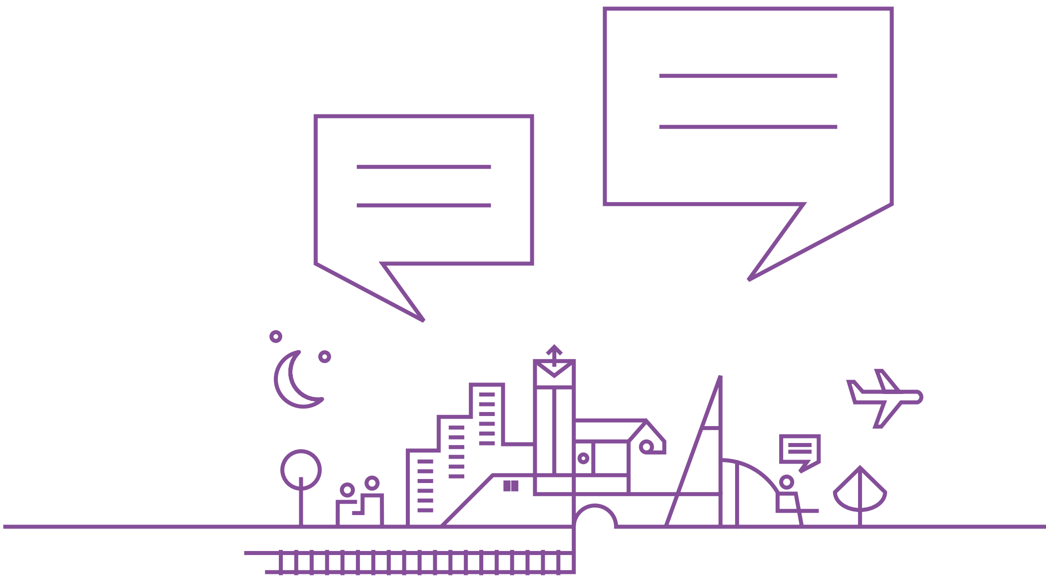
IEMA Transforming the world to sustainability

Institute and Faculty of Actuaries

A User Guide to Climate-Related Financial Disclosures

February 2024



Foreword

In 2020, we published the first edition of this guidance, which was designed to draw insight from both finance and sustainability oriented practitioners in recognition of the multidisciplinary challenges associated with climate-related financial disclosures. Moving forward to the current day, we have seen significant progress in both the uptake and content of disclosures and find ourselves again at a pivotal moment, offering the promise of integration of climate and related sustainability risks (and opportunities) into regular financial reporting. We now have, for example, scenarios such as those produced by the Network for Greening the Financial System (NGFS) to support longer-term assessment of business strategy resilience and transition frameworks, which can directly relate to nearer-term business planning. In this updated version, we accordingly attempt (again) to draw on significant practical experience to highlight relevant current issues for users of disclosures.

Paul Pritchard, FIEMA CEnv

The Taskforce on Climate-Related Financial Disclosures (TCFD) recommendations and resulting disclosures are proving to be hugely influential in changing the disclosure landscape. Take up in disclosures is increasing and more jurisdictions across the world are mandating their adoption, but disclosures need to be used to be of value.

It is encouraging to see how these disclosures continue to evolve to provide a richer understanding of the impacts of climate change and the risks and opportunities posed to different organisations. Users of these reports need to understand how they can make the best use of these disclosures, and respond to the evolution in reporting with a critical mindset. We hope this guide supports users of disclosures to feel confident in understanding and in applying the insights obtained, to support not only increased disclosures, but also their use in assessing how firms are adapting to our changing world, grappling with new opportunities, and managing material risks.

Wendy Walford, FIA

Foreword

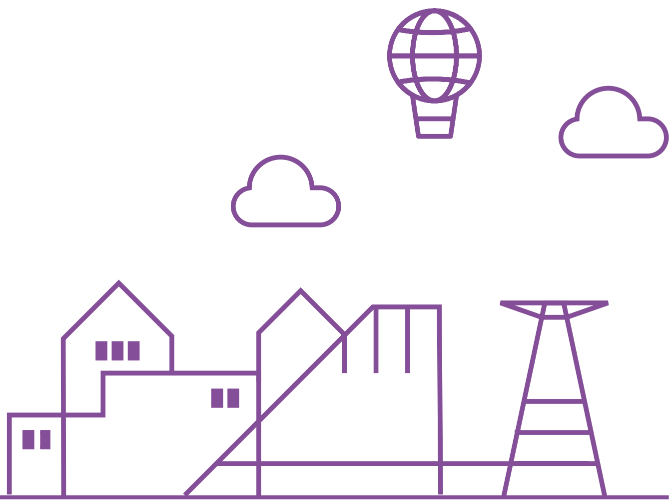
Disclosures, especially concerning climate-related information, will play a pivotal role in fostering net zero innovation and creating a more sustainable value chain for companies and society as a whole. Initiating the reporting of climate-related financial disclosures can have cascading effects on the environmental practices of suppliers within the value chain, particularly in the search for Scope 3 data.

Whilst the reality today may be that not all suppliers will be in a position to deliver all of the information required or requested, just the fact that companies begin to request the information can influence suppliers and contribute to positive change. Encouraging others to assess and disclose their own environmental impacts, even if they might not be ready to provide comprehensive data immediately, raises awareness about the significance of measuring and reducing greenhouse gas emissions within operations.

Collectively, as more and more companies begin to request environmental data, suppliers and society as a whole are incentivised to innovate and improve processes as these conversations propagate through business relationships. This can lead to the adoption of more sustainable practices, development of cleaner technologies, and a shift towards more sustainable alternatives.

The expectations for more environmentally responsible business are already in place. Disclosing climate-related financial information creates market pressure to adapt. The persistent request for environmental information plants the seeds for change and acts as a catalyst for a broader shift towards sustainability. There is more than one definition of what is good and more than one definition of what is good business.

David Luck CEnv, MIEMA, MSc Chair of IEMA Sustainable Finance Steering Group



Executive Summary

In 2020, the Institute of Environmental Management and Assessment (IEMA) and the Institute and Faculty of Actuaries (IFoA) published the first guidance for users of climate-related financial disclosures. Four years is a long time in climate reporting and we felt that this valuable guidance was due an update.

In the interim, Taskforce on Climate-Related Financial Disclosures (TCFD) recommendations and disclosures have been embraced by growing numbers of organisations, and the International Financial Reporting Standards Foundation (IFRS) has published new standards on sustainability and climate disclosures, which are set to be adopted by financial regulators around the world.

The Intergovernmental Panel on Climate Change (IPCC) Sixth Assessment Report (AR6) makes it clear that the background context of climate change is one of increasing risk for companies.

This update provides new insights into reading, understanding, and using climate-related disclosures. It remains challenging to provide consistent and decision-useful disclosures that impact on a financial assessment of a company, and the potential gaps in reporting and useful follow-up questions in this guidance have been recommended by practitioners in the field. This paper also covers the new and additional requirements of the IFRS Standards, and includes tips for understanding and using the reports that will begin to be published under these frameworks.

Sections 1, 2 and 3 provide the background explainers on the current landscape of climate-related financial disclosures and opening guidance on understanding them. Section 4 provides in-depth guidance on reading the disclosures and on following up with the reporting organisations. Readers more familiar with the background context may wish to go straight to Section 4.

Finance and risk professionals must continue to work together with sustainability specialists to better understand how financial services price and manage risks. As with the previous edition, this guidance reflects a collaboration between specialists that is essential if we are to collectively address the systemic risks that the world continues to face.

This updated guidance was compiled and reviewed by a working group of IEMA members and IFoA members.

Many thanks to:

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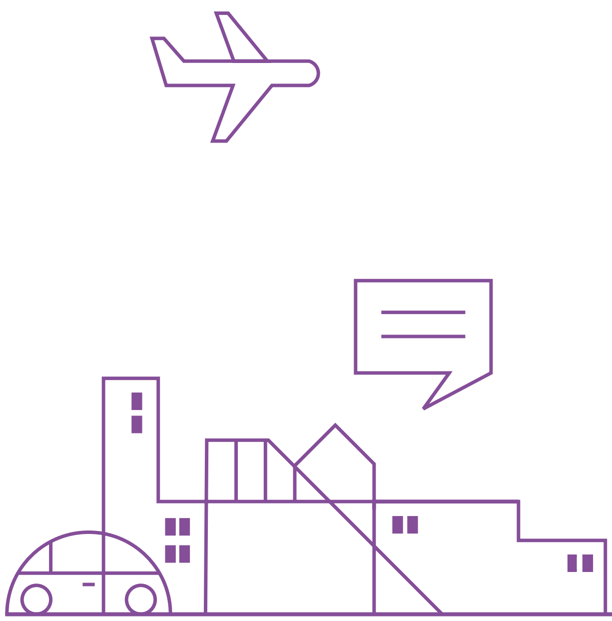


Introduction

Climate-related financial disclosures set out an organisation's assessment of the financial implications of the climate-related risks and opportunities they face.

In June 2017, the Task Force on Climate-related Financial Disclosures (TCFD), established by the Financial Stability Board (FSB), published a set of recommendations aimed at helping organisations of all types to assess and communicate key climate-related information. Progress on companies' climate-related financial disclosures has been monitored annually by the FSB since 2019.

In June 2023, the International Sustainability Standards Board (ISSB), established by the International Financial Reporting Standards (IFRS) Foundation, published two sustainability disclosure standards. IFRS S1, General Requirements for Disclosure of Sustainability-related Financial Information, sets out overall disclosure requirements on sustainability-related risks and opportunities. IFRS S2, Climate-related Disclosures, incorporates and builds on TCFD recommendations and is designed to enable a company to disclose climate-related information that could reasonably be expected to affect its prospects.

In July 2023, the IFRS Foundation and FSB formally announced that the IFRS Foundation would take over the monitoring of the progress on TCFD disclosures, effectively rolling the TCFD initiative into the ISSB. IFRS S1 and IFRS S2 are intended to create the first global baseline for comparable, and therefore useful, sustainability disclosures. Many jurisdictions around the world are expected to go on to endorse and incorporate these disclosures into requirements by way of domestic legislation or regulation.

