UNEP Finance Initiative
TCFD – Task Force on Climate-related Financial Disclosures

Climate risks and TCFD workshop
Day 2

12 October 2021

Agenda and objectives of the session

#	Sessions	Time (CET)
1	Latest regulatory developments on climate risk	
2	Examples of good practices in TCFD	
3	Conclusion and next steps	

- Understanding the landscape of regulatory development in relation to climate risk
- Develop further knowledge on the latest TCFD publications
- Learning what constitutes good practice for TCFD disclosure

Session #1

Latest regulatory developments on climate risk

1 Sector impacts and vulnerabilities (1/2)

Egypt has ben vulnerable to climatic changes, resulting in famine and political unrest during periods of drought

Sectors	Stressors	Risks
Agriculture	1. Increased temperatures 2. Increased drought frequency and duration 3. Changes in rainfall patterns 4. Sea level rise	■ Increased water demand ■ Reduced crop yields ■ Changing incidence of plant pathogens ■ Increased livestock disease and mortality ■ Loss of agriculture employment ■ Decreased water availability for irrigation, Salt water intrusion ■ Loss of arable land
Water Resources	**1. Increased temperatures** **2. Changes in precipitation** **3. Increased drought**	■ Increased variability in Nile River flow ■ Increased water demand ■ Decreased water availability for irrigation, drinking, and energy generation ■ Decreased hydropower supply ■ Increased domestic and transboundary water conflict
Tourism	**1. Increased temperatures** **2. Changing rain patterns** **3. Increased flooding** **4. Sea level rise**	■ Damage to ancient monuments and antiquities ■ Potential for coral reef deterioration in the Red Sea ■ Increased beach erosion ■ Damage to tourism infrastructure

1 Sector impacts and vulnerabilities (1/2)

Egypt has ben vulnerable to climatic changes, resulting in famine and political unrest during periods of drought

Sectors	Stressors	Risks
Health	1. Increased temperatures 2. More frequent and/or intense sand storms 3. Increased drought and flooding 4. Sea level rise	■ Increased heat stress ■ Increased cardiopulmonary disease ■ Increased injury and mortality from flooding and storms ■ Potential increase in vector-borne disease ■ Decreased nutrition and food security ■ Reduced water quality and availability
Coastal Zone	**1. Sea level rise** **2. Increased temperature** **3. Increasing storms and storm surge**	■ Damage to coastal infrastructure ■ Salt water intrusion ■ Reduced tourism industry ■ Loss of agriculture and fishery productivity

■ 2-3 degrees increase in annual temperatures by 2050 and ncreased duration of heat waves. 3 cm to 61 cm rise in sea level by 2085.

1 Historical climate vs. future climate

Given uncertainties in future flow, there is need to prepare for potential changes in both flood and drought incidence in Egypt.

Historical climate

- Average decrease in total annual precipitation of 6 percent per 30 year-period from 1901-2013, with significantly higher decrease of 22 percent in total annual precipitation from 1983-2013.
- There is evidence of increased frequency and severity of flash flooding in recent years
- 0.5°C per decade increase in average annual temperature from 1983-2013.
- Daily minimum temperatures have increased throughout Egypt, with fewer cool nights and more warm nights since 1960.

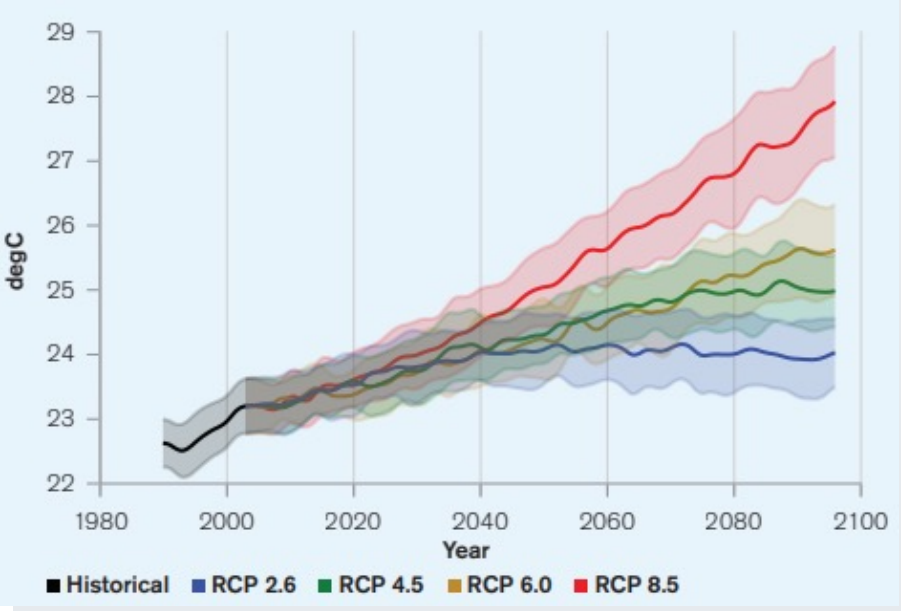
Future climate

- Increase in mean annual temperature of between 2°C to 3°C by 2050, with highest increases in the summer months of July-September and more rapid increases in the interior regions
- Projections for sea level rise in the Nile delta suggest an increase of between 3 cm and 61 cm by 2085 with increases in Alexandria of between 20 cm and 82 cm.
- Increased intensity and frequency of dust storms and sandstorms
- Significant increase in duration of long-lasting heat waves, with likely increase in duration of between 9 to 77 days by 2085
- Decrease in duration of long-lasting cold spells, with likely decrease in duration of 3 to 6 days by 2085.

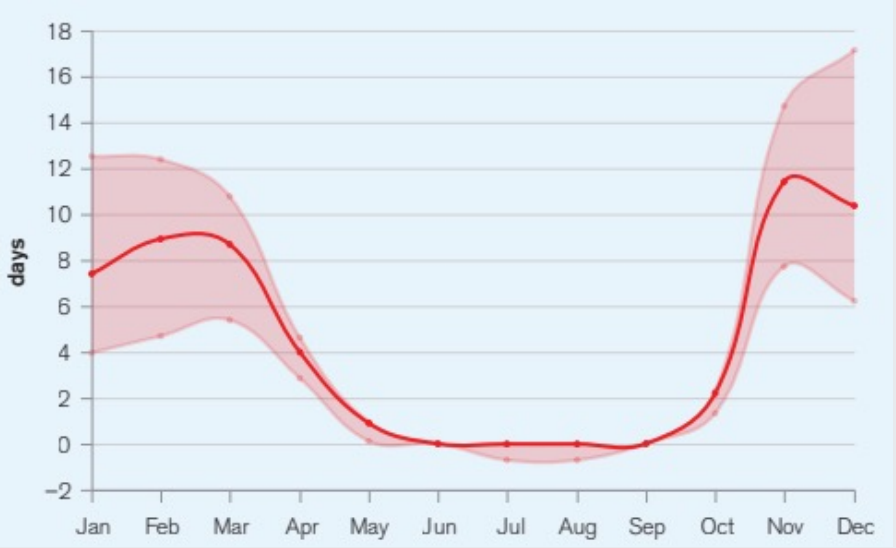
1 Key Trends in Egypt (1/3)

Increased heat and extreme heat conditions will result in significant implications for human and animal health, agriculture, water resources, and ecosystems.

