Bangladesh	Guideline on Sustainability and Climate-related Financial Disclosure published by Bangladesh Bank (based on IFRS S1 & S2)	Mandatory	Commencement dates range from 2024 to 2027	Banks and finance companies
Brazil	Comitê Brasileiro de Pronunciamentos de Sustentabilidade (CBPS)'s CBPS 01 and CBPS 02 (based on IFRS S1 & S2)	Mandatory	From 2026	Publicly held companies registered with the Brazilian Securities and Exchange Commission (CVM)
Canada	The Canadian Sustainability Disclosure Standards (CSDSs), including CSDS 1 and CSDS 2 (based on IFRS S1 & S2)	Voluntary unless mandated by provincial and territorial regulators	From 2025	Not specified
China	Basic Guidelines for Corporate Sustainability Disclosure	Expected to become mandatory	To be defined	To be defined—expected to include listed and listed companies, including small and medium-sized enterprises (SMEs)
European Union	European Sustainability Reporting Standards (ESRS) (EUR-Lex, 2023)	Mandatory	Commencement dates range from 2025 to 2027	Large public-interest entities, large undertakings that are not public interest entities

Jurisdiction	Name of the regulations/guidance/ rules	Mandatory/voluntary	Effective dates	Affected entities
Hong Kong, China	Hong Kong Financial Reporting Standard Sustainability Disclosure Standards (HKFRS SDS), including HKFRS S1 and HKFRS S2 (fully aligned with IFRS S1 & S2)	Mandatory	Commencement dates range from 2025 to 2028	Large listed issuers, non-listed financial institutions carrying a significant weight
India	Business Responsibility and Sustainability Report (BSBR) issued by the Securities and Exchange Board of India (SEBI)	Mandatory	From financial year (FY) 2022-2023 and onwards	Top 1000 listed entities by market capitalization (SEBI, 2021)
Indonesia	Pernyataan Standar Pengungkapan Keberlanjutan (PSPK), including PSPK 1 and PSPK 2 (based on IFRS S1 & S2)	To be determined	From 2027 (proposed)	To be determined
Japan	The Sustainability Standards Board of Japan (SSBJ) Standards (based on IFRS S1 & S2)	To be determined—the SSBJ Standards were developed under the assumption that SSBJ Standards would eventually be required	To be determined	Prime Market listed companies (anticipated)
Jordan	Amman Stock Exchange Climate-related Disclosures Regulatory Framework	The regulatory framework only mandates IFRS S2 and the climate-relevant portions of IFRS S1	2026 (voluntary), 2027 (mandatory)	Companies listed on ASE20 Index of the Amman Stock Exchange
Malaysia	The National Sustainability Reporting Framework (NSRF) using IFRS S1 & S2 as baseline	Mandatory	Commencement dates range from 2025 to 2027	Main market and ACE-listed issuers, large non-listed companies

Jurisdiction	Name of the regulations/guidance/rules	Mandatory/voluntary	Effective dates	Affected entities
Nigeria	IFRS Sustainability Disclosure Standards	Mandatory	Commencement dates range from 2028 to 2030	Public interest entities (from 2028), SMEs (from 2030)
Pakistan	IFRS Sustainability Disclosure Standards	Mandatory	Commencement dates range from 2025 to 2027	Listed companies, unlisted public interest companies
Singapore	IFRS Sustainability Disclosure Standards	Mandatory	Commencement dates range from 2025 to 2026	All issuers
Switzerland	The Swiss Code of Obligations (Art. 964a-c et seq.); and Ordinance on Climate Disclosures based on latest consultation outcome, the Swiss Federal Council should not be allowed to specify any equivalent standards other than the ESRS) (Bundesamt für Justiz, 2025).	Mandatory	Commencement dates range from 2022 to 2024	Public interest entities that meet certain thresholds concerning company size, balance sheet total, or sales
Türkiye	The Turkish Sustainability Reporting Standards (TSRS), including TSRS 1 and TSRS 2 (based on IFRS S1 & S2)	Mandatory	From January 2024	Listed companies, certain banks and non-bank financial institutions (NBFIs)
United Kingdom of Great Britain & Northern Ireland (United Kingdom)	UK Sustainability Reporting Standards (UK SRS) based on IFRS S1 & S2, with amendments concerning transition relief, requirements to use the Global Industry Classification Standard (GICS), among others.	To be determined	To be determined (consultation on exposure drafts of UK SRS S1 and UK SRS S2 until 17 September 2025)	Listed companies in the United Kingdom of Great Britain & Northern Ireland (United Kingdom), potentially companies that do not fall within the Financial Conduct Authority (FCA)'s regulatory perimeter

Jurisdiction	Name of the regulations/guidance/rules	Mandatory/voluntary	Effective dates	Affected entities
United States of America	The United States of America Securities and Exchange Commission (US SEC) climate disclosure rules/The Enhancement and Standardization of Climate-Related Disclosures for Investors	To be determined (litigation pending, US SEC paused legal defence)	To be determined (litigation pending, US SEC paused legal defence)	US SEC registrants (litigation pending, US SEC paused legal defence)
California (United States)	California Senate Bills SB-219, SB-253, SB-261	Mandatory	Commencement dates range from 2026 to 2027	Certain companies meeting thresholds on total annual revenues and doing business in California

2.3 Disclosure case studies on strategy and risk management TCFD pillar and IFRS S2 core content

To support the transition from TCFD-aligned reporting to IFRS S1 and S2, this section presents case studies from financial institutions and real-economy companies. These examples were selected to showcase actionable approaches currently adopted by corporate reporters from different industries to disclose information on climate-related risks and opportunities. While the examples may not represent full alignment with IFRS S1 and S2, they are designed to offer practical insights into how certain aspects of IFRS S1 and S2 core content could be addressed in practice. The purpose of these case studies is to provide examples of disclosure approaches that may support other entities in responding to emerging sustainability-related disclosure requirements.

While IFRS S1 requires disclosures on a broad range of sustainability-related topics (including social and nature-related matters) where these are financially material, the focus of this chapter is on the Strategy and Risk Management core content of IFRS S2, which addresses specifically climate-related disclosures. This emphasis is guided by the feedback from the UNEP FI Risk Centre Disclosures and Reporting Good Practices Working Group and findings from the latest IFRS Foundation's TCFD status report (see Figure 2). The latter shows that climate-related financial disclosures under the Strategy and Risk Management pillars remain the least reported among the four TCFD pillars. Informed by the aforementioned insights, the following sub-chapters present examples focused on the following areas:

- **IFRS S1 & S2 Strategy Core Content**: **Effects of climate-related risks and opportunities on an entity's prospects**, (2.3.1);
- **IFRS S1 & S2 Strategy Core Content**: **resilience of climate strategy** (2.3.2); and
- **IFRS S1 & S2 Risk Management Core Content**: the **processes to identify, assess, prioritize and monitor climate-related opportunities** (2.3.3).

Each subchapter begins with a summary of the relevant disclosure objectives, followed by key observations on current reporting practices and examples of disclosure approaches.

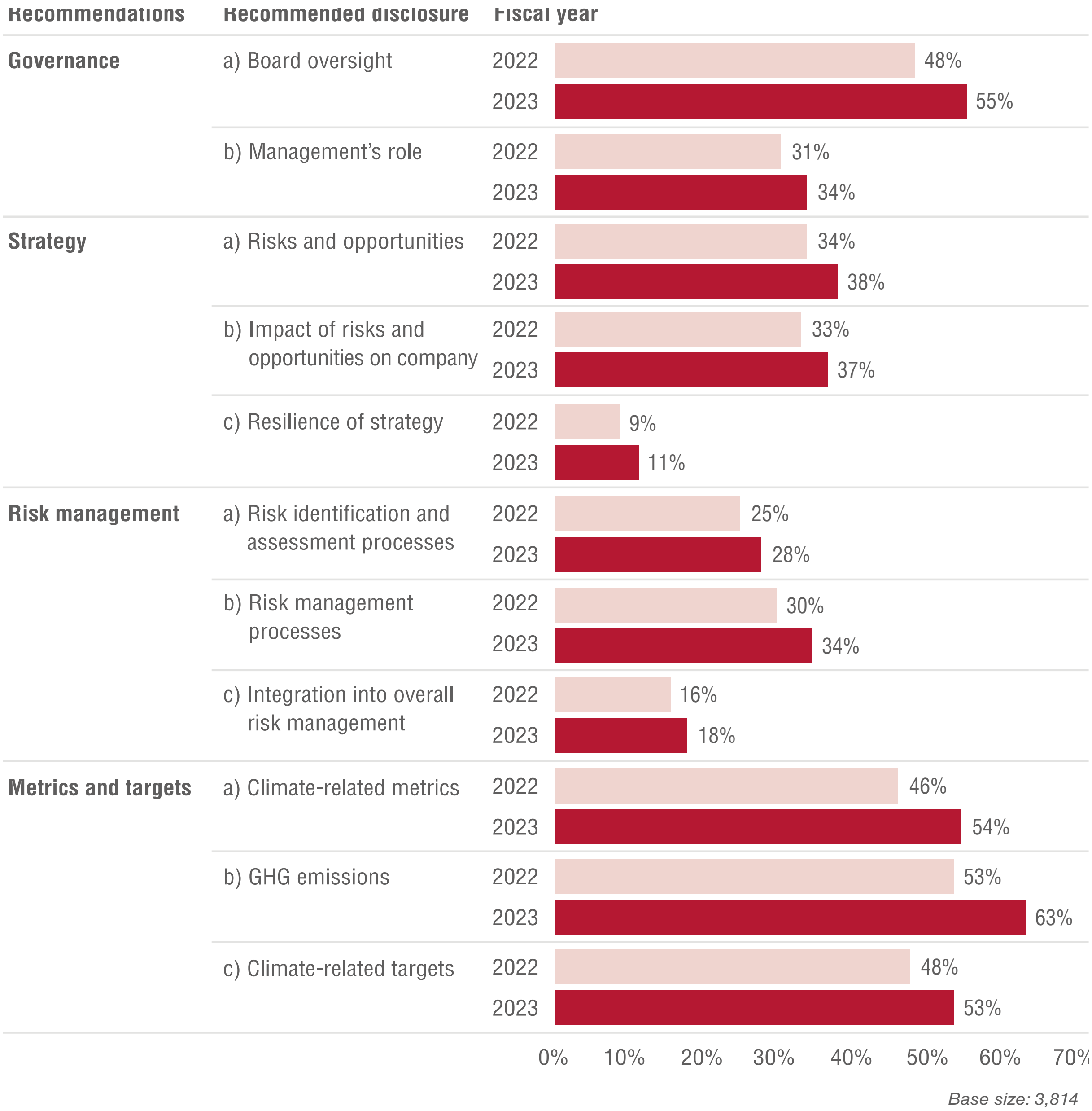


Figure 2: TCFD-aligned disclosures by 3814 public companies across Africa, Asia-Oceania, Europe, Latin America and the Caribbean, and North America by fiscal year for 2022 and 2023 (IFRS Foundation, 2024a)

2.3.1 Case studies on financial effects of climate risks and opportunities disclosures in the strategy core content

The strategy core content of IFRS S2 requires disclosures to enable users of general-purpose financial reports to understand an entity's strategy for managing climate-related risks and opportunities (see Table 6). It is important to note that climate transition plans[2] are integral to the Strategy core content disclosures in IFRS S2, as §9(c) requires disclosures of the effects of climate-related risks and opportunities that could affect the reporting entity's prospect[3] on the entity's strategy and decision-making, including information about its climate-related transition plan (see Chapter 4 for details).

This sub-chapter focuses on disclosures required under §9(d) of IFRS S2, concerning the disclosures of climate-related risks and opportunities' effect on an entity's financial position, financial performance, and cash flows. The following definitions are in line with the IFRS Conceptual Framework and IFRS Accounting Standards[4]:

- Financial position refers to the relationship between an entity's assets, liabilities, and equity (IFRS Foundation, 2018);
- Financial performance refers to the entity's results of operations during a period, which can be represented by income and expense, and profit and loss (IFRS Foundation, 2018); and
- Cash flows refer to the inflows and outflows of cash associated with operating, investing and financing activities (as per IAS 7).

Empirical research demonstrates that climate-related risks drive material financial effects. For example, Robert Engle et al. show that firms exhibit different sensitivities to climate-related news shocks, reflected through their "climate betas" (Engel et al., 2020). This is because companies with higher exposure to adverse climate news typically experience greater stock price volatility, implying that climate risks are priced by markets. Similarly, Bolton and Kacperczyk (2021) suggest that investors could demand a climate transition risk premium for exposure to future climate-related regulatory and market adjustments. Other studies such as those by the FSB (see Figure 3), the Basel Committee on Banking Supervision (BCBS) (2021) and the Network for Greening the Financial System (NGFS) (2022) show that climate shocks could be transmitted into traditional financial risks affecting businesses and households. This could, in turn, impact the macroeconomy and potentially the stability of financial systems..

2 IFRS S2 defines a climate-related transition plan as "[a]n aspect of an entity's overall strategy that lays out the entity's targets, actions or resources for its transition towards a lower-carbon economy, including actions such as reducing its greenhouse gas emissions".

3 In IFRS S1 & S2, an entity's prospect refers to its cash flows, access to finance or cost of capital (IFRS Foundation, 2024d).

4 It was noted in the Basis for Conclusions on IFRS S1 that terminology, guidance and concepts consistent with those in IFRS Accounting Standards were used for development of IFRS S2 when applicable (IFRS Foundation, 2022).

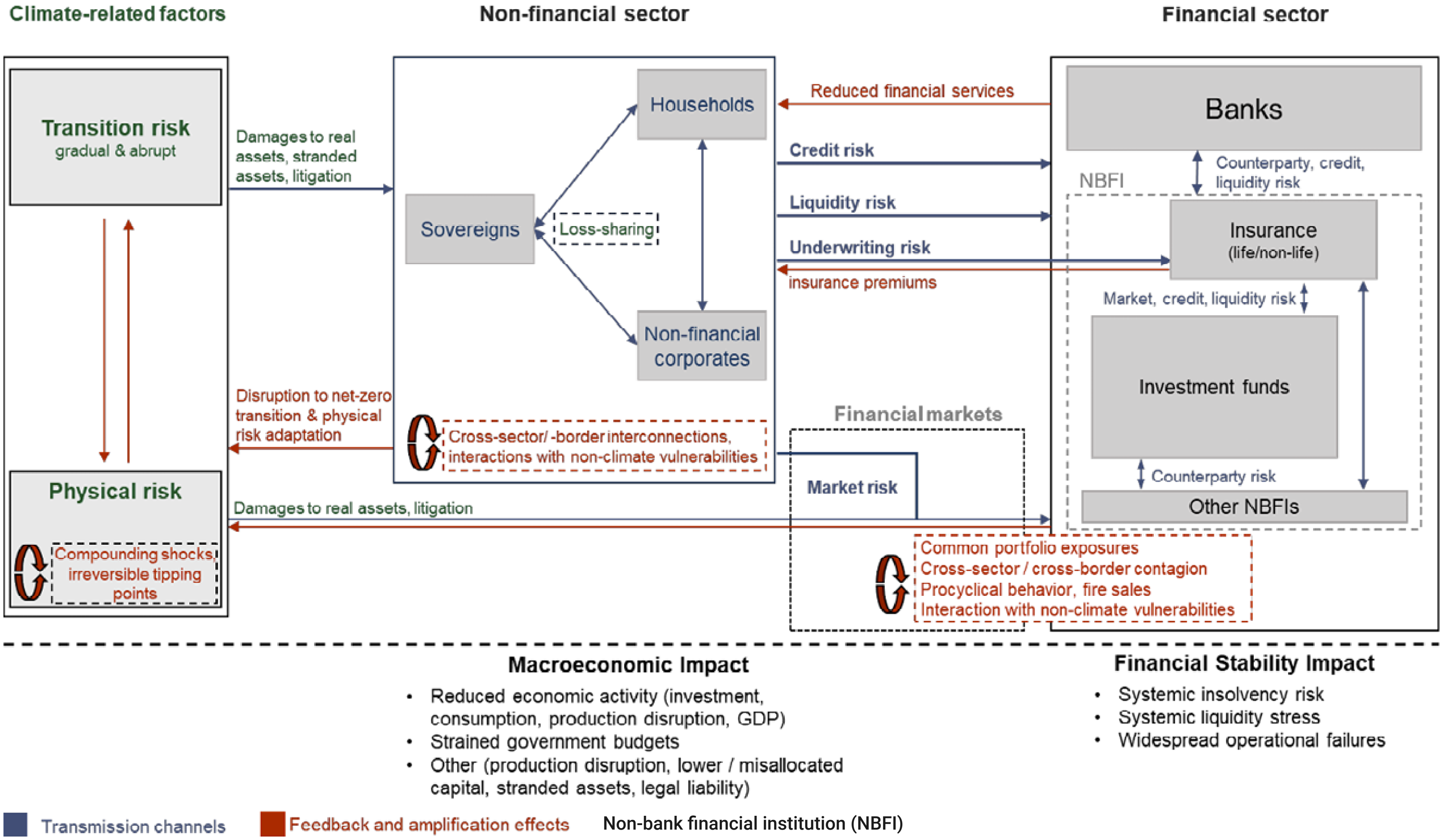


Figure 3: How climate shocks could be transmitted to the financial system and real economy (FSB, 2025b)

Climate shocks may compound pre-existing vulnerabilities, resulting in financial losses through multiple pathways. For instance, the introduction of a carbon tax may raise operational costs for emissions-intensive firms, reducing profitability and increasing the probability of default—thereby elevating credit risk for exposed lenders and investors. Abrupt repricing of emission-intensive assets can also generate market risk as market participants could adjust their expectations in response to new transition paths. Liquidity risk may arise when counterparties withdraw funding from financial institutions perceived as highly exposed to climate-related risks. It can also be triggered by margin calls following sudden asset repricing. These disruptions can extend across sectors and borders via global supply chains and trade networks and may be amplified through common portfolio exposures.

Households, corporates, and sovereigns may respond with changes in consumption, production, and investment behaviour, including various forms of loss-sharing. Reduced credit provision or withdrawal of insurance coverage may act as feedback loops that amplify financial stress. The financial system's sensitivity to such shocks depends on its level of exposure to climate-related risks and the effectiveness of its risk management practices. Transmission occurs through traditional risk channels used in financial-stability assessments, and its magnitude is shaped by the nature of the shock, the structure of the economy, and cross-sectoral interdependencies.

These findings reinforce the importance of disclosures under IFRS S2 §9(d), which require reporting entities to report on the current and anticipated effects of climate-related risks and opportunities on their financial position, financial performance, and cashflows. They also suggest that climate risks and opportunities may influence an entity's cost of capital—an important consideration for both internal planning and financing decisions.

Despite this, desktop research indicates that direct disclosures of quantified insights into all three financial dimensions—financial position, financial performance, and cash flows—were limited. Amongst financial institutions, the financial implications of climate-related risks and opportunities have primarily been reported through credit risk overlays. This aligns with how transition risks are typically expected to materialize: i.e. gradually, over medium- to long-term horizons, or abruptly due to factors such as litigations, through their impact on counterparties' business models and decarbonization trajectories, which may in turn affect credit ratings. In contrast, real-economy companies tend to focus on (i) operational impacts, such as reduced efficiency, damage to physical assets, and associated maintenance; and (ii) changes in commodity and raw material prices that would affect profitability.

These patterns highlight underlying challenges in quantifying and disclosing the financial effects of climate-related risks and opportunities, particularly in terms of data availability and forward-looking financial metrics. As further explored in 5.1, these challenges underscore the importance of continued capacity-building, plus the development of interoperable standards, sector-specific guidance, and decision-useful metrics to improve consistency and comparability across preparers.

Examples from financial institutions: climate risks and credit risk assessment

Financial institutions are advancing their capabilities to assess climate transition risks, including their impact on credit risk. The examples below show some actionable approaches for financial institutions to quantify client-level climate risks, and how they can impact credit risks.

For instance, regarding climate transition risks, Singaporean-based DBS bank uses in-house climate scenario analysis models and NGFS parameters to evaluate how transition risks could affect its clients' financial drivers, such as sales volumes, asset values. These assessments inform the bank's borrower-level ESG risk scores, which are then embedded in its credit approval process and credit decisioning (see Figure 4).