When the first iteration of this guidance was published in 2020, there were over 1,000 organisations supporting the TCFD recommendations.[1] Just two years later there were more than 4,000 supporters of the recommendations, from over 100 countries and with a combined market capitalisation of $27 trillion.[2]

These include national governments (Belgium, Canada, Chile, France, Japan, Sweden, and the United Kingdom), government ministries, central banks, regulators, stock exchanges, credit rating agencies, asset managers, asset owners, banks, and companies in sectors such as chemicals, energy, insurance, metals and mining, oil and gas, and transportation.

1 2020-TCFD_Status-Report.pdf (bbhub.io)

2 Support TCFD | Task Force on Climate-Related Financial Disclosures (fsb-tcfd.org)

Since the TCFD recommendations were published in 2017, extreme weather events around the world have highlighted the need for action on climate and for climate-related risk and opportunity assessments to be more deeply embedded into financial markets' operations, and legislation and regulation is expected to reflect this.

Many stakeholders are increasingly using these disclosures to gain insights into the organisations' responses to climate risk. If you are one of those stake-holders, this guide aims to help you understand what to look for in the disclosures so that you can draw valid and robust conclusions. It also identifies potential questions to help you in probing the disclosures or following up with the organisation that has produced them.

This guide focuses on disclosures that follow the TCFD recommendations and that will be applying the IFRS Standards. However, it is by no means a complete guide to the recommendations – it is primarily aimed at the users of disclosures. There is a wealth of information available, mostly aimed at organisations that are preparing disclosures, describing them in detail. Section 5 lists some of the information sources that users of the disclosures might find most useful.

1.1 Who is this guide for?

This guide is written to support all users of climate-related financial disclosures. We hope it will help a wide range of stakeholders, from risk management specialists and sustainability practitioners, from investors, lenders, and insurers, through to interested members of the public. Users of the disclosures have varying objectives: some stakeholders are interested in the financial impacts of climate change on the disclosing organisation, others in the impacts of the disclosing organisation on the environment, and others in broader sustainability issues, such as whether an organisation has committed to net zero or other climate goals. The processes and challenges described in this guide are intended to be relevant to all of them.

As there is such a broad spread of potential users of disclosures, with different interests, areas of expertise, financial sophistication, and knowledge of climate-related issues, we have not attempted to provide a guide to all the aspects of disclosures; for instance, we cover neither financial analysis nor climate science. Instead, we focus on aspects that are particularly relevant to climate-related financial disclosures and may be new to significant numbers of users.

1.2 How to use this guide

Climate-related financial disclosures represent a new area of financial reporting.

Section 2 is an overview that puts the disclosures in context. In it we give some background on the FSB Taskforce and other organisations that have published TCFD-aligned reporting requirements. This is followed by a table that sets out and compares the reporting requirements. Reading this section should help you demystify what has been referred to as the 'alphabet soup' of disclosures and understand both the purpose behind the disclosures and the type of information you can expect to find in them. If you are already aware of the context and accustomed to analysing other types of disclosures, you may want to skip both this section and the first part of Section 3.

Section 3 outlines a framework that will help you to get the most out of a set of disclosures. The framework is intended as a possible starting point for someone looking to get a better understanding of how an organisation's climate-related financial disclosures can be used. It is likely to be useful to all readers, describing what the disclosures can and cannot tell you about an organisation's business model and the actions it is taking in relation to climate-related risks.

Section 4 gives some practical guidance on interpreting disclosures through a set of considerations that should help you to direct your analysis appropriately. It then suggests some questions on additional requirements that you may want to use in follow-up discussions with the disclosing organisation. It is likely to be useful to all readers, but particularly those such as investment analysts, shareholders, journalists, environmental activists, and others who are prepared to engage directly with the disclosing organisation.

Finally, **Section 5** lists some further resources that you might find helpful.

1.3 Who has written this guide?

This guide has been produced by a joint working party set up by the Institute and Faculty of Actuaries (IFoA) and the Institute of Environmental Management & Assessment (IEMA). It draws on the insights of both financial and sustainability risk practitioners.

The IFoA is a royal chartered, not-for-profit, professional body which represents and regulates over 32,000 actuaries worldwide. Actuaries provide commercial, financial, and prudential advice on the management of assets and liabilities, especially where long-term risk and uncertainty are involved. The IFoA strives to act in the public interest by speaking out on issues where actuaries have the expertise to provide analysis and insight on social and public policy issues. www.actuaries.org.uk

IEMA is the professional body for everyone working in environment and sustainability, with over 21,000 members across more than 100 countries. IEMA is committed to supporting, encouraging, and improving the confidence and performance, profile, and recognition of all these professionals. It does this by providing resources and tools, research and knowledge sharing along with high-quality formal training and qualifications to meet the real-world needs of members from their first steps on the career ladder, right to the very top. Together, we can change perceptions and attitudes about the relevance and vital importance of sustainability as a progressive force for good. www.iema.net

Climate-Related Financial Disclosures

When they were first published, the TCFD recommendations represented an important development in relation to climate-related financial disclosures, and they are widely recognised as being the foundations of reporting frameworks. The IFRS Standards have incorporated these recommendations and built on them.

This section provides a brief background on currently applied recommendations, and a summary of the interlinkages between the different frameworks. We do not cover the background to either financial analysis or climate change as there is a wealth of information available elsewhere.

2.1 Background

The purpose and objective of establishing the TCFD was for climate disclosures to be integrated into financial reporting and disclosures. This is to enable understanding of financial risks and impacts of climate change on a business or organisation.

To increase user confidence in the information provided, it will need to be audited, so preparers need to ensure information can be verified and eventually assured.

Climate change is increasingly seen as one of the most significant issues faced by organisations today. This has led to growing demand from financial institutions and others for more information on the business implications and financial impacts of the risks it poses and the opportunities it presents. There are also a number of initiatives that seek to encourage a range of bodies, including corporates, pension schemes and governments, to commit to specific emissions targets, such as reaching net zero carbon emissions by a certain date, usually 2050 or earlier. Climate-related disclosures should shed useful light on the medium-term plans and short-term targets supporting these long-term commitments, thus supporting an understanding of the organisation's overall position and maturity with respect to climate change, including the resilience of the business strategy.

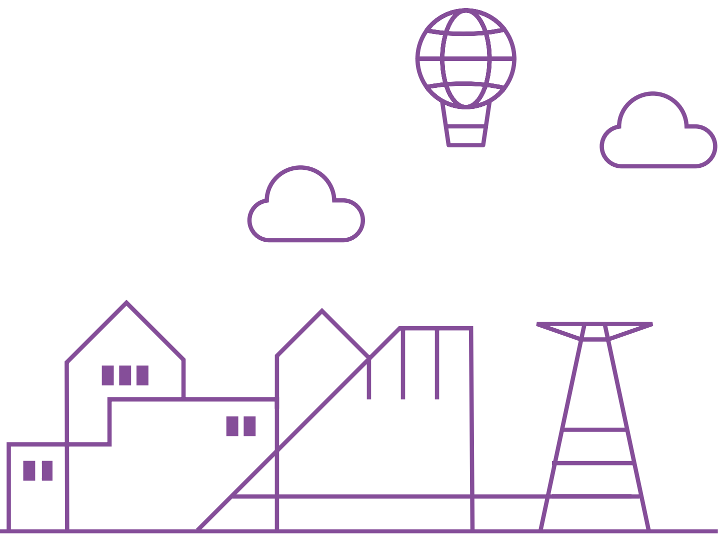
The TCFD recommendations and IFRS Standards aim to improve climate-related disclosures produced by organisations globally, by addressing their consistency, comparability, reliability, clarity, and efficiency. The TCFD and IFRS hope that better disclosures will enhance the assessment, management, and pricing of climate-related risks. Climate-related disclosures can provide useful information for investment, lending, and insuring decisions; they can also be used by other interested parties, such as clients, employees, suppliers, and environmental campaigners.

Importantly, they can help to identify organisations that are addressing the climate change agenda strategically and considering both risks and opportunities. In addition, they can enable organisations to better understand their own climate impacts and benchmark themselves against other organisations and standards.

This guidance is specifically focused on assisting users of reports, setting out a simple framework for users to understand their disclosures. This includes defining the objectives of using reports. This may be through understanding the sustainability impacts and dependencies on the organisation's business model or the impacts and dependencies of the organisation on sustainability topics. Establishing this focus at the start of the process will inform the focus of the review and assessment.

In the UK, TCFD-compliant disclosures have been required in Non-Financial and Sustainability Information Statements by large companies and LLPs since 2022. The TCFD reports that, by 2022, more than 3,800 companies were increasing their TCFD-aligned reporting having been engaged via regulators or voluntarily.

Regulators are currently exploring how they will supervise and enforce against climate-related financial disclosures.



Governance	Strategy
Governance around climate-related risks and opportunities 1. How the board provides oversight (including details of how these are reflected in terms of reference and corporate policies) 2. How the organisation's management assesses and manages them	**Actual and potential impacts of climate-related risks and opportunities on business strategy and financial planning** 1. What risks and opportunities have been identified over the short-, medium- and long-terms, using industry-based guidance and identifying where in the model and value chain these exist? 2. The impact on the organisation's business, strategy, and financial planning, including transition planning and any other information setting out how the company intends to achieve its targets 3. How resilient the strategy is under different climate scenarios
Risk management	**Metrics and targets**
The processes used to identify, access, and manage climate-related risks 1. Identifying and assessing climate-related risks and opportunities, including disclosures on processes and parameters used 2. Managing them 3. Integrating climate risk management into the overall risk management framework, and identifying and incorporating opportunities into the framework	**The metrics and targets used to assess and manage relevant climate-related risks and opportunities** 1. Scopes 1, 2 and 3 emissions 2. Climate-related targets, their consistency with international agreements on climate change and process made in achieving them (including use of carbon credits)

Figure 1: Core elements of climate-related financial disclosures

2.2 An overview of IFRS Standards

IFRS S1 is designed to require entities to disclose information about its sustainability-related risks and opportunities that is useful to users of its financial reports.