Historical and projected average temperature for Êgypt from 1986 to 2099



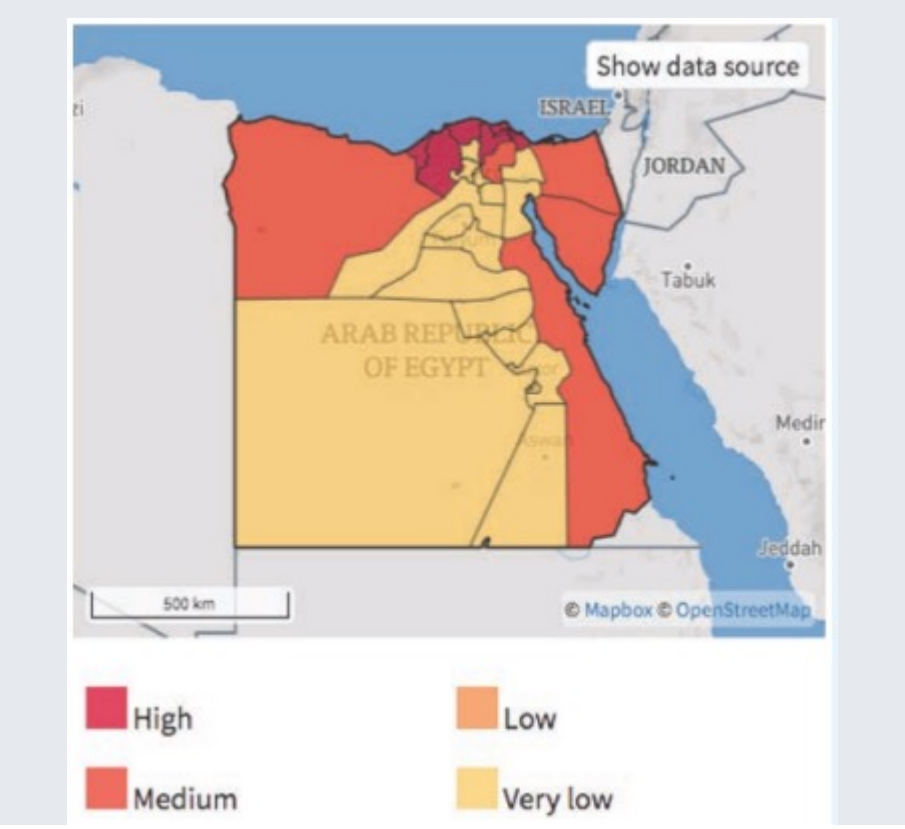
Projected change in summer days (Tmax>25C)



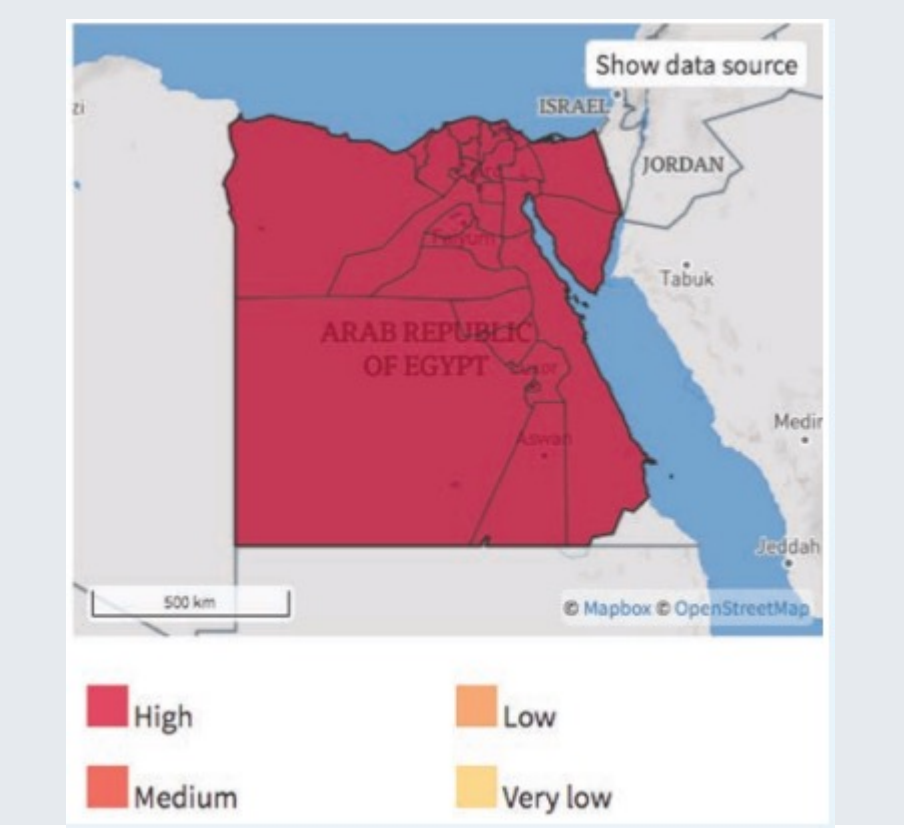
1 Key Trends in Egypt (2/3)

Climate change is expected to increase the risk and intensity of water scarcity and drought across the country

Risk of Coastal Flood



Risks of water scarcity

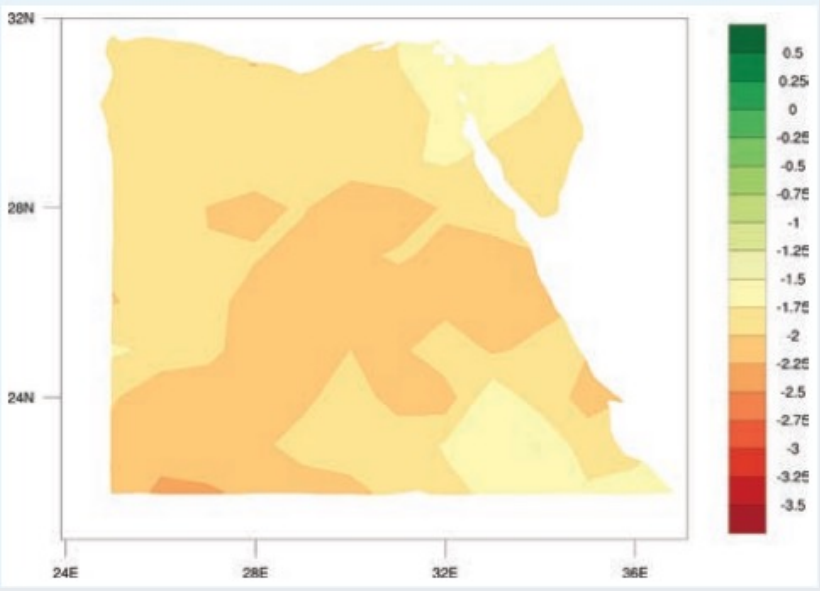


- Most of the country's population and infrastructure are concentrated in the Nile Delta and along the Mediterranean coast, making the country additionally vulnerable to the impacts of sea level rise, particularly inundation and saltwater intrusion.