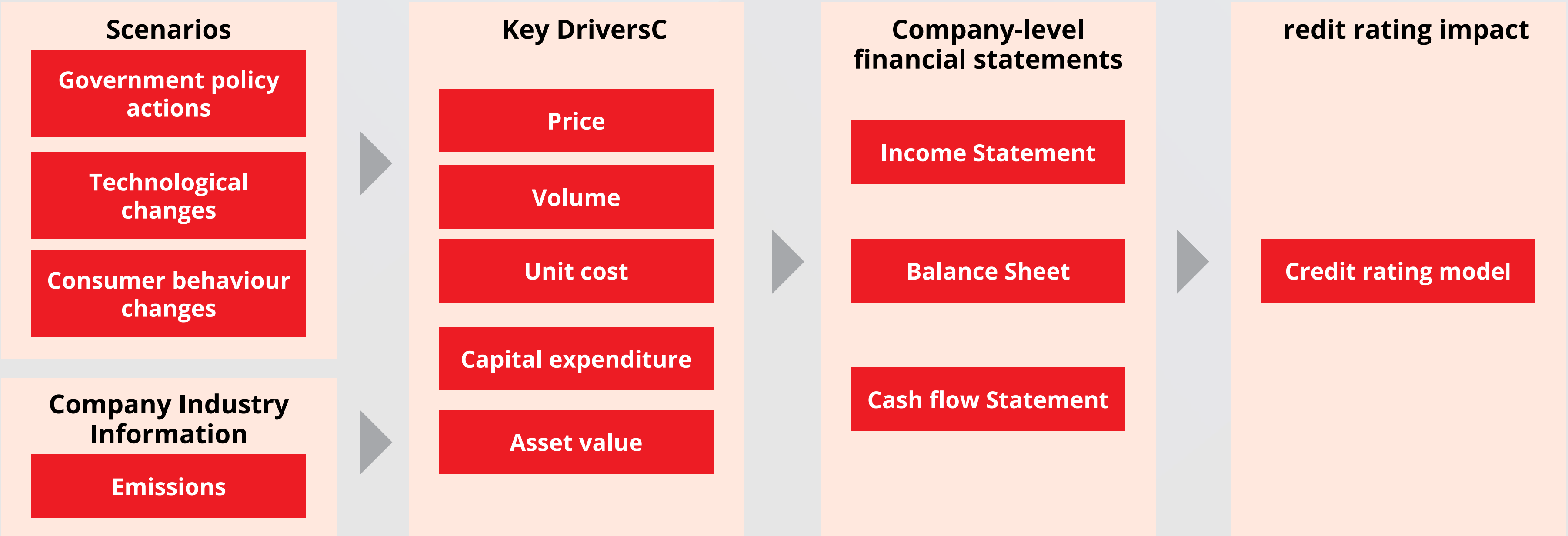


Figure 4: Overview of an approach to climate transition risk quantification (DBS, 2025)

Spain's Sabadell Bank leverages TCFD definitions to assess transition risks' financial effects on clients, informing its credit risk evaluations. Table 4 illustrates how factors like regulatory changes and technological shifts increase borrowers' costs, potentially leading to payment defaults and higher credit risks for the bank.

Table 4: Example of how climate transition risks can lead to possible financial effects of clients (Sabadell, 2024)

Factors		Possible Impacts
Policy & Legal	Increase in the cost of emissions or the use of natural resources.	Risk of borrowers failing to fulfil their payment obligations, particularly those with non-performing assets or belonging to sectors particularly exposed to transition risks.
	Increase in requirements concerning the monitoring, control and reporting of climate-related and environmental disclosures.	Increase in resources dedicated to the analysis, reporting and integration of transition and environmental protection plans in companies' activity. Potential increase in regulatory capital requirements for risks associated with climate change.
	Change in regulations of existing products and services.	Forecast increase in environmental demands going forward and lack of preparation in some sectors.
Technology (ICT)	Substitution of existing products and services with other more efficient or less polluting ones.	Risk of companies being pushed out of their respective activities due to a lack of innovation or failure to adopt technologies that promote the green transition compared to competitors.
	Failed investment in new technologies. Costs of transitioning to low-emissions technologies.	Technological changes depend on the availability of technology, in turn associated with investment in R&D, meaning that this aspect will determine the survival of some companies, especially those smaller in size.
Market	Changes in consumer preferences and/or tastes in relation to the transition to a more sustainable economy.	Risk of losing market share as a result of failing to offer sustainable products or due to poor ESG performance.
	Increased cost of raw materials.	Reduction of income due to increased costs of raw materials in certain carbon-intensive sectors.
Reputational	Stigmatization of a sector, company or product.	Loss of customers' solvency due to poor reputation as a result of the lack of a sustainable strategy or due to an incident or poor ESG ratings of a third party.
	Investment exclusions in certain sectors due to market pressures.	Loss of confidence among the general public.

Examples from real-economy companies on how climate risks could result in financial effects

Non-financial companies are progressing in assessing sustainability-related risks and opportunities. Regarding climate-related risks, there is a particular emphasis on how such risks may lead to changes in operating costs, raw material prices, and reputational exposure. These assessments are increasingly being translated into financial metrics, as illustrated in the examples below.

Unilever's 2024 Annual Report and Accounts details how climate physical and transition risks can affect operational risks and cost structures (see Figure 5). For example, physical risks, including extreme weather events, could disrupt the sourcing of agricultural commodities, leading to increased procurement volatility and costs. Transition risks, such as carbon taxes and technological shifts, could elevate operating expenses and compliance obligations. The company distinguishes between gross risks (unmitigated exposure) and net risks (residual effects after mitigation). This demonstrates how strategic responses such as alternative sourcing, hedging, and sustainable procurement practices help reduce the overall exposure.

Changing climate and extreme weather events (physical risk)

Increased manufacturing and supply disruption

Description	Assumptions	Risk type	Description
Increased physical effects of climate change disrupt commodity supplies, cause plant outages or disrupt our distribution infrastructure, causing delays and supply shortages and increasing uncertainty in financial planning for key commodities. Given the volatility-driven, and therefore unpredictable, nature of this risk, a quantitative analysis is not feasible.	**Gross risk** ▪ Climate change-driven increase in extreme weather disrupts supply chains, increasing delays, shortages and costs. **Net risk** ▪ Alternative sourcing strategies alleviate commodity shortages; insurance reduces costs from damages, delays and shortages; hedging fixes a share of commodity and energy prices.	**Gross**	In 1.5°C and <2°C scenarios, rising temperatures intensify extreme weather and market volatility, increasing commodity/energy and procurement costs. However, in <3°C and >4°C scenarios, greater temperatures rises drive more extreme weather (a 4°C rise quadruples extreme weather versus 1.5°C), thereby increasing costs.
		Net	In 1.5°C and <2°C scenarios, mitigation actions reduce commodity/energy and procurement costs. However, in <3°C and >4°C scenarios, extreme weather is more likely, increasing mitigation costs (e.g. insurance and hedging) and narrowing the gap between gross and net costs.

Product regulations and claims: composition and sourcing transparency (transition risk)

Increased scrutiny of sustainability claims

Description	Assumptions	Risk type	Description
Introduction of anti-greenwashing regulation globally increases the scrutiny of sustainability claims.	**Gross risk** ▪ Higher costs associated with increased compliance. ▪ Potential revenue decline due to reputational damage should investigations be opened to review our claims. **Net risk** ▪ We achieve our sustainability targets, which credibly substantiate our sustainability claims, and align our sustainability marketing across brands for consistency.	**Gross**	1.5°C: In the short term, countries worldwide follow Europe's lead by formalising anti-greenwashing regulation. Regulators monitor and scrutinise sustainability claims more rigorously. <2°C: Regulatory scrutiny becomes more rigorous from 2030, increasing the potential for action against us in the shape of claims reviews.
		Net	External audit, internal controls and verification processes support our sustainability claims, reducing the risk of negative impacts on our reputation and P&L. Increased brand and marketing spend to effectively communicate our claims across brands.

Figure 5: Example of how climate physical and transition risks could drive operational risks (Unilever, 2025)

Sustainability matter	IRO names	Value chain: Upstream	Value chain: Own operations	Value chain: Downstream	Rationale: description of negative impact and/or risk	Time horizon: Short term	Time horizon: Medium term	Time horizon: Long term
Climate change								
Climate change adaptation	Sourcing practices	●			**Impact:** Climate change poses a significant challenge to sourcing of ingredients, with extreme weather events risks, increased pests and diseases threatening crop yields. Adaptation is costly and complex, especially for small-scale farmers, and shifting sourcing regions adds to economic instability. **Risk:** Climate-related risks such as heatwaves, drought and water stress may impact raw materials, availability, quality and cost due to lower yields and greater yield variability.	●	●	●
Climate change mitigation	Emissions from sourcing and ingredients	●			**Impact:** Greenhouse gas emissions linked to agricultural activities and land-use changes for ingredients. **Risk:** Policy risks (e.g. carbon tax), technology risks (e.g. replacement and substitution of emission intensive assets), and market risks (e.g. consumers adopting more sustainable choices) are factors that may potentially lead to supply disruptions, regulatory action, increasing operating costs and impacts on Nestlé's reputation.	●	●	●

Figure 6: Example of how climate physical and transition risks could drive operational and reputational risks (Nestlé, 2025)

In its 2024 Non-Financial Statement, the Swiss-based multinational company Nestlé mapped the climate physical and transition risks across its value chain. This helped illustrate the potential effects from climate risks on its financial prospects under different time horizons (see Figure 6). For example, under climate change mitigation, Nestlé identifies emissions from sourcing and ingredients as a key source of transition risk. The company notes that policy shifts (e.g. carbon tax), technological change (e.g. the need to replace emissions-intensive assets), and evolving consumer preferences toward more sustainable products may lead to increased compliance and operational costs.

2.3.2 Case studies on climate resilience disclosures in the strategy core content

As Figure 2 shows, disclosures concerning resilience within the Strategy TCFD pillar were the least reported element amongst TCFD-aligned reports. This sub-chapter examines climate resilience disclosures as required under IFRS S2, specifically §9(e) of the Strategy core content (see Table 6). Under §9(e), entities are expected to disclose the resilience of their business model and strategy to climate-related risks and opportunities, taking into consideration different climate-related scenarios. These disclosures help users understand how an entity might adapt or respond under varying levels of climate impact.

It has been observed that when reporting on the climate resilience of strategies and business models, climate scenario analysis emerges as a key tool used by both financial institutions and non-financial companies. Often, it is used to evaluate the resilience of their strategies and portfolios under different climate futures. It is essential to note that credible climate transition plans also play a vital role in demonstrating resilience (see Chapter 4 for details). Transition plans articulate how an entity intends to shift its strategy and operations to remain viable in a low-carbon future. When clearly aligned with decarbonization pathways and supported by scenario-informed targets, transition plans help establish that an entity is not only managing transition risks but also enhancing long-term strategic and financial resilience. The case studies below illustrate potential approaches to disclosing resilience in alignment with IFRS S2 requirements.

Examples of how financial institutions report the use of scenario analysis to assess climate resilience

The global financial group BBVA has adopted a comprehensive approach to integrating climate risks across its enterprise risk management and strategic planning. In its 2024 Annual Report, the bank outlines how it uses scenario analysis to test the robustness of its business model under adverse climate-related developments (BBVA, 2025). Key elements of this approach include:

- Climate-related risks are embedded across BBVA's entire risk management cycle—from identification and assessment to management and reporting. These risks are incorporated into the bank's risk appetite framework and credit underwriting processes. BBVA also examines the implications of climate change for traditional prudential risks, including credit, market, liquidity, and operational risk, reinforcing an institution-wide perspective on resilience;
- In 2024, the bank conducted a stress test simulating the strategic impact of exiting relationships with customers that fail to meet milestones under transition engagement plans. These plans are central to its transition finance strategy, which combines support with ESG performance monitoring. The scenario assumed a full withdrawal from non-compliant clients, and results confirmed the resilience of the bank's strategic model. This disclosure demonstrates how scenario analysis can be used to assess the viability of climate-aligned engagement approaches under stress conditions; and
- Climate considerations are also integrated into BBVA's internal capital adequacy assessments, credit risk provisioning, and stress testing. Additionally, the bank highlights its operational resilience efforts, such as an eco-efficiency plan to reduce its own carbon footprint. Notably, BBVA's disclosure connects strategic resilience not only to financial modelling, but also to its relationship management—showing how client engagement can serve as a resilience lever.

Standard Chartered follows a similar approach leveraging climate scenario analysis for climate resilience building and related disclosures (2025). The bank uses internal models to quantify the effects of climate-related risks on its credit portfolios and integrates these findings into risk management and strategic planning processes.

In 2024, Standard Chartered assessed the resilience of its corporate and investment banking exposures at default. Scenarios were drawn from the NGFS and bespoke narratives. The bank used loan impairment intensity as a metric to measure the level of incremental expected credit loss against the exposure at default (see Figure 7). This metric enables the bank to assess the relative size of its exposure subject to potential losses from climate risks climate-driven expected credit losses.

For wealth and retail banking, Standard Chartered applied NGFS and bespoke climate scenarios in 2024 to assess physical and transition risks across key markets. For example, for residential mortgages, climate-adjusted expected credit losses were calculated using property revaluations under scenarios such as RCP 8.5. Stranded asset risk was assessed for properties likely to become uninhabitable due to flooding, storms, or sea-level rise, with higher exposures identified in Korea, India, Malaysia, China, and Bangladesh. Transition risks—such as elevated energy costs, were also factored into credit card portfolios. The results, which were subject to internal governance review, informed the bank's portfolio monitoring and risk mitigation strategies.

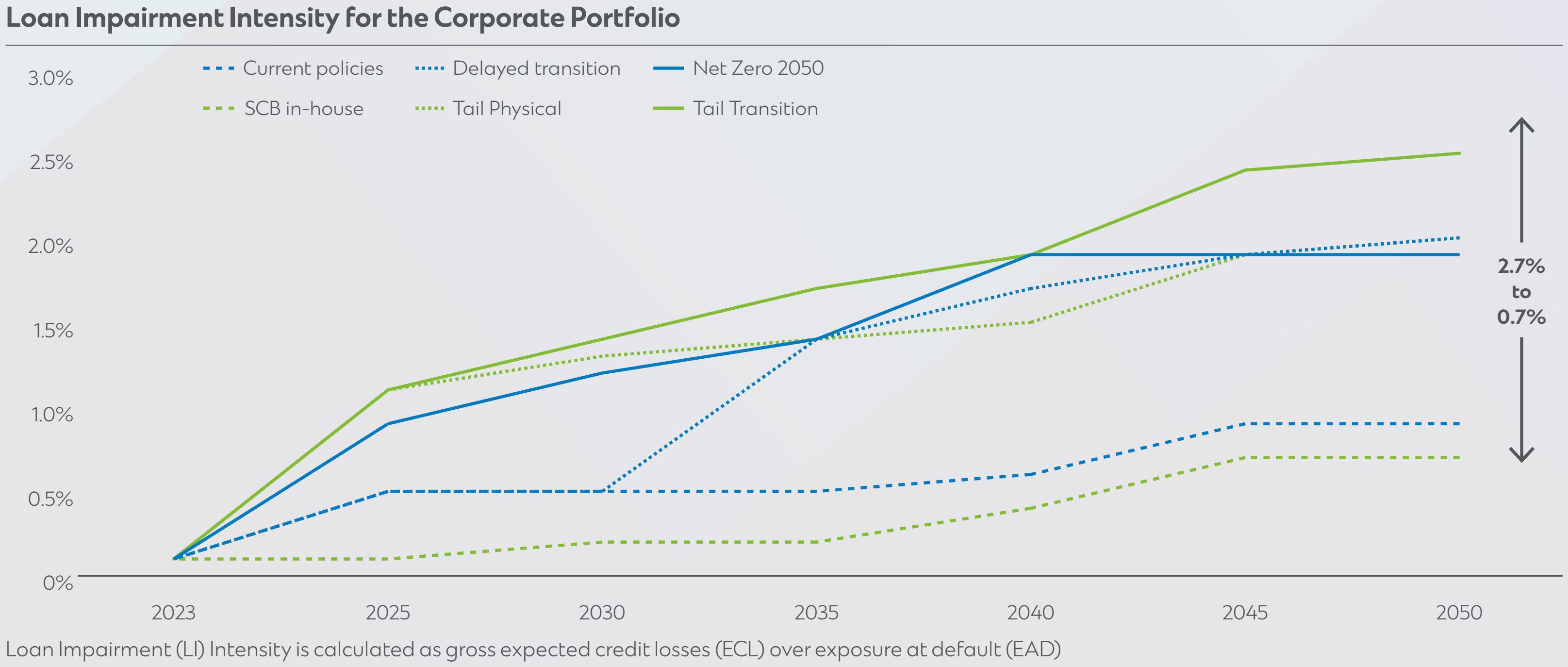


Figure 7: Example of loan impairment intensity analysis (Standard Chartered, 2025)

An example of a real-economy company disclosing how it uses scenario analysis to assess climate resilience

The sports apparel company Adidas discloses a structured approach to assessing the climate resilience of its business model and strategy, leveraging scenario analysis across its entire value chain. In 2024, the company conducted a climate scenario analysis across its entire value chain, covering both physical and transition risks identified through its broader risk and opportunity assessment.

The company applied a climate modelling tool across three greenhouse gas emissions scenarios—low (RCP2.6-SSP126), intermediate (RCP4.5-SSP245), and high (RCP8.5-SSP585)—and three timeframes (2030, 2040, 2050), aligned with its climate targets. This allowed the business to anticipate risk exposure over time, with scenario impacts expected to diverge more significantly from 2030 onwards.

Adidas created a digital visual representation visual referred to as the “digital twin” of its business model and geographical footprint to simulate risk exposure across geographies and assets. Risks and opportunities were then quantified (to the extent possible) and aggregated to inform not only the resilience analysis, but also future strategic planning and decision-making.

Insights from the digital twin and scenario analysis were used to inform Adidas’ structured resilience analysis (see Figure 8). The analysis evaluated the trend and materiality of key risks across scenarios and assessed the company’s existing capacity to manage them. For instance, risks such as supply chain disruption and physical damage to assets were found to be more significant in high-emissions scenarios by 2050, while carbon pricing and stakeholder activism were more acute in low-emissions pathways—particularly if emissions targets are not met.

The company also identified tailored mitigation strategies. These include logistics diversification, business continuity planning, material cost forecasting, and continuous delivery of its climate transition plan. Other measures focused on product and marketing innovation, supply chain flexibility, and capital market readiness.

Identified risks	Trend	Risk-handling actions
Physical damage and business disruption in our own or business partners’ properties	The risk is more significant in a high-emission scenario and in the 2050 timeframe.	– Regular update of climate risk assessment and to inform location decisions – Insurance coverage for property damage and business interruption
Interruptions in our supply chain	The risk is more significant in a high-emission scenario and in the 2050 timeframe.	– Diversification in the logistics portfolio – Incident and crisis response – Business continuity plans
Increasing costs of materials and high costs of low-carbon technologies	The risk is quite stable across the three different emission scenarios and timeframes.	– Flexibility in the materials portfolio – Material cost forecasts – Focus on material and technology innovation
Harm to and lower productivity of our own and business partners’ workforce	The risk is more significant in a high-emission scenario and in the 2040/2050 timeframes.	– Insurance coverage – Training and education – Use of adequate heating and cooling systems
Exposure to carbon pricing mechanisms, carbon-related regulations, and litigation	The risk is more significant in a low-emission scenario, combined with a scenario where adidas does not meet its corresponding GHG emissions reduction targets.	– Continuous monitoring of regulatory landscape – Delivery of the climate transition plan – Continuous review and adaptation of sourcing and logistics infrastructure – Continuous review and implementation of the sustainable material roadmap as part of the climate transition plan – Avoidance of major dependencies on one sourcing country/region
Stakeholder scrutiny and activism	The risk is more significant in a low-emission scenario, combined with a scenario where adidas does not meet its corresponding GHG emission reduction targets.	Transparent communication of climate transition plan and its year-on-year delivery
Lack of ability to adapt to changes in consumer preferences and product demand	The risk is prevalent in all emission scenarios.	– Consumer Insights to monitor market developments – Climate transition plan – Product and marketing innovation – Continuous consumer engagement and dialogue

Figure 8: Example of disclosures on resilience analysis (Adidas, 2025)

2.3.3 Case studies on climate-related opportunities disclosures in the risk management core content

The Risk Management core content of IFRS S2 mandates disclosures on processes to identify, assess, prioritize, and monitor climate-related risks and opportunities, integrated into an entity's overall risk management framework. This sub-chapter focuses on disclosures of the processes to identify, assess and manage climate-related opportunities.