IFRS S2 specifically applies to climate-related risks (both physical and transitional) and climate-related opportunities.

Both IFRS S1 and S2 require information on governance, strategy, risk management and performance:

a. the governance processes, controls, and procedures the entity uses to monitor, manage, and oversee sustainability-related risks and opportunities;

b. the entity's strategy for managing sustainability-related risks and opportunities;

c. the processes the entity uses to identify, assess, prioritise, and monitor sustainability-related risks and opportunities; and

d. the entity's performance in relation to sustainability-related risks and opportunities, including progress towards any targets the entity has set or is required to meet by law or regulation.

In line with the original TCFD recommendations, these requirements are applicable to all organisations, whether currently in or out of any regulatory scope.

Companies may continue to base reporting on TCFD recommendations unless or until they are required to meet IFRS S1 or S2 Standards. Companies that report according to IFRS S1 and S2 Standards are automatically TCFD-compliant.[3]

2.3 Decision-useful reporting

Decision-useful disclosures should contain enough detail, and be sufficiently clear, for you to use them when making your decisions. It is an ISSB requirement that an entity must not obscure material information with the immaterial, and must not aggregate material items that are dissimilar to one another. It is the aim that disclosures made using TCFD and IFRS Standards will be sufficiently consistent that they can be compared with one another. The TCFD recommendations and IFRS Standards provide a useful reference point for both content and clarity that can be applied by all organisations, including public bodies, NGOs, asset managers and asset owners (such as pension funds) as well as listed and private companies.

Disclosures that meet IFRS and TCFD Standards will identify the uncertainties facing the organisation as well as presenting the opportunities and competitive advantages that a well-planned response can bring. The expectation is that reporting will have a dual benefit. It will enable report users to make the optimum decisions, and enable organisations to make the best strategic decisions to address the issues they face. TCFD disclosures should accordingly clearly link into routine financial reporting, both in narrative and financial amounts.

Good disclosures will meet a broad range of user needs and should enable you to draw out the decision-useful information while identifying the limitations of the reporting for any conclusions you may draw.

We hope this guide will help you to decide what is decision-useful information for you and how best to find it in disclosures.

3 The IFRS Foundation has published a comparison of the requirements in IFRS S2 and the TCFD recommendations. As demonstrated in the comparison, companies that apply the ISSB Standards will meet the TCFD recommendations and so do not need to apply the TCFD recommendations in addition to the ISSB's Standards. IFRS – ISSB and TCFD | ifrs-s2-comparison-tcfd-july2023.pdf

2.4 What do climate-related disclosures look like?

IFRS S2, Climate-related disclosures, addresses four interlinked areas: governance, strategy, risk management, and metrics and targets, as shown in Figure 1. The information to be disclosed includes both qualitative information (for example, on governance) and quantitative information (for example, the metrics and targets). Disclosures under each of the four sections should be consistent and complementary. For example, the choice of metrics and targets should align with the organisation's strategy, and the governance structures should support the identification and management of climate-related risks.

Some aspects of the recommendations may be unfamiliar to those using disclosures for the first time: the distinction between physical and transition risk, the use of scenario analysis, and greenhouse gas (GHG) scopes. We describe them below.

2.4.1 Physical and transition risk and opportunity

There are two broad classes of risks that climate change poses to organisations: physical and transition risks.

1. Physical risks derive from the effects that most people think of when they consider climate change, and can be subdivided into two further categories: acute and chronic. Acute physical risks are event-driven, including increased severity of extreme weather events, such as cyclones, hurricanes, or floods. Chronic physical risks arise from longer-term shifts in climate patterns (e.g. sustained higher temperatures) that may cause rising sea levels or heatwaves.

2. Transition risks arise from the transition to the low-carbon economy. They include policy and legal risks, risks from changing technology and shifting patterns of demand and consumption, and reputational risks associated with a failure to adequately respond to climate change.

In the past, there has been considerable emphasis on physical risks, which it might be thought are more tangible than transition risks, but may occur over a longer timeframe. However, transition risks may impact organisations in the short term; those who fail to assess them adequately may be leaving themselves exposed to significant business risk.

Opportunities may arise from both the physical effects of climate change and the transition to a low-carbon economy through a reduction in GHG emissions. For example, companies may develop new products to address the problems of adapting to climate change or to provide ways of lowering emissions.

The degree to which these classes of risk and opportunity are relevant to a given organisation depends on the organisation's scale, its business sector and specific activities, and the location of its operations (including its supply chains). It will also depend on the response of governments, regulators, consumers, and competitors. Both physical and transition risk are associated with uncertainties, in both outcomes and the timescales over which they will emerge. The precise level of temperature change at a specific location and the resulting impacts are hard to predict. Extreme weather events are projected to become more common, but exactly where and when they will occur cannot be predicted over any reasonable length of time. The cost of carbon (i.e. CO2 and other GHG emissions) will undoubtedly rise, but to what level and at what cost to business is unclear. New technologies will emerge, but at what rate?

The balance between the impact on organisations of the two types of risk and opportunity will also be different under different climate pathways. Through the Paris Agreement,[4] governments have committed to taking action to keep global average temperature rises relative to a pre-industrial baseline to well below 2°C.

4 The Paris Agreement | UNFCCC

However, even with the currently committed policies, there remains a significant probability that warming will exceed 3°C by the end of the century[5] and physical climate impacts are likely to dominate. Alternatively, should countries be successful in realising the pathway envisaged in the Paris Agreement, rapid decarbonisation and huge technological shifts will be involved, presenting significant transition impacts for many organisations (along with less severe but still significant physical impacts). Long-term forecasting is incredibly difficult, and the range of potential outcomes is huge. Although climate risk will be significant for all organisations, there is uncertainty around whether physical or transition risk will dominate.

Liability and reputation risks have received less attention than physical and transition risks but may also be important. Liability risk is the risk that comes from people or businesses seeking compensation from the organisation for losses they may have suffered from physical or transition risks. Reputation risk concerns the damage to an organisation's reputation from its response (or lack of response) to climate risk. Again, there is uncertainty about the extent and level of these risks.

The TCFD recommendations and IFRS Standards indicate that climate-related disclosures should reflect these risks, opportunities, and uncertainties through the use of scenario analysis.

5 Emissions Gap Report 2023 | UNEP – UN Environment Programme

2.4.2 Scenario analysis

Scenario analysis should be used to help assess the potential implications of climate-related risks and opportunities for the organisation, and to help inform stakeholders about how resilient the organisation is in the light of these risks and opportunities. It is seen as a key tool in enabling a longer-term perspective – a way of dealing with a future there where is a great deal of uncertainty. It is important to recognise that future scenarios are not predictions but rather plausible futures which allow exploration of potential consequences for businesses and their strategies. Scenario analysis can be complex and data intensive; however, qualitative approaches requiring much less effort can also be very useful. Starting with accepted base scenarios (such as those produced by the Network for Greening the Financial System (NGFS))[6] will aid comparability for users of disclosures. The description of scenario-related work in disclosures should clearly link to, and be consistent with, other content relating to the main pillars and should support both the assessment of materiality and the long-term resilience of the business strategy.

It is expected that good disclosures will present a set of scenarios that cover a reasonable variety of future outcomes. In practice, at least two scenarios will be needed: one should be broadly 'Paris-aligned' (i.e. lower temperature) and the other should encompass more limited climate action (i.e. higher temperature). Scenario analysis can be either qualitative or quantitative, and the sophistication of an organisation's approach is likely to increase over time. In a sophisticated quantitative approach, each scenario will be a highly complex structure including detailed mitigation assumptions, effects on relevant industries and developing assumptions about climate.

A 'Paris-aligned' scenario will have transition risks to the fore, and temperature rises of well below 2°C. It may be difficult to judge whether a particular scenario is indeed 'Paris-aligned'; a scenario with 1.5°C temperature rises should fit the bill, as long as all its assumptions are consistent, but one that is described as 'net zero emissions' may or may not. It would depend on when and how the emissions target is achieved, and especially on the extent of the use of negative emission approaches, such as carbon capture technologies and natural carbon sequestration. In addition, the transition risks posed by earlier and later action to achieve the Paris Agreement target will have significantly different impacts, and good disclosures are likely to include both scenarios.[7]

The Intergovernmental Panel on Climate Change (IPCC) Sixth Assessment Report (AR6)[8] has identified clear gaps between mitigation and adaptation planning targets, and the pace at which policies, laws and finance are being implemented to active these targets.

As a result, the IPCC concludes that it is likely that warming will exceed 1.5°C during the 21st century and that it will be harder to limit warming to below 2°C than was envisaged when the Paris Agreement was signed. Risks will escalate with every increment of global warming, and as they do so, they will increasingly interact, creating compound and cascading risks that are more complex and difficult to manage.

The scenarios that organisations choose to use in their disclosures will provide information on the extent to which they have a broad understanding of the risks that climate change presents to them, and the robustness of the actions they are taking to address those risks.

When reading the disclosures, it is important to remember that a scenario is not a prediction or a forecast; it is simply a plausible path of development leading to a particular outcome. Scenarios can enhance critical strategic thinking by exploring alternative outcomes that challenge conventional wisdom about the future.

6 NGFS Scenarios Portal
7 The 2021 biennial exploratory scenario on the financial risks from climate change | Bank of England
8 AR6 Synthesis Report: Climate Change 2023 (ipcc.ch)

It is also important to realise that the scenarios used by different organisations may be significantly different, even if they are given the same name or description. Organisations may use different assumptions about what a 1.5°C scenario looks like, for example, and may also draw different conclusions about the impacts on the environment, political situation, and on the economy.

Recent research by the Institute and Faculty of Actuaries and Exeter University[9] indicates that commonly used climate models in financial services are underestimating risk. They found that:

1. many climate-scenario models in financial services are significantly underestimating climate risk;

2. carbon budgets may be smaller than anticipated and risks may develop more quickly;

3. regulatory scenarios introduce consistency but also the risk of group think, with scenario analysis outcomes being taken too literally and out of context.

