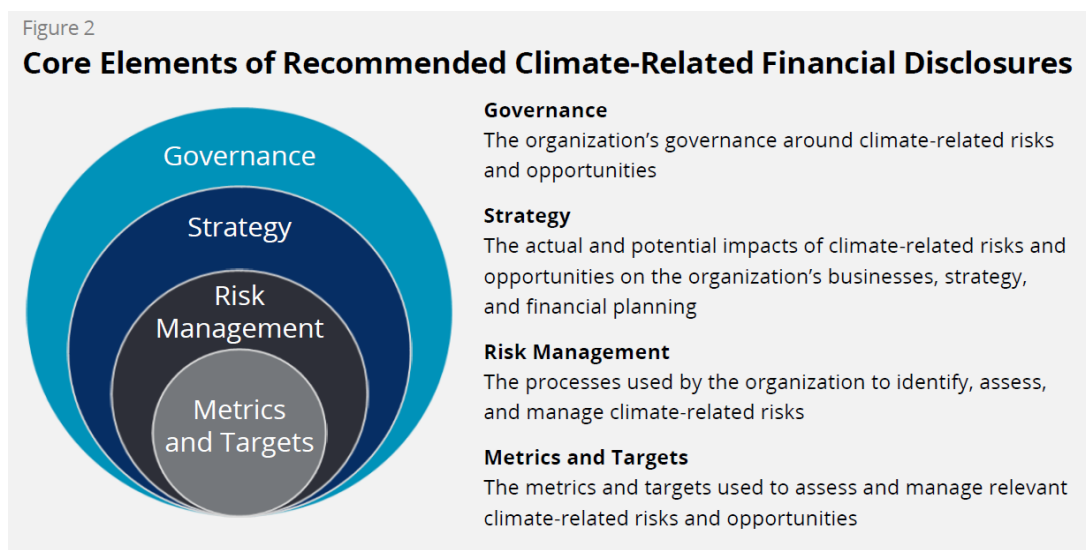


Diving into the TCFD’s Metrics and Targets Recommendation

Climate-related issues, such as extreme weather events and the transition to a lower-carbon economy, can have a significant impact on companies’ bottom lines. For instance, insurance companies may have to insure more damages due to frequent hurricanes, and banks could face credit risks by lending to fossil fuel producers or intensive fossil fuel customers.

It makes sense, therefore, that climate-related risks and opportunities be disclosed in mainstream or public annual financial filings, according to the Task Force on Climate-related Financial Disclosures (TCFD), so that investors and other stakeholders can formulate clear expectations of companies going forward.

To assist companies in this reporting process, the Task Force developed four recommendations for climate-related financial disclosures that are applicable across industries.



Source: TCFD

Of the four, two -- strategy and metrics and targets -- involve the assessment of materiality, which refers to the impact of an omission or misstatement of information in a company’s financial statements to the user. In other words, the omission of such information may influence the actions of the stakeholders.

Instead of prematurely assuming that climate-related risks are not material due to the longer-term nature of such events, the Task Force advises companies to determine the materiality of climate-related issues the way they do with other information included in annual financial filings.

If information under the two recommendations is not considered material, companies in the non-financial sector that have more than US\$1 billion equivalent in annual revenues should still consider disclosing the information in other reports, the Task Force suggests. This is because these companies are more likely to be financially impacted by climate change over time, so investors would be interested in monitoring how their strategies evolve.

Metrics and targets

Disclosure about the metrics and targets used by companies allows investors and other stakeholders to assess the company’s potential risk-adjusted returns, ability to meet financial obligations, general exposure to climate-related issues and progress in managing or adapting to those issues.

Companies should disclose the key metrics they use to measure and manage climate-related risks and opportunities (*see table below*). These metrics could cover risks associated with water, energy, land use and waste management. Additionally, companies should provide their internal carbon prices and climate-related opportunity metrics, which could be revenues from products and services designed for a lower-carbon economy.

Climate-related risks	Potential financial impacts
Enhanced emissions-reporting obligations	Write-offs, asset impairment and early retirement of existing assets due to policy changes
Uncertainty in market signals	Increased product costs due to changing input prices (e.g. energy and water) and output requirements (e.g. waste treatment)
Climate-related opportunities	Potential financial impacts
Development of climate adaptation and insurance risk solutions	Increased revenue through new solutions to adaptation needs (e.g. insurance risk transfer products and services)
Use of more efficient production and distribution processes	Increased production capacity, resulting in increased revenues

Examples of climate-related opportunities and potential financial impacts by the TCFD (summarised). Source: TCFD

As for the reporting of greenhouse gas (GHG) emissions, it should be calculated in line with the GHG Protocol methodology, so it can be compared across companies and jurisdictions. These metrics should be provided for historical periods to allow for trend analysis.

Last but not least, companies should describe their key climate-related targets relating to GHG emissions, water usage and energy usage in line with anticipated regulatory requirements or other goals. When doing so, they should state whether the target is absolute or intensity based, the time frame, base year from which progress is measured and key performance indicators.

