



Good Practice Guide to TCFD

October 2022



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Introduction to TCFD

1 What is TCFD

The Task Force on Climate-related Financial Disclosures (TCFD) was established by the Financial Stability Board (FSB), which is an international body that monitors and makes recommendations about the global financial system. The FSB is hosted by the Bank for International Settlements (BIS) in Switzerland.

The [full report](#) was published in June 2017 and the FSB has published annual reports in 2018, 2019 and 2020 on TCFD aligned disclosures, and these are available on the FSB website. Further guidance was updated in October 2021¹ including supplementary and sector specific guidance for financial and non-financial groups. The final report set out the framework for climate related disclosures, and these are based upon the four pillars of, Governance, Strategy, Risk Management and Metrics and Targets. These pillars are supported by 11 recommended disclosures.

Governance	Strategy	Risk Management	Metrics and Targets
Disclose the organisation's governance around climate related risks and opportunities.	Disclose the actual and potential impacts of climate-related risks and opportunities on the organisation's businesses, strategy, and financial planning where such information is material.	Disclose how the organisation identifies, assesses, and manages climate-related risks.	Disclose the metrics and targets used to assess and manage relevant climate-related risks and opportunities where such information is material.
Recommended Disclosures			
Describe the board's oversight of climate-related risks and opportunities.	Describe the climate-related risks and opportunities the organisation has identified over the short, medium, and long term.	Describe the organisation's processes for identifying and assessing climate-related risks.	Disclose the metrics used by the organisation to assess climate-related risks and opportunities in line with its strategy and risk management process
Describe management's role in assessing and managing climate-related risks and opportunities	Describe the impact of climate-related risks and opportunities on the organisation's businesses, strategy, and financial planning.	Describe the organisation's processes for managing climate-related risks.	Disclose Scope 1, Scope 2, and, if appropriate, Scope 3 greenhouse gas (GHG) emissions, and the related risks
	Describe the resilience of the organisation's strategy, taking into consideration different climate-related scenarios, including a 2°C or lower scenario	Describe how processes for identifying, assessing, and managing climate-related risks are integrated into the organisation's overall risk management.	Describe the targets used by the organisation to manage climate-related risks and opportunities and performance against targets

Source: pwc Taskforce on Climate-related Financial Disclosures: "where do I start?" _ May 2021

¹ [2021-TCFD-Implementing_Guidance.pdf \(bbhub.io\)](#)

1.1 The overall framework

TCFD sits within a wider UK framework which includes SDR (Sustainability Disclosures Requirements).



There are specific requirements depending on which part of the financial services industry your firm operates in within the UK. This guide will discuss these in more detail. TCFD is not just limited to FCA regulated entities.

1.2 Financial Sector

The Task Force developed supplemental guidance for the financial sector, which it organized into four major industries largely based on activities performed. The four industries are:

- a) banks (lending),
- b) insurance companies (underwriting),
- c) asset managers (asset management including wealth managers), and
- d) asset owners, which include public and private sector pension plans, endowments, and foundations (e.g. charities and not-for-profits with investments).

Although TCFD does not apply currently to financial adviser firms we hope that such firms will find this guide useful in helping customers determine which products or strategies are suitable and what actions firms are taking.

The Task Force believes that disclosures by the financial sector could foster an early assessment of climate-related risks and opportunities, improve pricing of climate-related risks, and lead to more informed capital allocation decisions.

1.3 Non-Financial Groups

The Task Force also developed supplemental guidance for non-financial industries that account for the largest proportion of GHG emissions, energy usage, and water usage. These industries were organised into four groups (i.e., non-financial groups):

- Energy
- Materials and buildings
- Transportation
- Agriculture, food forest products.

These are based on similarities in climate-related risks.

While this supplemental guidance focuses on a subset of non-financial industries, organisations in other industries with similar business activities may wish to review and consider the issues and topics contained in the supplemental guidance.

1.4 Scope of Coverage

To promote more informed investing, lending, and insurance underwriting decisions, the Task Force recommends all organisations with public debt or equity implement its recommendations. Because climate-related issues are relevant for other types of organisations as well, the Task Force encourages all organisations to implement these recommendations. In particular, the Task Force believes that asset managers and asset owners, including public- and private-sector pension plans, endowments, and foundations, should implement its recommendations so that their clients and beneficiaries may better understand the performance of their assets, consider the risks of their investments, and make more informed investment choices.