It has been observed that disclosures specific to climate-related opportunities are an emerging practice. Such disclosures were not a part of TCFD's recommendations when they were published in 2027, for example (see Table 7). Notably, the processes of identifying, assessing, and managing climate-related opportunities are frequently integrated within frameworks that address risks, impacts, and dependencies rather than treated as standalone processes. This integrated approach reflects the fundamental interconnection in sustainability reporting: organizational dependencies on natural capital and a company's environmental and social footprint simultaneously generate both risks and opportunities through the same impact pathways. When companies assess their dependence on fossil fuels, for instance, they identify not only transition risks but also potential opportunities in renewable energy adoption. The following sub-chapter presents case studies from both financial institutions and real-economy companies to showcase how reporting on the processes to identify, assess, prioritize, and monitor climate-related opportunities can be approached.

Companies, including financial institutions have found materiality assessments informative for the identification, assessment and management of climate-related opportunities.

Example of a financial institution leveraging materiality assessments to help identify and assess climate-related opportunities

In its 2024 annual report, the Spain-headquartered bank Santander details how it identifies and assesses sustainability-related impacts, risks and opportunities (IROs) by conducting a double materiality assessment. This assessment includes several phrases as shown in Figure 9.

Figure 9: Phases of materiality assessment (Santander, 2025)

Concerning the identification of sustainability-related opportunities, the bank conducts background and stakeholder analysis where both entity-level information (such as financial statements) and external information (such as stakeholder insights, and reports on sector trends) are considered. These insights help the bank identify over 100 potentially material IROs. These IROs are then categorized to a topic, sub-topic or sub-sub-topic level in a table format following Application Requirement 16 of ESRS 1. For example, the bank has identified two material climate-related opportunities; namely, "growth in the financing of renewable energy and other energy transition solutions" and "providing our customers with sustainable solutions in such sectors as construction, mobility or agriculture". Both opportunities concern Santander's downstream value chain as they both pertain to its efforts to support its customers in their transition goals.

In its assessment of opportunities—conducted as part of the IROs assessment—the bank specifies that the scope covers its global business operations. The assessment began with mapping projected ESG-related revenue against identified climate-related opportunities, followed by a comparison of this ESG revenue to the bank's total revenue. Santander also incorporated insights from a wide range of stakeholders, including retail customers, investors, non-governmental organizations, senior management, employees, regulators, and supervisors. In this way, the assessment reflected insights from both potentially affected groups and key audiences of its final report.

Example of a real-economy company leveraging the TCFD framework to help identify and assess climaterelated opportunities

Other frameworks, such as TCFD, can also be leveraged to help identify climate-related opportunities. Iberdrola, an electric utility company based in Spain, provides an illustrative example. The company based its identification of climate change related transition opportunities on the list of categories included in the TCFD Implementation Guide. This groups opportunities into five main typologies: resource efficiency, energy sources, products and services, markets and resilience.

As Figure 10 shows, nine potential climate-related opportunities have been considered. These are the opportunities that could make the greatest contribution to higher growth rates of some of the businesses. These opportunities are analyzed using an assessment and quantification model.

TCFD type	TCFD category	Opportunity
Products and services	Development and/or expansion of low-emission goods and services	Heat pump
	Development and/or expansion of low-emission goods and services	EV charging
	Development and/or expansion of low-emission goods and services	Green hydrogen
	Capacity to diversify activities	Transmission and distribution networks
	Capacity to diversify activities	Electricity generation
	Capacity to diversify activities	Pumped storage
	Capacity to diversify activities	Battery storage
	Change in consumer preferences	Electricity marketing
Market	Diversification of the activities of the business	Voluntary carbon markets

Figure 10: Example of the identification and assessment of climate-related opportunities (Iberdrola, 2025)

3. Materiality assessment disclosures for sustainability-related risk management

Materiality assessment is often the first step of sustainability-related reporting, providing a foundation for identifying and prioritizing the ESG issues most likely to influence an organization's financial prospects, resilience, risk profile, and value creation. These assessments also help identify where an organization has significant actual or potential positive and negative impacts on the environment, people, and society at large—whether through its operations, its offerings of services and products, or its business relationships across its value chain. By distinguishing which issues are financially material and which represent broader impact materiality, materiality assessments support risk management by surfacing relevant sustainability-related risks and opportunities. In this way, these assessments can help organizations focus resources, anticipate emerging threats, and align strategy accordingly.

This chapter explores the key concepts of materiality, and provides case studies showcasing actionable approaches to conducting and disclosing information about materiality assessment. It highlights the advantages of considering impact alongside financial materiality.

3.1 Key concepts and practical approaches to materiality assessment

This sub-chapter describes the primary approaches to materiality assessment, focusing on financial materiality, impact materiality, and double materiality (see Figure 11). For banks committing to the PRB, conducting an impact analysis can serve as a key input to support banks' impact materiality assessment. Such an analysis helps identify and prioritize the most significant actual and potential positive and negative impacts on people, society, and the environment. This process can be complemented with other sources and processes, such as stakeholder engagement and human rights due diligence.

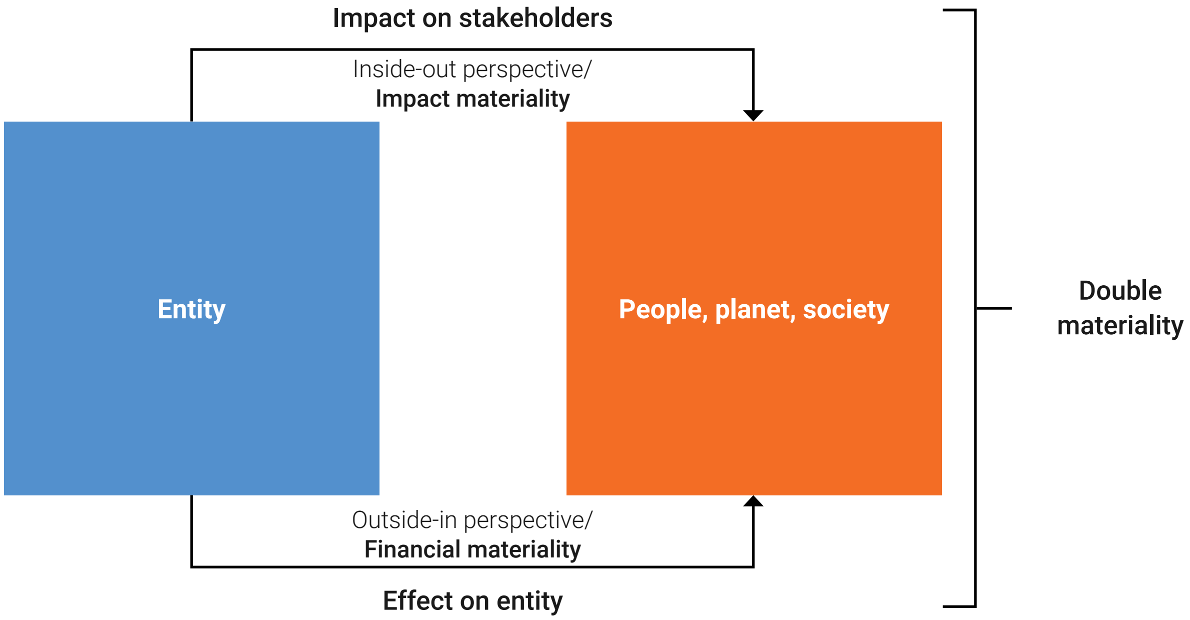


Figure 11: Visualization of how different concepts of materiality relate to each other (UNEP FI, 2025)

One critical area of impact materiality relates to Indigenous Peoples. Recent research, including the UNEP FI report Nature-related Finance and Indigenous Peoples, highlights the vital role that Indigenous rights, leadership, and knowledge play in nature-related finance and biodiversity outcomes. Drawing on outcomes from Conference of the Parties (COP) 16, the report calls on financial institutions to build just and inclusive partnerships with Indigenous Peoples and local communities, and to embed safeguards such as Free, Prior and Informed Consent into their nature-related strategies. As financial institutions align with global biodiversity goals—such as those set out in the Kunming-Montreal Global Biodiversity Framework—these issues could influence investor expectations, reputation, and the viability of business models. This is particularly the case for sectors with high exposure to land and ecosystem impacts. Hence, integrating indigenous peoples' rights considerations into both impact and financial materiality assessments is important.

Another development to consider in materiality assessment is the formal establishment of the Intergovernmental Science-Policy Panel on Chemicals, Waste and Pollution (ISP-CWP) in June 2025. The panel is designed to strengthen the science-policy interface by assessing the impacts of chemical pollution and waste on human and environmental health. The ISP-CWP's work is expected to provide a robust evidence base to help companies and financial institutions better understand and evaluate the materiality of pollution-related risks and impacts—particularly in sectors with high chemical footprints or exposure to waste-related liabilities. Over time, its findings could serve as a critical input into materiality assessments, scenario analyses, and sustainability risk frameworks.

3.1.1 Financial materiality in IFRS S1 & S2

IFRS S1 and S2 adopt a materiality perspective widely recognized as financial materiality, though not explicitly termed as such. This is seen from §18 of IFRS S1, which states that information is material if "if omitting, misstating or obscuring that information could reasonably be expected to influence decisions that primary users of general purpose financial reports make on the basis of those reports, which include financial statements and sustainability-related financial disclosures and which provide information about a specific reporting entity" (IFRS Foundation, 2023a).

This definition centres on the primary users of financial reports, including investors, lenders, and other creditors. It focuses on how sustainability-related risks and opportunities—such as climate-related risks and opportunities—could affect an entity's financial performance, cash flows, or access to capital. This 'outside-in' perspective (see Figure 11) helps enable informed financing decisions to the reporting entity.

3.1.2 Impact materiality in GRI Standards

The GRI Standards focus on impact materiality, which is an 'inside-out' perspective (see Figure 11). Organizations reporting in accordance with the GRI Standards are required to determine their material topics and apply GRI 3: Material Topics 2021 for the relevant disclosures on materiality and topic-specific impacts. According to GRI 3: Material Topics, material topics are defined as those that reflect "the organization's most significant impacts on the economy, environment, and people, including impacts on their human rights" (GRI, 2021).

Impact materiality under GRI is oriented toward a broad stakeholder base and supports the alignment of business activities with sustainable development goals across environmental, social, and governance dimensions. The identification of material topics relies on meaningful stakeholder engagement—such as consultations with communities, employees, and non-governmental organizations—and considers the severity, scope, and likelihood of both actual and potential impacts. This approach strengthens transparency and accountability while also supporting organizations in managing their positive and negative impacts on the economy, environment, and society in a structured and evidence-based manner. The GRI can serve as a reporting mechanism for PRB implementation, offering evidence for impact analysis, target-setting and stakeholder engagement, as both emphasize the importance of banks' indirect impacts through financial products and services.

3.1.3 Double materiality in CSRD/ESRS

CSRD/ESRS adopt a double materiality approach, which combines both financial and impact materiality perspectives. Under double materiality, information is considered material if it is necessary for understanding:

i. How sustainability-related risks and opportunities affect the company's financial performance, cash flows, or position (financial materiality, which is the same materiality perspective also adopted by IFRS S1 and S2); and

ii. How the company's operations, products, or services impact the environment, society, and human rights (impact materiality, aligned with GRI Standards).

This dual approach considers both the 'inside-out' and 'outside-in' perspectives (Figure 11) and enables a comprehensive evaluation of both the effects of sustainability-related risks and opportunities on the reporting entity and the impacts the entity has on people, the planet, and society. For example, a bank might assess climate change through both lenses: as financially material because of transition risks affecting loan portfolios and physical risks to financed assets; and as impact material due to its financing of high-carbon industries that contribute to global warming, hence reinforcing the medium and long-term financial risks. The 'inside-out' perspective of CSRD is also engrained in the PRB implementation narrative, showing how banks impact the environment and society through their core business activities.

3.2 The business case of impact materiality assessment

Materiality assessments can be structured in various ways depending not only on the reporting framework or standard but also an organization's specific context. Recognizing the systemic interconnections between the economy, people and the environment, the consideration of impact materiality—the assessment of an organization's significant effects on the economy, environment, and society—could support the identification of sustainability topics that may influence long-term business prospects (Impact Management Platform, 2023).

One potential benefit of considering impact materiality is the opportunity to integrate diverse stakeholder perspectives into the materiality determination process. It is important to recognize that financial and impact materiality are interconnected (GRI, n.d.): today's impacts can evolve into tomorrow's financial risks or opportunities. Starting with a robust assessment of impacts could therefore allow companies to better anticipate how sustainability issues may influence financial performance, access to capital, and enterprise value across different time horizons.

Incorporating impact materiality into assessment processes could also support early identification of emerging risks and opportunities stemming from evolving societal expectations, technological disruptions, and regulatory developments before they manifest as financial effects. This forward-looking perspective could potentially enhance organizational resilience and support proactive rather than reactive risk management. Additionally, demonstrating accountability for impacts could also contribute to trust-building with stakeholders, including communities, employees, investors, and regulators. This could potentially strengthen brand reputation and social license to operate. Reporting practices are evolving to reflect a broader understanding of materiality that includes impact considerations. For example, feedback from the 2024 UNEP FI Risk Centre Disclosures and Reporting Good Practices Working Group indicates that 73 per cent of Working Group respondents are already incorporating both impact and financial materiality perspectives in their reporting (Figure 12). This trend aligns with findings from other studies, reflecting a growing recognition of the importance of including impact assessments and impact materiality in sustainability disclosures. For instance, the 2023 ISS Global Benchmark Policy Survey found that 75 per cent of investors believe materiality assessments should include external company impacts, while only 6 per cent thought assessments should be limited to factors with direct financial impact (ISS Governance, 2023). To facilitate impact management and interoperable disclosures, UNEP FI offers a range of resources, including the UNEP FI Impact Radar and the UNEP FI-ESRS Interoperability Package, both of which are publicly accessible.

Figure 12: Feedback on materiality assessment perspective from the 2024 UNEP FI Risk Centre Disclosures & Reporting Good Practices Working Group (UNEP FI, 2025)

3.3 Case studies on materiality assessment presentations and approaches

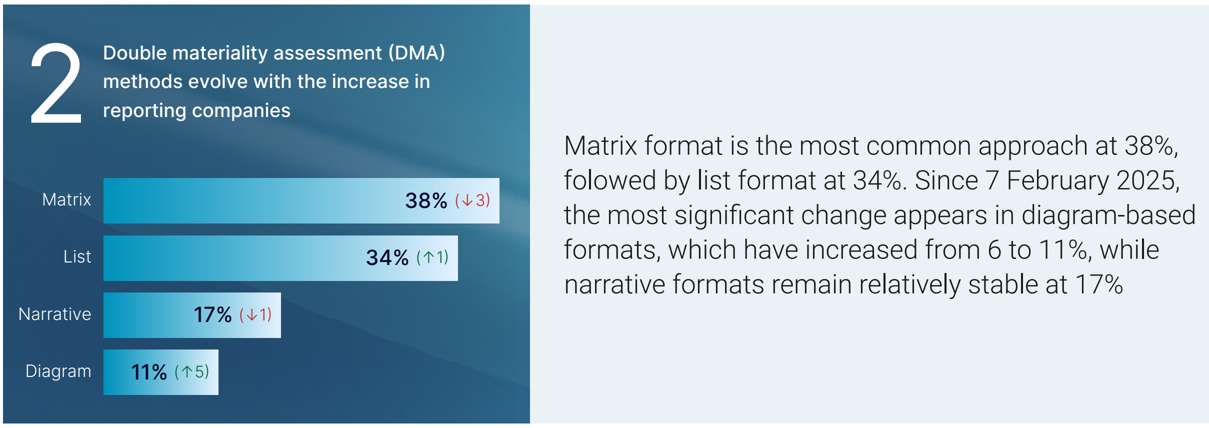


Figure 13: Study concerning the presentation of materiality assessments (Nasdaq, 2025)

Effective communication of both the process and outcomes of materiality assessments is essential for ensuring transparency and fostering stakeholder engagement. Clear communication helps stakeholders understand how material issues were identified and supports their ability to make informed decisions. To this end, organizations use a range of reporting formats tailored to different audiences. Among early reporting companies, the materiality matrix is the most commonly used format, adopted by 38 per cent of firms, followed by the list format (34 per cent). Narrative (17 per cent) and diagram-based (11 per cent) formats are less frequently used (see Figure 13).

The following sub-chapters highlight some examples of how financial institutions have implemented materiality assessments and communicated the relevant process and results. The examples have been categorized into sub-chapters based on the format used in reporting, including:

- Materiality assessments using a matrix (see 3.3.1); and
- Materiality assessments using a list or table format, including those leveraging ESRS topics and sub-topics, and those that link sustainability-related risks with traditional risk types (see 3.3.2).

3.3.1 Materiality matrix

Akbank's materiality assessment integrated multiple perspectives: stakeholder opinions, sustainability-related reporting standards, global trends, and the Turkish bank's strategic focus. This approach enables Akbank to perform its materiality assessment (see Figure 14), which evaluates sustainability-related topics issues across two critical dimensions on each axis of the matrix:

- Vertical axis: sustainability impact—assessed according to the magnitude, scope, and manageability of impacts
- Horizontal axis: financial impact—determined through the evaluation of the financial magnitude of risks associated with each material issue

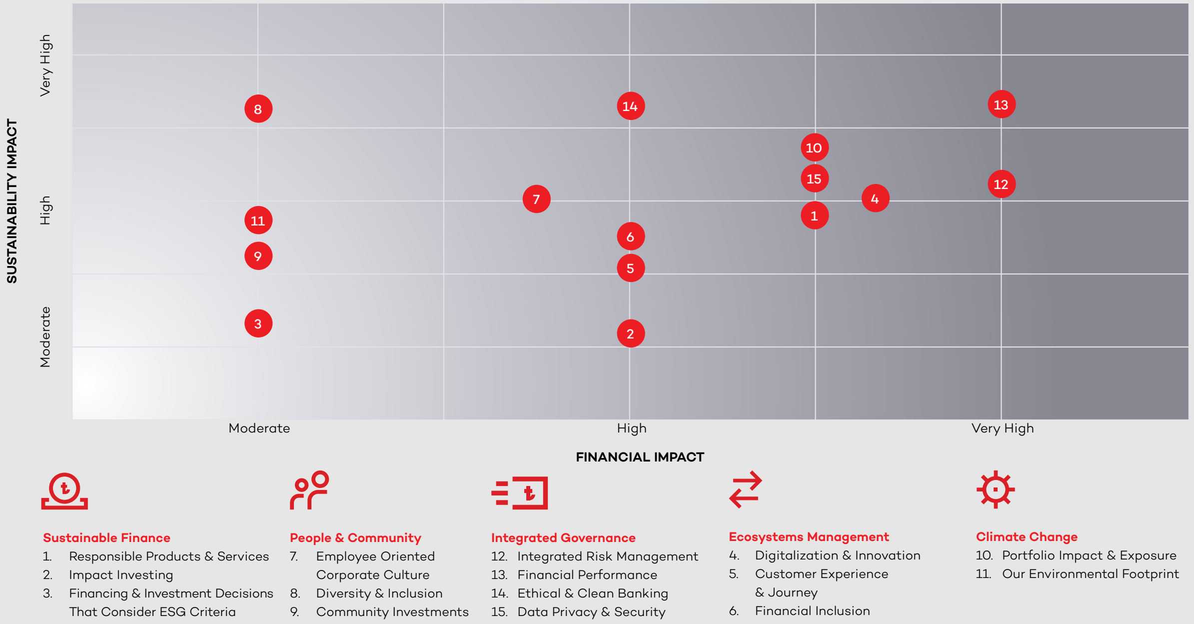


Figure 14: Example of materiality matrix that considers sustainability and financial impact (Akbank, 2024)

The assessment process involved internal collaboration, including with the bank's Risk Management Department, working alongside relevant department managers to evaluate the possible financial impacts of related topics and list actions that had been taken to mitigate the identified risks.

