How should we account for climate change?

A step-by-step guide to implementing the Financial Stability Board Task Force recommendations for disclosing climate change risk
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The Financial Stability Board Task Force recommendations

The Task Force on Climate-related Financial Disclosures (also known as the “Task Force” or “TCFD”) was set up by the Financial Stability Board (FSB) in 2015.

In June 2017, a series of recommendations (“Recommendations”) was issued to address gaps in the information disclosed on the financial impact of climate risk across the investment chain.

Globally, investors and shareholders have raised concerns about the lack of forward-looking assessments of climate-related issues, including information on how vulnerable organisations are to climate risks and advice on how to mitigate these vulnerabilities. For organisations, the absence of an internationally-recognised framework for disclosure prevents them determining what information is reported and how it is presented.

In response, the FSB created the industry-led Task Force in 2015 to establish a set of recommendations for consistent “disclosures that will help financial market participants understand their climate risks”. Mark Carney, the Governor of the Bank of England and founder of the Task Force, echoed this by warning that the fight against climate change will be jeopardised unless the risks associated with climate change are priced into capital allocation. For this, investors need the right information to respond to these developments.

The aim of the recommendations is for financial and non-financial sectors to take into account climate-related issues and to disclose the financial impact that climate risks have (or could have) on their organisation. The recommendations address a number of major challenges identified by the Task Force, including a lack of a coherent financial reporting framework which makes it difficult for investors, creditors and underwriters to use existing disclosures in their financial decisions. These stakeholders would want to know which companies are most vulnerable to climate risk, which are best prepared, and which are taking action.

With the release of the recommendations and associated sector-specific guidance in June 2017, organisations have the opportunity to apply a more rigorous and consistent approach to assessing and disclosing the financial impact of climate risks in their financial filings. All members of the Task Force, including BHP, Eni, Swiss Re and AXA, have signed up to the disclosure recommendations. A group of over 140 policymakers from around the world signalled their support for the recommendations, calling on all stock markets to ensure listed firms embrace the new guidance on climate risk disclosure.
This publication provides you with the guidance required to navigate the next steps towards managing your exposure to climate risks and addressing investors’ and shareholders’ expectations.

If you would like to continue the conversation do not hesitate to get in touch.

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**Key takeaways**

- The adoption of the recommendations is voluntary
- Recommendations apply to the financial sector (e.g., banks, insurance companies, Asset Owners and Asset Managers)
- Recommendations also apply to some high risk non-financial sectors (e.g., energy, transportation, material and buildings, agriculture, food and forest products)
- Climate risks include transition risks and physical risks
- Scenario analysis should be applied for assessing climate risks including a 2°C scenario based on short-term, medium-term and long-term scenario definitions
- Qualitative and quantitative information should be provided on an annual basis in financial filings

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The Task Force aimed to produce a set of recommendations with a different and very distinct focus. “Lots of frameworks focus on how companies impact the environment; we focused on how climate change and the environment impact companies from a financial standpoint,” Schapiro (Former Securities and Exchange Commission Chair). “That’s an important differentiator.”

The need to offer a clear path through the thicket of climate-related initiatives was also critical; faced with so many competing demands, it is easy for companies to “throw up their hands and say ‘This is just too complicated’,” says Schapiro. “These recommendations provide them with a coherent, informative framework for disclosure.” Instead, companies that use the TCFD’s recommended reporting framework can be confident that it synthesizes the existing work into a single source of guidance and best practice on climate-related financial reporting.

Extract from: “Turning up the heat Turning up the heat on climate-related reporting”. EY Reporting (March 2017): ey.com/reporting
The reporting challenge
Corporate disclosure of carbon risks has improved markedly over the past decade, but arguably the most material climate change risk remains hidden from most reports issued by fossil fuel companies. For these companies, it is not the scale of operational emissions that is the strategic challenge, but the emissions associated with their products which are currently locked into their reserves. The potential carbon footprints of reserves are material numbers which are not transparent. The long-term viability of these businesses rests on their future ability to extract and sell carbon, rather than their past emissions. For investors to gain a greater understanding of these risks, a change of mindset is required to consider the scale of the systemic risk posed by fossil fuel reserves. This will require moving beyond annual reporting of last year’s emissions flows to more forward-looking analysis of carbon stocks. This is a logical step as carbon reporting becomes mainstream and integrated with financial analysis.

The regulator’s responsibility
The recent financial crisis has shown that capital markets were not self-regulating and required unprecedented intervention; regulators were not monitoring the biggest systemic risks and so missed key intervention points. Listing authorities will need to take greater responsibility for reviewing the provision of information on embedded carbon by quoted companies. They need to ensure that taking the capital markets as a whole, systemic risks posed by the carbon asset bubble are addressed. Further regulation, guidance, and monitoring are needed to shift practices across the exchanges.

