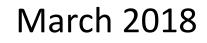
Task Force on Climate-related Financial Disclosures

Overview of Recommendations and Guidance

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BACKGROUND

G20 Finance Ministers and Central Bank Governors asked the Financial Stability Board (FSB) to review how the financial sector can take account of climate-related issues.

The FSB established the Task Force on Climate-related Financial Disclosures (TCFD) to develop recommendations for more effective climate-related disclosures that:

- could "promote more informed investment, credit, and insurance underwriting decisions" and,
- in turn, "would enable stakeholders to understand better the concentrations of carbon-related assets in the financial sector and the financial system's exposures to climate-related risks."

Industry Led and Geographically Diverse Task Force

The Task Force's 31 international members, led by Michael Bloomberg, include providers of capital, insurers, large non-financial companies, accounting and consulting firms, and credit rating agencies.



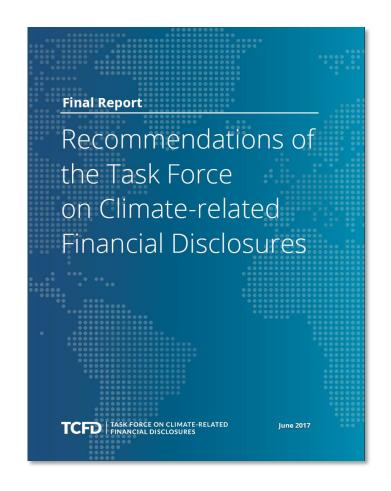
TCFD TASK FORCE ON CLIMATE-RELATED FINANCIAL DISCLOSURES

BACKGROUND (CONTINUED)

The Task Force published its final report in June 2017.

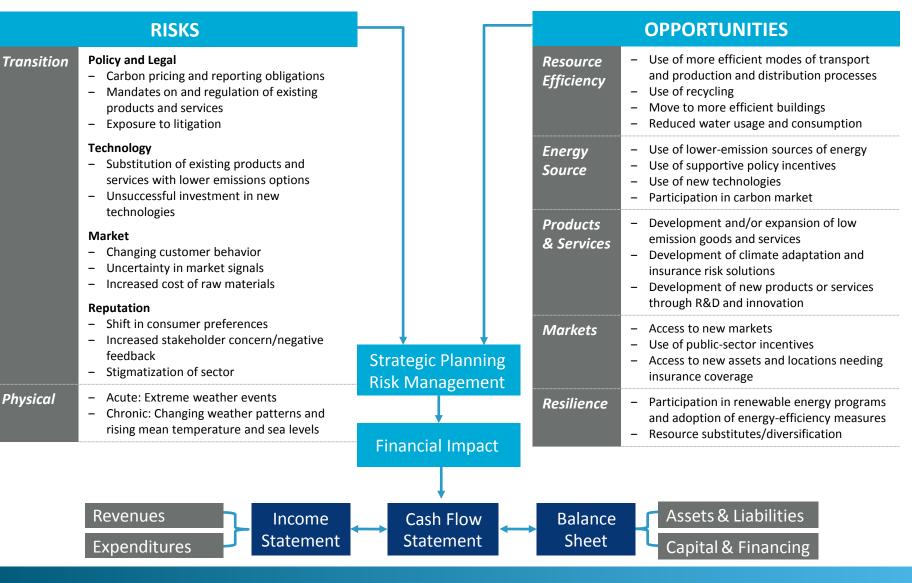
The report outlines recommendations to help address climate-related disclosure challenges faced by:

- Issuers who generally have an obligation under existing law to disclose material information, but lack a coherent framework to do so for climate-related information, and
- Investors, lenders, and insurers who need decision-useful, climate-related information to make informed capital allocation and financial decisions



TASK FORCE ON CLIMATE-RELATED FINANCIAL DISCLOSURES

FOCUS ON FINANCIAL IMPACT



FINANCIAL IMPACT BY INDUSTRY

To assist organizations in understanding how climate-related risks may impact them financially, the Task Force prepared a high-level overview of the types of financial impact of climate-related risks that have been identified for specific industries and groups.