The matrix identified 15 sustainability-related issues of moderate to very high sustainability and financial impact. For example, the topic "Portfolio Impact & Exposure" is assessed as 'high' to 'very high' on both sustainability and financial impact axes, reflecting its significant influence on the bank's portfolio due to climate change risks and its broader environmental implications.

The results of the materiality matrix are further detailed in a table format, which categorizes the topics under strategic focus areas such as "Ecosystem Management" and "Climate Change", describes their sustainability impacts, identifies affected stakeholder groups, and explains their importance to Akbank. For instance, under "Ecosystems Management", "Digitalization & Innovation" is noted for its positive contribution to efficiency and financial inclusion, which improves outcomes for customers. "Customer Experience & Journey", meanwhile, is noted for enhancing customer loyalty and competitiveness, affecting investors and customers.

Bank Rakyat Indonesia (Persero) Tbk (BRI) follows a similar approach by utilizing both matrix and tabular formats to communicate its sustainability priorities. BRI discloses its commitment to double materiality assessment in alignment with GRI Standards 2021 and IFRS S1 and S2, evaluating both corporate and stakeholder interests alongside financial and non-financial impacts.

BRI's materiality assessment process follows a structured methodology that includes analysing the bank's internal and external environment to understand context, identifying actual and potential impacts, risks and opportunities (IROs), assessing material IROs, and ultimately selecting priority issues for reporting. This approach enables BRI to evaluate its capacity to identify relevant sustainability factors contributing to long-term value creation while also assessing the interrelation between external impacts on society and environment and internal impacts on corporate value.

Stakeholder engagement forms an integral component of BRI's materiality assessment rather than a supplementary element. In alignment with UN Global Compact Principles 1 and 2 concerning human rights, BRI employs multiple engagement channels. These include online questionnaires distributed to key stakeholder groups; namely customers, Board of Management, employees, suppliers, and non-profit organizations. This engagement process is complemented by surveys, media analysis, policy reviews, investor concerns assessments, and ESG rating evaluations.

BRI presents its materiality assessment results through both matrix and tabular formats. The matrix (see Figure 15) displays 13 sustainability topics. Five are identified as material and essential for disclosure under IFRS S1 and S2; "Sustainable Finance", "Customer Service Excellence", "Financial Inclusion & Literacy", "Cyber Security", and "Good Corporate Governance". Following the matrix presentation, BRI provides detailed tabular information categorizing material issues into two key groups:

1. Impact Material Topics (inside-out approach)—issues arising from BRI's activities with direct impact on stakeholders and society, including sustainable finance (incorporating climate risk) and customer service excellence; and
2. Financial Material Topics (outside-in approach)—issues directly impacting BRI's financial performance, including financial inclusion and literacy, cybersecurity, and good corporate governance.

This dual presentation approach allows BRI to effectively communicate materiality at multiple levels of detail, providing both a strategic overview through the matrix and operational context through the tabular format. In this way, the bank is able to demonstrate how sustainability issues are prioritized and integrated into its risk management framework.

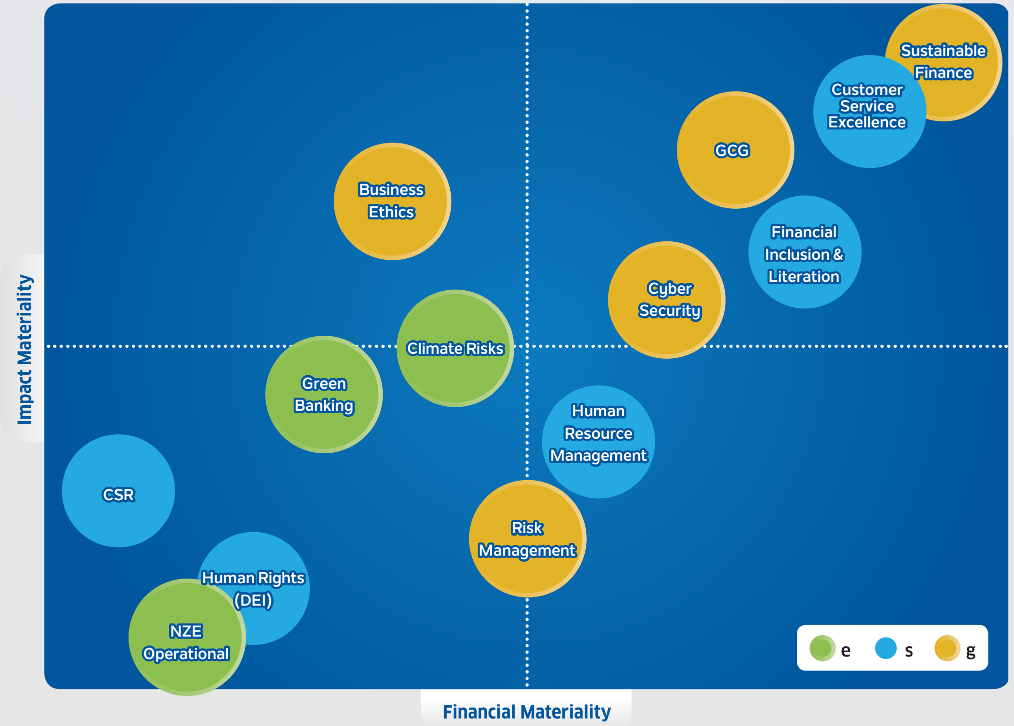


Figure 15: Example of materiality topic matrix (BRI, 2025)

3.3.2 List or table format

In its latest annual report (2025), Turkey-based Garanti BBVA employs a systematic three-phase approach to materiality assessment that effectively demonstrates the application of double materiality assessments. These three phases are:

Phase 1: Topic identification—The bank identifies a list of topics by considering its own strategic priorities, the expectations of its stakeholders, global trends and themes based on references from established reporting standards such as the ESRS and the GRI Standards.

Phase 2: Impact, risk and opportunity (IRO) identification—The bank then identifies the IROs for these topics using tools like ENCORE and the UNEP FI Impact Tools for impact identification alongside stakeholder surveys, human rights due diligence, and the SASB Standards for sectoral risk identification. The bank also employs internal methodologies for risk assessments. In this phase, the identified IROs are categorized based on set criteria, such as time horizon, whether the IRO exist or is a possibility, the value chain in question, and their place within to which ESRS topics.

Phase 3: Evaluation and prioritization—The third phase focuses on evaluating IROs using a scoring method, involving consultations with relevant business units, with results reviewed and approved by the Sustainability Committee.

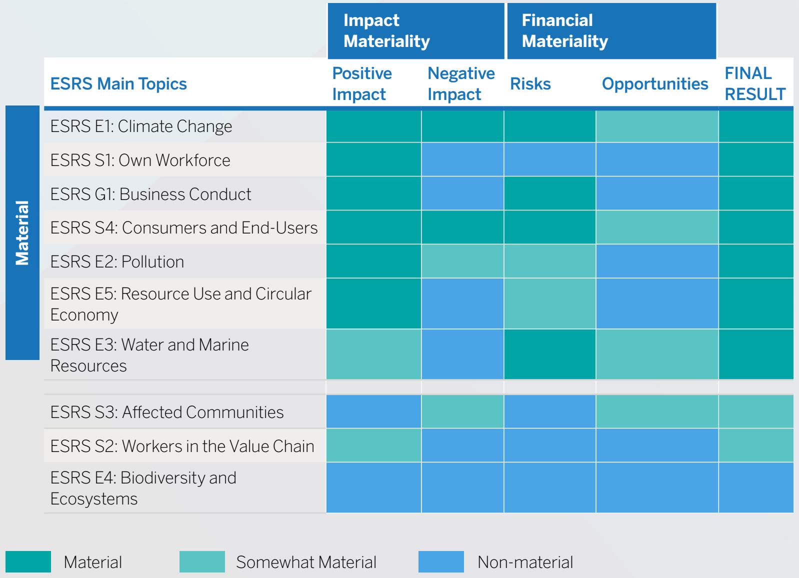


Figure 16: Example of double materiality assessment (Garanti BBVA, 2025)

For impact materiality, Garanti BBVA evaluates how its activities affect people, the environment and society at large. This quantifies impacts by weighting severity, which considers factors such as (i) magnitude ranging from minimal to critical effects; (ii) scope by geographical or sectoral reach; and (iii) irremediability, assessing the reversibility of harm (exclusively used for negative impacts). As for the evaluation of the severity of potential impacts, factors such as (i) likelihood (ranging from 'low probability' with at less than 15 per-cent probability to near certainty at over 90 per cent) and time horizons were considered. Thresholds for material impacts differ: positive impacts are considered significant only if they are of high magnitude, while negative impacts include both medium- and high-magnitude impacts with probable or current likelihood (Garanti BBVA, 2025).

Financial materiality assessments assess the probability and magnitude of financial impacts of sustainability-related risks and opportunities using both internal and external tools. For example, in the case of nature-related topics, the bank uses ENCORE to explore risks, exposures, and opportunities, considering dependencies on ecosystem services. The bank's climate risk assessment process evaluates physical and transition risks, analysing their impact on operations and traditional risk types across time horizons. In this process, it uses heatmapping, scenario analysis, and stress testing to assess climate-related financial risks, referencing standards and frameworks such as the Paris Agreement Capital Transition Assessment (PACTA), Partnership for Carbon Accounting Financials (PCAF) Standards.

Another example comes from ABN AMRO, whose approach to materiality assessment links sustainability considerations to traditional financial and non-financial risk types (see Figure 17). The Dutch bank's climate and environmental risk materiality assessment evaluates how sustainability factors affect established risk categories such as credit, liquidity, and market risk.

	Climate risk						Environmental risk					
	Physical risk			Transition risk			Physical risk			Transition risk		
Risk types	ST	MT	LT	ST	MT	LT	ST	MT	LT	ST	MT	LT
Credit risk	○	○	●	○	○	●	●	●	●	●	●	●
Market risk in the trading book	○	○	○	○	○	○	○	○	○	○	○	○
Market risk in the banking book	○	○	○	○	○	○	○	○	○	○	○	○
Liquidity risk	○	○	○	○	○	○	○	○	○	○	○	○
Business risk	○	○	○	○	●	●	○	○	○	○	●	●
Non-financial risk	●	●	●	●	●	●	○	○	○	●	●	●

○ Climate and environmental risk is assessed as not material ● Climate and environmental risk is material

Figure 17: Example of connecting material climate and environmental risks to traditional risk types (ABN AMRO, 2025)

Zooming into its financial materiality assessment, ABN AMRO applies a structured methodology based on likelihood and potential financial effects on capital, liquidity, and profit. The Dutch bank's assessment considers multiple time horizons and employs scenario analysis based on climate scenarios. The bank also establishes clear connections between impact materiality and financial risks, recognizing how impacts can influence financial performance through various transmission channels.

This integrated approach enables the bank to incorporate sustainability considerations within existing risk management structures, providing a framework for identifying, assessing, and managing sustainability-related risks alongside traditional financial risks.

4. Transition plan disclosures

This chapter focuses on transition plan disclosures, a key component of sustainability-related reporting under both IFRS S2 and ESRS E1, and as guided by voluntary frameworks such as those developed by the Glasgow Financial Alliance for Net Zero (GFANZ) and Transition Plan Taskforce (TPT). Transition plans are increasingly recognized as essential for assessing and managing climate-related risks and opportunities, as they provide forward-looking data that can inform risk management, capital allocation, and strategic planning. The FSB (2025a) has also highlighted the importance of credible transition plans in supporting financial system stability during the low-carbon transition. However, despite their importance, transition plans-related disclosures remain limited among financial and non-financial companies (EY, 2024; RMI, 2024), due to various challenges (see 5.1).The objective of this chapter is to support financial institutions in better understanding and implementing credible transition plan disclosures. Complementing existing guidance, this chapter showcases examples where companies have begun disclosing their transition strategies. These examples have been structured around the five disclosure elements in the TPT Framework, so as to facilitate implementation of transition plans-related disclosures.

4.1 Overview of existing key frameworks & standards and how they relate

Transition plans form a crucial component of key disclosure standards and frameworks, in the cases of IFRS S1 and S2 and ESRS.

Within the ISSB Standards, transition plans are integral to the Strategy core content disclosures in IFRS S2, as §9(c) requires disclosures of the effects of climate-related risks and opportunities that could affect the reporting entity's prospect[5] on its strategy, and its decision-making, including information about its climate-related transition plan.

Similarly, ESRS E1 (Climate Change) explicitly addresses transition plans as part of its "Transition Plan for Climate Change Mitigation" disclosure requirement (E1-1). This component requires companies to outline their strategies for aligning with the Paris Agreement, including measures, targets, progress monitoring. Inclusion of the expected impact of transition activities on business models and value chains is also required. EFRAG released its draft implementation guidance on transition plan for climate change mitigation in January 2025. The guidance sheds light on how climate transition plan disclosures in ESRS E1 can be approached (EFRAG, 2025c).

5 In IFRS S1 & S2, an entity's prospect refers to the entity's cash flows, access to finance, and the cost of capital (IFRS Foundation, 2024d).

Voluntary frameworks such as those developed by the GFANZ and TPT provide actionable guidance to facilitate the private sector's transition towards net zero. GFANZ, established in April 2021, aims at accelerating the transition to a net-zero global economy by focusing on supporting the financial services sector to achieve the Paris Agreement goals (GFANZ, n.d.). In 2022, GFANZ developed a framework that outlines key components in a credible transition plan (see 4.1.2). Building upon and aligning with IFRS S1 and S2, as well as the GFANZ framework, the TPT launched a disclosure framework in October 2023 to enhance transparency in transition plans (see 4.1.1).

In addition to these frameworks on climate transition plans, it is worth highlighting that the TNFD is currently piloting its Nature Transition Plans framework (TNFD, 2024a). The proposed framework on nature transition plan covers the same themes as the climate transition plan as recommended by GFANZ (see Figure 18). Furthermore, UNEP FI and the International Labour Organization (ILO) jointly developed the Just Transition Finance: Pathways for Banking and Insurance report, which provides financial institutions with practical recommendations and examples of emerging practices on how to embed just transition considerations structured in the same five elements of GFANZ and TPT.

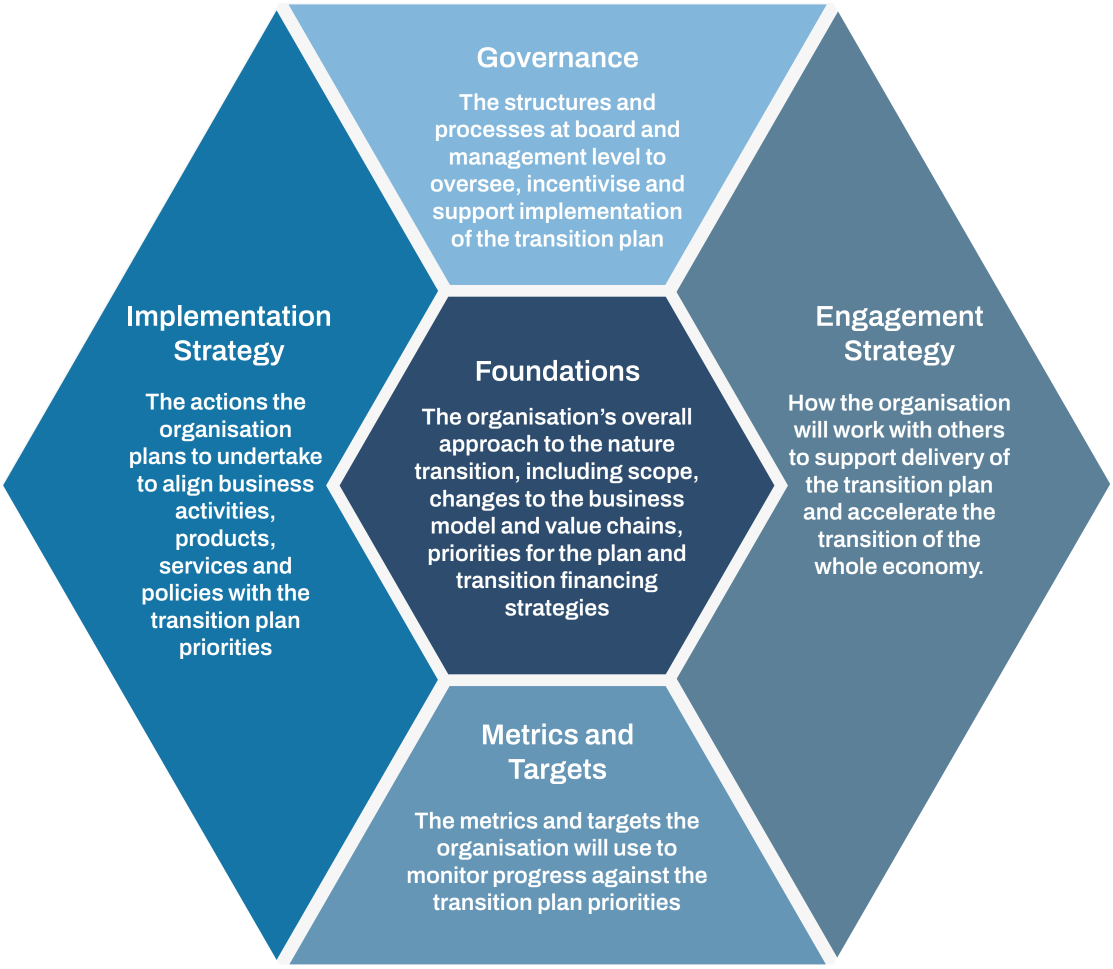


Figure 18: Proposed nature transition plan themes (TNFD, 2024b)

4.1.1 TPT Disclosure Framework

Launched in 2022, the TPT was established to support the development of credible corporate transition plans as part of the United Kingdom's ambition to become the world's first net-zero-aligned financial centre. In October 2023, the TPT released its final Disclosure Framework and Implementation Guidance, providing voluntary recommendations for aligning business strategies with net-zero goals (IFRS Foundation, 2023e).

In June 2024, the IFRS Foundation assumed responsibility for the TPT's disclosure-specific materials, integrating them into the IFRS Sustainability Knowledge Hub. This move aims to harmonize global sustainability reporting standards and reduce fragmentation in climate-related disclosures (IFRS Foundation, 2024e).It is important to note that while IFRS S2 requires disclosure of any existing transition plans, it does not mandate the creation of such a plan. The TPT Framework complements IFRS S2 by offering practical guidance on what constitutes a credible transition plan and includes a technical mapping to ISSB Standards (IFRS Foundation, 2023f).

To drive good practice in transition planning and related disclosures, the TPT Framework applies the three guiding principles of **Ambition**, **Action** and **Accountability**. The TPT Framework is organized across five Elements; namely **foundations**, **implementation strategy**, **engagement strategy**, **metrics & targets**, and **governance**, as displayed in Figure 19. These are consistent with the transition planning components proposed by GFANZ in its guidance (see 4.1.2).

Disclosure case studies followed by a succinct summary of each principle and element are given in 4.2.

Principles	Ambition	Action		Accountability	
Disclosure elements	1. Foundations	2. Implementation Strategy	3. Engagement Strategy	4. Metrics & Targets	5. Governance
Disclosure sub-elements	1.1 Strategic ambition	2.1 Business operations	3.1 Engagement with value chain	4.1 Governance, engagement, business & operational metrics, and targets	5.1 Board oversight & reporting
	1.2 Business model & value chain	2.2 Products & services	3.2 Engagement with industry		5.2 Management roles, responsibility & accountability
	1.3 Key assumptions & external factors	2.3 Policies & conditions	3.3 Engagement with government, public sector, communities & civil society	4.2 Financial metrics & targets	5.3 Culture
		2.4 Financial planning		4.3 GHG (emissions & removals) metrics & targets	5.4 Incentives & remuneration
				4.4 Carbon credits	5.5 Skills, competencies & training

Figure 19: Structure of the TPT Disclosure Framework (adapted from IFRS, 2023e)

4.1.2 GFANZ FI NZTP Framework

GFANZ's financial institution net-zero transition plan framework provides recommendations and guidance to support the development of credible and actionable transition plans by financial institutions. The framework outlines ten key components organized under five themes (Figure 20) and builds on established standards such as the TCFD.

