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TCFD Final Report
A summary for business leaders

June 2017

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Context

The G20 Finance Ministers and Central Bank Governors are concerned that the financial implications of climate change are not adequately disclosed by companies to the market. Whilst companies might take into account the physical risks associated with climate change, the transition risks are more often ignored. Insufficient disclosure hinders the capital markets from making well-informed asset allocation and risk pricing decisions, and could pose a financial stability problem.

Recognising that the first step towards management of risk is the measurement of risk, **Mark Carney**, Financial Stability Board (FSB) Chair, created the Task Force on Climate-related Financial Disclosures (TCFD) in Dec 2015. The TCFD is chaired by **Michael Bloomberg** and consists of 32 industry leaders, including PwC Partner **Jon Williams**.

In June 2017, the TCFD released its Final Report which contains its disclosure recommendations. The recommendations seek to balance between the need to raise the bar for existing climate disclosure standards and the desire to achieve widespread adoption. Recognising that approaches will evolve over time, the Task Force also developed a set of 7 principles to underpin companies' disclosures.

The G20 will consider how best to adopt the recommendations of the Final Report. As it is a private sector report, the G20 will not approve the report. However, it is worth noting that the April 2017 meeting of the G20 Finance Ministers and Central Bank Governors generally accepted the recommendations and supported their voluntary adoption by companies. We believe that some countries will lean towards regulation and others towards softer approaches such as recommended guidance.

The Report

The Report consists of three sections:

1. the core recommendations
2. the implementation guidance
3. the technical annex on scenario analysis

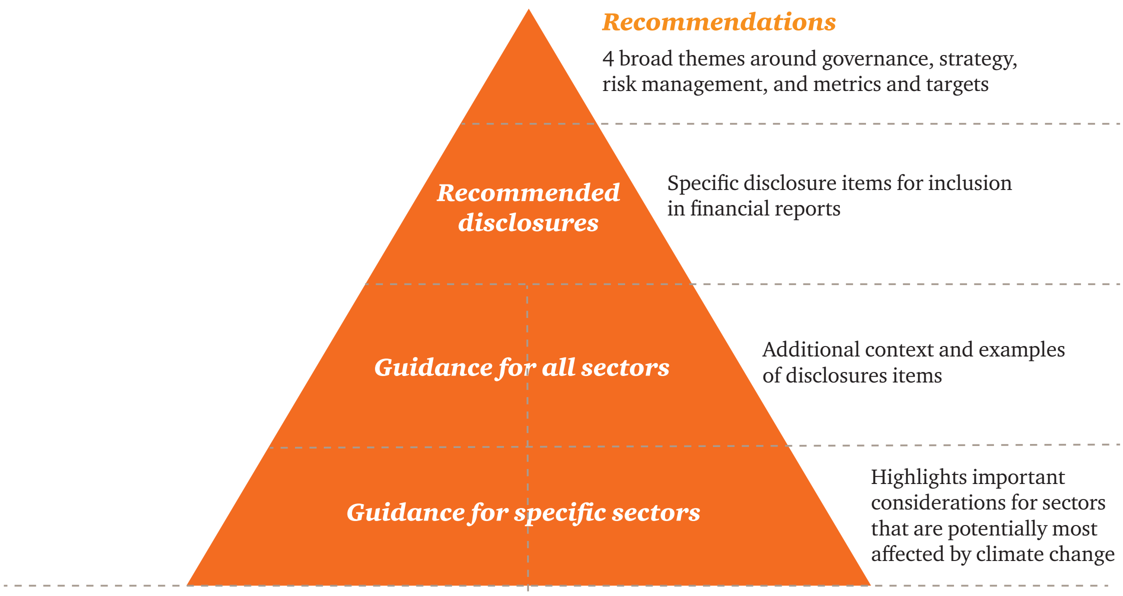
The core recommendations are straightforward to adopt and well-recognised as the basis for disclosure on many risks. Below that sit the Recommended Disclosures which contain more specificity[1].

These are supported by:

i) implementation guidance – a general set to be used by all sectors and 8 specific sets to be used by specific sectors (financial and non-financial) that are considered to be more at risk from climate change; and

ii) an annex providing more guidance on scenario analysis.