Do the maths
It’s a simple formula:
- **Company-level**: Reserves x carbon factor = carbon dioxide potential.
- **Exchange-level**: Sum of company carbon dioxide potentials = Exchange total.
- **Global-level**: Sum of exchange totals > Global carbon budget.

Today, these numbers do not add up. Moreover those responsible for the stability of financial markets have not yet started to collect this data or assimilate it into their risk models. It’s time that asset owners and capital market regulators made sure they did.

Recommendations:
- Regulators should:
  - Require reporting of fossil fuel reserves and potential CO2 emissions by listed companies and those applying for listing.
  - Aggregate and publish the levels of reserves and emissions using appropriate accounting guidelines.
  - Assess the systemic risks posed to capital markets and wider economic prosperity through the overhang of unburnable carbon.
  - Ensure financial stability measures are in place to prevent a carbon bubble bursting.

Extract from: Unburnable Carbon - Are the world’s financial markets carrying a carbon bubble?
Overview of the recommendations

The recommendations are structured around four themes that reflect core elements of how organisations operate – governance, strategy, risk management and metrics and targets.

Governance
How climate risks are integrated into the business.

Strategy
How climate risks are incorporated into future business decisions.

Risk management
The processes used to identify, assess and manage climate-related risks.

Metrics
The metrics and targets used to assess and manage risks and opportunities.

Each recommendation is supported by recommended climate-related disclosures. The Task Force has issued three reports:

1. Final Report: Recommendations of the Task Force on Climate-related Financial Disclosures
2. Annex: Implementing the Recommendations of the TCFD
   Guidance for implementation of the Recommendations for all sectors and sector-specific guidance.
3. Technical Supplement: The Use of Scenario Analysis in Disclosure of Climate-related Risks and Opportunities

Accounting for climate change
Overview of the reports

Final Report: Recommendations of the Task Force on Climate-related Financial Disclosures:

- Provides a description of the transition and physical risks and opportunities resulting from climate change
- Provides a description of the four themes structuring the recommendations and examples of recommended disclosures
- Outlines the key issues considered by the Task Force and the areas requiring further work

Annex: Implementing the Recommendations of the TCFD:

- Provides suggestions of recommended disclosures for all sectors across the four areas
- Provides suggestions of sector-specific recommended disclosures for the financial sector and certain non-financial sectors potentially most affected by climate change

Technical Supplement: The Use of Scenario Analysis in Disclosure of Climate-related Risks and Opportunities:

- Provides guidance for applying scenario analysis for climate risks assessment and disclosures
- Provides examples of resources, tools, parameters and outputs
- Provides a description of different scenarios, including a 2°C scenario
Key highlights of the Task Force reports

Adaptable by all organisations

Because the transition to a low-carbon economy will affect most economic sectors and industries in some way, the Task Force outlines recommendations on climate-related financial disclosures which it describes as widely adoptable and applicable to organisations across all sectors and jurisdictions. The Task Force recommends all financial and non-financial organisations with public debt or equity (listed companies) implement its recommendations, and also encourages other organisations to implement the recommendations as well.

All organisations are recommended to provide their Scope 1 and Scope 2 greenhouse gas (GHG) emissions and, if appropriate, Scope 3 GHG emissions and the related risks.
Note: Scope 3 refers to the emissions associated with the upstream and downstream life cycle of a product, process, or service. Upstream activities include operations that relate to the initial stages of producing a good or service (e.g., material sourcing, material processing and supplier activities).

Downstream activities include operations that relate to processing the materials into a finished product and delivering it to the end user (e.g., transportation, distribution and consumption).

Included in financial filings

Climate-related financial disclosures should be included in mainstream financial filings, and should be subject to appropriate internal governance processes, similar to those used for existing public financial disclosures such as review by the Chief Financial Officer and audit committee. Crucially, implementing the recommendations will require Company Directors to engage with climate-related issues more thoroughly. The recommendations promote quantitative financial disclosures, particularly disclosure of metrics about the financial impact that climate-related risks have or could have on an organisation (e.g., asset impairments, impact on cash flows from operations, net income and access to capital).

Designed to solicit decision useful, forward-looking information on financial impacts

The Task Force emphasises a greater need for forward-looking analyses, highlighting climate change scenario analysis as being important for organisations to incorporate into their strategic and financial planning. The report recommends scenario analysis under different potential future states, including a 2°C scenario, in order to provide insights into how business strategy deals with climate change, especially for organisations operating or investing in carbon-intensive areas.
Technical supplement

The use of scenario analysis in disclosure of climate-related risks and opportunities.