The financial impacts from climaterelated risks are grouped into the following general categories:

- Revenues
- Expenditures
- Assets and Liabilities
- Capital and Financing

*Largely, but not solely, based on select content from the Sustainability Accounting Standards Board (SASB) "Financial Impacts of Climate Risk" table in its Climate Risk Technical Bulletin

| Groups and Industries | | Revenues | Expenditures | Assets and Liabilities | Capital and Financing |
|----------------------------|---|----------|--------------|---------------------------|--------------------------|
| Financial | Banks | | | | |
| | Insurers | | | | |
| | Asset Owners | | | | |
| | Asset Managers | | | | |
| Energy | Oil and Gas | | | | |
| | Coal | | | | |
| | Electric Utilities | | | | |
| Transportation | Air Freight | | | | |
| | Passenger Air Transportation | | | | |
| | Maritime Transportation | | | | |
| | Rail Transportation | | | | |
| Tra | Trucking Services | | | | |
| | Automobiles and Components | | | | |
| Materials and Buildings | Metals and Mining | | | | |
| | Chemicals | | | | |
| | Construction Materials | | | | |
| | Capital Goods | | | | |
| | Real Estate Management and Development | | | | |
| Ag, Food, and Forest | Beverages | | | | |
| | Agriculture | | | | |
| | Packaged Foods and Meats | | | | |
| | Paper and Forest Products | | | | |

ORCE ON TE-RELA

DISCLOSURE RECOMMENDATIONS

The Task Force developed **four widely-adoptable recommendations** on climaterelated financial disclosures that are applicable to organizations across sectors and jurisdictions.

The recommendations are structured around four thematic areas that represent core elements of how organizations operate:



Governance

The organization's governance around climate-related risks and opportunities

Strategy

The actual and potential impacts of climate-related risks and opportunities on the organization's businesses, strategy, and financial planning

Risk Management

The processes used by the organization to identify, assess, and manage climate-related risks

Metrics and Targets

The metrics and targets used to assess and manage relevant climate-related risks and opportunities



DISCLOSURE RECOMMENDATIONS (CONTINUED)

The four recommendations are supported by **specific disclosures** organizations should include in financial filings or other reports to provide decision-useful information to investors and others.

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



KEY ELEMENTS OF DISCLOSURE RECOMMENDATIONS

Location of Disclosure

- The Task Force recommends that organizations provide climate-related financial disclosures in their mainstream (i.e., public) annual financial filings.
- The recommendations were developed to apply broadly across sectors and jurisdictions and do not supersede national disclosure requirements for financial filings.
- If certain elements are incompatible with national disclosure requirements, the Task Force encourages organizations to disclose those elements in **other official company reports**.
- Organizations in the four non-financial groups that have more than one billion U.S. dollar equivalent (USDE) in annual revenue should consider disclosing strategy and metrics and targets information in other reports when the information is not deemed material and not included in financial filings.

Financial Filings

Required annual reporting packages in which organizations deliver their audited financial results under the laws of the jurisdictions in which they operate.

Other Official Company Reports

Should be issued at least annually, widely distributed and available to investors and others, and subject to internal governance processes that are the same or substantially similar to those used for financial reporting.

KEY ELEMENTS OF DISCLOSURE RECOMMENDATIONS (CONTINUED)

Principle of Materiality

- The disclosures related to the Strategy and Metrics and Targets recommendations are subject to an assessment of materiality.
- The disclosures related to the Governance and Risk Management recommendations are not subject to an assessment of materiality and should be provided because many investors want insight into the governance and risk management context in which organizations' financial and operating results are achieved.

Scenario Analysis

- The Task Force encourages forward-looking information through scenario analysis—a useful tool for considering and enhancing resiliency and flexibility of strategic plans.
- Many investors want to understand how resilient organizations' strategies are to climate-related risks.
- Recommended disclosure (c) under Strategy and the related guidance asks organizations to describe the resilience of their strategies, taking into consideration different climaterelated scenarios, including a 2°C or lower scenario.

2°C Scenario

Provides a common reference point that is generally aligned with the objectives of the Paris Agreement.

Scenario Analysis Threshold

The Task Force established a threshold for organizations that should consider conducting more robust scenario analysis to assess the resilience of their strategies (those in the four nonfinancial groups with more than 1B USDE in annual revenue).