The UK has implemented TCFD [Mandatory climate-related financial disclosures by publicly quoted companies, large private companies and LLPs \(publishing.service.gov.uk\)](https://www.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/101311/mandatory-climate-related-financial-disclosures-by-publicly-quoted-companies-large-private-companies-and-llps.pdf)

1.5 Reporting

For purposes of adopting the Task Force's recommendations, asset managers and asset owners should use their existing means of financial reporting to their clients and beneficiaries where relevant and where feasible. Likewise, asset managers and asset owners should consider materiality in the context of their respective mandates and investment performance for clients and beneficiaries.

Principles for Effective Disclosure (see Section 4 for detail)

1. Disclosures should represent relevant information
2. Disclosures should be specific and complete
3. Disclosures should be clear, balanced, and understandable
4. Disclosures should be consistent over time
5. Disclosures should be comparable among companies within a sector, industry, or portfolio
6. Disclosures should be reliable, verifiable, and objective
7. Disclosures should be provided on a timely basis

For more information

<https://www.fca.org.uk/firms/climate-change-sustainable-finance/reporting-requirements>

2 Application of TCFD in the UK

The UK Government has announced that it will ensure the UK becomes the first country in the world to make TCFD aligned disclosures mandatory across the whole economy by 2025. The UK TCFD task force interim report has set out a timetable for achieving this goal. TCFD is already mandatory for premium listed issuers, and it is expected to apply to all UK listed companies over time. The reporting requirements will evolve and increase over time.

From December 2020, the Financial Conduct Authority (FCA) in the UK, introduced regulations for relevant FCA regulated companies to disclose, on a comply or explain basis, against the recommendations of the TCFD. In December 2021 the FCA went further and published requirements for asset managers and certain asset owners to make disclosures consistent with the TCFD recommendations. Firms falling into the FCA scope are required to make product level and entity level disclosures. The rules came into force on 1 January 2022 for the largest firms and will take effect on the 1 January 2023 for the smaller firms.

2.1 FCA Objectives²

- ***Better outcomes for clients and consumers.*** Greater transparency about how firms are managing climate-related risks and opportunities in their investment decisions will help clients and consumers take those factors into account when granting investment mandates and selecting products. It will also enable them to hold their providers to account. Better information on these factors should support a more competitive market, advancing our objective to promote effective competition in the interests of consumers. Given the global nature of many in-scope firms' asset management and administration business, our proposals are also likely to benefit clients' and consumers' decision-making internationally.
- ***Deeper consideration of climate-related risks and opportunities by in-scope firms.*** Our proposals will promote a structured approach to considering climate-related risks and opportunities by in-scope firms, improving investment outcomes for clients and consumers. This should also encourage an ecosystem of service providers to develop and deliver analytical tools, data, guidance and thought leadership. Furthermore, better transparency about how firms are addressing climate-related risks and opportunities will help markets price assets more accurately and allocate capital more effectively. This should lead to a smoother transition to a lower- carbon economy with less exposure to abrupt market corrections. This, in turn, should contribute to the overall efficiency and stability of the financial markets, and advance our market integrity objective.
- ***Coordinated information flow along the investment chain.*** The appropriate pricing of risks and efficient allocation of capital depends on all parties along the investment chain providing decision-useful information to one another. Our complementary TCFD-aligned disclosure rules and guidance for listed issuers aim to promote the flow of information from companies in the real

² FCA

economy to asset managers and asset owners, supporting their assessment of the climate-related risks and opportunities associated with their investments (or prospective investments). Our proposals aim to support firms sharing onward information on how they are taking climate-related risks and opportunities into account in the management of investments on behalf of clients and consumers. Clients may also require climate-related information to help fulfil their own regulatory obligations.

2.2 What businesses are in scope?

- Listed commercial companies
- UK registered large private companies and limited partnerships (more than 500 employees and £500m turnover)
- Banks and building societies
- Insurance companies,
- Asset Managers,
- Life insurers,
- Pensions. Applies to occupational pension schemes and FCA regulated pensions providers.

For the purposes of this Guide our focus is on asset managers and asset owners.