The Report's structure



Non-financial sectors:

- **Energy**
  - Oil and gas
  - Coal
  - Electric utilities
- **Transportation**
  - Air freight
  - Passenger air
  - Maritime transportation
  - Rail transportation
  - Trucking services
  - Automobiles
- **Materials and buildings**
  - Metals and mining
  - Chemicals
  - Construction materials
  - Capital goods
  - Real estate management and development
- **Agriculture, food and forest products**
  - Beverages
  - Agriculture
  - Packaged foods and meats
  - Paper and forest products

Financial sectors:

- **Banks**
- **Insurers**
- **Asset owners**
- **Asset managers**

[1] The final recommendations and supporting recommended disclosures can be found in the appendix of this document.

The core recommendations

Governance

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

Strategy

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

Risk management

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

Metrics and targets

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

Scope

The Report's scope includes all companies with publicly issued debt or equity, regardless of industry. Asset managers and asset owners, such as pension plans, insurance companies, endowments and foundations are also included. The Report recommends that disclosures are made in mainstream (i.e. public) annual financial filings and should be aligned with legislated thresholds on financial disclosure. 'Financial filings' refer to the annual reporting packages in which organisations are required to deliver their audited financial results under the corporate, compliance, or securities laws of the jurisdictions in which they operate.

The disclosures related to the 'Strategy' and 'Metrics and Targets' recommendations should involve an assessment of materiality, and the Task Force states that companies should only disclose information related to these recommendations if deemed material. The Task Force recommends that disclosures related to the 'Governance' and 'Risk Management' recommendations are provided in annual financial filings, independent of an assessment of materiality.

This is a logical approach, in our view, on the basis that any material financial disclosure should be put through the same rigorous governance processes regardless of whether the underlying driver is climate change or otherwise. It also allows companies to align their financial reporting with the legislated requirements depending on where they operate or are incorporated. This also would exempt smaller companies which may have a relatively smaller exposure to climate risks or less capacity at this stage to adopt the recommendations.

Given the TCFD's remit is from the FSB which is a G20 body, we expect that companies operating in the G20 countries will be asked to adopt the recommendations. Although the recommendations are voluntary, adoption is likely to be driven by four market 'levers' – investors, rating agencies, stock exchanges and consultancies.

Investors – asset owners and the asset managers who represent them – are impacted by how well the companies they invest in manage climate-related risks and opportunities. As such, prominent investors such as Aviva and Blackrock are making climate change a top priority and promising action if companies do not disclose in line with the TCFD recommendations. Ratings agencies also have the opportunity to see how better disclosure by companies can enable them to consider the financial impacts of climate change in credit and equity ratings. Stock exchanges will have the ability to encourage or mandate better climate disclosure in listings. Finally, consultancies and auditors can work with the main accounting standards boards translating climate-related disclosures into financial ones, and to advise clients on the implementation of the recommendations, and working with them to integrate these disclosures into financial reports.

These four levers could help to bridge this gap between voluntary disclosure and mandatory reporting.

Climate-related risks and opportunities

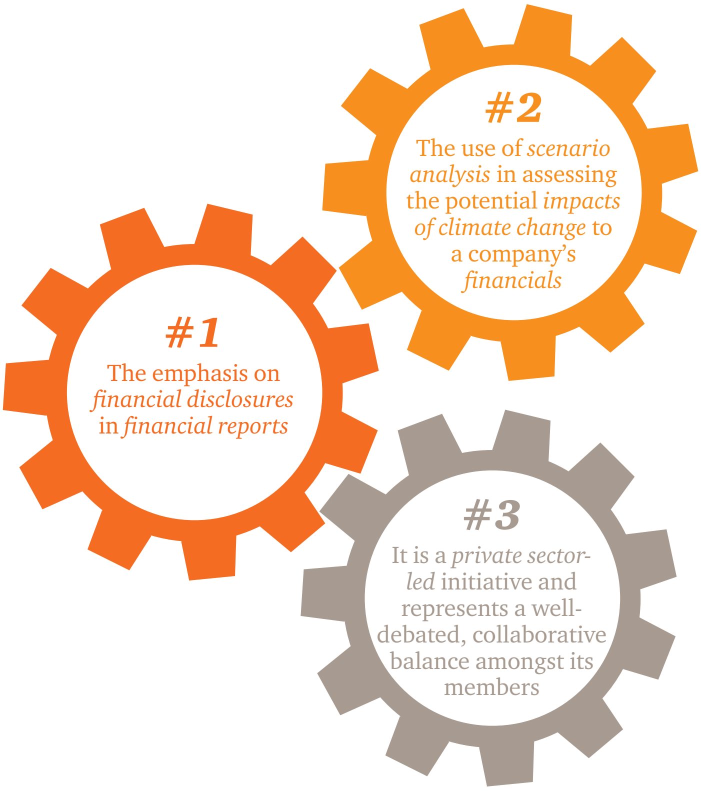
The TCFD moves understanding and acceptance of climate-related risks and opportunities beyond the traditional lens of physical impacts arising from severe weather events. The TCFD terminology suggests two broad types of climate-related risks – physical and transition risks. The table below explains further.