In future, we hope that there will be an improvement in the modelling of suitable reference scenarios and a consensus which may, however, differ by industry or sector.

2.4.3 Greenhouse gas scopes

Users of climate disclosures need to understand how the organisation measures and monitors its climate-related risks and opportunities. TCFD recommendations and IFRS Standards require that the metrics used to assess and manage relevant climate-related risks and opportunities are disclosed, to enable comparisons across industries and sectors. While other metrics may be provided, organisations should disclose their greenhouse gas (GHG) emissions calculated in line with the GHG Protocol Corporate Standard methodology.

For reporting purposes, the GHG Protocol[10] splits greenhouse gas emissions into three 'scopes' depending on their sources and the degree of control that the organisation has over them.

Scope 1 – All direct emissions from the activities of an organisation or under their control, including fuel combustion on-site such as gas boilers, fleet vehicles and air-conditioning leaks.

Scope 2 – Indirect generation emissions from electricity, heat or steam purchased and used by the organisation. Emissions are created during the production of the energy that is eventually used by the organisation. This can be disclosed based on the location or the contractual purchase of electricity. For example, in the UK you could report grid average (a location-based method) and the fact that you may have a 100% renewable energy contract to supply your business (a market-based method). Good practice is to report on both sets of numbers.

Scope 3 – All other indirect emissions from activities of the organisation, occurring from sources that they do not own or control. These are usually the greatest share of the carbon footprint, covering emissions associated with business travel, procurement (including the inputs to the organisation's products), waste and water. In addition, Scope 3 emissions include emissions resulting from customer use of the organisation's products and emissions arising from end-of-life product disposal. Some organisations, such as food manufacturers or house builders, will have significant upstream Scope 3 emissions, as production of their purchased goods will be highly emissions intensive. In other sectors, such as automotive and energy, it is downstream Scope 3 emissions from the use of their sold products that represent the overwhelming proportion of their overall footprint. Organisations that are themselves in the financial services sector must report their financed emissions.

9 The-emperor-s-new-climate-scenarios.pdf (actuaries.org.uk)
10 Homepage | GHG Protocol

Comprehensive Scope 3 data collection presents significant challenges and the specific Scope 3 elements included in the disclosures should be clear. For example, information on business travel may be easier to collect but much less important than GHG emissions associated with the supply chain. Because one organisation's Scopes 1 and 2 emissions are another organisation's Scope 3, by definition, Scope 3 emissions are double counting (or more if several organisations each count the same emissions). The purpose of counting Scope 3 emissions is to force the interrogation and understanding of supply chain impacts and to account for different business models (so for instance that a vertically integrated manufacturer should end up with a level reporting playing field to one which outsources more of the processes). There are several organisations that produce guidance to help identify which industries have material Scope 3 emissions.[11]

In a departure from the TCFD recommendations, the IFRS Standards require disclosure of Scope 3 emissions, as well as Scopes 1 and 2. Good disclosures will make clear the extent of Scope 3 disclosures and will indicate the likely significance of sources of emissions that have been omitted from the disclosures.

2.5 Nature-related financial disclosures

This guidance wouldn't be complete without some reference to the recommendations released in 2023 by the Taskforce on Nature-related Financial Disclosures (TNFD). The recommendations mirror TCFD very closely and, given the deep interconnection between nature-related issues and climate change, a full view of associated financial risk will ultimately depend on being able to understand and explain these links in disclosures. There are specific challenges associated with assessment of nature-related issues, including location dependency and understanding the impacts and dependencies on businesses.

A TNFD survey, carried out in August 2023, indicated that around 35% of corporates and financial institutions will be able to start reporting against TNFD by the financial year 2024, not going up to over 80% until FY 2026.[12] This seems to be ambitious. TCFD reporting is not yet at these levels, despite the recommendations having been published in 2017. Further, TCFD reporting is largely based on carbon emissions accounting, which has had a framework in place since 2001.
On the other hand, the integrated approach to the identification and assessment of nature-related issues has only been published in 2023 by TNFD. The 'LEAP' approach has four phases: Locate, Evaluate, Assess, Prepare.[13] It is likely that organisations will need some time to gain sufficient maturity to gather the data and make disclosures that users of TNFD will need. IEMA and IFoA will, of course, be following this process with interest and may publish user guidance in due course.

11 For instance, the Greenhouse Gas Protocol and the Science-Based Targets Initiative.
12 Getting_started_TNFD_v1.pdf
13 Guidance on the identification and assessment of nature-related issues: the LEAP approach – TNFD

Understanding disclosures

As you try to interpret climate-related financial disclosures, you may encounter difficulties in finding the required information. The disclosing organisation may well be approaching the issues from a different standpoint to yours, as well as having different aims. As organisations mature into the TCFD-aligned reporting process, the reports are becoming more comprehensive. However, there is still progress to be made and this is likely to remain the case when the IFRS Standards start to be used in 2024. For fiscal year 2022 reporting, 58% of companies disclosed in line with at least five of the 11 recommended disclosures, which is up from 18% in 2020; however, only 4% disclosed in line with all 11 recommended disclosures.[14]

This section aims to help you get the most useful information from disclosures.

3.1 A simple framework

Climate-related financial disclosures are an evolving area, and therefore have a number of limitations. Using a simple framework can help you avoid being misled or forming a view based on incomplete information. The frameworks are illustrated in Figure 3, and described below.

Stage 1. Define your objectives

1. Before you move on to the actual disclosures, you should think about your own objectives in analysing them. **Take time to set clear objectives that help meet your needs.** Make your objectives as specific as possible (see also Section 3.2).

Once you have decided on your overarching objective, you will be able to work out what information you will need. Some example objectives might be:

a. to determine whether the organisation's governance displays a proactive approach to managing climate risk above and beyond that of similar organisations;

b. to determine the level of temperature rise to which the organisation's strategy is aligned;

c. to understand how a significant rise in global temperatures might affect the value of your investment;

14 2023 TCFD Status Report: Task Force on Climate-related Financial Disclosures – Financial Stability Board (fsb.org). It should be noted that these statistics are derived from Artificial Intelligence analysis of reports.

d. to understand how the transition to a low-carbon economy might affect the organisation's business model, and how resilient it is to a 1.5–2-degree scenario;

e. to understand how the disclosures compare with good practice expectations in the organisation's sector;

f. to develop an understanding of the carbon footprint of the organisation and its supply chain;

g. to identify what corporate social responsibility the organisation demonstrates in seeking to reduce its climate change contribution, and how it supports others in reducing their climate change contributions.

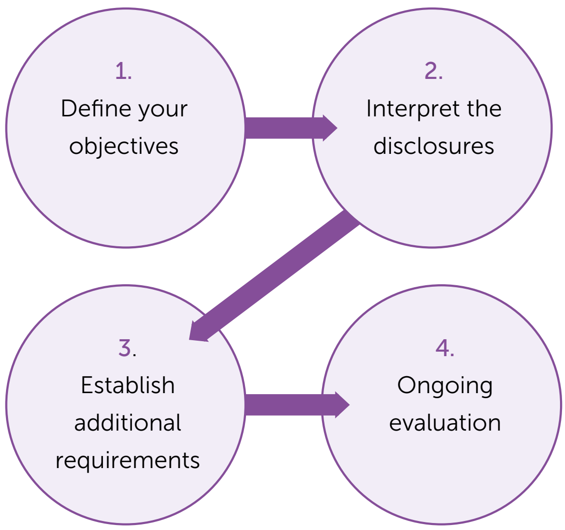


Figure 2: a framework for getting the most out of disclosures

2. **Use your objectives to determine what 'good' and decision-useful disclosures look like** for your purposes. Take into account what disclosures can and can't tell you, as described in Section 3.3. Doing this will help you to identify what you should be looking out for in the disclosures.

Stage 2. Interpret the disclosures

Once you've defined your objectives, you can move on to looking at the disclosures themselves.

3. **Locate the organisation's disclosures.** The disclosures should be included in financial filings or annual reports, but they may still be split across multiple documents.

4. **Compile relevant information from the climate-related disclosures in a focused and methodical way.** Establish what information contained in the disclosures is most relevant for each of your objectives. Be alert to the fact that disclosures from different organisations can vary significantly in structure and content, and so the location of information you are seeking may not be consistent across organisations.

5. **Analyse and draw conclusions from the information you have collected.** Form an overall view of the organisation based on the disclosure, and separately consider the following in relation to each of your objectives:

    a. what do the disclosures say?

    b. how reliable do you believe that information to be?

    c. how well does the information you have been provided compare with similar organisations? In particular, do they cover the same material issues? Do they have the same gaps?

    d. do NGOs or other stakeholders provide additional and credible information supporting or challenging the organisation's disclosure?

6. **Be alert to the general limitations of disclosures as set out in Section 3.2.3.** In particular, you will need to be aware of the underlying assumptions made by the disclosing organisation, even if they are not explicitly stated. Be prepared to challenge the information provided.

7. **Remember that disclosures are just one part of the wider suite of information available** about the organisation. To gain a fuller picture, you could consider cross-referencing conclusions against other information sources such as the Annual Report and Accounts, past climate-related disclosures the organisation has made, and other sustainability disclosures as well as investor presentations, press coverage and marketing material. Information about similar organisations might also be relevant.

    Section 4 contains a selection of questions that may help you interpret disclosures.

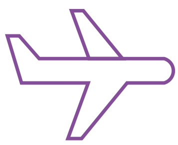
Stage 3. Establish additional requirements

Having analysed the disclosures, you can work out what's missing.

8. **Determine any gaps** where either information to meet your objectives is not available or where the information provided is not sufficiently robust for your purposes.

9. **Decide whether to seek additional information from the disclosing organisation** in order to fill in the gaps you have identified. Section 4 provides examples of questions you may wish to raise.

10. **Identify what information that would be useful to you is being withheld** on the grounds of commercial sensitivity or for other reasons including litigation or reputational risks of underperforming against previously stated targets. Use influence through direct contact, public policy positions or campaigns to encourage disclosure.