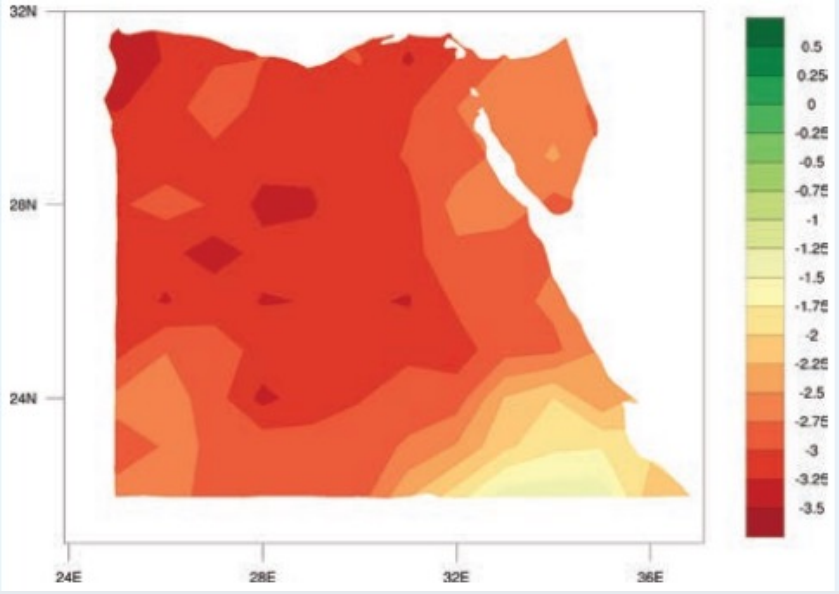
1 Key Trends in Egypt (3/3)

The entire country will be under significant water stress, most acutely occurring in the central and northwestern areas in the 2050s and 2090s

Spatial representation of SPEI across Tunisia for the period 2040 – 2059 under RCP 8.5



Spatial representation of SPEI across Tunisia for the period 2080-2099 under RCP 8.5



1 Latest regulatory developments (1/3)

MENA and Europe

MENA region

- **Egypt:** In January 2020, the Ministry of Finance of the Arab Republic of Egypt announced plan to issue green bonds. In July 2021, the FRA issued resolutions requiring companies listed on the Egyptian Stock Exchange, and companies operating in non-bank financial activities to submit environmental, social, and governance disclosure reports related to sustainability.
- **Tunisia:** On October 17th, 2016 the Tunisian parliament unanimously ratified the Paris Agreement and consequently formally adopted its intended nationally determined contribution. Since then, Tunisia has commitments towards the UNFCCC by submitting national communications, its first and second biennial updated reports (BUR) as well as its INDC.
- **Morocco:** In March 2021, the BAM published a directive for credit institutions to improve their management of climate-related and environmental risks. ACAPS implementation of the National Roadmap into the insurance sector, including promoting sustainable insurance (i.e. membership of UN PSI), development of incentive schemes, and other activities.

Europe

- **UK** PRA proposed climate stress test in next exploratory scenario. UK will also make climate disclosures mandatory
- **France** Bank of France will define stress test parameters
- **Norway** Norway's central bank announced need to integrate climate into risk assessment
- **Denmark** stress test development
- **EU**
  - ECB Guidelines on climate and environmental risks. New guidance on climate risk disclosures
  - First EU-wide pilot exercise on climate risk, whose main objective is to map banks' exposures to climate risk and provide an insight into the green estimation efforts banks have carried out

- A growing number of jurisdictions have announced plans to mandate climate-related disclosures

1 Latest regulatory developments (2/3)

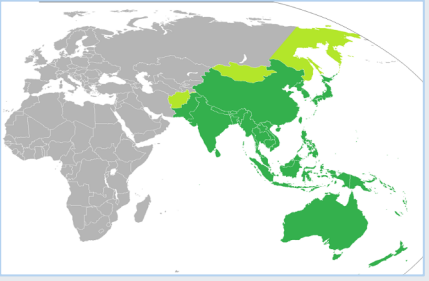
Americas and Asia

Americas

- **United States**
  - Fed recently joined the NGFS and discussed climate risk in semiannual Financial Stability Report
  - "Climate Change Financial Risk Act" to mandate climate stress testing and "Climate Risk Disclosure Act" to mandate climate-related disclosures introduced in last Congress
  - CFTC report: "Managing Climate Risk in the US Financial System"
- **Canada Bank of Canada** announced intent to develop climate stress tests

Asia & Oceania

- **Hong Kong** HK Monetary Authority (HKMA) will begin climate-related stress testing
- **Singapore** Monetary Authority of Singapore (MAS) will begin climate-related stress testing
- **Australia** Australian Prudential Regulatory Authority (APRA) has put forward a tender for climate stress tests on behalf of major banks for top 500 companies in Australia
- **New Zealand** Will require financial institutions disclose their climate risks in alignment with TCFD



- Climate stress testing has also become a growing consideration for financial supervisors

1 Latest regulatory developments (3/3)

NGFS
Central Banks and Supervisors Network for Greening the Financial System

- The Network for Greening the Financial System ("NGFS") is a peer-learning network of central banks and supervisors (with nearly 100 members and observers, including the U.S. Federal Reserve) focused on the financial system's risks from and impacts on environmental risks and climate change
- Its work covers five work streams considered important for global harmonization on climate risk.
- They have issued guidance and reports for central banks and supervisors, and also developed reference climate scenarios.
- June 2021 released new climate risk scenarios and May 2021 released a progress report on bridging data gaps.

BIS

- The Bank for International Settlements (BIS) promotes global monetary and financial stability through international cooperation's.
- April 2021 published a report that covers climate-related financial risks – Measurement Methodologies.
- April 2021 report on climate-related risk drivers and their transmission channels
- June 2021 Green Swan Conference

1 Trends in climate risk disclosure

And regulatory assessment ahead of COP26

Importance of these developments

- Increased collaboration between governments, regulators, financial institutions, modelers and other relevant stake holders
- Increased importance of understanding vulnerable exposures of financial institutions to climate risks
- Improved availability of guidance for financial institutions for climate risk management
- Development of forward-looking metrics and scenarios to use by financial institutions for identifying and assessing climate risks
- Greater access to platforms for financial institutions to voice their perspectives and challenges

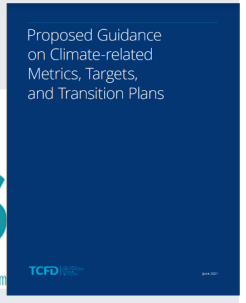
Observed trends

- Increased mandatory disclosures in line with TCFD
- Increased use of climate scenarios
- Enhancement of reference scenarios by institutions for greater specificity
- Greater global uptake, co-ordination and collaboration for climate-related disclosures
- Further efforts for standardizing disclosures and creating baseline frameworks
- Increasing regulatory climate stress test exercises

G7 United Kingdom 2021

BANK OF ENGLAND

NGFS Central Banks and Supervisors Network for Greening the Financial System



- Climate scenario analysis and mandatory disclosures are expected to increase in prevalence within the global financial system

1 Global developments in climate stress testing

Climate stress testing announcement

Eurozone	■ ECB published in 2021 the framework for the economy-wide climate stress test. On March 2021 the ECB released preliminary findings from a stress test aimed at assessing climate-related risks on the European banking sector over a 30-year horizon. ■ EBA announced that it will launch the 2021 EU-wide climate stress test exercise, with the publication of the macroeconomic scenarios on January 29, 2021. Expected results by July 31, 2021.
Australia	■ In September 2021, the Australian Prudential Regulation Authority (APRA) published details of a Climate Vulnerability Assessment (CVA) to assess the nature and extent of the financial risks that large banks in Australia may face due to climate change. ■ Climate risk scenario analysis and stress testing were designed in 2020 and are planned to be conducted in 2021.
UK	■ PRA and BOE will launch its climate stress test CBES in July 2021; results to be published in May 2022.
Singapore	■ MAS finalised environmental risk management guidelines for Banks, asset manager and insurers in December 2020. MAS proposed Banks should develop tools and metrics to monitor and assess exposures to environmental risk, including through scenario analysis and stress testing. MAS expects the first results by June 2022.

Session #2 Examples of good practices in TCFD

Good practices Pillar 1: Governance

2 Pillar 1: Governance

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			
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.	a) Describe the climate-related risks and opportunities the organization has identified over the short, medium, and long term. b) Describe the impact of climate-related risks and opportunities on the organization's businesses, strategy, and financial planning. c) Describe the resilience of the organization's strategy, taking into consideration different climate-related scenarios, including a 2°C or lower scenario.	a) Describe the organization's processes for identifying and assessing climate-related risks. b) Describe the organization's processes for managing climate-related risks. c) Describe how processes for identifying, assessing, and managing climate-related risks are integrated into the organization's overall risk management.	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) 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 organization to manage climate-related risks and opportunities and performance against targets.