2.2.1 Asset Managers



Within the portfolio manager classification, the following activities are included:

- Investment advice provided by a UK entity to institutional clients within a group where substantive investment decisions are based on that advice
- Asset management activities by private equity firms, etc.
- Discretionary portfolio management for retail as well as institutional clients

2.2.2 Asset Owners

This includes:

Insurance-based DC pension schemes and providers (e.g. personal pensions and stakeholder pensions, including both workplace and non-workplace pensions (unit-linked and with-profits))

Non-insurance DC pension schemes and providers (e.g. funds-based, offered by platform firms or similar)

SIPPs, either insurance or non-insurance-based, where the SIPP operator offers investments to be held within its SIPP wrapper

2.3 When does it apply?

From January 2021

- Premium listed companies

From October 2021

- Occupational pensions schemes (over £5bn),
- Banks, building societies and insurance companies

From January 2022 – first disclosures by 30 June 2023

- Occupational pensions schemes over £1bn
- Largest UK asset managers, life insurers and FCA regulated pensions providers (Asset managers over £50bn, asset owners over £25bn),
- UK registered large private companies and limited partnerships (more than 500 employees and £500m turnover)
- Wider scope of listed companies

From January 2023 – first disclosures by 30 June 2024

- Other UK asset managers, life insurers and FCA regulated pensions providers with assets over £5bn

2024/5

- Others

2.4 Reporting Requirements

- Annual TCFD entity reports, which are to be public reports, regarding the overall assets managed or administered by the firm in relation to 'TCFD in-scope businesses. The report should cover:
 - Governance,
 - Risk management
 - Strategy and scenario analysis
 - Metrics and targets
- Product and portfolio level disclosures, which will require disclosure of core metrics, such as:
 - Scope 1 and 2 GHG emissions
 - Scope 3 GHG emissions
 - Total carbon emissions
 - Carbon footprint
 - Weighted average carbon intensity
- On a best-efforts basis:
 - Climate Value at Risk
 - Climate warming scenario metrics
 - Other metrics

This is an evolving area, and where applicable we will provide updates on how to deliver the reporting and the data concerns.

2.4.1 Climate related scenario analysis

Firms must disclose:

- their approach to climate-related scenario analysis,
- how they apply climate-related scenario analysis in their investment and risk decision-making process,
- quantitative examples to demonstrate their approach to climate-related scenario analysis, where reasonably practicable

2.4.2 Disclosures

In December 2021, FCA introduced rules for asset managers and certain asset owners to make disclosures consistent with the TCFD's recommendations. If your firm belongs to one of these groups, you must make mandatory disclosures on an annual basis at entity and product-level. The rules come into effect for the largest firms on 1 January 2022 and 1 year later for smaller firms.

Entity-level disclosures. Firms would be required to publish, annually, an entity-level TCFD report (TCFD entity report) on how they take climate-related risks and opportunities into account in managing or administering investments on behalf of clients and consumers. These disclosures must be made in a prominent place on the main website for the firm's business and would cover the entity-level approach to all assets managed by the UK firm.

Product or portfolio-level disclosures. Firms would be required to produce, annually, a baseline set of consistent, comparable disclosures in respect of their products and portfolios, including a core set of metrics. Depending on the type of firm and/or product or portfolio, these disclosures would either:

- be published in a TCFD product report in a prominent place on the main website for the firm's business, while also being included, or cross-referenced and hyperlinked, in an appropriate client communication, or
- be made upon request to certain eligible institutional clients.

2.4.3 When and how must product or portfolio disclosures be made?

These must be made in the appropriate form of client communication which follows most closely after the annual reporting deadline starting from 30 June 2023. This would be either:

- the annual long report or half-annual report of a fund, provided that the disclosures are always included in the annual report,
- a periodic client report,
- an annual report to with-profits policyholders,
- an annual pension benefit statement or pension drawdown statement

3 TCFD Recommendations

3.1 Climate-related risks

TCFD recommendations are focused on climate-related risks. TCFD defines climate-related risks as referring to the potential negative impacts of climate change on a company or organisation. It is important to ensure disclosures are crafted around the firm's business model, operational structure and climate strategy.

Risks are categorized as physical and transitional.

Physical risks arise from climate change and may lead to increased business disruption and damages to assets. As an example, increased flooding in low lying areas of the UK would impact the insurance and lending sectors, apart from the human and environmental risks.