Type	Climate-related risk	Example
Transition	**Policy and legal:** the risk from emerging regulation aimed at addressing climate change or litigation risk	Canada will impose a carbon pricing scheme by 2018. This has cost implications for many industries, including car and industrial manufacturing, mining, oil and gas. It also has implications for the demand for carbon-intensive products and services, and therefore sector revenues.
	Technology: the risk from emerging technologies aimed at supporting the global low carbon transition	Innovations and technological progress, e.g. in renewable energy or electric vehicles will have implications for the business models of many companies in related sectors, reducing costs of electricity production or increasing capital or research and development expenditure as companies look to compete and respond.
	Market: the risk from shifting supply and demand curves as economies react to climate change	As the costs of renewable energy drop, the world has seen a corresponding increase in its adoption. In 2015, renewables represented 54% of all new capacity installed globally – the first time it has pulled ahead of fossil fuels[2].
	Reputation: the risks of damage to brand value and loss of customer base from shifting public sentiment about climate change	A global movement has seen commitments from investors responsible for $5 trillion to pledge divestment from fossil fuel companies in one way or another[3]. This could contribute to a reduction in capital available for such companies.
Physical	**Acute:** the risk of increasing severity of weather events	A leading British supermarket chain has found that 95% of its supply chain is vulnerable to disruption by climate change impacts with an estimated £360m of value at risk[4].
	Chronic: the risk of longer term changes in weather patterns and other climate change impacts	

[2] Global Trends in Renewable Energy Investment 2016, UNEP FI and Bloomberg New Energy Finance
[3] The Global Fossil Fuel Divestment and Clean Energy Investment Movement, 2016, Arabella Investors
[4] The Challenge of a Changing Climate, 2014, ASDA

What makes the TCFD different?

In our view, three factors differentiate the TCFD Recommendations from the many existing sustainability and climate reporting frameworks.



Firstly, there is the shift in emphasis from sustainability metrics only, such as water recycling rates or landfill waste reduction, to financial disclosures, such as the impact of carbon regulation to consumer demand for a company's products, or the supply chain disruptions likely to occur from severe weather events. The Report references disclosure of financial impacts such as increased operating costs, reduced revenues, impaired assets, more costly insurance premiums, higher capital costs and early asset retirement, to name a few.

Secondly, we believe the recommended use of scenario analysis will pose an interesting intellectual challenge for companies. The disclosure of its results will fill the growing gap between investor expectations and company disclosure, and go some way towards enabling more well-informed financial decisions to be made by stakeholders.

Lastly, the TCFD membership is drawn from the leaders and forward-thinkers of the private sector, with a balance across industries and roles. This enabled robust discussion and challenge between members, leading to the right balance being struck on tone and content. This should pave the way for widespread adoption of the Recommendations.

What are the core recommendations?

The core recommendations are based on the broad themes of governance, strategy, risk management, and metrics and targets. These are well-known to risk practitioners and corporate reporters, and commonly accepted as a way of reporting on many types of risks.

Here we highlight some of the more interesting disclosure items.

Governance

Companies are asked to disclose the extent of the board and management's oversight of climate-related risks and opportunities. This includes the process and frequency by which board committees, such as the audit committee, are kept informed and how climate change issues are considered when reviewing the company's performance, strategy and business plans. The audit committee's role in overseeing climate-related financial disclosures should be the same as with any other financial disclosure.

Strategy

If companies deem climate change to be material to their business, they are asked to disclose what climate-related risks and opportunities they are exposed to and how these will impact them, for example by affecting demand for their products and services or their supply chain which potentially lead to impacts on their income statements and balance sheets. Most importantly, companies are asked to conduct forward-looking scenarios on how their businesses will perform in a world where global warming is limited to 2 degrees Celsius.