2 Good practices in TCFD: Governance disclosures (1/8)

Credit Suisse TCFD Report 2020[1]

Efforts taken by Credit Suisse to implement climate-related recommendations

In 2018, we established a climate change program to address the TCFD recommendations with respect to external disclosures on climate-related risks and opportunities. In 2019, we integrated our TCFD adoption program into a Group-wide Climate Risk Strategy program to deliver on the first prong of our approach to addressing climate change and climate-related risks. The mandate of this program is to develop comprehensive strategies to address climate risk. This includes supporting our clients' energy transition towards low-carbon operations, technologies and services, continuing the ongoing implementation of the TCFD recommendations as well as working towards the implementation of various industry recommendations and compliance with upcoming regulatory expectations. This program is sponsored by the Chief Risk and Compliance Officer (CRCO) and has senior management representation from our business divisions as well as from General Counsel, Risk & Compliance and the new Sustainability, Research & Investment Solutions function.

Refer to page 13 for more details on Credit Suisse's three-pronged approach to address climate change and climate-related risks.

The Board's monitoring and supervision of climate-related risks & opportunities

The Board of Directors determines Credit Suisse's strategy towards climate-related matters

In 2020, the Board of Directors actively engaged with the Executive Board on designing the strategy for and establishing the new Sustainability, Research & Investment Solutions (SRI) function at Executive Board level. The Board continued to receive regular status updates on the implementation of SRI throughout the year, as well as on the progress of Credit Suisse's sustainability strategy. The Board furthermore received several briefings on the topics of sustainability and climate risks, covering both updates on external developments related to climate change, such as the increasing focus of global regulators on climate risks, as well as internal progress on specific initiatives supporting our sustainability strategy, such as the enhancement of our wealth management focused product and solutions offering with ESG integration.

Role of the Specialized Board committee in assisting the Board on Directors on climate change related matters

Climate change-related responsibilities are explicitly included in the Board's **Risk Committee** charter. In 2020, the Risk Committee conducted its annual review of our risk and sustainability framework, which included a discussion of key sustainability developments and steps taken by management to integrate sustainability considerations more closely into our risk assessment process. The Risk Committee also received a comprehensive briefing

Explanation

- Credit Suisse highlighted that the TCFD program is sponsored by the Chief Risk and Compliance Officer and outlined the senior management representation in detail
- Responsibilities from the management board have been written down, such as designing a strategy for the new Sustainability, Research & Investment Solutions
- Board's oversight is explained in a way that they received regular briefings related to climate change; more detailed topics have been mentioned in their report
- Roles and Responsibilities have been lied out very clearly
- Good example for Governance a) and b)

1. https://www.credit-suisse.com/TCFD

2 Good practices in TCFD: Governance disclosures (2/8)

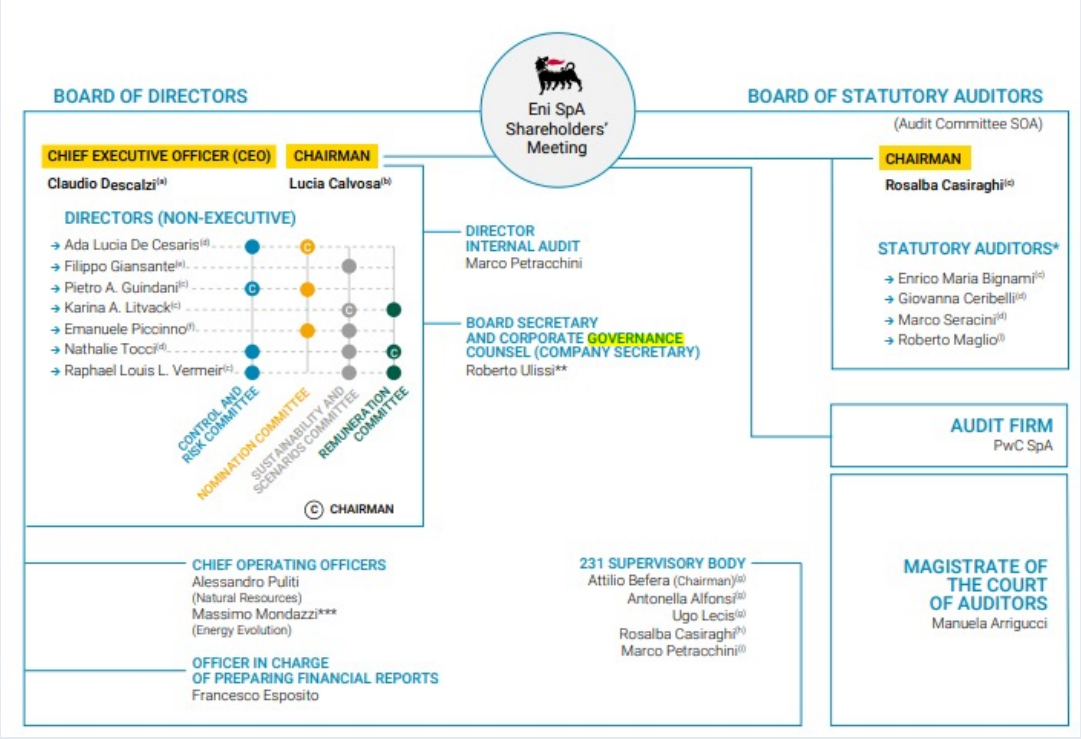
Credit Suisse TCFD Report 2020[1]

- Explained the interlinkages of the board's strategy across their divisions as an additional add on.

1. https://www.credit-suisse.com/TCFD

2 Good practices in TCFD: Governance disclosures (3/8)

Eni Annual Report 2020[1]



- Roles and Responsibilities are matched to positions and **persons**, which gives an overview of who is represented in different committees, which is beyond what FI's are currently doing. A good example for Governance a).

1. https://www.eni.com/assets/documents/eng/reports/2020/Annual-Report-2020.pdf

2 Good practices in TCFD: Governance disclosures (4/8)

Eni Annual Report 2020[1]

THE MAIN SUSTAINABILITY ISSUES ADDRESSED BY THE BOARD IN 2020

- 2020 Financial sustainability strategy and sustainability reporting
- 2019 Sustainability Report: "Eni For"
- Update of the UK Modern Slavery Act statement
- 2019 financial statements, including the consolidated Non-Financial Statement
- The Remuneration Report, including sustainability targets in the definition of performance plans
- 2019 HSE Report
- Four-year and long-term Plan (including non-financial targets)

- Detailed lists of board's oversights and achievements in one year.

1. https://www.eni.com/assets/documents/eng/reports/2020/Annual-Report-2020.pdf

2 Good practices in TCFD: Governance disclosures (5/8)

HSBC TCFD Update 2020[1]

Board oversight

The Board sets our strategic direction, including having responsibility for our climate strategy. We realise that our climate and sustainable finance ambitions will only be successful if they are integrated into our governance structure. As a result, our Group Chief Executive is the main sponsor of our climate ambition and we provide regular updates on our climate and sustainable finance initiatives to the Board and the Group Executive Committee.

The Group Chief Risk Officer and the chief risk officers of our Prudential Regulation Authority-regulated businesses are the senior managers responsible for climate financial risks under the UK Senior Managers Regime. The chief risk officers attend Board meetings and where appropriate provide regular verbal and written updates to the Board and Group Executive Committee ('GEC').

