Climate-Related Disclosures and Risk Management: Standards and Leading Practices

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03 November 2022
Introduction

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Climate disclosures aim to provide transparency about the potential impact of climate change on a company (*outside-in*).

More comprehensive disclosures also include the effect of the company’s activities on the climate (*inside-out* → double materiality).

Multiplicity of local and international standards and initiatives, which have only started to converge (e.g. around TCFD).

Climate disclosures require reporting information on climate-related risk management, and contribute in turn to accelerating the integration of climate considerations into ERM.
Contents of the Paper

1. Task Force on Climate-Related Financial Disclosures
2. Other Main Climate-Related Disclosure Initiatives
3. Selected National Regulations on Climate-Related Disclosures
4. Climate-Related Risk as Part of Enterprise Risk Management
5. Examples of Leading Practices on Climate-Related Disclosures
6. Conclusion & Next Steps

(Important) Glossary of terms & acronyms
2015 – the G20 Finance Ministers, Central Bank governors and the Financial Stability Board (FSB) create the TCFD to develop voluntary climate-related financial disclosures useful to investors and others to better assess the impact of climate-change on a company

2017 – TCFD initial framework release and recommendations

2021 – Consultation + 4th annual report including detailed guidance

October 2022 NEW – 5th annual report
TCFD Adoption to Date

- TCFD-aligned disclosure requirements already adopted in Brazil, Egypt, New Zealand, Singapore, Switzerland, UK
- Further requirements under discussions in Canada, EU, USA …
Overall TCFD Approach

- Four-pillar structure, which is fast becoming a global standard beyond climate topics (e.g. TNFD)

<table>
<thead>
<tr>
<th>Governance</th>
<th>Strategy</th>
<th>Risk Management</th>
<th>Metrics and Targets</th>
</tr>
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<tbody>
<tr>
<td>Disclose the company's governance around climate-related risks and opportunities.</td>
<td>Disclose the actual and potential impacts of climate-related risks and opportunities on the company’s businesses, strategy, and financial planning where such information is material.</td>
<td>Disclose how the company identifies, assesses, and manages climate-related risks.</td>
<td>Disclose the metrics and targets used to assess and manage relevant climate-related risks and opportunities where such information is material.</td>
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Specific subsector guidance (e.g. for banking, insurance, asset management) is also provided for these three pillars
Latest guidance (2021): focus on transition plans, and need to quantify climate impact on both sides of the balance sheet
The second TCFD pillar (Strategy) includes a recommendation to report the impact on the company of a **scenario with global warming of 2°C or lower above pre-industrial averages** (multiple scenarios are encouraged).

- Guidance on climate scenarios developed by TCFD, but also by EIOPA, or the IAA (papers #2 and #3 from this series).

- Climate scenarios remains the area with the lowest level of disclosure (2022 TCFD Status Report).
TCFD: Metrics and Targets

- **Targets**: where does the company aim to go long-term? e.g. net-zero by 2050

- **Current metrics**: how much GHG emission does it emit/finance/insure now?

- **Forward-looking metrics**: how do company emissions evolve under different scenarios?

Source: TCFD, 2021 Guidance on Metrics, Targets, and Transition Plans
The PSI were introduced by the UN Environment Programme Finance Initiative (UNEP-FI) in 2012.

Close to 500 members as of October 2022.

- **Principle 1**: embed ESG in decision-making
- **Principle 2**: work together with clients and partners to raise awareness of ESG issues, manage risk and develop solutions
- **Principle 3**: work together with governments, regulators, and key stakeholders to promote widespread ESG action
- **Principle 4**: regularly disclose progress on the Principles

The UN PSI also sponsor the Net Zero Insurance Alliance.
Carbon neutrality = purchase credits for CO2 emissions released
Net Zero = first reduce emissions as much as possible before offsetting + consider all greenhouse gas (GHG) emissions

Several Net-Zero alliances under the GFANZ (Glasgow Financial Alliance for Net Zero umbrella, including Net Zero Asset Owner Alliance (NZAOA) and Net Zero Insurance Alliance (NZIA)
Members generally pledge to reach net zero by 2050 or earlier