Transitional risks arise during the transition to a lower carbon economy, and include:

- Policy and legal e.g., changes to regulatory landscape
- Technology e.g., a technology that is heavily relied on becomes obsolete
- Market response e.g., change in market sentiment
- Reputation e.g., greenwashing

3.2 Disclosures (see also section 1)

3.2.1 Governance

Disclose the organisation's governance around climate-related risks and opportunities

Recommended Disclosures

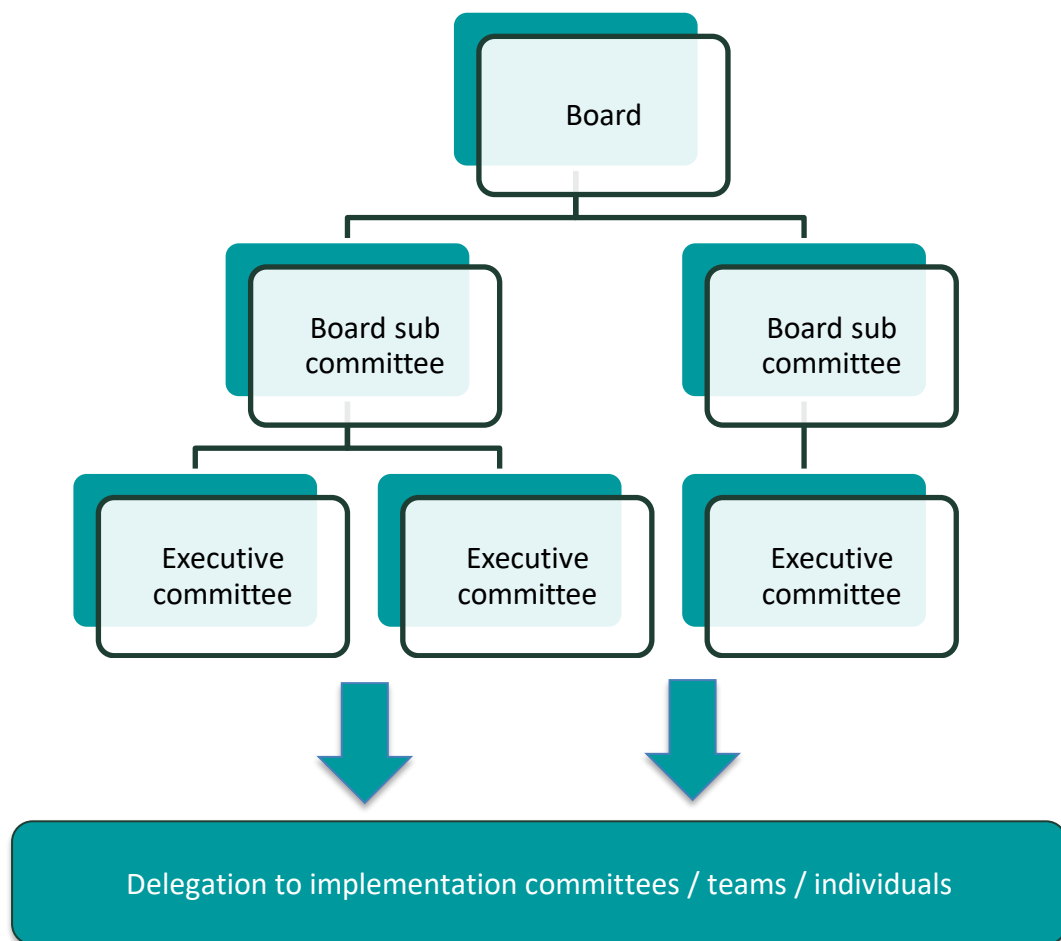
- a) Describe the board's oversight of climate-related risks and opportunities.
- b) Describe management's role in assessing and managing climate-related risks and opportunities.

Example:

The board sets the strategic direction and risk appetite of the group. It is the Board of Directors who hold ultimate accountability for decision making across Group wide strategies including financial, regulatory, including climate matters.

A governance structure schematic will usually be helpful to show the reporting lines and the remit of the underlying committees with the key personnel.

An example of a simple structure would be:



It is also important to reflect how this works within the different functions across the firm. This is an example for a more complex firm, your schematic may be considerably simpler.



*The Own Risk and Solvency Assessment and the Internal Capital Adequacy and Risk Assessment process

Source: Quilter TCFD Report 2021

This can be adapted for firms who are smaller.