The Group Risk Committee ('GRC') provides oversight of climate risks and opportunities through a wide range of high level enterprise risk reports, deep dives and updates. For example in 2020, the GRC and the HSBC UK Risk Committee received an update on the thematic review of climate risk management and reviewed the Group's climate risk appetite statement and risk management approach.

- Overview of governance structure and positions linked to climate opportunities and climate risks. A good example for Governance a).

1. HSBC, 2020.

2 Good practices in TCFD: Governance disclosures (6/8)

HSBC TCFD Update 2020

Management's role

The GEC and regional and global business executive committees manage our climate ambitions and are advised by our Climate Business Council. An information dashboard is provided to the GEC every quarter to seek to improve our awareness and management of key climate risks. Management responsibilities for climate risk are integrated into the relevant business and functional areas.

Climate risk receives risk management oversight at the Risk Management Meeting of the Group Executive Committee ('GRMM') through the 'Top and emerging risk' report. In 2020, the Group Risk Executive Committee also reviewed an update on the financial and non-financial risks from climate change. A dedicated Climate Risk Oversight Forum ('CROF') is responsible for shaping and overseeing HSBC's approach to climate risk. This forum also provides updates to the GRC and GRMM on climate risk matters.

All these forums interact with each other on items that require broader co-ordination, discussion, business or risk engagement.

Roles and responsibilities for managing climate risk are aligned to HSBC's risk management framework and the three lines of defence model to ensure robust oversight and challenge of our capabilities.

In 2020, the Climate Business Council shaped the Group's sustainability strategy and climate ambition that was subsequently approved by the Board in October. The CROF defined the Group's climate risk appetite and risk management approach, which was endorsed by the GRMM and GRC in November and will be considered by the Board in early 2021. All Group risk forums have received updates on the Group's climate stress testing and scenario approach, and the ESG Steering Committee and the Disclosure Committee have reviewed and approved climate-related disclosures.

In addition, climate risk updates were provided to our principal subsidiaries in the UK, Asia, Singapore and Mexico, as well as to HSBC Insurance and our digital business services and compliance functions.

- Detailed outline for how management roles are involved in assessing and managing climate-related risks and opportunities. A good example for governance b).

2 Good practices in TCFD: Governance disclosures (7/8)

Eni Annual Report 2018[1]

GOVERNANCE

Eni's decarbonization strategy is part of a structured system of Corporate Governance; within this, the **Board of Directors** (BoD) and the Chief Executive Officer (CEO) play a central role in managing the main aspects linked to climate change. The BoD examines and approves, based on the CEO's proposal, the Strategic Plan, which sets out strategies and includes objectives also on climate change and energy transition. Eni's economic and financial exposure to the risk that may derive from new carbon pricing mechanisms is examined by the BoD both in the phase leading up the authorisation of every investment and in the following half-year monitoring of the entire project portfolio.

The BoD is also informed annually on the result of the impairment test carried out on the main Cash Generating Units in the E&P sector and elaborated with the introduction of a carbon tax valued according to the IEA SDS scenario (see pages 99-100). Finally, the BoD is informed on a quarterly basis of the results of the risk assessment and monitoring activities of Eni's top risks, including climate change. Since 2014, the BOD has been supported in conducting its duties by the **Sustainability and Scenarios Committee** (CSS), with whom examines, on a periodic basis, the integration between strategy, future scenarios and the medium/long-term sustainability of the business. During 2018, the CSS discussed in detail climate change issues at all meetings, including the decarbonisation strategy, energy scenarios, renewable energies, research and development to support the energy transition, climate partnerships and water resources and biodiversity issues[2]. Since the second half of 2017, the BoD and the CEO are also supported by an **Advisory Board**, composed of international experts, called to analyze the main geopolitical, technological and economic trends, including issues related to the decarbonization process[3]. In 2018, Eni also contributed to the "Climate Governance"[4] initiative of the World Economic Forum (WEF), with the involvement of the Eni BoD. From 2015, the CEO also chairs the Steering Committee of the **Climate Change Program**, a cross-functional working group composed of members of Eni's top management that assists the CEO in developing and monitoring an appropriate short/medium/long-term decarbonization strategy.

The strategic commitment to reduce greenhouse gas emissions is part of the Company's key goals. Therefore, the CEO's short-term incentive plan includes the objective of reducing the intensity of GHG direct emissions from upstream operated activities by 12.5%. This objective is consistent with the target of reducing greenhouse gases by 2025 announced to the market and is applied to the incentives for Company managers who have a strategic role on this matter.

Explanation

- Makes clear linkages between its decarbonisation strategy and corporate governance, showing the importance of interconnectivity of information
- Specific information is given about how the Board exercise its oversight functions,
- Explanation is given on how the board is supported by various committees.

1. https://www.eni.com/assets/documents/Annual-Report-2018.pdf

2 Good practices in TCFD: Governance disclosures (8/8)

Royal Bank of Canada Annual Report 2018[1]

The board believes strongly that achieving sustainable growth goes beyond generating profits, and that RBC has an important role to play as a corporate citizen that is fully involved in each of the communities where we do business. Specifically, we recognize that climate change is the most pressing issue of our age, and we oversee the bank's enterprise-wide approach to accelerating clean economic growth and supporting the transition to a low-carbon economy.

The Board and its Committees oversee senior management who is responsible for the execution of the management of E&S risks and opportunities. The Board provides oversight of our environmental strategy and our E&S risks, including our approach to managing these risks. GRM has a dedicated E&S risk team that develops approaches to identify, assess, monitor and report on climate-related risks, as appropriate. Performance goals on climate-related risks have been established at the management level.

Explanation

- It shows that climate issues feature prominently at the top. Chair of the Bords, introduces the annual report by referring to climate change as the “most pressing issue” of our age and explains the Board’s oversight function in this report.
- Explains which functions are involved in identifying, assessing, monitoring and reporting on climate-related issues, and ties this back to performance goals at a management level.

1. https://annualreports.rbc.com/ar2018/

2 Questions

Menti poll

- On a scale from 1-5 how efficient do you find it to match the roles and responsibilities to specific persons in the disclosure? Example (3/8)
- How would you define a good practice for the governance Pillar?