Given the importance of forward-looking assessments of climate-related risk, a technical supplement is available to assist organisations in undertaking and using climate-related scenario analysis including:

- Using scenario analysis
- Considerations for applying scenario analysis
- Analytical choices involved in scenario analysis
- Types of climate-related scenarios
- Publicly available climate-related scenarios from the International Energy Agency, the Intergovernmental Panel on Climate Change and others

Publicly available 2°C scenarios suggested by the report include:

- International Energy Agency, The 2°C Scenario (2DS)
- World Energy Outlook, 450 Scenario
- Deep Decarbonization Pathways Project

Scenario analysis will enable better information for investors to assess how companies have aligned their technical business strategies with the requirements of the Paris Agreement. As outlined in the technical supplement when performing the scenario analysis, organisations should ensure the following:

- That scenarios are appropriate and supporting assumptions are reasonable
- That relevant information is provided to Board Members and Financial Executives (e.g., Chief Financial Officers, Chief Accounting Officers and Controllers), who will need to be involved in an organisation’s evaluation of climate-related risks and opportunities. This should also include information on the efforts undertaken to manage the risks and maximise the opportunities
- Links between scenario analyses performed to assess the potential impact of climate-related risks, opportunities and assumptions underlying cash flow analyses used to assess assets (e.g., goodwill, intangibles and fixed assets) impairments

Strong focus on risks and opportunities related to transition to lower-carbon economy

The Task Force emphasises the importance of integrating the identification and management of climate-related financial risk into existing risk management frameworks.

The report outlines specific categories for climate-related risks and climate-related opportunities in order to enable consistent categorisation, divided into two major categories: risks related to the transition to a lower-carbon economy and risks related to the physical impacts of climate change (please refer to the diagram opposite). Transition risks include policy, legal, technology, reputational and market changes to address mitigation and adaptation requirements related to climate change. Climate-related opportunities include resource efficiency, energy source, products and services, markets and resilience.
Disclosure of risk is recommended to be made for each time horizon (short, medium, and long-term) that could have a material financial impact on the organisation.

**Information quality controls**

Because the climate risks disclosures should be included in mainstream financial reports or other public documents, the Task Force recommend that the governance processes should be similar to those used for existing public financial disclosures and would likely involve review by the Chief Financial Officer and audit committee as appropriate.

For those organisations that do not have publicly traded debt or equity securities, including some Asset Managers and Asset Owners, the climate-related financial disclosures should follow similar review and approval protocols currently used by those organisations for similar communications. In the case a recommended disclosure is not made, preparers should provide their rationale for omitting the disclosure.

Disclosures should be defined, collected, recorded, and analysed in such a way that the information reported is verifiable to ensure it is of high quality. For future-oriented information, this means assumptions used can be traced back to their sources.

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**Climate-related risks, opportunities, and financial impact**

<table>
<thead>
<tr>
<th>Transition risks</th>
<th>Opportunities</th>
</tr>
</thead>
<tbody>
<tr>
<td>Policy and legal</td>
<td>Resource efficiency</td>
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<tr>
<td>Technology</td>
<td>Energy source</td>
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<td>Market</td>
<td>Products or services</td>
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<td>Reputation</td>
<td>Markets</td>
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<td>Physical risks</td>
<td>Resilience</td>
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<tr>
<td>Acute</td>
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<tr>
<td>Chronic</td>
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</table>

**Strategic planning**

Risk management

**Financial impact**

Income statement  →  Cash flow statement  →  Balance sheet

**Sources:**
- Final Report: Recommendations of the Task Force on Climate-related Financial Disclosures
- Accounting for climate change
Why organisations should act now

Will your business conform to a ‘wait and see’ approach or will it look to maximise gains from the adoption of the recommendations?

Implementing the recommendations requires changes to the governance and risk assessment processes and will likely require several years for an organisation to be in a position to generate valuable information for investors and shareholders to help them make informed decisions. The earlier your organisation embarks on this journey the better as it provides a platform to help educate directors and management about the climate risks and enables leadership to engage with investors and shareholders on the impacts and opportunities for your organisation.

Organisations in the specific high-risk sectors (energy, transportation, material and buildings, agriculture, food and forest products, or with annual revenue above USD $1 billion) may be impacted by these recommendations through investor demands, increasing incidence of shareholder resolutions addressing the need for transparency in disclosure of financial effects of climate change, and regulatory change. Boards should familiarize themselves with the recommended disclosures and be prepared to discuss potential changes to existing processes and disclosures, depending on the materiality of the impact of climate change for that company. For example, directors and management may need to know more about the climate risks associated with the organizations that they oversee, and engage with investors and shareholders on the impacts and opportunities for their organization.