BENEFITS OF IMPLEMENTING THE RECOMMENDATIONS

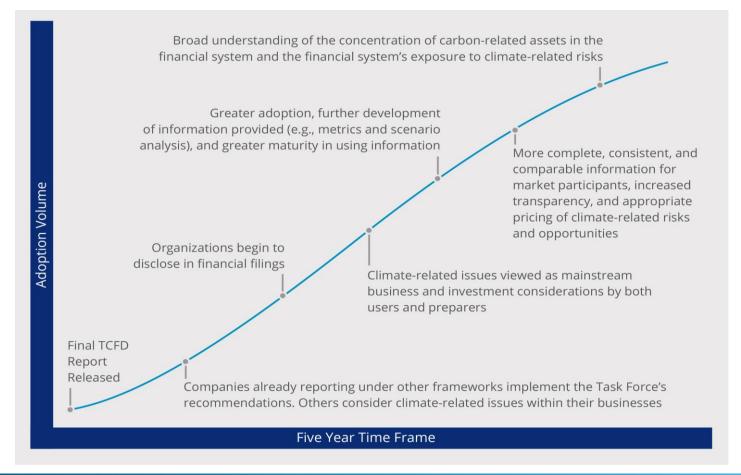
Some of the potential benefits associated with implementing the Task Force's recommendations include:

- easier or better access to capital by increasing investors' and lenders' confidence that the company's climate-related risks are appropriately assessed and managed
- more effectively meeting existing disclosure requirements to report material information in financial filings
- increased awareness and understanding of climate-related risks and opportunities within the company resulting in better risk management and more informed strategic planning
- proactively addressing investors' demand for climate-related information in a framework that investors are increasingly asking for, which could ultimately reduce the number of climate-related information requests received



ILLUSTRATIVE IMPLEMENTATION PATH

The TCFD expects that **reporting of climate-related risks and opportunities will evolve** over time as organizations, investors, and others contribute to the quality and consistency of the information disclosed.





BEGINNING THE JOURNEY – ILLUSTRATIVE ROADMAP

For organizations in early stages of assessing climate-related risks and opportunities, it may be helpful to develop a roadmap for implementing the recommendations.

Year 1

- Compare current disclosures to the recommendations, especially Governance and Risk Management, and identify alignment and gaps
- Determine information and data needs and process changes
- Begin evaluating metrics for assessing climate-related risks and opportunities
- Incorporate climate-related risks into risk identification and assessment process as needed
- Assign oversight to board committees and management as needed
- Disclose information related to Governance and Risk Management recommendations or disclose intention to implement the TCFD recommendations

Year 2

- Implement new processes for information and data collection and reporting
- Identify metrics useful for assessing climate-related risks and opportunities
- Adjust data collection to support metrics
- Identify climate-related risks and opportunities and assess whether they are material
- Identify relevant climate-related scenarios and consider how those scenarios might affect the organization
- Disclose information related to Governance and Risk Management recommendations and item (a) of the Strategy recommendation, where the information is material

Year 3

- Calculate and use metrics for assessing climate-related risks and opportunities
- Integrate scenario analysis into strategic planning and/or risk management frameworks
- Disclose information related to Governance and Risk Management recommendations
- Disclose information related to Strategy and Metrics and Targets recommendations, where the information is material



WIDESPREAD SUPPORT FROM COMPANIES AND INVESTORS

In June 2017 more than 100 global CEOs signed a letter committing to support the Task Force's recommendations. Hundreds of additional companies have since joined statements of support for or commitments to implement the recommendations.



TASK FORCE ON CLIMATE-RELATED

June 29, 2017

In signing this statement, we affirm our commitment to support the voluntary recommendations of the industry-led Financial Stability Board (FSB) Task Force on Climate-related Financial Disclosures (TCFD). We believe that climate change will have significant impacts across many sectors and that we, as business leaders, have an important role to play in ensuring transparency around climate-related risks and opportunities.

We encourage other business leaders to join us in this united effort to improve disclosure across sectors and regions. The Task Force's recommendations will catalyze more consistent, comparable, and reliable disclosure of climate-related information that will facilitate more informed business and investment decision-making.

These disclosures are an important step forward in enabling market forces to drive efficient allocation of capital and support a smooth transition to a low-carbon economy.

In signing this letter, we are proud to express our support for better disclosures of climate-related risks and opportunities and we urge other business leaders to do the same.

3 July 2017

LETTER FROM GLOBAL INVESTORS TO GOVERNMENTS OF THE G20 NATIONS

This letter is signed by 390 investors representing more than USD \$22 trillion in assets.

As long-term institutional investors, we believe that the mitigation of climate change is essential for the safeguarding of our investments.

We have previously conveyed our strong support for the Paris Agreement and we reiterate our call for governments to continue to support and fully implement the Agreement.

Commit to implement the recommendations of the Task Force on Climate-related **Financial Disclosures**

Climate change poses serious risks to the global economy. Nonetheless, investors and financial markets lack clear and comparable information about which companies or assets are most exposed to this issue and which are best prepared.