The guidance provided by GFANZ has informed the structure and content of the TPT Disclosure Framework. The framework recommends that financial institutions set clear net-zero objectives, align business models and portfolios with climate goals, engage clients and policymakers, track progress through robust metrics and targets, and embed oversight at the governance level. All these measures are aimed at enabling institutions to support real-economy decarbonization while managing transition risks.

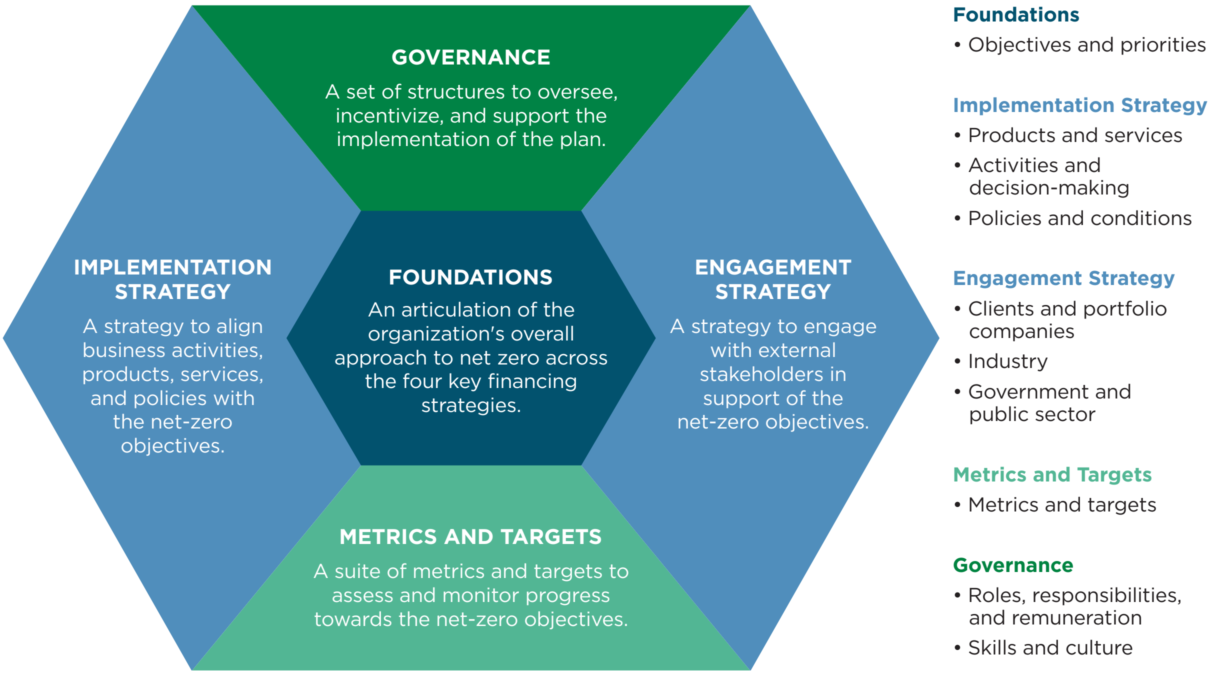


Figure 20: GFANZ financial institution net-zero transition plan framework (GFANZ, 2022)

4.2 Disclosure examples per TPT framework disclosure elements

This chapter provides examples that showcase industry practices for transition plan-related disclosures from both financial and non-financial companies. The examples are structured by TPT Disclosure Element and are based on publicly disclosed transition plans or climate-related disclosures. Further examples of disclosures on this specific elements in relation to just transition can be found in the Just Transition Finance Pathways report by UNEP FI and the ILO.

4.2.1 Foundations

'Foundations' refers to the entity's strategic ambition for transitioning to a low-carbon economy, outlining goals and objectives. The TPT Framework requires disclosures on the scope, dependencies, and implications of this ambition. It includes three disclosure sub-elements.

The example here discusses how disclosures on sub-element 1.1 strategic ambition can be disclosed.

Aviva plc in its 2024 Climate Transition Plan (2025) articulates a strategic ambition to achieve net zero by 2040. This is supported by specific interim targets, such as reducing Scope 1 and Scope 2 carbon intensity by 60 per cent by 2029 from a 2019 baseline. The insurer's plan also details several achieved targets which contributes to achieving its strategic ambition, such as a reduction of 64 per cent of Scope 1 and Scope 2 carbon intensity by revenue of listed equity and corporate bonds from a 2019 baseline against am ambition of 25 per-cent reduction; and the investment of GBP 8.7 billion in sustainable assets against a GBP 6 billion target. This example illustrates how entities can disclose strategic ambition comprehensively, ensuring clarity and alignment with global standards.

Achieved	Medium-term ambitions		Long-term ambition
By year-end 2024	**2025-2030**		By 2040
64% reduction in Scope 1 & 2 carbon intensity of listed equity and corporate bonds (vs. 2019 baseline; target was 25%)	**70%** of suppliers by spend setting validated science-based targets by year-end 2025	**Insure the Transition** support our customers' transition to EV ownership through continued proposition development	Net Zero Group
£8.7bn invested in sustainable assets since 2019, against a target of £6bn	**Electrify** our UK and Ireland fleet by year-end 2025, and rest of world by year-end 2027	**60%** reduction in Scope 1 and 2 economic carbon intensity of equity, corporate bonds and loans, infrastructure and real estate assets held in shareholder, with-profits and policyholder funds (where we have decision-making control and data) by year-end 2029 (from a 2019 baseline)	
100 % operational electricity from renewable sources *(this metric was subject to external independent reasonable assurance by EY)*	**100%** electricity from renewable sources maintained up to and beyond year-end 2025	**90%** reduction in Scope 1 and 2 GHG emissions by year-end 2030 (from a 2019 baseline)	

Figure 21: Example of Foundations disclosures (Aviva, 2025)

4.2.2 Implementation strategy

'Implementation strategy' involves actions to achieve the strategic ambition. The information disclosed under 'implementation strategy' could help report readers understand the credibility and feasibility of the reporting entity's implementation roadmap. It should also help elucidate potential implications for the entity's balance sheet, income statement, cashflow statement, and associated resourcing needs. Implementation strategy includes disclosures on four disclosure sub-elements: business planning and operations, products and services, policies and conditions, and financial planning.

This example from Buro Happold's Net Zero Routemap (2023) is an example of how sub element 2.1 on business operations can be approached for disclosures. The example (see Figure 22) from the engineering consultancy showcases how information about actions committed to achieving the strategic ambition can be linked to the products and services offered.

Figure 22 displays a structured implementation framework across three core operational dimensions: advisory, design, and operations. It clearly connects the actions that the company is committed to taking to achieve net zero with regards to its own operations and its products and services. This presentation helps provide stakeholders with clear insight into how Buro Happold is embedding climate considerations across its entire organizational structure, from advisory functions to design practices and internal operations.

1. BURO HAPPOLD NET ZERO ROUTEMAP

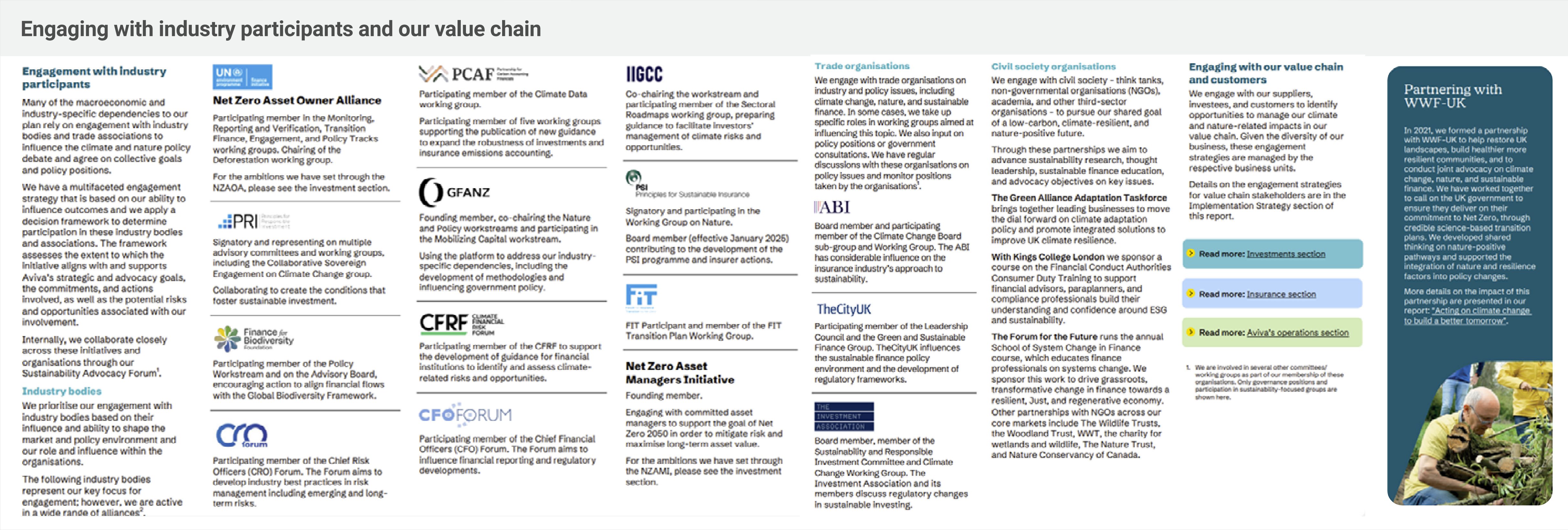
		ACTIONS
ADVISORY	Sectors	Understand and/or contribute to net zero roadmaps in each sector and region we operate in.
	Cities and regions	Understand and/or contribute to net zero climate policy and strategy in each of the cities and regions we operate in.
	Clients	Provide strategic net zero advice across client portfolios.
DESIGN	Infrastructure	Support the clean energy transition through strategic advice, infrastructure design and commercial structuring, prioritising solutions that best support system-wide decarbonisation.
	Buildings	Target net zero for every building project by identifying appropriate* targets, presenting a net zero concept design option, and measuring carbon performance.
	Data	Collect data on energy use intensity and embodied carbon intensity at each stage of the project and enter into the building performance dashboard.
OPERATIONS	Knowledge	Set relevant sustainability objectives for all staff and share knowledge across the practice through multiple channels.
	Governance	Ensure carbon management underpins all our work and track progress against our plan. Establish new commitment committee to review and advise our CEO on climate opportunities and risks of major projects.
	Communications	Communicate openly and transparently through external communications such as the Global Sustainability Report and internal communications and dashboards.

Figure 22: Example of Implementation Strategy disclosures (Buro Happold, 2023)

4.2.3 Engagement strategy

'Engagement strategy' refers to how entities collaborate with stakeholders to support their transition plans. It includes three disclosure sub-elements: engagement with value chain, engagement with industry; and engagement with government, the public sector, and civil society. This element helps ensure that entities disclose how they leverage relationships with suppliers, customers, industry peers, and policymakers to align their operations and value chains with their net-zero objectives.

The example from Aviva (Figure 23) discusses how disclosure on sub-element 3.1 engagement with value chain can be disclosed. This sub-element concerns disclosures of engagement activities with value chain stakeholders, such as industry participants, suppliers and customers, to achieve the strategic ambition of transition plan.



Engaging with industry participants and our value chain

Engagement with industry participants

Many of the macroeconomic and industry-specific dependencies to our plan rely on engagement with industry bodies and trade associations to influence the climate and nature policy debate and agree on collective goals and policy positions.

We have a multifaceted engagement strategy that is based on our ability to influence outcomes and we apply a decision framework to determine participation in these industry bodies and associations. The framework assesses the extent to which the initiative aligns with and supports Aviva's strategic and advocacy goals, the commitments, and actions involved, as well as the potential risks and opportunities associated with our involvement.

Internally, we collaborate closely across these initiatives and organisations through our Sustainability Advocacy Forum[1].

Industry bodies

We prioritise our engagement with industry bodies based on their influence and ability to shape the market and policy environment and our role and influence within the organisations.

The following industry bodies represent our key focus for engagement; however, we are active in a wide range of alliances[2].

Net Zero Asset Owner Alliance

Participating member in the Monitoring, Reporting and Verification, Transition Finance, Engagement, and Policy Tracks working groups. Chairing of the Deforestation working group.

For the ambitions we have set through the NZAOA, please see the investment section.

PRI

Signatory and representing on multiple advisory committees and working groups, including the Collaborative Sovereign Engagement on Climate Change group.

Collaborating to create the conditions that foster sustainable investment.

Finance for Biodiversity Foundation

Participating member of the Policy Workstream and on the Advisory Board, encouraging action to align financial flows with the Global Biodiversity Framework.

CRO forum

Participating member of the Chief Risk Officers (CRO) Forum. The Forum aims to develop industry best practices in risk management including emerging and long-term risks.

PCAF

Participating member of the Climate Data working group.

Participating member of five working groups supporting the publication of new guidance to expand the robustness of investments and insurance emissions accounting.

GFANZ

Founding member, co-chairing the Nature and Policy workstreams and participating in the Mobilizing Capital workstream.

Using the platform to address our industry-specific dependencies, including the development of methodologies and influencing government policy.

CFRF Climate Financial Risk Forum

Participating member of the CFRF to support the development of guidance for financial institutions to identify and assess climate-related risks and opportunities.

CFO FORUM

Participating member of the Chief Financial Officers (CFO) Forum. The Forum aims to influence financial reporting and regulatory developments.

IIGCC

Co-chairing the workstream and participating member of the Sectoral Roadmaps working group, preparing guidance to facilitate investors' management of climate risks and opportunities.

PSI Principles for Sustainable Insurance

Signatory and participating in the Working Group on Nature.

Board member (effective January 2025) contributing to the development of the PSI programme and insurer actions.

FIT

FIT Participant and member of the FIT Transition Plan Working Group.

Net Zero Asset Managers Initiative

Founding member.

Engaging with committed asset managers to support the goal of Net Zero 2050 in order to mitigate risk and maximise long-term asset value.

For the ambitions we have set through the NZAMI, please see the investment section.

Trade organisations

We engage with trade organisations on industry and policy issues, including climate change, nature, and sustainable finance. In some cases, we take up specific roles in working groups aimed at influencing this topic. We also input on policy positions or government consultations. We have regular discussions with these organisations on policy issues and monitor positions taken by the organisations[1].

ABI

Board member and participating member of the Climate Change Board sub-group and Working Group. The ABI has considerable influence on the insurance industry's approach to sustainability.

TheCityUK

Participating member of the Leadership Council and the Green and Sustainable Finance Group. TheCityUK influences the sustainable finance policy environment and the development of regulatory frameworks.

The Investment Association

Board member, member of the Sustainability and Responsible Investment Committee and Climate Change Working Group. The Investment Association and its members discuss regulatory changes in sustainable investing.

Civil society organisations

We engage with civil society - think tanks, non-governmental organisations (NGOs), academia, and other third-sector organisations - to pursue our shared goal of a low-carbon, climate-resilient, and nature-positive future.

Through these partnerships we aim to advance sustainability research, thought leadership, sustainable finance education, and advocacy objectives on key issues.

The Green Alliance Adaptation Taskforce brings together leading businesses to move the dial forward on climate adaptation policy and promote integrated solutions to improve UK climate resilience.

With Kings College London we sponsor a course on the Financial Conduct Authorities Consumer Duty Training to support financial advisors, paraplanners, and compliance professionals build their understanding and confidence around ESG and sustainability.

The Forum for the Future runs the annual School of System Change in Finance course, which educates finance professionals on systems change. We sponsor this work to drive grassroots, transformative change in finance towards a resilient, Just, and regenerative economy. Other partnerships with NGOs across our core markets include The Wildlife Trusts, the Woodland Trust, WWT, the charity for wetlands and wildlife, The Nature Trust, and Nature Conservancy of Canada.

Engaging with our value chain and customers

We engage with our suppliers, investees, and customers to identify opportunities to manage our climate and nature-related impacts in our value chain. Given the diversity of our business, these engagement strategies are managed by the respective business units.

Details on the engagement strategies for value chain stakeholders are in the Implementation Strategy section of this report.

Read more: Investments section

Read more: Insurance section

Read more: Aviva's operations section

1. We are involved in several other committees/ working groups as part of our membership of these organisations. Only governance positions and participation in sustainability-focused groups are shown here.

Partnering with WWF-UK

In 2021, we formed a partnership with WWF-UK to help restore UK landscapes, build healthier more resilient communities, and to conduct joint advocacy on climate change, nature, and sustainable finance. We have worked together to call on the UK government to ensure they deliver on their commitment to Net Zero, through credible science-based transition plans. We developed shared thinking on nature-positive pathways and supported the integration of nature and resilience factors into policy changes.

More details on the impact of this partnership are presented in our report: "Acting on climate change to build a better tomorrow".

Figure 23: Example of engagement strategy disclosure (Aviva, 2025)

Aviva (2025) engages with suppliers by setting a target for 70 per cent of its suppliers by spend to have validated science-based targets by the end of 2025, covering both its general insurance claims and non-claims supply chains. As of 2024, 51 per cent of suppliers by spend had achieved this. Aviva supports suppliers through workshops, one-on-one consultations, and contractual incentives, encouraging alignment with the Paris Agreement.

As for customers, Aviva promotes low-carbon choices by facilitating the transition to electric vehicles (EVs). The company offers tailored insurance products with lower premiums and extended coverage for EV charging infrastructure.

Beyond direct value chain engagement, Aviva collaborates with industry bodies and civil society. The company is a signatory to the Principles for Responsible Investment (PRI) and a member of the UNEP FI Net-Zero Asset Owner Alliance. Aviva also participates in the Climate Change group and the Green Alliance Adaptation Taskforce, advocating for policy changes. Through a partnership with WWF-UK, launched in 2021, Aviva supports habitat restoration in the United Kingdom, contributing to biodiversity goals alongside emissions reductions.

Another example from ING, a Netherlands-based multinational bank (Figure 24) illustrates how a financial institution could operationalize client engagement based on climate alignment criteria. Clients are first screened against ING's Environmental and Social Risk (ESR) policy. Restricted activities lead to no engagement, while green finance qualifies for business growth. For clients within the scope of ING's Terra programme, emissions are assessed against sectoral pathways. Where clients are not yet aligned, ING evaluates the strength and implementation of their transition plans.

Clients are then categorized as Aligned, Aligning, or Not Aligning, with corresponding actions ranging from business as usual to enhanced monitoring or a halt on new business from 2026. ING notes this approach will evolve as client data and transition expectations mature.

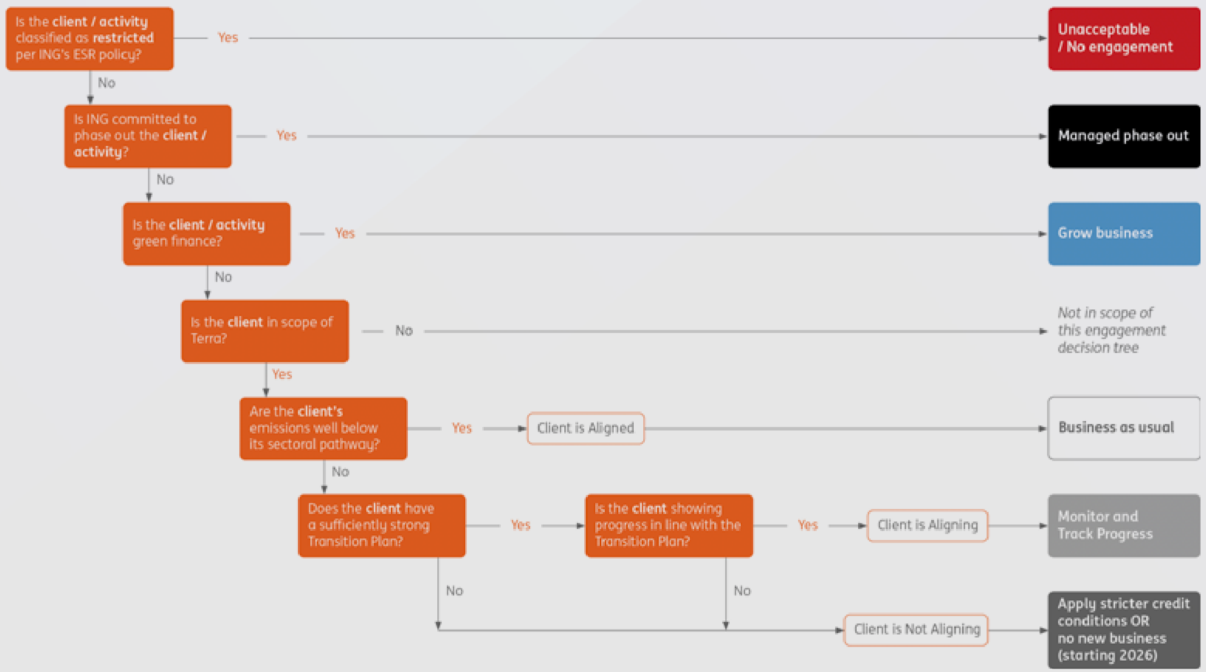


Figure 24: Example of decision tree on implementing climate engagement (ING, 2024)

4.2.4 Metrics & targets

'Metrics & targets' refers to the disclosure of information about any financial metrics and targets that a reporting entity uses to drive and monitor progress towards the strategic ambition of its transition plan. It includes four disclosure sub-elements.