Specific actions to take:
Different players can take specific actions to try and optimize their own responses to climate-related issues. Asset owners, asset managers, consultants, advisors, ratings agencies and banks can take a number of tangible steps including:
• Developing a considered view of climate change and a set of related policies or goals
• Strengthening governance and risk management in line with best practice frameworks
• Adapting their business models to the changing demands of investors
• Engaging with non financial companies and other institutions in the investment value chain

Financial institutions around the world have a unique opportunity to shape the global transition to a low carbon economy. Those that respond pro-actively will create value for their clients, give themselves a competitive advantage, reduce systemic financial risks and make an invaluable contribution to society as a whole.

Benefits of adopting the recommendations

As well as satisfying investors’ demands there are significant benefits for businesses who implement all of the recommendations.

Risk management
• Climate risks (transition risks and physical risks) are embedded in an organisation’s risk management process and risk register

Familiarisation for scenario analysis
• Improved capability in quantitative modelling and data analytics
• Greater rigour and sophistication in the use of data sets and assumptions supporting the definition of scenarios

External communication
• Consistency of messaging across different external reporting mediums (e.g., investor relations, financial reporting, corporate reporting, sustainability reporting)

Shift the focus areas from external stakeholders
• Content of disclosures is more aligned with interest of long-term investors
• Focus of investors and shareholders shifts towards forward-looking assumptions and methodology, opportunities and strategy

Educational journey/fiduciary duty
• Increased directors’ awareness of their fiduciary duty
• Education journey for Board Members and investor relations personnel

Accounting for climate change
Steps to implement the recommendations

Implementing the recommendations will require organisations to collect new types of information and data from their supply chains and put in place new processes and governance structures. Integrating these changes into the business will take time and it is expected that many businesses will start on a journey to full implementation. Organisations need to show investors that they are making progress and should start by adopting an implementation plan.

The below sets out an optimistic timeline to reach full implementation

<table>
<thead>
<tr>
<th>Year 1</th>
<th>Year 2</th>
<th>Year 3</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Gap analysis of current disclosure state compared to the recommendations</td>
<td>• Implement new data and reporting processes</td>
<td>• Integrate scenario analysis into strategic planning and/or enterprise risk management frameworks</td>
</tr>
<tr>
<td>• Identification of new data and process requirements</td>
<td>• Calculate climate metrics of full data set and compare to year 1 results. Set baseline metrics for external purposes and comparison in future years</td>
<td>• Ongoing implementation of recommendations</td>
</tr>
<tr>
<td>• Collection of missing data and calculation of climate risk metrics from preliminary data set for internal benchmarking purposes and data quality control</td>
<td>• From year 1 scenario analysis implement management strategies for any identified value chain risks</td>
<td></td>
</tr>
<tr>
<td>• Review scenario analysis to identify a range of appropriate scenarios and apply them across the value chain to qualitatively assess impacted sectors for internal purposes</td>
<td>• Run scenario analysis using appropriate scenarios and identify qualitative risk areas and quantify potential impacts</td>
<td></td>
</tr>
<tr>
<td>• Assign oversight to relevant board committees</td>
<td>• Document the process: communicate to relevant parties; be prepared to disclose key inputs, assumptions, analytical methods, outputs and potential management responses</td>
<td></td>
</tr>
<tr>
<td>• Disclosure of certain recommendations dependant on current processes</td>
<td>• Disclosure of all recommendations</td>
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So what now for organisations potentially impacted by climate change?

If you would like to discuss your next steps further, our multi-disciplinary climate change team is ready to work with you.
EY is a global leader in assurance, tax, transaction and advisory services. The insights and quality services we deliver help build trust and confidence in the capital markets and in economies the world over. We develop outstanding leaders who team to deliver on our promises to all of our stakeholders. In so doing, we play a critical role in building a better working world for our people, for our clients and for our communities.

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About EY’s Climate Change and Sustainability Services
Governments and organizations around the world are increasingly focusing on the environmental, social and economic impacts of climate change and the drive for sustainability.

Your business may face new regulatory requirements and rising stakeholder concerns. There may be opportunities for cost reduction and revenue generation. Embedding a sustainable approach into core business activities could be a complex transformation to create long-term shareholder value. The industry and countries in which you operate as well as your extended business relationships introduce specific challenges, responsibilities and opportunities.

Our global, multidisciplinary team combines our experience in assurance, tax, transactions and advisory services with climate change and sustainability knowledge and experience in your industry. You’ll receive tailored service supported by global methodologies to address issues relating to your specific needs. Wherever you are in the world, EY can provide the right professionals to support you in reaching your sustainability goals.

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References