Key scope of emissions for financial institutions: Scope 3 Category 15 (investments, insurance contracts)
Measurement methodologies developed in partnership with PCAF
November 2021: the IFRS foundation launches the International Sustainability Standards Board (ISSB)

Focus on enterprise value (no double materiality) and priority on climate

Building upon existing frameworks (such as TCFD)

March 2022: ISSB launched a consultation on two new disclosure standards (general sustainability + climate-related)

October 2022 NEW: ISSB confirms Scope 3 GHG emissions disclosure requirements

The ISSB aims issue its final Standards ‘as early as possible in 2023’
Classification tool aiming to provide market clarity on what is sustainable, to support investment decisions and to fight greenwashing

Taxonomies are generally defined based on clear objectives (e.g. Paris Agreement)

‘Green’ taxonomies are more advanced than ‘brown’ taxonomies

Several taxonomies are being developed by regional hubs, sovereign states, private sector, academia or NGOs. The most advanced and influential initiative is currently the EU Taxonomy

Multiple taxonomies may bring confusion and fragmentation to the market; harmonization and standardization are key
Taxonomies of Sustainable Activities Around the World

Green taxonomy in force

Green taxonomy under development
Investors are considering financial products’ sustainability, adding ESG dimensions to traditional investment criteria.

Issuers and distributors of financial products (including insurers) are increasingly communicating on their product’s sustainability characteristics.

A clear framework is needed to fight greenwashing by enhancing transparency and consistency, including Principal Adverse Impacts (PAI).

<table>
<thead>
<tr>
<th><strong>EU SFDR</strong></th>
<th><strong>Article 6</strong> products that don’t consider sustainability factors</th>
<th><strong>Article 8</strong> products that promote sustainability factors</th>
<th><strong>Article 9</strong> products with sustainability objectives</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>UK</strong></td>
<td>Not promoted as sustainable</td>
<td>Responsible</td>
<td>Sustainable Aligned</td>
</tr>
<tr>
<td></td>
<td>Sustainable Transitionning</td>
<td></td>
<td>Sustainable Impact</td>
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Biodiversity loss and climate change are both driven by human activities and mutually reinforce each other → conserving biodiversity is critical to addressing climate change.

The TNFD (launched June 2021) aims to provide a framework for organizations to report and act on nature-related risks.

Building upon the 4-pillar structure of the TCFD to avoid repetition and accelerate market adoption.

TCFD and TNFD aim to be comprehensive in their coverage of climate and nature-related financial risks, and complementary in their usability and adoption.

Second iteration of the beta version of TNFD framework in June 2022, with plans to finalize it in 2023.
Selected National Regulations on Climate Disclosures

- Canada
- USA
- UK
- European Union
- Switzerland
- China & Hong Kong
- Japan
- Australia
- New Zealand
Focus on the European Union

- The EU has set a comprehensive framework for climate and sustainability reporting
- The EU framework is driven by three main regulations of the European Parliament

<table>
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<tr>
<th>(Green) Taxonomy</th>
<th>Disclosure (SFDR)</th>
<th>Benchmark</th>
</tr>
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</table>
| **Six environmental objectives**  
  • Climate change mitigation  
  • Climate change adaptation  
  • Water and marine resources  
  • Circular economy  
  • Pollution prevention and control  
  • Biodiversity and ecosystems  
  Must contribute significantly to at least one objective, do no significant harm to the others, and respect minimum human rights and labor standards | Disclose information about integration of sustainability risks in investment decision-making process and provide sustainability related information with respect to financial products  
  Specific constraints for insurers and pension fund managers relating to pre contractual information  
  Specific disclosure requirements for sustainable products (Art. 8 & 9) | Labels to support climate-focused investment strategies :  
  • EU Climate Transition Benchmarks  
  • EU Paris-Aligned Benchmarks  
  Strict eligibility criteria, labels are automatically withdrawn if a benchmark does not align for two consecutive years |
Focus on the UK

- Phased-in requirements to implement TCFD and annual disclosures

- UK Taxonomy in development (largely inspired by the EU Taxonomy)