Stage 4. Ongoing evaluation

You should be prepared to change your conclusions when necessary. The whole process of climate-related disclosures is still new, so it is expected that the quality of disclosures will improve over time. Organisations' approaches to climate risk are also likely to change, partly as a result of the disclosure process.

11. Monitor sources of additional information. Activity prompted by the TCFD recommendations is expanding rapidly, and there may also be sudden, significant shifts in policy responses. You should monitor key areas that have informed your conclusions. Alongside organisation-specific disclosures, further resources that you might find helpful to monitor are provided in Section 5.

12. Reassess past conclusions if your objectives change or new information becomes available, for example, responses to questions raised with the organisation.

13. Be aware that climate-related disclosures reflect the situation at a specific point in time, and the climate risks the organisation is facing and its approach to address these may be rapidly evolving. For example, views on disclosure may evolve in response to better understanding of climate risk or expectations of good corporate practice. Ongoing evaluation will ensure that your conclusions remain robust.

3.2 Understanding your objectives

There is a wide range of possible users of disclosures, each with different interests and seeking different information. For example, if you are within a disclosing organisation you may be interested in information that will support your business decisions, or in comparing your organisation with competitors. You might be an external stakeholder interested in the financial viability of the organisation, how well it fits culturally with your aims, whether it is complying with regulations, or taking advantage of climate-related opportunities, or you may be interested in the organisation's effect on the environment. You may be well-informed about climate change and the related risks but know little about financial analysis; conversely, you might be a financial expert with only rudimentary environmental knowledge.

It's important to think carefully about your objectives and the limits of your expertise so that you can work out whether the disclosures you are looking at are providing information that is useful to you, or whether the surface message is potentially misleading.

When thinking about your objectives, you need to be clear about two things: what type of climate-related impacts you are concerned about, and your time horizon.

3.2.1 Climate-related impact types

The first major issue is to clarify what type of climate-related impacts interest you. There are different taxonomies, and not all are consistent with each other. Good disclosures should be clear about the meaning they attach to such terms as 'climate risk', as different organisations may attach different meanings to the same term.

Climate change poses risks to the organisation, and the organisation's activities may pose risks to the environment. Although the latter is not the focus of the TCFD recommendations or of the IFRS Standards, it will be the main interest of some users and disclosures will provide useful information about it. Good disclosures will be very clear about the differences (and connections) between these types of risk.

The European Financial Reporting Advisory Group (EFRAG) has taken the approach of requiring reporting on 'double materiality',[15] in which the impact an organisation has on the environment is also disclosed. Users of climate-related financial disclosures should consider whether their interests extend to double materiality – i.e. they require information on the organisation's impacts on environmental characteristics as well as vice versa – in determining whether such disclosures meet their objective. The Transition Plan Taskforce Disclosure Framework builds on TCFD and IFRS frameworks and lines up reporting of current status and on future planning within the financial reporting system.

Another distinction that is made is between physical and transition risks, as described in Section 2.4.1. Sometimes liability risk and reputation risk are also distinguished from physical and transition risks. These are all risks posed by climate change to the organisation.

Sometimes organisations do not explicitly identify climate as a separate risk category but include it within existing categories such as operational risk.

Finally, some organisations consider only the negative impacts of climate change – they focus on the risks rather than on opportunities. Good disclosures will cover both risks and opportunities and will identify potential positive side-effects of managing the risks.

3.2.2 Time horizon

Depending on your objectives, your time horizon may be as short as a few years or may stretch far into the future. You will need to analyse the disclosures in the light of your time horizon. Disclosures providing only short-term information on expected impacts will be of limited use if you are concerned with the situation over the next 30 or more years. As the IFoA report on climate scenarios points out, warming of greater than 1°C by 2050 and 2°C by 2080 is now modelled as entirely possible, and this is within life expectancy for many people currently in workplace schemes. The European Insurance and Occupational Pensions Authority (EIOPA) has specified 80 years as long range for the Own Risk and Solvency Assessment (ORSA).[16]

However, if an organisation is to achieve long-term goals, it will need to have short-term objectives that move it in the right direction and it should be held to account for them. Conversely, although some risks may not be expected to crystallise for many years, the impact on the economic value of the organisation could be felt more immediately. If the time horizon underlying the disclosures differs significantly from yours, you may not be able to make robust decisions without further investigation.

While existing business planning processes tend to operate on relatively short timescales (in climate terms) it is clear that a longer perspective is required (often to 2050) where there is a great deal of uncertainty over outcomes and financial consequences. The use of scenario analysis is a tool that specifically aims to address elements of short-termism.

15 Double Materiality Guidelines (efrag.org)
16 The-emperor-s-new-climate-scenarios.pdf (actuaries.org.uk)

3.2.3 What the disclosures can and can't do

The disclosures may give insight into issues such as:

- how seriously the organisation is taking climate-related risk and opportunities
- whether the organisation has an overall strategic objective linked to decarbonisation, such as net zero
- the material risks the organisation faces
- opportunities opening up for the organisation
- the organisation's business model and culture, and how they are changing
- the organisation's progress in reducing emissions
- the impacts of the organisation on the environment
- potential climate-related liabilities that may arise
- what actions the organisation is taking to manage the risks
- how quickly the organisation's business model is changing.

However, not all disclosures will be equally helpful, especially as the quality of disclosures continues to evolve over time. And as with all financial disclosures, lack of consistency may make direct comparisons between organisations difficult.

You should also be alert to greenwashing: organisations sometimes convey a false impression that they or their products are environmentally sound by being selective in the information that they disclose. They may accentuate the positives, while remaining silent on their weaknesses. In general, the disclosures can only tell you directly about the areas that they cover; it is often the omissions that are significant. You should therefore try to work out what is covered and what is not, and ask yourself whether the absence of information is most likely to represent immaturity in disclosure or risk management, or a conscious hiding of material facts.

Some of the recommended approaches to preparing disclosures require access to scarce data and skills, and the use of complex and potentially poorly understood techniques – this is especially true of both scenario analysis and the quantification of Scope 3 GHG emissions. This means that, in some cases, the information in disclosures may be difficult to interpret without full access to the assumptions and methodologies that have been used and may be overly sensitive to key assumptions.

It's also important to realise that climate disclosures are just one component in the full suite of information that may be available on a given organisation, rather than standing in isolation. The other information might include annual reports and accounts, regulatory filings, press coverage, marketing materials, and so on. Especially in the early years of the climate disclosure process, some disclosures may cover only a subset of the information that you might be looking for. Finally, any disclosures relate to a particular point in time and may be, to some extent, outdated even by the time they are published. Market conditions can change rapidly and unexpectedly due to changing customer or stakeholder sentiment; risks can also materialise suddenly and unexpectedly.

We expect transition planning to be employed more widely over the next few years. Eventually, transition planning will reach a stage of maturity in which companies aren't just reporting on plans, but also on progress against previously stated plans. At this point it will become easier to evaluate point-in-time disclosures within the wider context of a company's risk exposure.

In summary, you should be clear on how the information that is available relates to your own objectives. It's always useful to cross-reference disclosures with other information and take a holistic view rather than relying on any one source. And you should also be prepared to challenge and request additional information from the organisation if necessary.

Reading the disclosures and following up with the disclosing organisation

This section contains a selection of considerations and questions to help you interpret disclosures. In some cases, additional guidance is provided in italics. An important part of your analysis is to assess how useful the disclosures will be in meeting your objectives, as your objectives may not align with those of the disclosing organisation. These pointers should help you work out whether the disclosures are decision-useful in the context of your objectives.

4.1 Governance

Gaining a good understanding of the governance of climate change risks and opportunities is clearly critical; the governance arrangements in place will in large part determine the success of strategy, risk and opportunities assessments, application of metrics and attainment of targets.

4.1.1 How seriously is the organisation taking climate change?

Organisations are responding to the increased focus on climate-related issues at different levels of urgency. When interpreting the disclosures, the following questions aim to help you form an overall view of the organisation, and how reliable you believe that information to be.

Consider To what extent is the organisation's board discussing and taking responsibility for the organisation's climate actions?

Is there evidence that governance of environment issues is top-down, or is it more likely to be relying on a bottom-up approach? Bottom-up approaches are less likely to succeed because it can be difficult to 'sell concepts upwards' in a large organisation. Strong direction from the board bakes organisational climate strategies into strategic planning, whereas a bottom-up approach tends to rely more on the actions of exceptionally motivated individuals. Which areas of the business are engaged in this process? Is it properly embedded into the finance function, which prepares the reports? Is it visibly embedded into the procurement function?

Consider Is there evidence that climate risk is being managed across functions within the organisation and integrated into existing risk management processes? Are the disclosures incorporated into routine financial reporting processes?

It is important that climate risks are treated as a business issue, rather than a specialist concern to be covered only within sustainability or corporate responsibility reporting. Detailed information on sustainability impacts may require further dedicated and separate disclosure. Some organisations treat climate-related financial reporting as primarily a compliance exercise, while other see climaterelated reporting as an opportunity to display how they are thinking strategically about protecting and enhancing value in a rapidly changing world.

Consider Overall, do the disclosures give the impression that the organisation is taking climate change seriously? Is it being given sufficient attention at board and executive management level?

Ask (asset owners) Does your reporting to members, beneficiaries or savers include climate-related issues?

4.1.2 Is the organisation taking defined steps to improve climate-related skills and competencies?

Consider Is there evidence of building the skills and capabilities with respect to climate change issues, to ensure relevant climate-related information can readily be used in everyday business activities?

This should consider the needs of the wider (non-specialist) workforce as well as those resources that might be dedicated to climate/sustainability risk. IEMA's paper on green skills: Greening your organisation: A blueprint for a green workforce transformation provides insights to help an organisation design a strategic green workforce transformation.[17]

Ask What climate change expertise is there on your Board, Audit Committee and Finance function (or accessible to it through advisory panels or other arrangements)?

Ask Does your remuneration policy include any metrics related to climate change?

How specific and measurable are they?