The example from Legal & General (2023) explores how disclosure on sub-element 4.3 GHG metrics & targets can be reported, particularly concerning Scope 3 GHG emissions.

Scope 3 category	Scope 3 category description	Key business relevance	2022 tCO_2e	Materiality assessment	Example associated target/ commitment
Category 1	Purchased goods and services	Group-wide	–	Materially relevant to our organisation. We are working closely with our supply chain to obtain robust data during 2023 and plan to disclose in future years.	By the end of 2023 we will set a scope 3 category 1 (purchased goods and services) science-based target aligned with our net zero ambition.
Category 2	Capital goods	LGIM Real Assets and LGC	–	Relevant to our organisation. We are developing processes to capture this data and will disclose in future years.	We are committed to reducing the embodied carbon of our homes and real estate investments.
Category 3	Fuel and energy-related activities	Group-wide	8,301	Relevant to our organisation. Data collated and disclosed for 2022.	100% of our energy to be purchased from a renewable source.
Category 4	Upstream transportation and distribution	Group-wide	–	Included in category 1.	–
Category 5	Waste generated in operations	LGC and core occupied offices	400	Relevant to our organisation. Data collated and disclosed for 2022.	We will divert 100% of waste from landfill by 2025 in all offices and LGC development projects where we are responsible for waste management.
Category 6	Business travel	Group-wide	5,467	Relevant to our organisation. Data collated and disclosed for 2022.	From 2030, our group-wide business travel will generate net zero emissions.
Category 7	Employee commuting (working from home)	Group-wide	4,739	Relevant to our organisation. Data collated and disclosed for 2022.	None at present.
Category 8	Upstream leased assets	Group-wide	306	Relevant to our organisation. Data collated and disclosed for 2022.	Our net zero ambition is shaping our future location strategy.
Category 9	Downstream transportation and distribution	L&G Modular Homes	–	Relevant to our organisation. Data will be collated as we deliver modular homes across the UK and will be disclosed in the future.	None at present.
Category 10	Processing of sold products	n/a	–	Not relevant.	–
Category 11	Use of sold products	LGIM Real Assets and LGC	–	Relevant to our organisation. We are developing processes to capture this data and will disclose in future years.	All new homes we deliver, from 2030, will be enabled to operate at net zero carbon emissions.
Category 12	End of life treatment of sold product	LGIM Real Assets and LGC	–	Relevant to our organisation. We are developing processes to capture this data and will disclose in future years.	–
Category 13	Downstream leased assets	LGIM Real Assets and LGC	0.4m[2]	Relevant to our organisation. Data collated and disclosed for 2022.	LGIM Real Assets is committed to achieving net zero carbon across our real estate equity platform by 2050.
Category 14	Franchises	n/a	–	Not relevant.	–
Category 15	Investment	Group proprietary assets	5.8m	Relevant to our organisation. Data collated and disclosed for 2022.	By 2030, reduce portfolio GHG emission intensity by 50%[3] and increase financing of low-carbon technology and infrastructure.

Figure 25: Example of metrics & targets disclosures (Legal & General, 2023).

The company's climate transition plan includes a table (Figure 25) that outlines how each Scope 3 emissions category is assessed in terms of its relevance to the business. This includes information on whether a given category applies to the group as a whole or to specific subsidiaries. However, key details—such as the base year used for emissions or emissions intensity reduction targets—are not clearly communicated. The transition plan does include a materiality assessment of the company's Scope 3 emissions, along with associated net-zero target(s).

4.2.5 Governance

'Governance' refers to the structures and processes in place to oversee and implement the transition plan. It includes five disclosure sub-elements: board oversight, roles, responsibility and accountability, culture, incentives and remuneration, and skills, competencies and training. This element enables entities to demonstrate robust governance mechanisms to drive accountability and embed climate considerations into their strategic and operational frameworks.

The example focuses on how disclosures concerning sub-element 5.5 skills, competencies, and training can be done. This sub-element requires entities to disclose how they are developing the skills and competencies of their workforce to effectively implement their transition plan.

NatWest's Climate-related Disclosures report highlights the training initiatives to build workforce capabilities for implementing its climate transition plan (Figure 26).

To highlight a few facts on the report, the Edinburgh-headquartered bank collaborated with the University of Edinburgh Centre for Business, Climate Change and Sustainability to deliver tailored climate education to all its NatWest Group colleagues. Training content is designed into 'core', 'common', and 'technical' trainings. In 2023, NatWest completed the education of approximately 55,000 colleagues through its Climate Change Fundamentals programme, designed in partnership with this programme. Climate Change Fundamentals enables NatWest employees to develop the knowledge, skills, and behaviours to understand their role in climate change, both personally and professionally (NatWest, 2024).

Outcomes of the training initiatives have also been disclosed, as results of employee surveys were included. For example, over 90 per cent of respondents stated that 'they will alter their actions on climate change professionally and their actions on climate change personally" after completing the training.

At NatWest Group, we recognise the importance of investing in our people to build the future skills and behaviours we need to realise our climate ambition.

In 2023, we continued our £1.5 million partnership with the University of Edinburgh Centre for Business, Climate Change and Sustainability (UoE B-CCaS) to deliver tailored climate education to all NatWest Group colleagues (refer to 2022 Climate-related Disclosures Report for further details). Content, designed at three different levels (Core, Common and Technical), delivered through our Natwest Learning Academy, supports the development of relevant colleague capabilities. This approach centres on three key ambitions:

1. Provide easily accessible climate awareness learning, enabling colleagues to take ownership and act.
2. Equip colleagues in priority roles with the capability to do their job and manage climate-related risks.
3. Inspire climate action and innovation through learning and professionalisation.

The aim is to create a consistent language across our organisation, promoting better discussions, decision-making and risk management.

Core training – Provide easily accessible climate awareness learning.

In 2023, we committed to educate all colleagues through our **Climate Change Fundamentals** programme which was completed by c.55,000 colleagues across the bank. The 60-minute programme created in partnership with UoE was designed to enable all colleagues across the bank to continue to develop the knowledge, skills and behaviours, to understand their role in climate change, both personally and professionally.

Common training – Equip colleagues in priority roles.

Building on the Climate Change Fundamentals programme, in Q3 of 2023 we launched **Climate Pathways** as another step towards helping to address the climate challenge and driving positive change within the bank. Our first pathway, 'How climate uncertainty impacts risk and opportunity', was completed by c.16,000 colleagues, to reach our aim of having appropriate climate-related risk training across the business. Other topics included 'Catalysing change through climate conversations' and 'Transitioning through institutional levers' were made up of expert-led micro lectures, case studies and curated reading resources. Key impacts from the programme included increased colleague confidence and awareness in climate topics, with:

- 85% of respondents said they understood how climate uncertainty affects our business and customers.
- 79% of respondents said they understood how they could act on climate change in their roles.

In addition to programmes delivered with UoE B-CCaS, we also launched an internal **Greenwashing Awareness** training to c.15,000 colleagues, supporting their understanding of greenwashing and the importance of maintaining effective controls to mitigate any associated risks.

Technical training – Inspire climate action and innovation.

We continued to offer climate education programmes focused on real estate, retail and leisure, and manufacturing sectors. Since launch in 2022 over 705 colleagues have completed these programmes, including 192 in 2023. This was delivered by industry partners, academic leaders, and subject matter experts from within the business. Following completion of the three programmes, over 90% of respondents stated that 'they will alter their actions on climate change professionally and their actions on climate change personally'.

Best Digital Learning Transformation Programme

Awarded gold at the 2023 Learning Technologies Awards for our Climate Change Transformation Programme created in partnership with UoE. This recognised our commitment to embedding transformation in a way that adds value to our customers and communities.

We are also passionate about engaging with our colleagues, beyond education, to make the future more sustainable.

- **Sustainability Network (formerly known as Sustainable Futures Network)** is our employee-led network with over 3,100 members focused on empowering colleagues to embed sustainability at home and at work. In 2023, the network was recognised at the Global Good Awards for its ability to encourage sustainable behaviour among colleagues.
- **Giki Zero** is our carbon calculating employee engagement tool used by 5,400 colleagues, providing more than 160 climate action steps to help implement sustainable behaviours in everyday life.

Figure 26: Example of governance disclosure (NatWest, 2024)

5. Practical challenges in sustainability-related disclosures and needs for capacity-building

5.1 Disclosures in practice and challenges faced by financial institutions

The implementation of multiple ESG reporting standards and frameworks could present organizations with challenges that extend beyond mere compliance requirements. On one hand, while standards and frameworks cover similar key topics, these instruments differ in terms of scope, granularity, and methodological approaches. Materiality assessments are critical for determining the relevance of sustainability information to be disclosed, but expectations vary depending on the underlying materiality approach—whether financial, impact-based, or both. Financial institutions must navigate these differences while also addressing practical challenges, such as selecting appropriate thresholds, documenting assessment processes, and involving stakeholders in a structured manner.

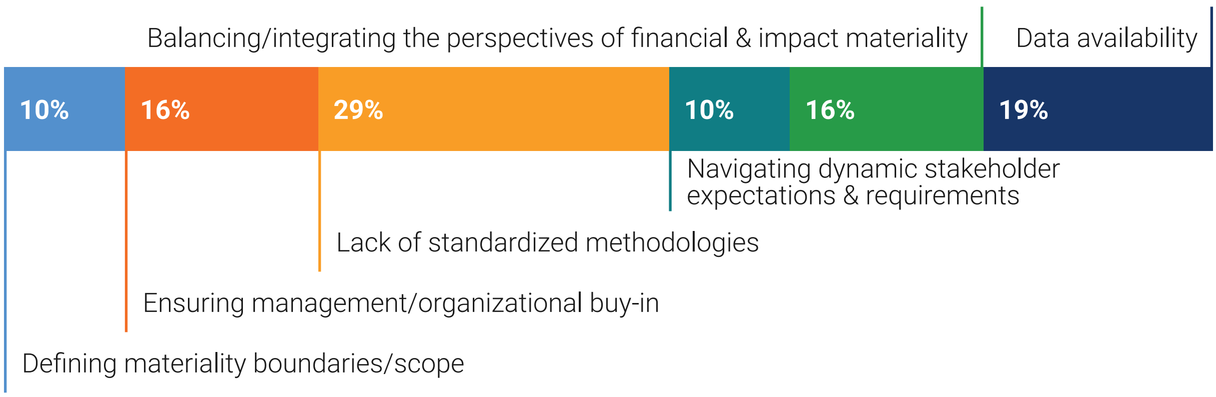


Figure 27: Feedback on challenges in double materiality assessments (UNEP FI, 2025)

Feedback from the 2024 UNEP FI Risk Centre Disclosures and Reporting Good Practices Working Group members, in which 20 financial institutions participated (see Figure 27) highlights potential practical implementation challenges that could be faced by financial institutions in conducting and reporting information related to double materiality assessments. Some of these challenges include:

- **Lack of standardized methodologies and challenges in quantifying IROs** (see 5.1.1): Respondents also noted challenges in developing robust and consistent approaches to quantifying impacts, risks, and opportunities. Nearly three in ten (29 per cent) identified the absence of harmonized methodologies for identifying, assessing, and prioritizing material issues as creating difficulties in producing comparable disclosures across frameworks. Additionally, 16 per cent highlighted particular challenges when attempting to translate qualitative sustainability impacts into financial metrics that can meaningfully inform decision-making and strategic planning;

- **Data availability**: Around one in five (19 per cent) respondents highlighted difficulties in obtaining consistent, high-quality data that would allow comprehensive quantification of impacts, risks and opportunities (see 5.1.2 for more details);

- **Managing stakeholder and shareholder expectations** (see 5.1.3 for details): Almost one in six (16 per cent) respondents cited ensuring organizational buy-in and alignment as a barrier to effective double materiality assessment and related disclosures.

5.1.1 Lack of standardized methodologies and challenges in quantifying impacts, risks, and opportunities

While Chapter 3 discusses the advantages of considering impacts in materiality assessments, this section focuses primarily on the challenges associated with assessing and disclosing sustainability-related risks and opportunities from a financial materiality perspective, as required under IFRS S1 and S2. Many of the issues outlined here may also arise in the context of impact materiality assessments. In practice, the two dimensions often intersect, as organizations seek to understand how broader environmental and social impacts may translate into financial risks over time. This interplay is also reflected in certain reporting standards that incorporate both financial and impact materiality perspectives, as in the case of the ESRS.

Ample evidence shows that environmental shocks like those arising from climate change could lead to financial risks, such as through affecting asset valuations, credit availability and cash flows (Brunette et al., 2021). However, quantifying these risks, impacts and opportunities to reflect changes in financial position, financial performance and cash flows remains challenging for many financial and non-financial companies.

Difficulties could arise in assessing climate-related risks and opportunities across varying time horizons (IMF, 2019), linking global, regional, and sector-specific assessments and detailed supply chain analysis to financial statements (UNEP FI, 2024b). Moreover, modelling uncertainties and differences across sectors and regions could make the conversion of climate risks into financial risk metrics even more challenging (NGFS, 2022b; Kurian et al., 2023).

Transition plan disclosures provide an illustrative example of where these challenges are evident. IOSCO (2024) identified several barriers that hinder the quality and comparability of transition plans-related reporting, including, amongst others, the following:

- Transition plan disclosures have remained largely narrative and often fall short of demonstrating their direct impact on the reporting entity's financials. This is despite growing expectations for material transition-related information to be integrated into overall strategy and for associated financial impacts to be presented through quantitative metrics. More conceptual common definitions—such as what constitutes a hard-to-abate sector—are also lacking, further hindering comparability and clarity; and

- The lack of global guidance on transition plan disclosures can result in critical gaps in investors' core data sets. This comes despite many jurisdictions moving towards mandatory requirements for climate-related disclosures. Such information gaps may undermine the use of transition plans as a tool for investors to detect and mitigate potential greenwashing in relation to the achievability, ambition and accountability of an entity's climate strategy.

Given the systemic relevance of transition plans to financial stability (FSB, 2025a), enhanced guidance, such as the definition of a hard-to-abate sector, may support more consistent and decision-useful transition plan disclosures. In response to this need, the IFRS Foundation has assumed responsibility for the disclosure-specific outputs of the Transition Plan Taskforce (TPT). In addition, it intends to develop educational materials and assess the need for additional application guidance under IFRS S2. Such initiatives reflect ongoing efforts to support the development of credible transition plans and advance the consistent disclosure of transition-related information.

Although financial institutions increasingly acknowledge sustainability-related risks in their disclosures, the extent and granularity of quantified financial impacts vary. For example, disclosures relating to credit risk generally tend to be more developed; however, research from the European Banking Authority (EBA, 2025) indicates that only a few institutions have started integrating climate risks into their internal capital considerations, including Probability of Default (PD) models. **In contrast, disclosures addressing the actual and potential effects of climate risks in cash flow or liquidity have been observed to be more qualitative in nature.** This could be due to several reasons. First, the financial effects from climate change on cash flows and liquidity could be seen as more indirect, as they often manifest alongside market reactions, funding challenges, or broader economic impacts. For example, an institution with a GHG-intensive portfolio may experience diminished demand for funding instruments in wholesale debt markets. This can lead to potential challenges rolling over debt or raising capital, hence creating a potential liquidity effect (Office of the Superintendent of Financial Institutions, 2025). Further complexity arises from the short-term nature of conventional liquidity assessments, which may not account for longer-term ESG risks (Prudential Regulation Authority, 2023).

Similarly, disclosures related to human capital and social risks are often qualitative in nature. Companies frequently point to the lack of standardized indicators and clear methodological guidance for measuring and reporting these topics in a consistent and comparable way (IFRS Foundation, 2024e). Juxtaposed to this context, it is important to note that the ISSB has commenced a research project about disclosures on risks and opportunities related to human capital. This will help inform the ISSB whether it should pursue standard-setting for such disclosures (IFRS Foundation, n.d.).

5.1.2 Data collection and quality for disclosures: ensuring consistency and accuracy

Studies highlight a significant challenge in obtaining sufficient ESG data that are granular, consistent, comparable, and reliable, including for climate-related risks and opportunities (BaFin, 2024; UNEP FI, 2024a). This includes a lack of detailed emissions data at the location level and forward-looking climate data essential for accurate risk assessment (NGFS, 2022a). In addition, a lack of historical data on financial risks stemming from specific ESG risks, such as defaults and losses that can be linked to environmental physical events, and transition trends has also been observed (EBA, 2025).

Several factors contribute to these data gaps. First, regional disparities in data availability and quality, driven by differences in resource availability and prioritization, exacerbate inconsistencies across geographies (UNEP FI, 2024b). Second, disparities in capacity between larger and smaller organizations could lead to a potential size bias in ESG ratings (OECD, 2020; UNEP FI, 2024a). Additionally, variations in disclosure requirements across jurisdictions create challenges in cross-comparability of climate-related financial disclosures. These differences mean that the financial effects of climate risks and opportunities—on financial position, financial performance, and cash flows—may be reported using inconsistent metrics that may not capture the full spectrum of impacts (Vinelli & Kidd, 2024).

These data challenges could complicate financial institutions' ability to effectively identify, assess, manage, and report the financial impacts of climate-related risks and opportunities. In practice, financial institutions often consider a combination of metrics from different data sources to assess climate risks within their lending portfolios. These sources include direct data from clients, and estimates derived from emissions trajectories, sectoral averages, industry benchmarks and other information sources. However, the accuracy of these metrics has been observed to be generally lower than that of traditional financial metrics due several factors:

- Dependency on historical emissions data and the use of carbon exposure as a proxy, which could adversely impact companies' ability to consider the full spectrum of climate-related financial risks and opportunities (Hess, 2022);
- Metrics such as the Weighted Average Carbon Intensity (WACI) are highly sensitive to outliers and variations in investment allocations[6], which can compromise their reliability for assessing climate risks (GOV.uk, 2021); and
- Variability of results from climate risk quantification tools, given differences in the types of hazards assessed, methodological choices and other considerations (Hoehn et al., 2024).

In parallel, data challenges related to physical risks also persist (UNEP FI, 2024c). For example, financial institutions could lack access to detailed asset- or facility-level information on vulnerabilities that are essential for accurately assessing physical risks. On the other hand, scenario analysis for physical risks typically requires highly sophisticated

6 For example, the weighted average carbon intensity could appear lower for those companies with high revenue driven by high prices

models in relation to hazard frequency, severity, exposure, and vulnerability—parameters that are often not readily available or standardized. These complexities could potentially result in inconsistent assessment results, limiting the ability of financial institutions to understand the potential impacts of physical climate risks on asset values, operational continuity, and collateral quality.

5.1.3 Managing Stakeholder and Shareholder Expectations

Financial institutions face mounting pressure to deliver credible, consistent, and decision-useful sustainability disclosures amidst technical and data-related challenges. This pressure is underscored by global risk rankings, which continue to be topped by environmental risks such as extreme weather events and biodiversity loss, as well as social risks such as inequality and societal polarization (see Figure 28).