Good practices Pillar 2: Strategy

2 Pillar 2: Strategy

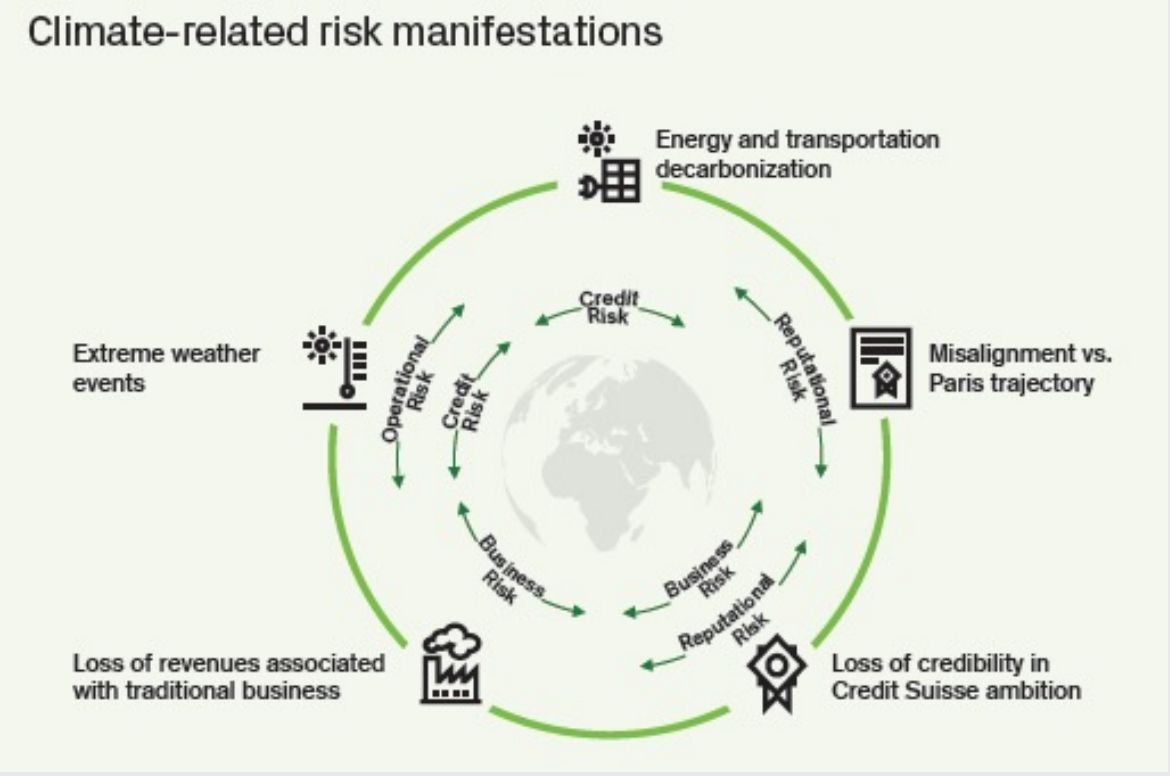
Governance	Strategy	Risk Management	Metrics and Targets
Disclose the organization's governance around climate-related risks and opportunities.	Disclose the actual and potential impacts of climate-related risks and opportunities on the organization's businesses, strategy, and financial planning where 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

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.	a) Describe the climate-related risks and opportunities the organization has identified over the short, medium, and long term. b) Describe the impact of climate-related risks and opportunities on the organization's businesses, strategy, and financial planning. c) Describe the resilience of the organization's strategy, taking into consideration different climate-related scenarios, including a 2°C or lower scenario.	a) Describe the organization's processes for identifying and assessing climate-related risks. b) Describe the organization's processes for managing climate-related risks. c) Describe how processes for identifying, assessing, and managing climate-related risks are integrated into the organization's overall risk management.	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) 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 organization to manage climate-related risks and opportunities and performance against targets.

2 Good practices in TCFD: Strategy disclosures (1/9)

Credit Suisse TCFD Report 2020[1]



- Very good visualization for a) in the strategy pillar to describe the risks involve, which needs to be considered in the business overall risk strategy.

1. https://www.credit-suisse.com/TCFD

2 Good practices in TCFD: Strategy disclosures (2/9)

Credit Suisse TCFD Report 2020[1]

Energy and transportation decarbonization: Global policies (e.g. cross-border carbon tax) and/or technological breakthroughs might accelerate transition towards greener energy sources and products. This could trigger a wave of defaults and reallocation of capital.
Manifestation: Credit risk

Misalignment vs. Paris trajectory: Industry-wide trajectories, common metrics and pathways for financial institutions are currently being set. Credit Suisse actively promotes transition, but also depends on clients to engage, commit and deliver on commitments towards "net zero" in a collaborative effort.
Manifestation: Reputational risk

Loss of credibility in Credit Suisse ambition: We aspire to become leaders and we are striving to achieve that position, with significant management focus. The journey towards leadership will entail significant efforts on multiple fronts with potential execution risk, and includes external dependencies.
Manifestation: Reputational risk, business risk

Loss of revenues associated with traditional business: Credit Suisse's leadership position in sustainability may lead to rejection of transactions with clients that do not have a credible transition plan. This may result in loss of revenues associated with such transactions and assets under management if clients decide to move assets away. At the other end of the spectrum, a slow pivoting towards "green" may alienate clients who strongly support the transition, and thereby also lead to a loss of AuM.
Manifestation: Business risk

Extreme weather events: More frequent and severe weather events might lead to credit risk implications related to the financed portfolios as well as operational risks related to buildings and infrastructure owned by Credit Suisse as well as overall business continuity.
Manifestation: Credit risk, operational risk

- Further detail was given to the manifestation of business risks.

1. https://www.credit-suisse.com/TCFD

2 Good practices in TCFD: Strategy disclosures (3/9)

Credit Suisse TCFD Report 2020[1]

ambitions of Credit Suisse, we expect to introduce further restrictions over time.

A summary of our sector policies and guidelines is available at:
credit-suisse.com/sectorpolicies

Credit Suisse has made strong commitments for green and renewables sector

Credit Suisse has a considerable pedigree in the green bond market, underwriting the first-ever green bond issuance in 2008 from development funding institutions.

Credit Suisse has long been a supporter of the Green Bond Principles and we are actively seeking to help mobilize more capital toward a "low carbon" economy. In this respect, Credit Suisse and the Climate Bond Initiative (CBI) joined forces in September 2020 and published "Financing Credible Transitions," which presents a framework for defining ambitious and credible transition pathways for companies to collectively reduce global emissions in line with the goals of the Paris Agreement. Its aim is to support rapid growth of a transition bond market as part of a larger and liquid climate-related market, and to deliver confidence for investors, clarity for bankers and credibility for issuers.

Growth in green bond issuance
From 2013 to the end of 2020, we supported the issuance of over USD 49 billion of sustainable debt capital markets products such as green, social, sustainability, sustainability-linked and transition bonds as well as green certificates of deposits and commercial paper.

These activities include coordinating and underwriting a number of landmark and inaugural deals, including a

Capital for sustainable businesses

150 transactions
in clean and renewable energy businesses

Credit Suisse actively supports clean and renewable energy businesses and, by the end of 2020, had been involved in over 150 transactions in this field with a value of more than USD 130 billion since 2010.

USD
4.3 billion
of tax equity has been committed to 29 renewable energy opportunities warehouse capacity

Over the past decade, a total of approximately USD 4.3 billion of tax equity has been committed to 29 renewable energy opportunities as a result of the collaboration between our Strategic Transactions Group and our Debt Capital Markets Solutions team. Multiple transactions were closed in 2020, which included Credit Suisse's inaugural community solar investment.

USD
1.6 billion
of renewables asset-backed warehouse capacity

In 2020, Credit Suisse served as structuring agent and bookrunner on a number of solar securitizations, notably two totaling USD 571 million, as well as another USD 247 million solar securitization. Credit Suisse also served as placement agent for a USD 216 million residential solar portfolio and a portfolio of German transmission infrastructure assets of undisclosed size. In addition, Credit Suisse put in place an additional approximately USD 1.6 billion of renewables asset-backed warehouse capacity.

Ethical food
and sustainable farming

In 2020, Credit Suisse served as the bookrunner on the IPO for an ethical food company disrupting the US food system with its model of conscious capitalism focused on the humane treatment of animals and sustainable farming practices. We also worked with a number of companies in the electrical vehicles and mobility industry, including a Chinese smart electric vehicle company on its IPO.

Creating
sustainable businesses

In providing merger and acquisitions services we are creating sustainable businesses through transactions. For instance, we advised exclusively on the largest US residential solar merger.

ESG
energy transition and social impact

In 2020, we worked on a number of ESG, energy transition and social impact Special Purpose Acquisition Corporations (SPACs).

- A good example for Strategy b) as it gives a clear overview of their commitments.