Additional information should be included – such as:

- Whether a specific committee has been established with oversight for this or whether it is included within other committee's terms of reference
- The key responsible for climate-related risks within the business – some firms may have a Chief Sustainability Officer, for others the responsibility lies with the Chief Operating Officer
- Who has day to day responsibility for managing climate-related issues
- Information on the firm's climate risk appetite
- Detailed analysis of the risk process
- Establishment of forums and committees to manage TCFD and climate-related risks

3.2.2 Strategy

Disclose the actual and potential impacts of climate-related risks and opportunities on the organisation's businesses, strategy, and financial planning where such information is material.

It is worth noting that the risks will obviously inform the strategy that the firm follows and therefore the two sections are interlinked.

Recommended Disclosures

- a) Describe the climate-related risks and opportunities the organisation has identified over the short, medium, and long term.
- b) Describe the impact of climate-related risks and opportunities on the organisation's businesses, strategy, and financial planning.
- c) Describe the resilience of the organisation's strategy, taking into consideration different climate-related scenarios, including a 2°C or lower scenario.

Example:

Whilst we agree that changes required to achieve a low carbon economy may present risks, we also believe that there are opportunities for us and our customers during this transition. We are committed to ensuring our business model is structured to ensure we contribute to a low carbon-based economy as well as ensuring our customers have access to solutions which meet their requirements. We are committed to demonstrating our own climate related credentials to facilitate a chain of activity which contributes to a lower carbon economy.

From an investment perspective you may want to include statements such as:

- Explaining your approach to stewardship
- Engagement versus divestment
- Thematic approach
- Voting policy – does this include climate-related factors

ESG integration – specifically climate-related issues

- How you integrate ESG factors
- Focus specifically on climate-related metrics etc.



Our strategy to achieving a low carbon business is:

For example:

- Headline themes / activities of the strategy, including how it relates to the overall strategy of the firm.
- Include achievements to date in a timeline.
- The impact this has had on your corporate strategy and what additional resource requirements were identified and whether any changes were made to the governance structure
- Outline how the strategy relates to the firm's stakeholders

The climate related risks and opportunities for the firm are:

(This is an example of one climate risk and opportunity)

Risk	Reputational and legal	Policy and regulatory	Extreme weather events and shifts in long-term climate patterns
Risk type	Transitional	Transitional	Physical
Definition	The risk that customers or stakeholders perceive that our response to the climate challenge is inadequate or that we are failing to suitably reduce our impact on the climate. This risk could also arise if we unintentionally convey misleading information about our environmental soundness, or about the environmental soundness of our sustainable investment solutions.	In future, we could need to respond to an increasing level of policy actions or regulatory requirements in response to the climate crisis.	There is a risk of increased severity or frequency of extreme weather events such as storms, as well as chronic changes such as rising mean temperatures and sea levels.
Likelihood	Possible	Likely	Likely
Relative significance	Medium	Low	Medium
Time period⁵			
Potential financial impact	Could result in reduced market share and revenues or the potential for litigation action.	Could increase our expense base.	Could cause disruptions to business operations and / or increased expenses.
Management response	<ul style="list-style-type: none"> - Our Climate Action plan forms a key pillar of our Responsible Wealth Manager strategy. - We are signatories to the UK Stewardship Code and the United Nation's Principles for Responsible Investment. - We measure and monitor our emissions from our direct operations and value chain, and across our portfolios, where possible. - We ensure that all climate-related disclosures, strategy-setting activities, and activities relating to our sustainable investment solutions go through appropriate internal governance and oversight. 	<ul style="list-style-type: none"> - We take our regulatory obligations seriously and are complying with all applicable climate-related regulatory requirements. - We consider emerging climate-related regulatory requirements in the jurisdictions in which we operate. 	<ul style="list-style-type: none"> - We assess and monitor our exposure to physical climate risks in our operational activities, considering the potential impact on buildings, data centres, and colleague productivity. - Analysis of exposure to physical climate-related risks informs our business continuity procedures. - We are strengthening the management of climate-related risks in our third-party management processes.

Source: Quilter TCFD Report 2021

You may wish to include a link to further information on your climate strategy.

3.2.3 Risk Management

Disclose how the organisation identifies, assesses, and manages climate-related risks.

Recommended Disclosures

- Describe the organisation's processes for identifying and assessing climate-related risks.
- Describe the organisation's processes for managing climate-related risks.
- Describe how processes for identifying, assessing, and managing climate-related risks are integrated into the organisation's overall risk management.