	2 years		10 years
1st	Misinformation and disinformation	1st	Extreme weather events
2nd	Extreme weather events	2nd	Biodiversity loss and ecosystem collapse
3rd	State-based armed conflict	3rd	Critical change to Earth systems
4th	Societal polarization	4th	Natural resource shortages
5th	Cyber espionage and warfare	5th	Misinformation and disinformation
6th	Pollution	6th	Adverse outcomes of AI technologies
7th	Inequality	7th	Inequality
8th	Involuntary migration or displacement	8th	Societal polarization
9th	Geoeconomic confrontation	9th	Cyber espionage and warfare
10th	Erosion of human rights and/or civic freedoms	10th	Pollution

Figure 28: Global risks ranked by severity over the short and long Term (World Economic Forum, 2025)

Stakeholders, including institutional investors, civil society, workers, affected communities, and regulators, are increasingly scrutinizing the authenticity and robustness of sustainability claims. The 2025 Edelman Trust Barometer report reveals that 62 per cent of respondents believe businesses are not doing enough to address climate change (Edelman Trust Institute, 2025). This sentiment underscores the increasing pressure on companies to demonstrate tangible actions and transparent reporting in their sustainability initiatives.

Shareholders are exerting influence through engagement and voting activities. However, regional differences persist. Recent research by Morningstar shows that while European firms' support for significant environmental and social resolutions has remained high, there is a decline in support among firms in the United States of America (see Figure 29).

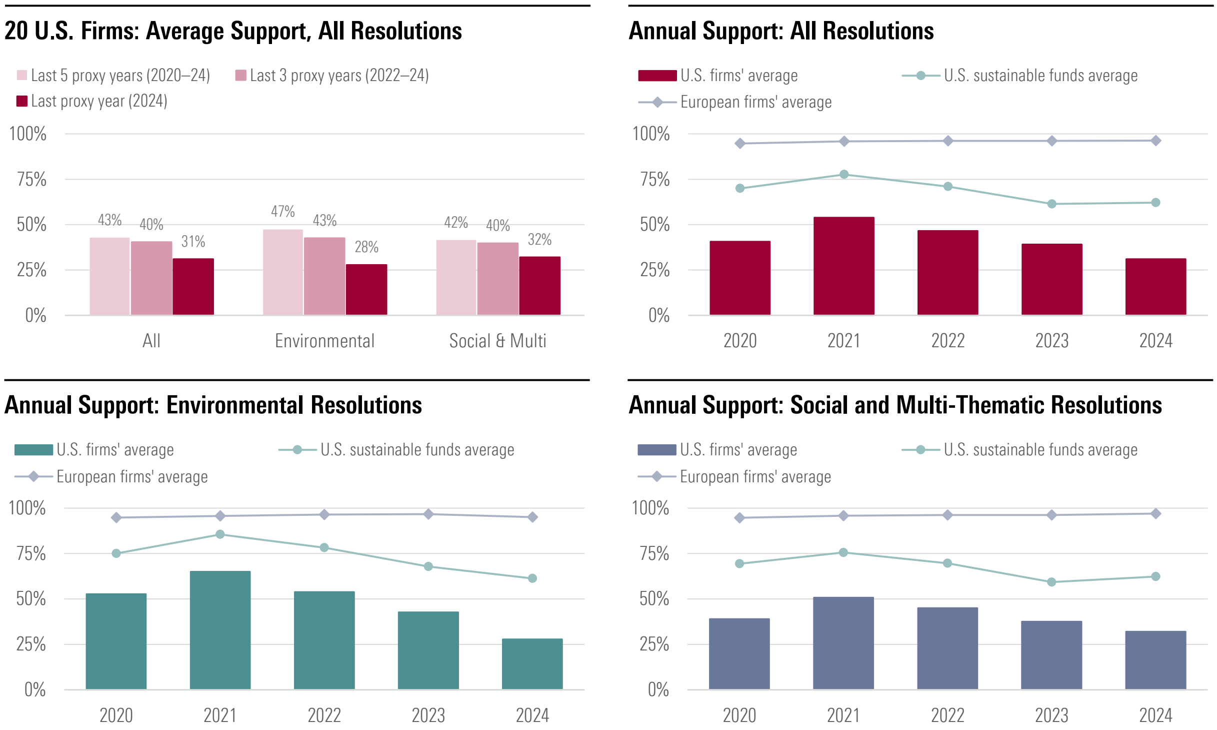


Figure 29: Trends in asset managers' support for environmental and social resolutions (Morningstar, 2025)

The pressure from stakeholder and shareholder expectations necessitates a strategic approach to sustainability reporting, ensuring that disclosures are both comprehensive and aligned with a company's financial objectives.

However, balancing these expectations presents challenges. Companies often grapple with limitations in the internal capacities required to ensure consistency across different reporting standards and frameworks. This is especially acute in a regulatory landscape that is evolving so fast. Moreover, the divergence in stakeholder and shareholder priorities can lead to tensions in determining the focus and depth of sustainability disclosures.

In response to this complex environment, some companies are developing robust internal processes that integrate stakeholder engagement, materiality assessments, and transparent reporting practices. These processes aim to address stakeholder concerns while enabling shareholders and supervisory authorities to access clear and relevant information.

5.2 Essential areas for capacity-building and further guidance

The challenges discussed in the previous sections not only affect report preparers but also carry direct implications for the broader policy and regulatory ecosystem. As regulators and standard setters aim to foster the adoption of sustainability-related disclosures across sectors and regions, it is crucial that implementation challenges are addressed through targeted capacity-building for report preparers and through practical, coordinated guidance from standard setters and policy makers. Key areas of focus could involve clarifying technical reporting requirements, enhancing alignment across disclosure frameworks, and developing accessible tools and resources to address persistent disclosure gaps.

The readiness of companies to adopt sustainability reporting standards could be improved by enhancing capacity-building, which would allow effective assessment of sustainability-related risks and opportunities. Building upon the discussion on challenges, some essential areas for capacity-building and further guidance from standard setters and policy makers could include:

- **Data-related skills and capabilities**: As discussed in 5.1.1, companies (including financial institutions), face persistent gaps in the availability and quality of ESG-related data. These gaps are often compounded by limited internal capacity to manage and use sustainability-related data effectively. Technical proficiency in areas such as data governance, risk modelling, and disclosure preparation is essential to ensure that reported information is robust, decision-useful, and compliant with regulatory expectations.
- **Translating IROs into financial metrics**: A commonly reported challenge—outlined in 5.1.1—is the lack of standardized methodologies for assessing and quantifying impacts, risks, and opportunities (IROs), particularly in relation to linking them with financial outcomes. Without a consistent approach, companies may struggle to translate sustainability-related factors and shocks into conventional financial metrics that reflect financial position, performance, and cash flows. At the same time, identifying and disclosing climate-related risks that could affect enterprise value, and estimating their potential financial impacts across short-, medium-, and long-term time horizons, requires both technical modelling skills and a solid conceptual understanding of sustainability disclosure frameworks.
- **Further guidance on sector-specific disclosures and metrics** can support preparers in linking IROs with financial information. For financial institutions in particular, where sustainability-related risks often stem from counterparties—such as through financed emissions or concentrated exposures to high-risk sectors—sectoral guidance can provide relevant indicators on potentially relevant sectoral risk drivers. This enables more targeted and comparable assessments of sustainability-related impacts on financial performance.

  In the case of climate-related disclosures, IOSCO (2024) emphasized that the ability of an entity to align with any specific climate transition pathway depends on the technological developments in their sector and the climate-related policy landscape in their jurisdiction—such as fiscal and industrial policies. Hence, while development of standardized guidance on transition plan is welcomed, such guidance should consider jurisdictional, and sectoral differences when assessing the credibility of transition plans.
- **Simplifying reporting for small and medium-sized enterprises (SMEs) through standardized disclosures**: The forthcoming EFRAG Voluntary Sustainability Reporting Standard for SMEs (VSME) is a key voluntary initiative designed to ease the reporting burden for SMEs by providing a standardized set of information that can replace ESG questionnaires and data requests that could often be seen as uncoordinated or fragmented (EFRAG, 2024). By providing a streamlined, consistent approach to key sustainability metrics, the VSME can improve disclosure efficiency and quality. Finan-

cial institutions could also stand to benefit, as more standardized and comparable information from SME clients can enhance the quality and consistency of ESG risk assessments across portfolios.

The G20 Sustainable Finance Working Group (2024) further supports such initiatives. In particular, it encourages relevant authorities, international organizations, and standard setters to develop voluntary SME reporting standards that align—where appropriate—with international frameworks such as the ISSB. In addition, the G20 is calling for improved comparability and interoperability of disclosures, while maintaining flexibility to accommodate jurisdiction-specific and sectoral contexts. For emerging markets and developing economies, it recommends endorsing or adapting leading voluntary standards to local circumstances and promoting their use among both public and private stakeholders. Doing so will enhance comparability and mitigate greenwashing risks, the G20 reasons.

- **Stakeholder engagement and communication**: As highlighted in 5.1.3, managing stakeholder and shareholder expectations can pose significant challenges. This is particularly true in the context of evolving regulatory requirements and heightened public scrutiny. Effective external communication of sustainability-related disclosures—such as transition plans, materiality determinations, and performance against ESG targets—requires enhanced capacity in both technical ESG reporting and stakeholder engagement practices. These skills are essential not only for ensuring transparency but also for fostering stakeholder trust and demonstrating accountability.

  In addition, the effectiveness of sustainability reporting depends on stakeholder confidence in the information disclosed, and not just technical quality. Such confidence can be eroded by inconsistent data and assessment methodologies, as well as concerns about greenwashing. Because many stakeholders consider ESG ratings and performance indicators as proxies for corporate sustainability performance, shortcomings in these tools can weaken the credibility of disclosures. ESG ratings and other sustainability-related performance indicators do not always reflect an accurate picture of corporate ESG performance. This is partly because sustainability disclosures—key inputs into these ratings and indicators—vary in quality and scope. Moreover, certain ESG rating methodologies can introduce size biases, since these ratings often correlate with company size and the resources that larger firms can devote to ESG reporting and disclosure (OECD, 2020). In extreme cases, flawed models have produced implausible estimates—for example, a company's Scope 3 emissions have been estimated to exceed total annual anthropogenic greenhouse gas emissions (Busch et al., 2020). To help mitigate these risks, report preparers can include information on methodological limitations, assumptions, and data constraints when making disclosures.

Conclusion

Sustainability-related disclosures enable financial institutions and real-economy companies to understand and respond to current and emerging risks. When grounded in established frameworks and standards, disclosures could provide a structured basis for the identification, assessment, and monitoring of sustainability-related risks and opportunities, while enabling forward-looking, risk-informed decision-making, and long-term strategic planning.

Yet, in practice, disclosure gaps remain. First, quantitative disclosures on the financial effects of climate change across the dimensions of financial position, financial performance, and cash flows remain limited, as highlighted by the Financial Stability Board (FSB) (2024). Second, disclosures reflecting the interaction of impact and financial materiality are at an early stage of implementation and could benefit from capacity-building and further guidance. This is despite this combined perspective's potential in offering additional insights into how environmental and social factors may influence an organization's risk profile, resilience and value creation. Third, although transition plan disclosures are integral to key standards such as IFRS S1 and S2 and ESRS E1 and are recognized as systemically relevant to financial stability (FSB, 2025a), related disclosures remain largely narrative in nature. These gaps could limit the decision-usefulness of disclosures and their ability to inform strategic planning and enterprise risk management.

To support more practical understanding of how these gaps may be addressed, this report presents illustrative case studies from financial institutions and real-economy companies. Focused on climate-related financial disclosures, materiality assessments, and transition plans, the examples showcase actionable practices intended to inform implementation of disclosure requirements and foster peer learning across sectors.

Realizing the full potential of sustainability-related disclosures will require continued collaboration among regulators, standard-setters, financial institutions, and real-economy actors, coupled with targeted capacity-building and practical guidance. Together, this will help advance credible, decision-useful sustainability disclosures that support a just and effective transition.

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Appendix

Table 5: Detailed table—examples of jurisdictional uptake of sustainability-related disclosure requirements and guidance informed by and/or interoperable with IFRS S1 & S2, by region (UNEP FI, 2025)

Jurisdiction	Name of the local standards/ rules/regulations/guidance	Descriptions	Effective dates	Affected entities
Australia	Australian Sustainability Reporting Standards: ▪ AASB S1 General Requirements for Disclosure of Sustainability-related Financial Information; and ▪ AASB S2 Climate-related Disclosures.	The Australian Accounting Standards Board's (AASB) issued in 2024 (AASB, 2024): ▪ **AASB S1 (voluntary)** concerns voluntary disclosures of sustainability-related risks and opportunities affecting cash flows, access to finance, or cost of capital over the short, medium, or long term; and ▪ **AASB S2 (mandatory for certain entities)** requires disclosures of climate-related risks and opportunities affecting cash flows, access to finance, or cost of capital over the short, medium, or long term[7]. AASB S1 and AASB S2 were developed by incorporating IFRS S1 and S2. To provide further guidance, the Australian Securities & Investments Commission (ASIC) issued on 31 March 2025 Regulatory Guide 280 for entities required to prepare a sustainability report.	The commencement dates of sustainability reporting requirements range **from 1 January 2025 to 1 July 2027**, depending on sustainability reporting thresholds based on corporate size, emissions, and value of assets (see the 2025 Regulatory Guide for details).	Entities that are required to prepare a sustainability report containing climate-related financial information under Chapter 2M of the Corporations Act 2001 (latest version with compilation date of 17 March 2025), which may include: ▪ **Registered corporations** under the National Greenhouse and Energy Reporting Act 2007; ▪ **Registered schemes**; ▪ **Registrable superannuation entities**; and ▪ **Retail corporate collective investment vehicles**. Please check (ASIC, 2025) for details.

7 AASB S2 states that, an entity applying AASB S2 is not required to apply AASB S1 General Requirements for Disclosure of Sustainability-related Financial Information, which is a voluntary Standard addressing sustainability-related financial disclosures in general. However, since Appendix D of AASB S1 contains requirements concerning climate-related financial information, an entity may refer to AASB S1 for guidance in complying with the requirements in Appendix D.

Jurisdiction	Name of the local standards/ rules/regulations/guidance	Descriptions	Effective dates	Affected entities
Bangladesh	**Guideline on Sustainability and Climate-related Financial Disclosure** published by Bangladesh Bank on 26 December 2023.	The Guideline has been formulated based on IFRS S1 and S2, incorporating TCFD Recommendations which is positioned as a set of requirements and accompanying guidance (Bangladesh Bank, 2023).	Implementation dates range from **June 2024 to 2027** (see the Guideline for details).	**Banks and finance companies** (Bangladesh Bank, 2023).
Brazil	**Comitê Brasileiro de Pronunciamentos de Sustentabilidade (CBPS):** ▪ CBPS 01: General Requirements for Disclosure of Sustainability-related Financial Information mandatory for publicly-held companies; and ▪ CBPS 02: Climate-related Disclosures mandatory for publicly-held companies.	The Brazilian Securities and Exchange Commission (CVM) issued on 29 October 2024 CVM **Resolutions 217**, **218** and **219**, making the IFRS S1 and S2-aligned standards published by the Comitê Brasileiro de Pronunciamentos de Sustentabilidade (CBPS) mandatory for sustainability-related disclosures by publicly-held companies, including financial institutions (Gov.br, 2024).	Mandatory reporting will begin for fiscal years starting on or after **January 1, 2026**.	**Publicly held companies** registered with the CVM.
Canada	**Canadian Sustainability Disclosure Standards (CSDSs)**: ▪ **CSDS 1**: General Requirements for Disclosure of Sustainability-related Financial Information (based on IFRS S1); and ▪ **CSDS 2**: Climate-related Disclosures (based on IFRS S2).	The Canadian Sustainability Standards Board (CSSB) published its first Canadian Sustainability Disclosure Standards (CSDSs) based on IFRS S1 and S2 (FRAS, 2024a) in December 2024. The CSDSs are **voluntary unless mandated by provincial and territorial regulators** according to the Canadian Securities Administrators (CSA) (CSA, 2024). For the CSDSs to become mandatory disclosures under securities legislation in Canada, the CSDSs would need to be incorporated into a CSA rule. The CSA is anticipated to publish a revised rule on sustainability-related disclosures for public foment (CSA, 2024).	Both CSDS 1 and CSDS 2 take effect for voluntary reporting in fiscal years starting on or after **January 01, 2025**, with **transition reliefs** of 1 to 3 years, depending on the areas of reporting, (FRAS, 2024b) provides more details.	As of June 2025, the CSDSs do not mandate which entities would be required to provide interim sustainability-related financial disclosures.

Jurisdiction	Name of the local standards/ rules/regulations/guidance	Descriptions	Effective dates	Affected entities
China	Basic Guidelines for Corporate Sustainability Disclosure	The Ministry of Finance (MOF) of China issued the Basic Guidelines for Corporate Sustainability Disclosure in 2024, establishing broad requirements for Chinese companies to disclose sustainability-related information (MOF, 2024). These guidelines largely align with IFRS S1 and S2, requiring disclosures on governance, strategy, risk and opportunity management, along with metrics and targets. However, the MOF's guidelines adopt a **double materiality** approach, evaluating both the impact of ESG factors on a company's financial performance and their broader ESG outcomes (UNEP FI, 2025).	As of April 2025, the scope of implementation and implementation requirements of the Guidelines are to be defined. A phased implementation approach which involves **gradual expansion from listed to non-listed companies, large enterprises to SMEs, qualitative to quantitative requirements, and voluntary to mandatory disclosure** is expected (Gov.cn, 2024).	
European Union	**European Sustainability Reporting Standards (ESRS)** under the Corporate Sustainability Reporting Directive (CSRD) (EUR-Lex, 2023).	The CSRD requires companies to report on sustainability matters using the ESRS, which are developed by the European Financial Reporting Advisory Group (EFRAG). CSRD/ESRS adopt a **double materiality** approach. On 26th February 2025, the European Commission adopted the 'Omnibus' package to simplify EU rules, including CSRD/ ESRS (EU Commission 2025a). On 27 March 2025, the mandate of the simplification of ESRS was made by the EU Commissioner for Financial Services and the Savings and Investments Union (EFRAG, 2025a), a task to which EFRAG is fully committed (2025b). As of April 2025, there are 12 ESRS, covering the full range of sustainability issues (see 1.2).	The CSRD/ESRS implementation follows **a phased approach**. According to Omnibus I—COM(2025)80, the following entities will fall within the scope of CSRD/ESRS (European Commission, 2025c): ▪ **Large public-interest entities** with more than 1000 employees and either more than EUR 500 million turnover or a balance sheet above EUR 25 million (**from FY 2024**); and ▪ **Large undertakings** that are not public interest entities with more than 1000 employees and either a turnover above EUR 50 million or a balance sheet above EUR 25 million (**from FY 2027**).	

Jurisdiction	Name of the local standards/ rules/regulations/guidance	Descriptions	Effective dates	Affected entities
Hong Kong, China	**Hong Kong Financial Reporting Standard Sustainability Disclosure Standards (HKFRS SDS)**: ▪ **HKFRS S1**: General Requirements for Disclosure of Sustainability-related Financial Information; and ▪ **HKFRS S2** Climate-related Disclosures.	HKFRS S1 and S2, both of which are fully aligned with IFRS S1 and IFRS S2 were published by the Hong Kong Institute of Certified Public Accountants on 12 December 2024 (HKICPA) (HKICPA, 2024).	The HKFRS SDS will come into effect on **1 August 2025** (HKICPA, 2024), with a **phased approach from 2025 to 2028** for mandatory reporting, according to the Hong Kong Financial Services and the Treasury Bureau (FSTB) (FSTB, 024). For details, please see the Implementation Roadmap.	Large publicly accountable entities, including: ▪ **Large listed issuers**; and ▪ **Non-listed financial institutions** carrying a significant weight.

Jurisdiction	Name of the local standards/ rules/regulations/guidance	Descriptions	Effective dates	Affected entities
India	Business Responsibility and Sustainability Report (BRSR)	In May 2021, the Securities and Exchange Board of India (SEBI) introduced the BRSR to require disclosures on companies' ESG parameters. The BRSR seeks disclosures from listed entities on their performance against the nine principles of the 'National Guidelines on Responsible Business Conduct' and reporting under each principle is divided into essential and leadership indicators. The essential indicators are required to be reported on a mandatory basis while the reporting of leadership indicators is on a voluntary basis (SEBI, 2021). On 12 July 2023, the SEBI issued a framework for the disclosure and assurance requirements for a sub-set of BRSR called BRSR Core (SEBI, 2023). With this announcement comes the following key updates: ▪ From financial year 2023-2024, the top 1000 listed entities (by market captailization) shall make disclosures as per the updated BRSR format as part of their annual reports; ▪ The requirement for mandatory reasonable assurance of the BRSR Core. This assurance requirements commence between the financial years of 2023-2024 to 2026-2027, depending on market captailization of these listed entities.	The BRSR came info effect from financial year 2022-2023, with mandatory requirements for assurance starting from the financial years of 2023-2024 until 2026-2027. For details, please see the circular SEBI/HO/CFD/CFD-SEC-2/P/CIR/2023/122.	The filing of BRSR shall be mandatory for the **top 1000 listed companies by market captailization** (SEBI, 2021).