1. https://www.credit-suisse.com/TCFD

2 Good practices in TCFD: Strategy disclosures (4/9)

Credit Suisse TCFD Report 2020[1]

Climate-related opportunities

#	Type	Climate-Related Opportunity*
1	Markets	Financing: Equity issuance (e.g., through sustainable capital markets transactions, private placements, or SPACs) aligned with the Credit Suisse Sustainable Activities Framework as well as M&A sell-side and buy-side advisory to support the transition of our clients to reach a stronger ESG performance.
2	Markets	Financing: Issue green debt financing instruments (private or public debt, structured notes) to fund projects or assets that mitigate climate change by reducing emissions, protect ecosystems, or otherwise have a positive environmental impact.
3	Markets	Financing: Lending to fund green or climate-related projects (e.g., renewable energy infrastructure, low-carbon public transportation) or technologies that are expected to play an important role in decarbonizing the economy ("green loans") or offering sustainability-linked loans whose pricing is based on the borrower's ESG score or overall sustainability achievements.
4	Markets	Financing: Evaluate new property investments also from an ESG perspective with respect to the impact on a property's current and potential future value as it relates to energy efficiency, public transport connectivity, use of sustainable materials, tenant wellbeing, and community engagement.
5	Products and Services	Investing: Actively exercise the bank's rights as shareholder in companies or on behalf of clients by voting at shareholder meetings and actively engaging with investee companies in order to preserve long-term shareholder value, enhance long-term returns, and influence companies' ESG performance.
6	Products and Services	Investing: Integrate environmental, social, and governance (ESG) criteria along the investment process consequently and broad-based with the objective to achieve an improved risk-return profile in clients' investment portfolios and make portfolios more resilient against financial market shocks resulting from climate risks.
7	Products and Services	Investing: Develop investment strategies premised on the view that a rapid shift in public sentiment and policy-making regarding the climate may lead to a large variation in the fortunes of companies that stand to gain from the resulting transition, and those that will lose.
8	Products and Services	Investing: Expand the product offering to investment strategies that are aligned with the Credit Suisse ESG Investment Framework, which allows clients to make a positive impact on society and the environment without sacrificing returns.
9	Products and Services	Advise: Provide financial advice and develop financing strategies that enable existing and prospective clients to move towards a low-carbon economy and reach a stronger ESG performance.
10	Products and Services	Advise: Provide investment advice to enable existing and prospective clients to better understand and manage their exposure to climate risks and enhance their resilience to both physical and transition risk.

#	Type	Climate-Related Opportunity	Horizon*
1	Resource Efficiency	Office Efficiency: Improve energy efficiency of current office space and capture cost-savings from optimization programs and investments in energy-efficient technologies and energy storage.	ST-LT
2	Resource Efficiency	Office Space Optimization: Optimize office occupancy rate by rationalizing down office space in a hybrid working model that is flexible to allow for increased levels of home working.	
3	Resource Efficiency	Office Lease: Develop sustainability criteria for office selection and green leasing policies for landlord-controlled spaces to create incentives for efficiency gains.	ST-LT
4	Resource Efficiency	Data Center Efficiency: Improve utilization and energy efficiency of in-house data centers and capture cost-savings from optimization programs and investments in energy-efficient technologies and energy storage.	ST-LT
5	Resource Efficiency	Data Center Optimization: Source third-party suppliers and cloud providers with improved energy and carbon performance aligned with industry best practice.	ST-LT
6	Energy Source	Renewable Electricity Supply: Source 100% of electricity from renewable sources for all data centers and office space.	MT
7	Energy Source	Transition Heating to Zero Carbon: Replace fossil fuel heating with efficient electrical systems using air source or ground source heat pumps powered by renewable electricity.	MT-LT
8	Energy Source	On-site and off-site generation: On-site and off-site generation for office buildings and parking lots (e.g., solar panels).	MT-LT
9	Energy Source	Vehicles: Shift leased, owned, and third-party fleets to low carbon vehicles, install on-site charging infrastructure for electric vehicles and introduce employee schemes for electric vehicles or low carbon alternatives.	MT-LT
10	Resilience	Procurement: Engage suppliers across our supply chain to improve carbon performance and introduce low carbon policies.	ST-LT
11	Resilience	Sourcing: Increase supply of renewable energy to offices and data centers and use electrical storage where possible.	MT-LT
12	Resilience	Employee Engagement: Encourage employees to take climate actions in office, expand employee training and benefit programs that enable employees to calculate their own carbon footprint, and reduce carbon emissions through a range of actions that include renewable energy, electric vehicles, and more efficient modes of travel.	MT-LT
13	Resilience	Data and Management Information: Develop management information dashboards structured on climate-impact data, to enable decision-making processes.	MT-LT

- Priorities, as well as opportunities, are clear and transparent.

https://www.eni.com/assets/documents/eng/reports/2020/Annual-Report-2020.pdf

2 Good practices in TCFD: Strategy disclosures (5/9)

Eni Annual Report 2020[4]

TCFD RECOMMENDATIONS		AR 2020	2020 SUSTAINABILITY REPORT
		Consolidated Non-Financial Information	*Addendum Eni For - Carbon neutrality by 2050*
GOVERNANCE			
Disclose the organization's governance around climate-related risks and opportunities.	a) Oversight by the BoD		√
	b) Role of the management	√ Key elements	√
STRATEGY			
Disclose the current and potential impacts of climate-related risks and opportunities on the organization's businesses, strategy, and financial planning where such information is material.	a) Climate-related risks and opportunities		√
	b) Incidence of risks and opportunities linked to climate	√ Key elements	√
	c) Resilience of the strategy		√
RISK MANAGEMENT			
Disclose how the organization identifies, assesses, and manages risks related to climate change.	a) Identification and assessment processes		√
	b) Management processes	√ Key elements	√
	c) Integration into overall risk management		√
METRICS & TARGETS			
Disclose the metrics and targets used to assess and manage risks and opportunities related to climate change where such information is material.	a) Metrics used		√
	b) GHG emissions	√ Key elements	√
	c) Targets		√

- Great overview that all four pillars will be captured in the upcoming reports.

https://www.eni.com/assets/documents/eng/reports/2020/Annual-Report-2020.pdf

2 Good practices in TCFD: Strategy disclosures (6/9)

Eni Annual Report 2020[1]

scenario and the reference regulations. Eni will pursue a strategy that aims to achieve by 2050 the net-zero target on GHG Lifecycle Scope 1, 2 and 3 emissions, and the associated emission intensity (Net Carbon Intensity), referred to the entire life cycle of the energy products sold. In addition, the **intermediate decarbonization targets** were confirmed and further extended:

- -25% of Net GHG Lifecycle Emissions @2030 vs. 2018 and -65% @2040;
- -15% of Net Carbon Intensity of energy products sold @2030 vs. 2018 and -40% @2040;
- Net-zero Carbon Footprint for Scope 1 and 2 emissions from upstream activities by 2030, with a new target of halving by 2024 vs. 2018;
- Net-zero Carbon Footprint for Scope 1 and 2 emissions from all group operations by 2040.

Actions mostly already in place that will contributer to achieve these results are:

- reduction of hydrocarbon production in the medium term, with gradual growth of the gas share, which will reach 90% by 2050;
- gradual conversion of traditional refining using new technologies for the production of decarbonized products and recycling of waste materials;
- increase of "bio" refining capacity to 5/6 million tonnes, palm oil free starting from 2023;
- growth in renewable energy capacity production to 60 GW by 2050;
- progressive increase in the production of blue energy carriers (electricity and hydrogen) from gas, combined with CO_2 capture and storage projects;
- increase in Eni gas e luce retail customers, with over 20 million by 2050;
- forest conservation projects totalling around 40 million tonnes/year by 2050.