These are the areas to consider for your responses:

- Risk policy – where and how is climate change embedded within the firm's risk management framework for the corporate and for investments
- How you manage these risks on an ongoing basis

There are specific requirements for asset managers and owners which will be implemented over the next couple of years:

- Entity level reporting - how the asset manager or owner takes into account climate-related risks and opportunities in managing or administering investments for their clients
- Product level - producing consistent, comparable disclosures for their products and portfolios

3.2.4 Metrics and Targets

Disclose the metrics and targets used to assess and manage relevant climate-related risks and opportunities where such information is material.

It is important that appropriate disclosures are made regarding the data used and it should be identified where data are missing and explanations should be provided where proxies and assumptions are made. There should be transparency regarding the methodology used.

Recommended Disclosures

- a) Disclose the metrics used by the organisation to assess climate-related risks and opportunities in line with its strategy and risk management process.
 - b) Disclose Scope 1, Scope 2, and, if appropriate, Scope 3 greenhouse gas (GHG) emissions, and the related risks.
 - c) Describe the targets used by the organisation to manage climate-related risks and opportunities and performance against targets.
- For both corporate and investment elements include metrics and targets (with timelines where appropriate)
 - If the firm doesn't have an agreed timeline for investments (which is potentially likely) details of the frameworks you are considering / are aligning to would be helpful
 - Explain the Scope 1,2 and 3 metrics and what is encapsulated in each for the firm

Investment metrics

There are numerous factors to consider:

- What do you report? For a discretionary fund manager reporting on a model will be the most sensible solution at this point in time. It must be stressed that for example the balanced model metrics will not be exactly the same as every balanced mandate
- The data are potentially inconsistent therefore you need to be clear about the data source and the coverage of holdings. For example, the data sets are biased towards larger companies and data for non-equity related holdings may be difficult to obtain. You may wish to only disclose metrics where there is a reasonable coverage level as otherwise it might be meaningless information
- The data may have been estimated
- The methodology that has been applied to calculate the metrics must be clear

4 TCFD Seven Fundamental Principles for Effective Disclosure

Principle 1: Disclosures should present relevant information

The organisation should provide information specific to the potential impact of climate-related risks and opportunities on its markets, businesses, corporate or investment strategy, financial statements, and future cash flows.

- Disclosures should be eliminated if they are immaterial or redundant to avoid obscuring relevant information. However, when a particular risk or issue attracts investor and market interest or attention, it may be helpful for the organisation to include a statement that the risk or issue is not significant. This shows that the risk or issue has been considered and has not been overlooked.
- Disclosures should be presented in sufficient detail to enable users to assess the organisation's exposure and approach to addressing climate-related issues, while understanding that the type of information, the way in which it is presented, and the accompanying notes will differ between organisations and will be subject to change over time.
- Climate-related impacts can occur over the short, medium, and long term. Organisations can experience chronic, gradual impacts (such as impacts due to shifting temperature patterns), as well as acute, abrupt disruptive impacts (such as impacts from flooding, drought, or sudden regulatory actions). An organisation should provide information from the perspective of the potential impact of climate-related issues on value creation, considering and addressing the different time frames and types of impacts.
- Organisations should avoid generic or boilerplate disclosures that do not add value to users' understanding of issues. Furthermore, any proposed metrics should adequately describe or serve as a proxy for risk or performance and reflect how an organisation manages the risk and opportunities.

Principle 2: Disclosures should be specific and complete

- An organisation's reporting should provide a thorough overview of its exposure to potential climate-related impacts; the potential nature and size of such impacts; the organisation's governance, strategy, processes for managing climate-related risks, and performance with respect to managing climate-related risks and opportunities.
- To be sufficiently comprehensive, disclosures should contain historical and future oriented information in order to allow users to evaluate their previous expectations relative to actual performance and assess possible future financial implications.
- For quantitative information, the disclosure should include an explanation of the definition and scope applied. For future-oriented data, this includes clarification of the key assumptions used. Forward-looking quantitative disclosure should align with data used by the organisation for investment decision making and risk management.
- Any scenario analyses should be based on data or other information used by the organisation for investment decision making and risk management. Where appropriate, the organisation should also demonstrate the effect on selected risk metrics or exposures to changes in the key underlying methodologies and assumptions, both in qualitative and quantitative terms.