Metrics and targets	
Disclose the metrics and targets used to assess and manage relevant climate-related risks and opportunities where such information is material	
<ul style="list-style-type: none"> Disclose the metrics used by the organisation to assess climate-related risks and opportunities in line with its strategy and risk management process 	<ol style="list-style-type: none"> Provide key metrics used to measure and manage climate-related risks and opportunities Provide internal carbon prices and climate-related opportunity metrics Describe methodologies used to calculate or estimate climate-related metrics
<ul style="list-style-type: none"> Disclose Scope 1, Scope 2 and if appropriate, Scope 3 greenhouse gas emissions and the related risks 	<ol style="list-style-type: none"> GHG emissions calculated in line with GHG Protocol methodology GHG emissions and associated metrics provided for historical periods
<ul style="list-style-type: none"> Describe the targets used by the organisation to manage climate-related risks and opportunities and performance against targets 	<ol style="list-style-type: none"> Describe key climate-related targets Consider whether target is absolute or intensity based, time frame, base year from which progress is measured and key performance indicators to measure progress

Table 1: Recommendations and supporting recommended disclosures by the TCFD (summarised). Source: TCFD

Sector-specific guidance

The TCFD provides some additional guidance for companies in specific sectors. Banks, who could be exposed to material climate-related risks through their borrowers, customers or counterparties, should provide metrics used to assess the impact of climate-related risks on their lending and other financial intermediary business.

These metrics could relate to credit exposure, equity and debt holdings or trading positions. The Task Force suggests that banks also describe the amount and percentage of carbon-related assets relative to total assets, as well as the amount of lending and other financing connected with climate-related opportunities. Meanwhile, asset owners should report their weighted average carbon intensity (see *graphic below*) for each fund or investment strategy.

The Task Force acknowledges the limitations of current metrics to measure carbon footprint, but it sees the use of weighted average carbon intensity as the first step. Given data availability and methodological issues, it understands that some asset owners may only be able to report this information for a portion of their investments.













Table 2

Common Carbon Footprinting and Exposure Metrics

Metric	Supporting Information	
Weighted Average Carbon Intensity	<i>Description</i>	Portfolio's exposure to carbon-intensive companies, expressed in tons CO ₂ e / \$M revenue. <i>Metric recommended by the Task Force.</i>
	<i>Formula</i>	$\sum_n \left(\frac{\text{current value of investment}_i}{\text{current portfolio value}} * \frac{\text{issuer's Scope 1 and Scope 2 GHG emissions}_i}{\text{issuer's \$M revenue}_i} \right)$
	<i>Methodology</i>	Unlike the next three metrics, Scope 1 and Scope 2 GHG emissions are allocated based on portfolio weights (the current value of the investment relative to the current portfolio value), rather than the equity ownership approach (as described under methodology for Total Carbon Emissions). Gross values should be used.
	<i>Key Points</i> + / -	<ul style="list-style-type: none"> + Metric can be more easily applied across asset classes since it does not rely on equity ownership approach. + The calculation of this metric is fairly simple and easy to communicate to investors. + Metric allows for portfolio decomposition and attribution analysis. - Metric is sensitive to outliers. - Using revenue (instead of physical or other metrics) to normalize the data tends to favor companies with higher pricing levels relative to their peers.

Source: TCFD

As for non-financial companies, they should consider providing historical trends and forward-looking projections, as well as metrics that support their scenario analysis and strategic planning process. In particular, key metrics related to GHG emissions, energy, water, land use and if relevant, investments in climate adaptation and mitigation should be disclosed. Illustrative examples for some sectors are provided by the Task Force in its reports (*refer to table below*).

ENERGY GROUP METRICS – ILLUSTRATIVE EXAMPLES						
Financial Category	Climate-Related Category	Example Metric	Unit of Measure	Alignment	Rationale for Inclusion	Oil and Gas Coal Electric Utilities
Revenues	GHG Emissions	Estimated Scope 3 emissions, including methodologies and emission factors used	MT of CO ₂ e	GRI: 305-3 CDP: EU4.3	(Relatively) high carbon emissions in the value chain may accelerate development of alternative technologies in a low-carbon economy. The level of emissions informs vulnerability to a significant decrease in future earning capacity.	  
Revenues	Risk Adaptation & Mitigation	Revenues/savings from investments in low-carbon alternatives (e.g., R&D, equipment, products or services)	Local currency	CDP: CC3.2, 3.3, CC6.1 SASB: NR0103-14	New products and revenue streams from climate-related products and services and the return on investments of CapEx projects that create operational efficiencies.	  
Expenditures	GHG Emissions	Describe current carbon price or range of prices used	Local currency	CDP: CC2.2 SASB: NR0101-22, NR0201-16	Internal carbon prices used, affecting the assessment of an organization's key assets, provide investors with a proper understanding of the reasonableness of assumptions made as input for their risk assessment.	  
Expenditures	Risk Adaptation & Mitigation	Expenditures (OpEx) for low-carbon alternatives (e.g., R&D, equipment, products, or services)	Local currency	GRI: G4-OG2 CDP: EU4.3	Expenditures for new technologies are needed to manage transition risk. The level of expenditures provides an indication of the level to which future earning capacity of core business might be affected.	  

Source: TCFD

Of course, some companies may follow other frameworks in their climate-related financial disclosures. The Task Force has identified where its recommendations are aligned with other frameworks, such as the CDP Climate Questionnaire, G20/OECD Principles of Corporate Governance and the International Integrated Reporting Framework, in its [reports](#).

Additionally, [in the Task Force's 2020 Status Report](#), it mentioned its intentions to have its proposed science-based targets formally validated against the Science Based Targets Initiative's criteria and expand its reporting to track these numbers.

Sources:

- <https://assets.bbhub.io/company/sites/60/2020/10/FINAL-TCFD-Annex-Amended-121517.pdf>
- <https://www.fsb-tcf.org/recommendations/>
- <https://www.fsb-tcf.org/publications/>