17 Greening your organisation for a green workforce transformation (iema.net)

4.1.3 Consistency of reported values

Consider Is there alignment with the stated values of the organisation and its public policy positions and practice?

Are the areas of climate risk, and the approaches to them, that are disclosed under TCFD or IFRS Standards consistent with the organisation's stated high level corporate aims? For example, the organisation may align itself with sectoral decarbonisation initiatives which infer public policy developments, such as support for development of specific abatement technologies. Does the organisation take part in climate lobbying, or belong to industry bodies that do so?

ISO IWA:42 2022 Net Zero Guidelines state that an organisation's plans for a transition to net zero should include advocating and supporting climate policy and legislation, and take action to ensure it is not involved directly or indirectly in lobbying against climate ambition.[18]

Ask Have you reviewed your membership of trade associations to ensure you are not funding organisations whose position is less progressive on climate issues than your own?

Ask (asset owners and asset managers) What is your voting record on climate-related resolutions?

ESG proposals by shareholders are increasing in number and in detail of content. Is your voting strategy clear and easily accessible to clients?

Ask (for asset owners) What oversight do you exercise over your asset managers' approach to climate risk management?

4.2 Strategy

The purpose of climate-related financial disclosures is ultimately to demonstrate to the user that the organisation has a robust strategy for managing climate-related risks and opportunities.

4.2.1 Managing climate-related risks and opportunities

Consider Do the disclosures cover all the areas recommended by the TCFD and/or the IFRS Standards (as appropriate)? Does the report highlight areas of further development and include clear commitments to report on all required areas?

While it is no longer a new area of reporting, it is expected that organisations may take several iterations to develop their climate-related reporting and capabilities. The disclosures should clearly signpost an organisation's future plans, including transition plans, to enable comparability and understanding of the areas that require further development. Disclosures that fail to identify any gaps and weaknesses may be an indication of potential greenwashing.

Ask What plans do you have for developing your disclosures and for the further integration of climate risks into your business model?

Scenario analysis and resilience of business strategy are often challenging themes.

18 IWA 42:2022(en), Net zero guidelines (iso.org) Paragraph 9.1.2 (e)

Consider Is there adequate consideration of forward-looking disclosures, such as capital expenditure and investment?

Where there is a transition plan and/or other plans to mitigate against risks and to make the most of opportunities from climate change, are these funded and supported by the organisation as a whole? Is the organisation investing consistent with the level of ambition described in the organisation's strategy?

Consider Is the application of a materiality lens to the disclosure clearly explained?

There are different materiality lenses that may be applied to climate-related risks and opportunities, and it is important to understand, in particular, how decisions to leave out information on impacts considered immaterial have been made. The TCFD recommendations note that 'Organisations should determine materiality for climate-related issues consistent with how they determine the materiality of other information included in their annual financial filings'.[19] The Task Force cautions organisations against prematurely concluding that climate-related risks and opportunities are not material based on perceptions of the longer-term nature of some climate-related risks.

The 2022 FRC thematic review of TCFD[20] observed that 'materiality was often not well explained' and some companies did not explain how they had applied materiality to their disclosures. Where some elements of TCFD guidance were not included in disclosures, it was unclear to the FRC whether they had been omitted because they had been considered immaterial or for other reasons. The FRC July 2023 thematic review of metrics and targets[21] further noted that 'many companies are struggling to present a clear message to investors about which metrics and targets are materially important for managing climate-related risks and opportunities, and further indicated that companies should avoid placing undue focus on immaterial areas of their business (seen as being green) at the expense of more carbon-intensive business activities. In their 2022 good practice review the ECB gave detailed descriptions of good practice around materiality assessments.[22]

Consider Is the climate resilience of the organisation's strategy discussed?

The risks from climate change will present different challenges to organisations' strategies. Transition risk may require additional investment and development of the business model. Physical risk may require significant adaptation efforts or even make current business models unsupportable. It is important that the organisation can demonstrate that it has understood and considered the strategic consequences of these very different scenarios.

19 FINAL-2017-TCFD-Report.pdf (bbhub.io) Section 2 Location of Disclosures and Materiality

20 FRC thematic review examines quality of climate-related metrics and targets disclosures

21 FRC July 2023 thematic review metrics and targets https://www.frc.org.uk/news-and-events/news/2023/07/frc-thematic-review-examines-quality-of-climate-related-metrics-and-targets-disclosures/

22 ECB November 2022 Good practices for climate-related and environmental risk management Observations from the 2022 thematic review https://www.bankingsupervision.europa.eu/ecb/pub/pdf/ssm.thematicreviewcercompendiumgoodpractices112022~b474fb8ed0.en.pdf

Consider Have the Scope 3 emissions been disaggregated by category and/or constituent gas?

Scope 3 emissions essentially provide a management tool for exploring future business models and product strategies. Aggregation could not only obscure information that is material to understanding risk, it could also hide opportunities presented by the transition. Disaggregation could also provide useful information for understanding the emissions associated with different categories of assets under management.

Consider Do the disclosures indicate a credible and holistic transition approach? Do they assume specific technological solutions such as NETs (negative emission technologies) or CCS (carbon capture and storage)?

Technological solutions are at varying stages of development, and many of them are untested, not yet available, or have not proven to be economically viable. Heavy reliance on technologies which may not come forward may expose a company to greater transition risks.

Consider How does the organisation's approach compare to that of competitors? Does their approach align with any strategic advantage they are claiming?

An organisation's disclosures are likely to put a positive slant on their activities and goals. Comparisons across organisations operating in similar markets can help form a view of how the broader market is likely to respond and insights on the achievability of the organisation's assessment of their advantage.

Ask (investment consultants) How do your investment manager recommendations take account of their climate risk management and voting record on climate-related resolutions?

4.2.2 Time horizons

Consider Do the time horizons considered include those relevant for you?

Organisations should include both a view over long-term time horizons in order to demonstrate understanding of the issue and also a shorter-term assessment to provide specific actions that will enable them to achieve their long-term objectives.

Ask What is your organisation's strategy around decarbonisation? Have you set a long-term objective around net zero, with accompanying short- and medium-term goals?[23]

Ask What do you believe are the most important climate-related risks and opportunities to your organisation over the time horizon I'm interested in?

4.2.3 Transition planning

Consider Has the organisation set out a clear timeline for transition planning and implementation?

A long-term strategic objective should be accompanied by realistic, credible, and costed medium-term targets and short-term actions. These may include items such as incorporating carbon considerations in investment decisions, including decarbonisation targets in executive remuneration and ensuring that lobbying activity supports the objectives of the Paris Agreement.

23 For instance, using Science-Based Targets Ambitious corporate climate action - Science Based Targets

Consider Do the disclosures show the connection between the organisation's approach to climate change and its overall strategy? How well integrated is that approach?

Do the overall strategic ambitions for the organisation explicitly acknowledge the relevance of preparing for the impacts of climate change?

Ask Do you believe your organisation has any strategic advantages related to low-carbon economy opportunities and carbon risk management? Please elaborate.

4.2.4 Alignment with the wider sector

Consider Is the organisation engaged with external parties? Is it proactively working to support wider initiatives and to influence others? If so, what types of initiatives does it support?

Very few organisations will be able to address their long-term climate risks by themselves. Many will need to collaborate within the sector, within geographies or across their extended value chain. Leadership or participation in such approaches can be a useful indicator of preparedness and commitment.

Ask What engagement do you have with policymakers, regulators, professional bodies, and wider collaborations on climate-related issues?

Ask What are the leading climate initiatives in your sector? How are you engaged with them and what has your experience been? When you state you are a leader in your sector, how do you evidence that? What is your contribution to the sector?

(For investment managers) Initiatives include Climate Action 100+, the Institutional Investors Group on Climate Change (IIGCC) and the UN's Principles for Responsible Investment (PRI). Links to these and additional resources are listed in Section 5.

4.3 Risk management

Risk modelling and scenario analysis should help you understand potential business implications of climate-related risks and opportunities. It is important to understand not only how an organisation identifies, assesses, prioritises, and monitors climate-related risks and opportunities, but also how these processes are then embedded into the overall risk management process.

Scenario analysis is highly complex and what constitutes good practice is still emerging in this area. It is accordingly important to understand the key assumptions used and limitations of the exercise. The following questions should help you assess the risk modelling and scenario analysis undertaken, and further resources are provided in Section 5.

4.3.1 Risk identification

Consider How much of the business model is covered in the disclosure? Does it cover all the organisation's activities, including subsidiaries and joint ventures? Does anything significant appear to be missing from the scope of the report?

There may be very different levels of risk, opportunity and resilience across an organisation's different lines of business and geographies. Policy and regulations can differ widely between countries, for example. Also, it is possible the most material risk exposures may be faced in a small (and otherwise insignificant) part of the overall organisation. For financial institutions such as banks and insurers, are the risks to both assets and liabilities considered? For asset owners, are aspects of the disclosures limited to certain asset classes?

Consider Is the organisation's full value chain addressed in the disclosure?

While impacts associated directly with the business form a starting point, it is likely that many organisations will find significant risks and opportunities both in their supply chain and in the products and services used by their customers.

Consider Is there a clear description of the process involved in assessing the risks?

There is likely to be considerable subjective judgement involved, particularly in the transition risk assessment.

Consider Do the disclosures explicitly consider climate-related issues beyond greenhouse gas emissions?

Note that the TCFD and IFRS requirements go further than simply GHG emissions. TNFD disclosures may be relevant to your objectives.

Consider Is scenario analysis being used to consider sustainability risks beyond climate change?

Ask Explain how you have treated liability risk in your disclosures.

For example, organisations might be exposed to litigation risk through a failure to disclose climate risks properly, or failure to mitigate impacts and ensure resilience.

Ask How do you address climate risks in your supply chain?

Supply chain risk assessment will require an understanding beyond GHG emissions including location-dependent aspects (such as political and water risk).

Is adaptation planning being implemented by your supply chain?

4.3.2 Risk assessment and prioritisation: use of scenarios

Consider Are the respective roles of qualitative and quantitative scenario analysis explained in the disclosure?