Focus on the United States of America

<table>
<thead>
<tr>
<th>Federal level</th>
<th>NAIC</th>
<th>Individual States (examples)</th>
</tr>
</thead>
<tbody>
<tr>
<td>May 2021: Presidential Biden’s Executive Order on Climate-Related Financial Risks asks the Secretary of the Treasury to present a plan for improving climate-related disclosures</td>
<td>Insurers with premiums exceeding $500 M are asked to produce an annual Insurer Climate Risk Disclosure Survey. By November 2022, insurers responding to the NAIC survey are asked to comply with the TCFD framework.</td>
<td>15 US States committed in 2022 to use the NAIC survey for companies listed in their jurisdictions (c. 80% of US GWP)</td>
</tr>
<tr>
<td>March 2022: SEC proposals for mandatory climate reporting rules for listed companies including scope 1, 2 and – in some cases – scope 3 emissions</td>
<td>The California Department of Insurance collects and makes publicly available responses to the NAIC Survey.</td>
<td>State of California:</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Insurers with GWP &gt; $100 M asked to publicly disclose investments in oil, gas &amp; coal companies (since 2016)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Since April 2021 entities with revenue over $500 M must disclose their climate-related financial risks in accordance with TCFD</td>
</tr>
<tr>
<td></td>
<td></td>
<td>New York State: guidance for domestic insurers on managing the financial risks from climate change (including disclosures)</td>
</tr>
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Focus on China

Mainland China

- July 2021 (People’s Bank of China): Guidelines on Environmental Information Disclosure for Financial Institutions, with similarities to TCFD

- Three taxonomy initiatives:
  - Green Bond Endorsed Projects Catalogue
  - Green Industry Guiding Catalogue (mandatory for sustainable financing purposes)
  - Technical Report on UN SDG Finance Taxonomy

Hong Kong

- July 2021 (Hong Kong Monetary Authority): draft guidance for TCFD-aligned disclosures

- November 2021 (Hong Kong Exchange): guidance on climate-related disclosures, incorporating key TCFD recommendations

- Plans for mandatory TCFD-aligned disclosures by 2025
Focus on Japan

- June 2021: climate-related disclosures introduced by the Tokyo Stock Exchange (TSE) on a ‘comply or explain’ basis
- April 2022: mandatory disclosures, with companies listed on the TSE Prime Market required to follow TCFD
- Japan has the highest number of TCFD supporters ahead of US and UK
- The (optional but widely applied) JFSA Stewardship Code requires institutional investors to build skills and resources to include sustainability in their investment management strategies
Integrating Climate Risk into the ERM Framework

COSO framework

- Governance and culture
- Strategy and goal setting
- Measurement
- Review and correction
- Information, communication and reporting
Climate Risk Governance

The integration of climate risks into an organization’s ERM framework falls into two broad categories:

1. As part of dedicated ESG taskforce
2. As part of general ERM

An effective climate risk governance may include:

- Effective climate risk oversight from the board
- Clear role, responsibilities, and accountability across all three lines of defence
- Up-to-date framework and policies for the relevant traditional risk types through which climate risks materialize
- Appropriate allocation of climate-related risk responsibilities for executive management, including a link with remuneration
- Internal controls embedded into all relevant processes: covering risk identification, assessment, acceptance or approval, monitoring and reporting
- Continuous education and awareness-building to develop climate risk understanding across the organization
Financial institutions, including insurance companies, have **three main areas** of focus:

- their investments (their own and managed assets)
- their lending and/or underwriting activities
- their own operations

**Investments & underwriting** are usually the most material aspects.

**Challenges:**

- Not all climate-related risks may be already modelled in a company’s risk framework.
- Using adequate data and modelling granularity for climate risk exposure and materiality assessments.
- Model risk is another area of focus.
Climate Scenarios in ORSA (European Union)

Insurance companies with material exposure to climate risks, both physical and transition, are required to include at least two long-term climate scenarios in their ORSA based on two global temperature increase trajectories (one below 2C, and one equal to or higher than 2C).
A growing number of supervisory authorities have either conducted, are in the process of conducting or have announced plans to conduct climate stress testing exercises.