Jurisdiction	Name of the local standards/ rules/regulations/guidance	Descriptions	Effective dates	Affected entities
Indonesia	The exposure drafts of the following standards were released on December 17, 2024: ▪ PSPK 1: Persyaratan Umum Pengungkapan Informasi Keuangan Terkait (General Requirements for Disclosure of Sustainability-related Financial Information, based on IFRS S1); and ▪ PSPK 2: Pengungkapan Terkait Iklim (Climate-Related Disclosures, based on IFRS S2).	On December 17, 2024 the Institute of Indonesia Chartered Accountants (IAI) has published **exposure drafts** of its sustainability reporting standards (IAI, 2024a) based on IFRS S1 and S2. Stakeholders were invited to give feedback on the exposure drafts by 31 March 2025.	According to the roadmap for sustainability disclosure standards released by the IAI (2024b), the proposed effective date for PSPK 1 and PSPK 2 is **1 January 2027**.	As of April 2025, the scope of entities subject to PSPK 1 and PSPK 2 is to be determined.

Jurisdiction	Name of the local standards/ rules/regulations/guidance	Descriptions	Effective dates	Affected entities
Japan	**The Sustainability Standards Board of Japan (SSBJ) Standards** (SSBJ, 2025a): **Universal Sustainability Disclosure Standard** "Application of the Sustainability ▪ Disclosure Standards" (corresponding to the requirements other than those included in the "Core content" section of IFRS S1); ▪ **Theme-based Sustainability Disclosure Standard No. 1** "General Disclosures" (corresponding to the requirements in the "Core content" section of IFRS S1); and ▪ **Theme-based Sustainability Disclosure Standard No. 2** "Climate-related Disclosures" (corresponding to requirements in the "Core content" section of IFRS S2)	To align sustainability disclosure standards in Japan with the IFRS Sustainability Disclosure Standards, the SSBJ announced the issuance of the inaugural sustainability disclosure standards (SSBJ, 2025a) on 5 March 2025. The SSBJ Standards incorporate all the requirements of IFRS S1 and S2, with jurisdiction-specific alternatives (SSBJ, 2025b).	The SSBJ Standards do not prescribe the scope and timing of entities that would be required to apply the SSBJ Standards. However, **SSBJ Standards were developed under the assumption that SSBJ Standards would eventually be required,** under the Japanese securities laws and regulations, to be applied by entities listed on the Prime Market of the Tokyo Stock Exchange (SSBJ, 2025b).	

Jurisdiction	Name of the local standards/ rules/regulations/guidance	Descriptions	Effective dates	Affected entities
Jordan	Amman Stock Exchange Climate-related Disclosures Regulatory Framework	In December 2024, the Amman Stock Exchange (ASE) established a regulatory framework to permit the use of IFRS S1 and S2, for sustainability-related disclosures. However, **the regulatory framework only mandates IFRS S2 and the climate-relevant portions of IFRS S1**.	The Regulatory Framework will progress from **a voluntary phase to mandatory application** (ASE, 2024): ▪ For disclosures published on or after **1 January 2026**, companies listed on the ASE20 Index are permitted to use of IFRS S1 and IFRS S2 Standards; ▪ For disclosures published on or after **1 January 2027**, the disclosure of the climate-related requirements of IFRS Sustainability Disclosure Standards; namely, IFRS S2 and the climate relevant portions of IFRS S1 shall become mandatory for all companies listed on the ASE20 Index (ASE, 2024).	**Companies listed on the ASE20 Index** of the Amman Stock Exchange (ASE, 2024).
Malaysia	The National Sustainability Reporting Framework (NSRF)	On 24 September 2024, The Securities Commission (SC) of Malaysia has published the National Sustainability Reporting Framework (NSRF) which addresses the use of IFRS S1 & S2 as the baseline for sustainability reporting in Malaysia. The Malaysian Stock Exchange (Bursa Malaysia) announced on 23 December 2024 enhancements to the sustainability reporting requirements in the Main Market and ACE Market Listing Requirements (Bursa Malaysia, 2024). Under the enhanced requirements, **a listed issuer must prepare its sustainability statement in the annual report in accordance with the IFRS Sustainability Disclosure Standards**. The enhancements seek to foster the use of IFRS S1 & S2 as the baseline standards for sustainability reporting in Malaysia.	Reporting requirements follow **a phased and developmental approach** (Ministry of Finance, 2024): ▪ **From 1 January 2025**: Large-listed issuers on the Main market with market captailization of RM2 billion and above; ▪ **From 1 January 2026**: Remaining Main market listed issuers; and ▪ **From 1 January 2027**: Listed issuers on the ACE Market as well as non-listed companies with revenue of RM2 billion and more.	The NSRF is applicable to the following entities (Ministry of Finance, 2024): ▪ Main market **listed issuers**; ▪ ACE market listed issuers; and ▪ **Non-listed companies** with revenue of RM2 billion and more.

Jurisdiction	Name of the local standards/ rules/regulations/guidance	Descriptions	Effective dates	Affected entities
Nigeria	**IFRS Sustainability Disclosure Standards**	The Financial Reporting Council of Nigeria (FRC) published the Roadmap Report for Adoption of IFRS Sustainability Disclosure Standards in Nigeria in March 2024 (FRC, 2024).	**A phased approach** to the adoption of the IFRS Sustainability Disclosure Standards has been adopted, with full application of the **mandatory reporting** for applicable entities commencing from the accounting period beginning **on or after 1 January 2028** (FRC, 2024).	The mandatory adoption phase is categorized into two as follows (FRC, 2024): ▪ **All public interest entities** (Reporting date: Accounting period beginning on or after January 1, 2028); and ▪ **Small and medium-sized entities** (Reporting date: Accounting period beginning on or after January 1, 2030).
Pakistan	**IFRS Sustainability Disclosure Standards**	The Securities and Exchange Commission of Pakistan (SECP) announced on 1 January 2025 (SECP, 2025) a phased adoption of IFRS Sustainability Disclosure Standards in Pakistan.	The standards will be implemented in **a phased approach** ranging from 2025 to 2027.	**Listed companies** in Pakistan (SECP, 2025) in the first and second phases, **unlisted-licensed public interest companies** in the third phase.
Singapore	**IFRS Sustainability Disclosure Standards**	The Singapore Exchange Regulation (SGX RegCo) announced in September 2024 that it would start incorporating IFRS S1 and S2 into its sustainability reporting regime following broad support from respondents to a public consultation (SGX RegCo, 2024).	**From FY 2025** for mandatory climate reporting that starts incorporating the climate-related requirements in the IFRS Sustainability Disclosure Standards, with the requirement on Scope 3 GHG emissions disclosures under review and not yet implemented (SGX RegCo, 2024). **From FY 2026** other primary components of a sustainability report (other than climate-related disclosures) will be mandated (SGX RegCo, 2024).	Beginning with FY 2025, SGX RegCo will require **all issuers** to start reporting Scope 1 and Scope 2 greenhouse gas (GHG) emissions. Their climate-related disclosures must also start incorporating the climate-related requirements in the IFRS Sustainability Disclosure Standards (SGX RegCo, 2024).

Jurisdiction	Name of the local standards/ rules/regulations/guidance	Descriptions	Effective dates	Affected entities
Switzerland	**The Swiss Code of Obligations (Art. 964a-c et seq.)**; and **Ordinance on Climate Disclosures**	Articles 964a to 964c of the Swiss Code of Obligations require certain public interest entities to publish an annual report on non-financial matters, including environmental, social and governance issues. The Ordinance on Climate Disclosures mandates reporting aligned with the TCFD recommendations. Regarding the framework of disclosures, a consultation from 26 June 2024 proposed allowing ESRS and the use of equivalent standards to the ESRS, such as IFRS S1 & S2 and the GRI Standards (Admin.ch, 2024). The consultation outcome, published on 21 March 2025 by the Bundesamt für Justiz (The Federal Office of Justice) (2025) concluded that **the Swiss Federal Council should not be allowed to specify any equivalent standards other than the ESRS.**	▪ The non-financial reporting obligations outlined in Articles 964a–c of the Swiss Code of Obligations became effective on **1 January 2022**; and ▪ The Ordinance on Climate Disclosures of Switzerland enters into force on **1 January 2024**.	Undertakings must report if they: ▪ Are **public interest entities** (as defined in Article 2(c) of the Auditor Oversight Act); ▪ Have **≥ 500 full time employees** on average over two successive financial years (consolidated); and ▪ **Exceed CHF 20 million in balance sheet total or CHF 40 million in sales** in two successive years.
Türkiye	**The Turkish Sustainability Reporting Standards (TSRS)**, which include: ▪ TSRS 1 Sürdürülebilirlikle İlgili Finansal Bilgilerin Açıklanmasına İlişkin Genel Hükümler (General Requirements for Disclosure of Sustainability-related Financial Information); and ▪ TSRS 2 İklimle İlgili Açıklamalar (Climate-Related Disclosures)	TSRS 1 and TSRS 2, released by Kamu Gözetimi, Muhasebe ve Denetim Standartları Kurumu (KGK) and published on the official gazette on 29 December 2023 are based on IFRS S1 and S2, respectively, requiring companies to disclose sustainability-related and climate-related financial information. Mandatory for companies meeting specific thresholds, with some exemptions for certain listed companies.	Entities shall report using TSRS 1 and TSRS 2 for annual reporting periods beginning on or after **1 January 2024** (KGK.gov.tr, 2023a; b).	According to official announcement by KGK released on 6 March 2025, entities subject to mandatory sustainability-related reporting using TSRS 1 and TSRS 2 could include: ▪ Certain **companies** whose shares are traded on the stock exchange; ▪ Certain **banks and non-bank financial institutions** whose shares are traded on the stock exchange, and with more than 1 branch and 250 employees. Please refer to the official announcement in the original language for details (KGK.gov.tr, 2025).

Jurisdiction	Name of the local standards/ rules/regulations/guidance	Descriptions	Effective dates	Affected entities
United Kingdom of Great Britain & Northern Ireland	**UK Sustainability Reporting Standards** (UK SRS), including: ▪ Exposure draft of UK SRS S1; and ▪ Exposure draft of UK SRS S2	The government of the United Kingdom of Great Britain & Northern Ireland (United Kingdom) is setting up an endorsement and implementation process for IFRS S1 and S2, by creating the United Kingdom Sustainability Reporting Standards (UK SRS) (Gov.uk, 2024a). In June 2025, the country's government released the exposure draft of UK SRS S1 and UK SRS S2 developed based on IFRS S1 and S2, with four proposed amendments with includes the following (Gov.uk, 2025): ▪ the removal of transition relief in IFRS S1 that permits delayed reporting on the first year; ▪ the extension of the transition relief in IFRS S1 that permits a 'climate-first' approach by an additional year; ▪ the removal of the requirement to use the Global Industry Classification Standard (GICS) in IFRS S2; and ▪ the removal of the 'effective date' clauses in IFRS S1 and S2. The country's government is now consulting on the exposure drafts of the United Kingdom versions of IFRS S1 and IFRS S2—respectively called UK SRS S1 and UK SRS S2. The consultation is open until 17 September 2025, alongside a consultation on the development of an oversight regime for assurance of sustainability-related financial disclosures.	**To be determined—**The Government is consulting on the exposure drafts of UK SRS until 17 September 2025, and a decision is expected regarding future requirements to be taken in Q2 2025 (Gov.uk, 2024a).	▪ **Listed companies in the United Kingdom**; and ▪ Potentially United Kingdom companies that do not fall within the Financial Conduct Authority (FCA)'s regulatory perimeter.
United States of America	**The Enhancement and Standardization of Climate-Related Disclosures for Investors**	The U.S. Securities and Exchange Commission (SEC) adopted rules to enhance and standardize climate-related disclosures for investors, which integrated TCFD recommendations in March 2024 (SEC, 2024). However, the rule was challenged in litigation, and the U.S. SEC withdrew its defence of the rules (SEC, 2025).	**To be determined**—Despite adoption of the rule by U.S. SEC in March 2024, the rule faces litigations and the U.S. SEC paused its legal defence of the rule (SEC, 2025).	**Registrants of the U.S. SEC**

Jurisdiction	Name of the local standards/ rules/regulations/guidance	Descriptions	Effective dates	Affected entities
	California Senate Bills: ▪ SB 219 Greenhouse gases: climate corporate accountability: climate-related financial risk; ▪ SB-253 Climate corporate data accountability act; and ▪ SB-261 Greenhouse gases: climate-related financial risk.	In October 2023, the California Governor signed into law two state senate bills (SB-253 and SB-261) that require certain public and private US companies doing business in California to provide both quantitative and qualitative climate disclosures (California Legislative Information, 2023). On 27 September 2024, the California Governor signed into law California state senate bill SB-219 which introduced amendments to SB-253 and SB-261 (California Legislative Information, 2024). SB-253 and SB-261 faced litigations. However, the court has in its 3 February 2025 order dismissed Count II (the Supremacy Clause claims) and Count III (as to the extraterritorial claims) concerning the two senate bills.	Effective dates vary **between 2026 and 2027**, depending on multiple factors.	SB-253 and SB-219 define **reporting entity** as a partnership, corporation, limited liability company, or other business entity formed under the laws of this state, the laws of any other state of the nation or the District of Columbia, or under an act of the Congress of the United States of America with **total annual revenues in excess of USD 1 billion** and that **does business in California**. SB-261 and SB-219 defines **covered entity** as a corporation, partnership, limited liability company, or other business entity formed under the laws of the state, the laws of any other state of the nation or the District of Columbia, or under an act of the Congress of the United States of America with **total annual revenues in excess of USD 500,000,000** and that **does business in California**.

Table 6: TCFD pillar & IFRS S2 core content on strategy, (UNEP FI, 2025; adapted from TCFD, 2017 and IFRS Foundation, 2023b)

TCFD Pillar/ IFRS S1 & S2 Core Content	Framework/Standards					
	TCFD Recommendations (2017)		IFRS S2			
	Recommendations	Recommended disclosures	§No.	Objective of disclosure	§No.	Disclosure requirements
Strategy	Disclose the actual and potential impacts of climate-related risks and opportunities on the organization’s businesses, strategy, and financial planning where such information is material.	a) Describe the climate-related risks and opportunities the organization has identified over the short, medium, and long term.	S2 8	To enable users of general-purpose financial reports to understand an entity’s **strategy** for **managing** climate-related risks and opportunities.	S2 9	Disclose information to enable users of general-purpose financial reports to understand the following:
		b) Describe the impact of climate related risks and opportunities on the organization’s businesses, strategy, and financial planning.			S2 9(a)	The **climate-related risks and opportunities that could reasonably be expected to affect the entity’s prospects** (see S2 10–12);
		c) Describe the resilience of the organization’s strategy, taking into consideration different climate-related scenarios, including a 2°C or lower scenario.			S2 9(b)	The **current and anticipated effects** of those climate-related risks and opportunities on the entity’s **business model** and **value chain** (see S2 13);
					S2 9(c)	The **effects** of those climate-related risks and opportunities on the entity’s **strategy** and **decision-making**, including information about its **climate-related transition plan** (see S2 14);

TCFD Pillar/ IFRS S1 & S2 Core Content	Framework/Standards					
	TCFD Recommendations (2017)		IFRS S2			
	Recommendations	Recommended disclosures	§No.	Objective of disclosure	§No.	Disclosure requirements
					S2 9(d)	The **effects** of those climate-related risks and opportunities on the entity's **financial position**, **financial performance** and **cash flows** for the reporting period, and their **anticipated effects** on the entity's financial position, financial performance and cash flows over the **short**, **medium** and **long term**, taking into consideration how those climate-related risks and opportunities have been factored into the entity's **financial planning** (see S2 15–21); and
					S2 9(e)	The **climate resilience** of the entity's **strategy** and its **business model** to climate-related changes, developments and uncertainties, taking into consideration the entity's identified climate-related risks and opportunities (see S2 22).

Table 7: TCFD pillar & IFRS S2 core content on risk management (UNEP FI, 2025; adapted from TCFD, 2017 and IFRS Foundation, 2023b)

TCFD Pillar/ IFRS S1 & S2 Core Content	Framework/standards					
	TCFD Recommendations (2017)		IFRS S2			
	Recommendations	Recommended Disclosures	§No.	Objective of Disclosure	§No.	Disclosure Requirements
Risk management	Disclose how the organization identifies, assesses, and manages climate-related risks.	a) Describe the organization's **processes** for **identifying** and **assessing climate-related risks**.	S2 24	To enable users of general-purpose financial reports to understand an entity's **processes** to **identify**, **assess**, **prioritize** and **monitor** climate-related risks and opportunities, including whether and how those processes are **integrated** into and inform the entity's overall risk management process.	S2 25(a)	Disclose information about the **processes** and related **policies** the entity uses to identify, assess, prioritize and monitor climate-related **risks**, including the following information:
		b) Describe the organization's **processes** for **managing** climate-related risks.			S2 25(a)(i)	The **inputs** and **parameters** the entity uses (e.g., information about data sources and the scope of operations covered in the processes);
		c) Describe how processes for identifying, assessing, and managing climate-related risks are **integrated into the organization's overall risk management**.			S2 25(a)(ii)	Whether and how the entity uses **climate-related scenario analysis** to inform its **identification** of climate-related **risks**;
					S2 25(a)(iii)	How the entity assesses the **nature**, **likelihood** and **magnitude** of the effects of those **risks** (for example, whether the entity considers qualitative factors, quantitative thresholds or other criteria);
					S2 25(a)(iv)	Whether and how the entity **prioritizes** climate-related risks relative to other types of risk;
					S2 25(a)(v)	How the entity **monitors** climate-related risks; and
					S2 25(a)(vi)	Whether and how the entity has **changed** the processes it uses compared with the previous reporting period

TCFD Pillar/ IFRS S1 & S2 Core Content	Framework/standards					
	TCFD Recommendations (2017)		IFRS S2			
	Recommendations	Recommended Disclosures	§No.	Objective of Disclosure	§No.	Disclosure Requirements
					S2 25(b)	Disclose the **processes** the entity uses to identify, assess, prioritize and monitor climate-related **opportunities**, including information about whether and how the entity uses climate-related scenario analysis to inform its identification of climate-related opportunities
					S2 25(c)	Disclose the **extent** to which, and how, the processes for identifying, assessing, prioritizing and monitoring climate-related risks and opportunities are **integrated** into and inform the entity's overall risk management process.
					S2 26	In preparing disclosures to fulfil the requirements in §25, an entity shall avoid unnecessary duplication in accordance with IFRS S1 (see S1 B42(b)). For example, although an entity shall provide the information required by S2 25, if oversight of sustainability-related risks and opportunities is managed on an integrated basis, the entity would avoid duplication by providing integrated risk management disclosures instead of separate disclosures for each sustainability-related risk and opportunity.

UNEP Finance Initiative (UNEP FI) brings together a large network of banks, insurers and investors that catalyses action across the financial system to deliver more sustainable global economies.

For more than 30 years the Initiative has been connecting the UN with financial institutions from around the world to shape the sustainable finance agenda establishing the world's foremost sustainability frameworks that help the finance industry address global environmental, social and governance challenges.

Convened by a Geneva, Switzerland-based secretariat, more than 500 banks and insurers with assets exceeding USD 100 trillion are individually implementing UNEP FI's Principles for Responsible Banking and Principles for Sustainable Insurance. Financial institutions work with UNEP FI on a voluntary basis to apply the sustainability frameworks within their industries using practical guidance and tools to position their businesses for the transition to a sustainable and inclusive economy.

Founded in 1992, UNEP FI was the first initiative to engage the finance sector on sustainability. Today, the Initiative cultivates leadership and advances sustainable market practice while supporting the implementation of global programmes at a regional level across Africa & the Middle East, Asia Pacific, Europe, Latin America & the Caribbean and North America.

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