Organisations may start with qualitative explorations of issues of concern such as that described in the CDP guide to scenario analysis.[24] Potentially significant concerns may then be translated into estimates of financial impact on the organisation.

Quantitative methods are less certain. Firms are at various stages of developing tools to quantify the risks of climate change, and as the understanding of risk drivers improves, there is scope for those tools to become more quantitative, robust and data-driven.[25] IFoA recommendations[26] include using a simple approach of using a reverse stress-testing approach based on a ruin scenario of 100% loss of GDP at a certain temperature limit, and supporting this with debate around assumptions, including developing thinking on ways in which climate change may realistically evolve based on current emissions and warnings.

24 CDP Technical note on scenario analysis: Conducting and disclosing scenario analysis. Version 4.0 January 2023

25 Letter from Victoria Saporta 'Thematic feedback from the 2022/2023 round of written auditor reporting' (bankofengland.co.uk)

26 The-emperor-s-new-climate-scenarios.pdf (actuaries.org.uk)

Use of Network of Central Banks and Supervisors for Greening the Financial System (NGFS) scenarios[27] has become commonplace, with International Energy Agency Sustainable Development Scenario[28] also often used, although the specific details of the scenarios used and the actual scenario process followed are often not very clear. Further, the NGFS scenarios are not sufficiently granular to identify local physical risk and there is still limited use of insurance expertise and data (both internal and external) in the TCFD process to support local physical risk assessment. It is worth asking for clarity on these points.

Consider Are any scenarios or stress tests that are reported consistent with those you consider most relevant? Are the assumptions behind a scenario consistent? How do they relate to the wider market or scientific consensus? Do the disclosures adequately reference and use the latest internationally accepted science in relation to the chosen scenarios?

An approach that is increasingly adopted is to use a 3-degree (or more) warming scenario for assessing physical risk and a net zero pathway scenario for transition risk.

Ask How have you chosen the scenarios that you use? Has IPR29 (the Inevitable Policy Response, which seeks to forecast potential future policy changes) influenced your decision-making?[29]

Ask To what extent, and for how long, have you been using climate-scenario analysis in your investment process?

Consider Some organisations choose a scenario that most closely aligns to their own preferred future and then apply small variations to arrive at a set of scenarios. These are, however, unlikely to enable proper exploration of plausible alternative futures, acting rather to confirm/validate their existing approach.

Ask Is your climate-scenario analysis robust?

Much scenario analysis on warming currently assumes overly benign outcomes (for instance, pointing simply to slower GDP growth). Recent research shows that this deeply underestimates the more likely severe impact of risks.[30]

27 NGFS Scenarios Portal

28 Introducing the Sustainable Development Scenario - Event - IEA

29 PRI | Inevitable Policy Response (unpri.org)

30 For a comprehensive understanding of this issue, this report is recommended reading: the-emperor-s-new-climate-scenarios.pdf (actuaries.org.uk)

Consider Has stress testing or sensitivity analysis been undertaken on reported disclosures?

This might involve, for example, exploring the impact of a range of carbon prices and the timing of anticipated policy measures. In the financial services sector, does the stress testing align with that currently required as part of the regulatory framework?

A good tool for the financial sector is Climate Value at Risk (Climate VaR) that is a measure to estimate potential financial losses that a company or portfolio of assets could incur as a result of climate change. The UNEP Finance Initiative has published a paper on scenario-based methods for climate risk assessment.[31]

Does the organisation disclose the assumptions underpinning the models and their limitations? Do they demonstrate an understanding of how the assumptions and limitations impact on their conclusions? How does this align with your expectations and how does this inform your assessment of the organisation's resilience?

Ask What is your view on the current level of carbon pricing? Have you analysed how a higher carbon price might affect your organisation either directly or through your supply chain?

Ask What is your view on Scope 1 and 2 carbon intensity and future potential ability to pass on carbon costs?

Consider Is there adequate consideration of both downside risk and opportunity in the disclosure? Are both risks and opportunities addressed in a balanced way?

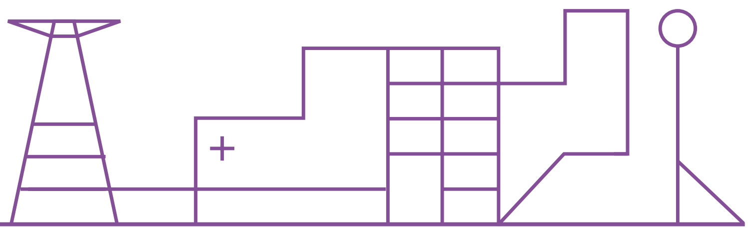
Alignment of business models with climate concerns will necessarily involve an examination of the future opportunities for the organisation's products and services. This might involve modification to existing products or new market opportunities associated with the transition.

4.3.3 Risk management integration and monitoring

Ask (Investment managers and consultants) What metrics do you use to monitor and manage climate risks at a portfolio level? What targets have you set to improve these metrics over time?

Ask How well-integrated is climate risk management into your business risk management? What time horizons do you consider? (Investment managers and consultants) In what ways do you consider climate risks and opportunities in your investment process, and to what extent does this affect investment decisions?

The most severe climate-related financial risks will crystallise in the banking and insurance sectors if too little action is taken and too late to have an impact on global warming.[32]



31 TCFD-Changing-Course-Oct-19.pdf (unepfi.org)
32 SS319 (bankofengland.co.uk)

Ask (for defined benefit pension funds) Have you discussed climate risks with the Scheme Actuary?

As well as the IFoA paper referenced throughout this guidance, Carbon Tracker has published a report on the risks specific to pension funds.[33]

Ask (for asset owners and asset managers) How do you engage with investee companies on climate change?

Ask (for investment managers and consultants) When valuing your (or your clients') portfolios, how do you address stranded asset risk?

Ask (for investment managers and consultants) How are you addressing climate risks to index-tracking investment funds?

Ask (for asset owners and asset managers) How do you take account of climate considerations when selecting and monitoring third-party providers?

Ask As audit capabilities grow, it is likely that IFRS S1 and S2 Standards will be supervised and enforced against. How prepared is the reporting organisation for this development?

4.3.4 Decision-usefulness

Comparing the risks and opportunities identified in the disclosures across similar markets will help form a view of how the broader market is likely to respond, and help you form insights on the realism of the organisation's assessment of their competitive advantage and the robustness of their claims. Some considerations and questions you may want to use to aid you in this goal are:

Consider Do the disclosures clearly distinguish between the financial risks to the organisation from the effects of climate change, and the risks to the environment from the organisation's operations?

When terms such as 'climate risk' are used in the disclosure, is it clear which type of risk they refer to?

Consider How does the range of climate-related sustainability risks considered compared to those you consider relevant?

Consider Do the disclosures explicitly address risks and opportunities that are specific to the sector that the organisation operates in, and distinguish them from risks and opportunities that arise from factors that are unique to the organisation?

How does this organisation's strategic risks section of the annual report compare to peers in the same sector? Is this organisation identifying opportunities that have been overlooked by others?

33 https://carbontracker.org/the-climate-risk-delusion-under-pricing-climate-risk-contributes-to-climate-change-itself-and-puts-global-pension-wealth-in-peril/

4.4 Metrics and targets

4.4.1 The big picture

Although greenhouse gas emissions are an important component of impact assessment, it is important to recognise that there are other climate-related sustainability issues such as water availability, human rights, biodiversity, and the benefits provided to humans by the natural environment and healthy ecosystems (ecosystem services).[34] These may be important for manufacturing processes or supply chains. The Just Transition is now a commonly used term to encompass the need to consider the impacts of the low-carbon transition on all workers and communities, such as the loss of jobs in fossil fuel dependent industries or the implications for less developed economies associated with these issues.[35] Meanwhile biodiversity and nature-related risks are relevant to actuaries in all fields of work. Human dependencies on biodiversity and nature will present different levels of risk to different economic sectors, meanwhile human activities are causing biodiversity loss. The implications for actuaries are explored in the IFoA report *Biodiversity & Nature-Related Risks for Actuaries: An Introduction.*[36]

Consider Where ESG data and rankings are employed, is it clear what they are intending to measure, for example, sustainability impacts or financial risk to the company, and is it clear what the related assumptions and limitations are?

Different ESG raters use different methodologies and this divergence muddies the waters, making straight comparisons between reports difficult.[37]

Consider If the organisation has a simple 'scorecard' or 'dashboard' to measure its overall performance, are climate impacts and the organisation's responses to them included?

Consider Are the climate-related financial disclosures consistent with other disclosures made by the organisation? Are the disclosures generally consistent with the rest of the report (if any) in which they are contained?

For example, is the information consistent with the information in the organisation's annual report and accounts? Or with any recent press coverage or investor presentations?

Consider Is there evidence of greenwashing in this, or other, disclosures?

This might include cherry-picking achievements as a simple list rather than a demonstration of progress against key objectives. The same achievements may have been reported several times over extended time periods.

Consider How does the information provided in the disclosures compare to other publicly available information on the organisation or its peers? How do the current disclosures compare with those from previous years?

34 A global assessment report on biodiversity and ecosystem services from the Intergovernmental Science-Policy Platform on Biodiversity and Ecosystem Services (IPBES) indicates that goals for conserving and sustainably using nature cannot be met by current trajectories.

35 See, for example: Financing a Just Transition - Grantham Research Institute on climate change and the environment (lse.ac.uk) and Climate change and the just transition - A guide for investor action - Grantham Research Institute on climate change and the environment (lse.ac.uk)

36 biodiversity-and-nature-related-risks-for-actuaries-an-introduction.pdf

37 Studies into this have been published, amongst others by the Review of Finance (Vol 26, Issue 6, Nov 22) https://academic.oup.com/rof/article/26/6/1315/6590670

Well-established standards for greenhouse gas and sustainability measurement and reporting include the ISO 14000 and ISO 14064-5 series of standards,[38] the Greenhouse Gas Protocol[39] and the Sustainability Accounting Standards Board (SASB) suite.[40]

4.4.2 The detail

Consider Is reported climate and emissions data independently audited or assured?