Principle 3: Disclosures should be clear, balanced, and understandable

- Disclosures should be written with the objective of communicating financial information that serves the needs of a range of financial sector users (e.g., investors, lenders, insurers, and others). This requires reporting at a level beyond compliance with minimum requirements. The disclosures should be sufficiently granular to inform sophisticated users, but should also provide concise information for those who are less specialized. Clear communication will allow users to identify key information efficiently.
- Disclosures should show an appropriate balance between qualitative and quantitative information and use text, numbers, and graphical presentations as appropriate.
- Fair and balanced narrative explanations should provide insight into the meaning of quantitative disclosures, including the changes or developments they portray over time. Furthermore, balanced narrative explanations require that risks as well as opportunities be portrayed in a manner that is free from bias.
- Disclosures should provide straightforward explanations of issues. Terms used in the disclosures should be explained or defined for a proper understanding by the users.

Principle 4: Disclosures should be consistent over time

- Disclosures should be consistent over time to enable users to understand the development and/or evolution of the impact of climate-related issues on the organisation's business. Disclosures should be presented using consistent formats, language, and metrics from period to period to allow for inter-period comparisons. Presenting comparative information is preferred; however, in some situations it may be preferable to include a new disclosure even if comparative information cannot be prepared or restated.
- Changes in disclosures and related approaches or formats (e.g., due to shifting climate related issues and evolution of risk practices, governance, measurement methodologies, or accounting practices) can be expected due to the relative immaturity of climate related disclosures. Any such changes should be explained.

Principle 5: Disclosures should be comparable among organisations within a sector, industry, or portfolio

- Disclosures should allow for meaningful comparisons of strategy, business activities, risks, and performance across organisations and within sectors and jurisdictions.
- The level of detail provided in disclosures should enable comparison and benchmarking of risks across sectors and at the portfolio level, where appropriate. The placement of reporting would ideally be consistent across organisations—i.e., in financial filings—in order to facilitate easy access to the relevant information.

Principle 6: Disclosures should be reliable, verifiable, and objective

- Disclosures should provide high-quality reliable information. They should be accurate and neutral—i.e., free from bias.

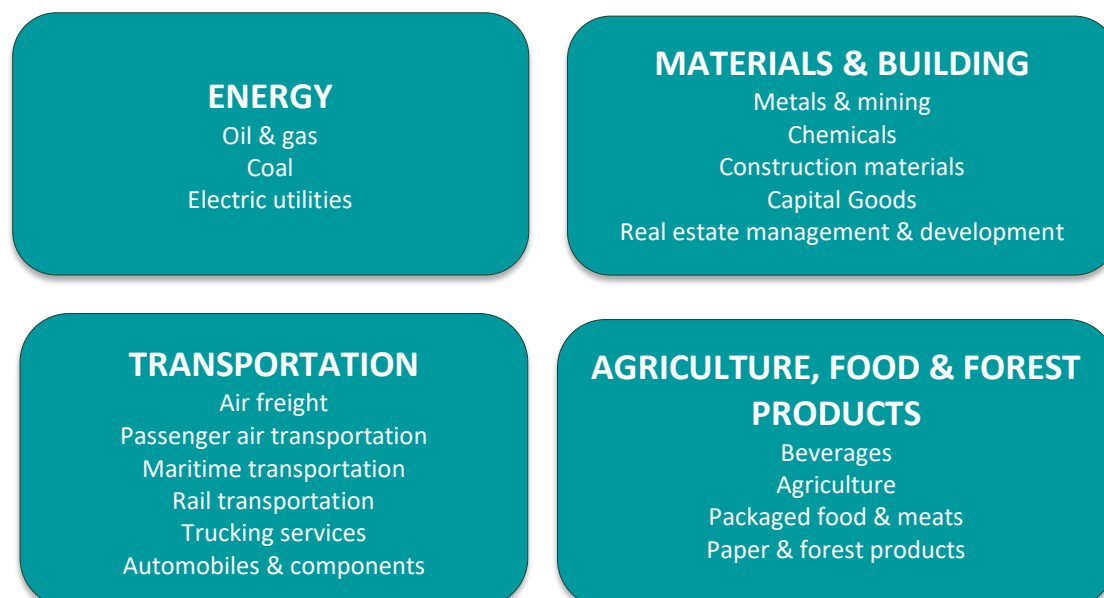
- Future-oriented disclosures will inherently involve the organisation's judgment (which should be adequately explained). To the extent possible, disclosures should be based on objective data and use best-in-class measurement methodologies, which would include common industry practice as it evolves.
- Disclosures should be defined, collected, recorded, and analysed in such a way that the information reported is verifiable to ensure it is high quality. For future-oriented information, this means assumptions used can be traced back to their sources. This does not imply a requirement for independent external assurance; however, disclosures should be subject to internal governance processes that are the same or substantially similar to those used for financial reporting.