<table>
<thead>
<tr>
<th>Country</th>
<th>The Netherlands</th>
<th>United Kingdom</th>
<th>France</th>
<th>Canada</th>
<th>Australia</th>
<th>European Union</th>
</tr>
</thead>
<tbody>
<tr>
<td>Supervisory authority</td>
<td>DNB</td>
<td>PRA/Bank of England</td>
<td>ACPR/ Banque de France</td>
<td>Bank of Canada</td>
<td>APRA</td>
<td>ECB</td>
</tr>
<tr>
<td>Participants</td>
<td>Banks, insurers, and pension funds (voluntary)</td>
<td>Largest banks and insurers</td>
<td>Banks and Insurers (voluntary)</td>
<td>6 large banks and insurers (voluntary)</td>
<td>Major banks</td>
<td>Banks</td>
</tr>
<tr>
<td>Risks included</td>
<td>Transition only</td>
<td>Physical, transition, litigation</td>
<td>Physical, transition</td>
<td>Transition only</td>
<td>Physical, transition</td>
<td>Physical, transition</td>
</tr>
<tr>
<td>Projection horizon</td>
<td>5 years</td>
<td>30 years (physical risks: 60 years)</td>
<td>30 years</td>
<td>30 years</td>
<td>30 years</td>
<td>30 years</td>
</tr>
<tr>
<td>Scenarios</td>
<td>3</td>
<td>3 (built based on NGFS)</td>
<td>4 (built based on NGFS)</td>
<td>4 (mostly built based on NGFS)</td>
<td>2 (built based on NGFS)</td>
<td>3 (built based on NGFS)</td>
</tr>
</tbody>
</table>
Roles for Actuaries in Climate Risk Management

Traditional Roles

- Impact of climate on premiums, claims, reserving
- Impact on asset portfolios (Cf. IAA CRTF Paper #4)
- Solvency requirements, ALM, capital management
- Development of new products, impact underwriting

Emerging Areas

- Climate Value at Risks
- Preparation and analysis of climate disclosures
- Raising climate risk awareness
- Continuous education, professional requirements
- Collaboration with supervisors and international bodies

Actuarial Tools

- Scenario analysis
- Stochastic projections
- Financial decision tools
- Financial impact analysis
- Cost benefit analysis
Collaboration with Other Stakeholders

- Regulators & Supervisors
- Scientific community, academia
- Financial institutions
- International organisations
- Other professional bodies
- NGOS & civil society
- Actuary
The Need for Quality Climate-related Disclosures

Without disclosures demonstrating in-depth understanding of the potential implications of climate risk, companies face reputation and litigation risks.

**Sample case – McVeigh v. Retail Employees Superannuation Trust (Australia)**

**Event history**

A member of the pension fund challenged the trustees in 2018 for **failing to disclose the risks of climate change**.

**Event impact**

The outcome of the case, a **change in strategic direction** from the trustees, demonstrates the pressure that can be put on decision-makers through legal challenge, and actuaries may take note of the importance of good **climate-related risk management and disclosures**.
Selected Examples

**Figure 3: Equity Portfolio’s Carbon Footprint (tCO2e/SEK million)**

- **alecta**
  - Pension fund
  - Early adopter for UN Global Compact initiative (2004), PSI (2012), TCFD (2017), Global Reporting Initiative (GRI), Sustainability Accounting Standards Board (SASB)
  - Highlights the vast diversity of frameworks

- **AVIVA**
  - Multinational insurer

- **Itaú**
  - Bank & financial services

In 2020 MAIF became one of the first companies in France to adopt the status of **purpose-driven company**

**Climate VaR for Shareholder Funds as at 31 December 2021**

- Public database with main ESG and climate indicators over time
Selected Examples

- Use of the UN SDGs
- Qualitative scenario analysis
- Climate integrated into ORSA

- Internal carbon price (Carbon Steering Levy), with plans to increase the carbon price to USD 200 per tonne of CO2 by 2030
- Enhanced oil and gas policy

- Sets out limitations and uncertainties in climate models
- Climate integrated into ERM, with scenarios and stress testing
- Original approach to carbon neutrality (mangrove planting)
Conclusion

- Rapidly developing field, convergence and integrated reporting will play out over the next few years
- Leading reporting standards (e.g. EU regulation) include double materiality
- Long-term targets (e.g. 2050 net-zero commitments) vs. immediate action? → greenwashing and reputation risks (Cf. AAE discussion paper, September 2022)
- Discussion is starting on whether and how to integrate climate risk not only in ERM, but also in prudential capital requirements
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