To address this issue, companies are encouraged to commit to implement the recommendations of the Task Force on Climate-related Financial Disclosures (TCFD). The TCFD has published recommendations for reporting climate-related financial information in mainstream reports (annual financial filings).

Companies, investors and financial organizations globally are encouraged to implement the recommendations to allow a more efficient allocation of capital, improve the dialogue among all financial players and support a smooth and rapid transition to a lowcarbon economy

Read the commitment

Global Investors Driving Business Transition

The Paris Agreement set an ambitious goal to hold average global warming to well below 2-degrees Celsius and to reach net zero greenhouse gas emissions by the second half of the century. Doing so will require significant cuts in global greenhouse gas emissions - on the order of 80 percent by 2050

In support of the Paris Agreement, more than 400 investors representing more than US \$24 trillion signed the Global Investor Statement on Climate Change. The statement included the following commitment:

"As institutional investors and consistent with our fiduciary duty to our beneficiaries, we will work with the companies in which we invest to ensure that they are minimising and disclosing the risks and maximizing the opportunities presented by climate change and climate policy.

Climate Action 100+ is a new five-year investor initiative to engage with the world's largest corporate greenhouse gas emitters to curb emissions, strengthen climate-related financial disclosures and improve governance on climate change

Open letter to the Task Force on Climate-related Financial Disclosures

Dear Mr. Bloomberg, dear Task Force Members,

as a network of leading, globally active companies and organizations of Ger-man business, the goal of econsense is to provide a platform for dialog and a think tank to advance sustainable development. econsense and its 36 mem-ber companies are committed to the Paris Agreement and welcome this common and global approach to tackle climate change. We recognize the relevance of a comprehensive approach for the disclosure of climate-related risks and opportunities. The recommendations of the Task Force on Climaterelated Financial Disclosures (TCFD) are a step towards a more consistent, comparable, and reliable disclosure of climate-related information and have the potential to facilitate more informed business and investment decision

econsense member companies report on climate-related information in various initiatives. Thus, we would like to emphasize the need for the alignment of existing approaches to avoid increasing reporting burdens and to reduce omplexity of reporting requirements for companies. A pilot phase and voluntary field-testing of the final recommendations of the TCFD by individual firms will be of utmost importance to ensure their applicability and validity. We are available for further discussion and advocate an open dialog about the meaningful operationalization of the recommendations of the TCFD and the implementation of the Paris Agreement.

To further elaborate our position:

We believe that climate change will have significant impacts across many sectors and that business has an important role to play in providing the inno vations needed to combat climate change. We also see the need to ensure transparency around climate-related risks and opportunities. Disclosure and nanagement of climate-related risks and opportunities support long-term successful and sustainable value creation.

Global CEOs call for greater disclosure of climate risks and opportunities



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INCREASING SUPPORT POST REPORT LAUNCH

On December 12, French President Emmanuel Macron hosted the One Planet Summit on the two year anniversary of the Paris Agreement. In advance of this summit more than 130 additional companies announced their support for the TCFD, demonstrating significant traction among both financial institutions and public corporations.

237 supporting companies with over \$6.3 trillion in market cap, headquartered in 29 countries,

- including over 150 financial firms responsible for assest of more than \$81.7 trillion.

In addition to 3 national governments,

- over a dozen accounting organizations, and
- the largest proxy advisory firms



EXTENSION OF TCFD REMIT

In February 2017, the FSB welcomed a proposal by the Task Force to continue its work until at least September 2018 with a focus on the following:

- promoting and monitoring adoption of the TCFD's recommendations by companies
- evaluating the extent to which the recommended disclosures are meeting the needs
 of users





CURRENT AND PLANNED ACTIVITIES

Since its report was issued, the Task Force has been focused on promoting adoption of the recommendations through the activities described below.

Current and Planned Activities

| Held a two-day conference in collaboration with the Bank of England on scenario analysis. | Conducting preparer workshops to support implementation. | | |
|---|--|--|--|
| Formed a "preparer forum" for European oil and gas companies to discuss implementation issues. | Engaging with industry associations and NGOs to identify areas of common interest and possible collaboration. | | |
| Speaking at conferences to build awareness and understanding of the TCFD recommendations. | Engaging with financial and non-financial companies, investors, industry associations, NGOs, and others to gain additional support for the recommendations. | | |
| Engaging with companies working on implementation of the recommendations to clarify expectations. | Supporting integration of the TCFD recommendations into existing climate-related reporting frameworks. | | |