Consider Is there evidence of an internal control framework considering data issues (including quality and coverage) and potential improvement plans? Is externally provided data subject to review?

Consider What degree of internal or external assurance (e.g. limited or reasonable assurance[41]) is there around the completeness and accuracy of the disclosures?

Despite the TCFD/IFRS-aligned disclosures often being part of the annual financial reports, they are not subject to an assurance opinion from the auditor. However, the disclosures count at 'other information' and the auditor must consider whether there is a material inconsistency between the other information and the financial statements, and between the other information and the auditor's knowledge obtained in the audit. The limitation of this is therefore the lengths the auditor goes to, to seek additional knowledge during the audit process. In the EU, legislation will be in place in 2026 to provide for reasonable assurance standards.[42]

Climate disclosures may also include independent assurance opinions. It is important to understand the scope of the opinion and the limitations associated with it. They may be restricted to only specific metrics within the report and may be limited assurance rather than a reasonable assurance process. As with the financial reports, these differences in auditing opinion will set the scope of the auditor's review.

Ask What are your quality assurance and compliance approaches for climate-related financial information?

The same level of assurance should be provided for climate-related financial information as for finance, management, and governance disclosures.

Consider How complete are the disclosures of GHG emissions?

Scope 1, 2 and 3 emissions are described in Section 2.4.3. Indirect Scope 3 emissions are likely to be harder to quantify but may nonetheless be very important (in some business contexts dwarfing the direct and operational emissions of Scopes 1 and 2). It is important that disclosures are clear about what emissions are included and any obvious restrictions, for example, emissions such as fugitive methane being estimated with limited accuracy. It should be noted that IFRS Standards require disclosures of Scope 3 emissions, making gaps in this data increasingly difficult to justify. Nonetheless, Scope 3 data should be interrogated, as data collections and methodologies used can vary.

38 ISO - ISO 14000 family — Environmental management

39 Homepage | GHG Protocol

40 SASB Standards overview - SASB

41 For more information on this, see: https://www.icaew.com/technical/audit-and-assurance/assurance/process/scoping/assurance-decision/limited-assurance-vs-reasonable-assurance

42 https://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:32022L2464

Consider Is consideration given to the unavoidable uncertainty around data quality and models? There is limited data available in many areas, and what there is may be of poor quality. Even within the context of established Scope 1 and 2 GHG reporting there are quality issues, with accounting methods and reporting methods currently being reviewed by GHG Protocol. Scope 3 is more complex still, with obvious difficulties such as access to externally held data combined with differing views on applicable boundaries.[43] Notwithstanding these issues, climate-related financial disclosures frameworks are increasingly requiring disclosure on all aspects of all three scopes.

4.4.3 Progress towards commitments

Consider Are there measurable commitments for which the organisation will be held to account?

What might be the consequences of them not achieving their commitments? Does the organisation have a track record (as detailed in disclosures or other publicly available information) of meeting its prior commitments to climate actions?

Credible climate-related disclosures need not present lengthy details of achievement. However, it would be expected that they reference the organisation's track record either as an indicator that the organisation is transitioning effectively, or possibly as background to help underpin a new urgency.

Ask What role do science-based reduction targets play in your organisation's strategy? How realistic are those targets?

Consider Does the organisation disclose information that makes it possible to assess progress against targets? Is there evidence that progress is being made? Evidence of progress against reduction targets (particularly those that are updated annually or science-based[44]) is an important indicator of progress.

Transition planning is encouraged, and as part of the plan an entity should assess how the transition plan will impact on its financial position. The Transition Plan Taskforce recommends that transition plans should be updated every three years, with material information from implementation stages being fed into annual financial reports.[45]

43 Survey on Need for GHG Protocol Corporate Standards and Guidance Updates | GHG Protocol and MBA Survey Summary Webinar_Slides.pdf (ghgprotocol.org)

44 Ambitious corporate climate action - Science Based Targets The Science-Based Target initiative certifies targets consistent with a 2-degree pathway, reflecting the language of the Paris Agreement.

45 TPT-Implementation-Guidance-1.pdf (transitiontaskforce.net) and TPT-Disclosure-Framework.pdf (transitiontaskforce.net)

Further resources

There is a wealth of resources available on climate-related financial disclosures. Many of the reports, guides, and other resources seek to support the preparers of disclosures. Our goal in this guide is to help broader users find further information in their area of interest.

Guidance on legislation

Companies in the UK can access guidance on legislation, scope and content of reports which was prepared by the Department for Business, Energy & Industrial Strategy and published in February 2022. Mandatory climate-related financial disclosures by publicly quoted companies, large private companies and LLPs (publishing.service.gov.uk)

TCFD resources

The TCFD Knowledge Hub provides a wealth of information on the recommendations themselves, along with case studies and other guidance papers. Some of the items are directed at a specific industry, while others are more general. Resources cover a wide range of issues such as capex, investment mandates, carbon pricing and scenarios. They are typically flagged with one or more of the four TCFD thematic areas: G (Governance), S (Strategy), R (Risk management), M (Metrics and targets). The site can be searched by resource type (e.g. legislation/regulation), by country and by industry. TCFD Knowledge Hub – TCFD Knowledge Hub (tcfdhub.org)

The FSB publishes annual TCFD Status Reports: Publications | Task Force on Climate-Related Financial Disclosures (fsb-tcfd.org)

IFRS sector-specific resources

Sector-specific guidance is being published by the IFRS (amongst other standard-setters) and is an area under development: IFRS-S2-IBG – Issued IFRS Standards

CSRD(ESRS) disclosures

At EU Level – EFRAG's Appendix IV – TCFD recommendations and ESRS reconciliation table – is a good source for integrating TCFD into CSRD(ESRS) disclosures.

Bank of England resources - Climate Financial Risk Forum | Bank of England

Network of Central Banks and Supervisor for Greening the Financial System - NGFS

Financial Reporting Council resources

Recent publications that are particularly relevant include the Financial Reporting Council (FRC) guidance on Net Zero Disclosures – Net Zero Disclosures (frc.org.uk), which in turn provides links to FRC reviews of disclosure reports and example banks.

The FRC also provides suggested conversation starters for audit committees and assurance on climate risk – Net Zero Disclosures (frc.org.uk). The FRC Statement of Intent on Environmental, Social and Governance challenges outlines research conducted by the FRC and the FRC's planned activities in this area – ESG and Climate (frc.org.uk)

Accountancy professionals

The Institute of Chartered Accountants in England and Wales (ICAEW) hosts a hub with content on the role of the accountancy profession in climate matters – Climate hub | ICAEW. The Climate Financial Risk Forum, hosted by the Bank of England has four technical working groups on disclosure, scenario analysis, risk management and innovation, each of which have published a range of outputs – Climate Financial Risk Forum | Bank of England

Insurance professionals

The International Association of Insurance Supervisors produces a range of papers on climate change risks to the insurance sector – Climate risk – International Association of Insurance Supervisors (iaisweb.org)

Internal carbon pricing

Internal carbon pricing can be used to link climate-related risks and opportunities to financing decisions. The World Business Council for Sustainable Development (WBCSD) discusses the challenges and highlights the importance of this tool in a 2023 paper –Navigating internal carbon pricing to drive decision-making (wbcsd.org)

Additional guidance for investment managers

United Nations Principles for Responsible Investment

Climate Action 100+ – Climate Action 100+

UN-convened Net-Zero Asset Owner Alliance

Net Zero Asset Managers initiative

Paris-Aligned Investment Owners initiative

Risk management resources

Useful publications include Global Insurance Market Report: 210930-GIMAR-special-topic-edition-climate-change.pdf (iaisweb.org) and Practical Guide to Climate Change for Life Actuaries.pdf

From the Actuarial Association of Europe, a paper on sustainable products in insurance and sustainability issues and reputational risks for insurance companies – https://actuary.eu/publications/positions-discussion-papers/

Also of interest may be this series of papers on climate issues published on the International Actuarial Association website

CDP has published a Technical Note on Scenario Analysis

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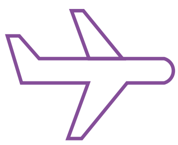

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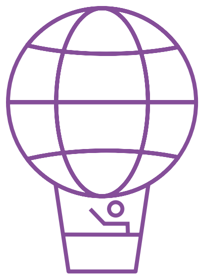
We are the Institute of Environmental Management and Assessment (IEMA). We are the global professional body for over 20,000 individuals and 300 organisations working, studying or interested in the environment and sustainability. We are the professional organisation at the centre of the sustainability agenda, connecting business and individuals across industries, sectors and borders. We also help and support public and private sector organisations, governments and regulators to do the right thing when it comes to environment and sustainability-related initiatives, challenges and opportunities. We work to influence public policy on environment and sustainability matters. We do this by drawing on the insights and experience of our members to ensure that what happens in practice influences the development of government policy, legislation, regulations and standards.



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The Institute and Faculty of Actuaries (IFoA) is a royal chartered, not-for-profit, professional body.

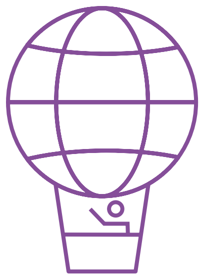
Research undertaken by the IFoA is not commercial. As a learned society, research helps us to fulfil our royal charter requirements to further actuarial science and serve the public interest.

Actuaries provide commercial, financial and prudential advice on the management of a business's assets and liabilities, especially where long term management and planning are critical to the success of any business venture. They also advise individuals, and advise on social and public interest issues.

Members of the IFoA have a statutory role in the supervision of pension funds and life insurance companies. They also have a statutory role to provide actuarial opinions for managing agents at Lloyd's of London.

Members are governed by the Institute and Faculty of Actuaries. A rigorous examination system is supported by a programme of continuing professional development and a professional code of conduct supports high standards reflecting the significant role of actuaries in society.

The IFoA is available to provide independent expert comment to the media on a range of actuarial-related issues, including COVID-19 and its long term consequences, mortality, pensions, life and general insurance, health and care, finance and investment, climate change and sustainability, systems thinking, uncertainty and judgement, and risk management.



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