Principle 7: Disclosures should be provided on a timely basis

- Information should be delivered to users or updated in a timely manner using appropriate media on, at least, an annual basis within the mainstream financial report.
- Climate-related risks can result in disruptive events. In case of such events with a material financial impact, the organisation should provide a timely update of climate related disclosures as appropriate.

5 Disclosure Considerations for Non-Financial Organisations

Based on its assessment, the Task Force identified the four groups and their associated industries, listed below, as those that would most benefit from supplemental guidance.



Organisations with more significant exposure to climate-related issues should consider disclosing key aspects of their scenario analysis, such as the ones described below.

1. The scenarios used, including the 2°C or lower scenario
2. Critical input parameters, assumptions, and analytical choices for the scenarios used, including such factors as:
 - Assumptions about possible technology responses and timing (e.g., evolution of products/services, the technology used to produce them, and costs to implement)
 - Assumptions made around potential differences in input parameters across regions, countries, asset locations, and/or markets
 - Approximate sensitivities to key assumptions
3. Time frames used for scenarios, including short-, medium-, and long-term milestones (e.g., how organisations consider timing of potential future implications under the scenarios used)
4. Information about the resiliency of the organisation's strategy, including strategic performance implications under the various scenarios considered, potential qualitative or directional implications for the organisation's value chain, capital allocation decisions, research and development focus, and potential material financial implications for the organisation's operating results and/or financial position.

6 Calculating the Metrics

The five metrics have differing implementation dates.

1. Scope 1 and 2 GHG emissions will be mandated from when the rules come into force.
2. Scope 3 GHG emissions. Firms should disclose Scope 3 emissions from no later than 30 June 2024. This is 1 year later than the deadline for the first disclosures.
3. Total carbon emissions. As this is the sum of 1 and 2, firms should disclose Scope 3 emissions from no later than 30 June 2024. This is 1 year later than the deadline for the first disclosures.

$\sum_i \left(\frac{\text{current value of investment}_i}{\text{current portfolio value}} \times \frac{\text{issuer's Scope 1 and Scope 2 GHG emissions}_i}{\text{issuer's \$M revenue}_i} \right)$	$\sum_i \left(\frac{\text{current value of investment}_i}{\text{current value of all investments (€M)}} \times \frac{\text{investee company's Scope 1, 2 and 3 carbon emissions}_i}{\text{investee company's €M revenue}_i} \right)$
$\sum_i \left(\frac{\text{current value of investment}_i}{\text{issuer's market capitalization}_i} \times \frac{\text{issuer's Scope 1 and Scope 2 GHG emissions}_i}{\text{issuer's market capitalization}_i} \right)$	$\sum_i \left(\frac{\text{current value of investment}_i}{\text{investee company's enterprise value}_i} \times \text{investee company's Scope 1, 2 and 3 carbon emissions}_i \right)$
$\frac{\sum_i \left(\frac{\text{current value of investment}_i}{\text{issuer's market capitalization}_i} \times \frac{\text{issuer's Scope 1 and Scope 2 GHG emissions}_i}{\text{current portfolio value (\$M)}} \right)}{\text{current portfolio value (\$M)}}$	$\frac{\sum_i \left(\frac{\text{current value of investment}_i}{\text{investee company's enterprise value}_i} \times \text{investee company's Scope 1, 2 and 3 carbon emissions}_i \right)}{\text{current value of all investments (€M)}}$

Weighted average carbon intensity (WACI)

Portfolio's exposure to carbon-intensive companies, expressed in tons CO₂e / \$M revenue. *Metric recommended by the Task Force.*

Total carbon emissions

The absolute greenhouse gas emissions associated with a portfolio, expressed in tons CO₂e.

Carbon footprint

Total carbon emissions for a portfolio normalized by the market value of the portfolio, expressed in tons CO₂e / \$M invested.

Scope 1, 2 and 3 GHG emissions, disclosed separately

Scope 1 refers to all direct GHG emissions.

The scope 1, 2 and 3 definitions are contained in the low carbon benchmark regulation:

A: TCFD

B: SFDR