Risk management

Companies are asked to disclose how they identify, assess and manage climate-related risks and specifically, how the management of climate-related risks is integrated into existing risk management frameworks.

Metrics and targets

Companies which deem climate change to be material are expected to disclose metrics and set targets that are aligned with the risks and opportunities they have identified as material for their business. The report also specifically asks for companies to disclose their Scope 1 and 2 greenhouse gas emissions, and if appropriate, Scope 3 as well. This is in recognition of the fact that rising emissions are still a key driver of global warming, and big emitters are, arguably, subject to greater transition risk.

These disclosures should be provided in companies' mainstream (i.e. public) financial filings, where 'financial filings' refer to the annual reporting packages in which organisations are required to deliver their audited financial results under the corporate, compliance, or securities laws of the jurisdictions in which they operate.

It is up to companies to determine the materiality of any climate-related risks or opportunities they face and to disclose their assessment. Companies should disclose information related to the 'Strategy' and 'Metrics and Targets' recommendations if deemed material. The disclosures related to the 'Governance' and 'Risk Management' recommendations should be provided in annual financial filings, independent of an assessment of materiality. However, it should also be noted that the Task Force recommends that organisations in the: Energy, Transportation, Materials and Buildings, and Agriculture, Food and Forest Products sectors with have more than US$1 billion equivalent in annual revenue should disclose information regarding 'Strategy' and 'Metrics and Targets' in other reports when the information is not deemed material and not included in financial filings.

The company's stakeholders, particularly investors and ratings agencies, will increasingly expect disclosure and companies will need to disclose or explain why there is no disclosure.

Key questions for companies

As companies look forward into 2018 and beyond, we believe 5 key considerations should feature in your plans.

1 *Do you have the right strategy and governance structures in place?*

In our view, climate-related risks and opportunities should be managed no differently to any other types of risks and opportunities. For many companies, climate-related risks and opportunities will be relevant to functions such as strategy, finance, risk and reporting. This should therefore be a relatively simple and potentially valuable action for most companies.

2 *Do you have an understanding of how climate change could financially impact your business?*

This involves at its simplest level a materiality assessment, and in greater depth, the use of scenarios to anticipate potential impacts to income statements and balance sheets. As the use and disclosure of scenario analysis increases in the market, this will become the standard expectation from investors and other stakeholders.

3 *Is your business prepared to respond to the identified climate-related risks and opportunities?*

Market leaders are looking to distinguish themselves commercially on this aspect – by identifying the 'winners' and 'losers' of a global economy impacted by climate change and transitioning towards a low carbon future. Investors will be looking to put their money where they believe they can receive the greater risk-adjusted returns.

4 *Are you in a position to meet investor and stakeholder demands for climate-related financial information?*

There is a shift in emphasis from reporting on your business's impact to climate change to reporting on the financial impact of climate change on your business. Investors are increasingly expecting to see this sort of financial disclosure and we believe that they will use the TCFD's report to demand it. This implies that climate-related financial disclosures will have to go through the same rigour and governance as standard financial reporting.

5 *Have you got the right data and systems in place?*

The management and reporting of climate risks and opportunities will require re-thinking how your company collects and analyses data, and how such data is fed into the systems and processes which underly the business decisions made by your employees. Although the temptation is to place an 'add-on' onto existing approaches, we think that in the long term, taking a integrated approach will help to streamline processes and reduce costs.

Appendix – The recommendations and supporting recommended disclosures

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.

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.

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.

Risk management

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

Recommended disclosures

a. Describe the organisation's processes for identifying and assessing climate-related risks.

b. Describe the organisation's processes for managing climate-related risks.

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

Metrics and targets

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

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.

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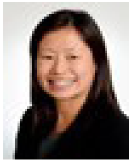

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Identifying, assessing, managing and reporting on your climate-related risks and opportunities will strengthen your core business and help meet growing stakeholder expectations.

Please contact us if you would like to learn more about the tools and services we can provide to support you.

Additionally, please visit our website at www.pwc.co.uk/services/sustainability-climate-change/climate-risks-and-the-fsb-task-force.html for more information, including tailored guidance documents for the following sectors:

- Agriculture, food and forestry
- Building and materials
- Energy
- Financial services
- Retail and consumer
- Transport

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