CARBON NEUTRALITY BY 2050

CLIMATE CHANGE

GOAL
Combat climate change

PUBLIC DOCUMENTS
Policy "Sustainability", Eni's Position on biomass, Eni's responsible engagement on climate change within business associations, Strategic Plan 2021-2024: towards zero emissions (February 2021)

PRINCIPLES

- Full decarbonization of all products and processes by 2050;
- reduce the carbon footprint towards zero emissions with the contribution of Forestry and CCS initiatives
- develop and implement new technologies for the reduction of climate-altering emissions and more efficient energy production
- ensure sustainable biomass management along the entire supply chain
- ensure consistency and transparency in the activities of associations with Eni's strategy on climate change and energy transition, in line with stakeholders' expectations

Eni Annual Report 2020[1]

- Highlight details about GHG Lifecycle scope 1, 2 and 3 emissions in their overall strategy
- Clear and transparent targets
- Linked actions that will contribute to achieving the results
- Mapping of public documents and principles to each of their underlying strategy goals

1. https://www.eni.com/assets/documents/eng/reports/2020/Annual-Report-2020.pdf

2 Good practices in TCFD: Strategy disclosures (7/9)

UN environment programme 50 1972-2022

HSBC TCFD Update 2020

Our target ambition

We have developed a strategic framework for our climate stress testing and scenario analysis capabilities. The framework, which is in the process of being implemented, has been designed using a principle-based approach. This ensures our climate analysis can deliver insights that support both our business strategy and risk decision making, and can evolve over time. It is designed to allow us to make continuous improvements in line with new and rapidly evolving standards, align with our existing frameworks and processes, and to embed climate in our core business strategy, client engagement, and financial and strategic planning processes.

The strategic framework will help us to:

- Integrate climate risk analysis into the core business applications and broader frameworks around planning, client engagement and business strategy planning.
- Support our business teams in assessing transition strategies for customers in priority sectors and advising on risk implications.
- Embed clear accountabilities, ownership and responsibilities for climate targets across our senior management and global functions.
- Meet regulatory expectations on climate stress testing and scenario analysis.
- Develop enriched climate specific data and infrastructure to allow accurate measuring and monitoring of climate impact and progress.

Progress so far

Achieving these capabilities will take time. We are implementing a phased development approach to ensure that we benefit from the lessons we learn along the way and can respond to change.

In 2020, we laid the foundations by communicating our strategy, engaging with customers, setting our target ambition level and starting to develop our climate risk scenario testing capabilities. In the coming years, we aim to expand our capabilities and coverage, and increasingly integrate climate change scenario testing results into relevant business-as-usual activities and key processes to help deliver our climate strategy.

To support HSBC's strategic and financial decision making, we have developed capabilities to conduct pilot climate scenario analysis on our portfolios exposed to climate risk. We reflect granular characteristics in our analyses to ensure that insights are useful and actionable both from a risk management and business perspective.

Our bespoke models use evolving and sophisticated industry approaches to estimate the impact of physical and transition climate risk on selected segments of our portfolios. These were developed in close collaboration with our risk management, finance and global business teams ensuring that the key drivers of climate risk for the most vulnerable sectors and locations are reflected at a granular level. Identifying and monitoring these different and diverse impacts will strengthen our ability to manage risk and support our customers' climate goals.

- Sections focus only on the resilience of the companies strategy, which is in line with c) of the strategy pillar.

2 Good practices in TCFD: Strategy disclosures (8/9)

UN environment programme 50 1972-2022

HSBC TCFD Update 2020

Wholesale loan exposure to transition risk sectors and customer questionnaire responses

	Automotive	Building and construction	Chemicals	Metals and mining	Oil and gas	Power and utilities	Total
Wholesale loan exposure as % of total wholesale loans and advances to customers and banks[1,2,3]	≤3.1%	≤4.0%	≤3.4%	≤2.5%	≤3.4%	≤3.2%	≤19.6%
Proportion of sector for which questionnaires were completed[4]	42%	44%	32%	45%	42%	40%	41%
Proportion of questionnaire responses that reported either having a board policy or a management plan[4]	68%	81%	77%	54%	84%	93%	77%
Sector weight as proportion of high transition risk sector[4]	16%	20%	18%	13%	17%	16%	100%

Use of climate stress testing and scenario analysis to answer strategic questions

Guiding questions

- How will our clients be impacted under different climate scenarios?
- How should we advise our clients to mitigate their climate risk exposure?
- How do we accurately track and monitor impact of climate risk on performace?

- What is the impact of climate risk on our business plan?
- Do we have sufficient financial resources given the potential climate scenarios?
- Does our financial resource allocation approach reflect the climate risks facing the business?

- Where are the key pockets of climate risk in the portfolio?
- Is this climate risk exposure within risk appetite?
- What is the impact of potential mitigation actions?

Embedding into core processes

Client advisory and decision making	**Product design**	**Strategic planning**
	Risk management	**Regulatory reporting**
Performance metrics	**Capital planning**	**Public disclosures**

- Sections focus only on the resilience of the companies strategy, which is in line with c) of the strategy pillar.

2 Good practices in TCFD: Strategy disclosures (9/9)

Commonwealth Bank of Australia "Becoming a simpler, better bank" Annual Report 2018[1]

The Commonwealth Bank of Australia, an Australian multinational bank, discloses the potential financial opportunities it sees in the low-carbon transition, in terms of sustainable finance, global environmental markets, and products and services.

In the 2017 financial year, the company also quantified these opportunities by creating a low-carbon target for 2025, against which it measured progress in the 2018 financial year. This is a further example of how strategy and metrics and targets TCFD disclosures may be interconnected, with the latter shedding light on the effectiveness of the former.

Low carbon transition opportunities

There are significant opportunities presented by the transition to a low carbon economy.

Sustainable finance
This financial year our lending exposure to the renewable energy sector grew to $3.7 billion, reflecting our expertise in this market. For the year ended June 2018, Commonwealth Bank ranked number one for Mandated Lead Arranger financing roles of renewables projects in Australia and ranked 18th globally.[1]

We have also set up a Sustainable Finance Committee to focus on identifying other low carbon opportunities, such as climate bonds. This year we led more than $2 billion of green or sustainability notes.

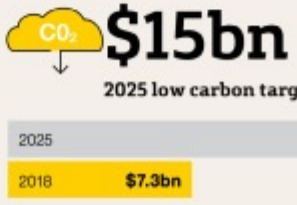
We continue to support business investment in energy efficiency improvements through our $300 million partnership with the Clean Energy Finance Corporation on the Energy Efficient Equipment Finance program.

In the 2017 financial year we set ourselves a Low Carbon Target of $15 billion by 2025[2]. Our progress to date shows our exposure to low carbon projects as at 30 June 2018 is $7.3 billion. Eligible projects include renewable energy, 6-star rated commercial green buildings, energy efficiency and low carbon transport. We have aligned our Low Carbon Target eligible projects with the green project categories identified in the Green Loan principles[3].

Global environmental markets
We are aiming to be a market leader in environmental markets, supporting our clients' transition to a net zero emissions economy. We target clients globally who have a strategy in place to support their transition. We support this transition by providing tailored financing and risk management environmental market solutions to meet client requirements. This includes facilitating liquidity across global environmental markets.

Products and services
Across retail and business lending, investment and insurance, we will continue to explore and develop product and service options which meet emerging customer needs, to help them reduce their exposure and/or build resilience to climate change.

This year we added a new Alliance Partner – Affirmative Investment Management – and the Affirmative Global Bond Fund (the Fund) to the FirstChoice platform. The Fund invests in global green bonds and utilises ESG criteria and environmental impact screens; it is the first of its kind available to retail investors in Australia.



1. https://www.commbank.com.au/content/dam/commbank/about-us/shareholders/pdfs/results/fy18/cba-annual-report-2018.pdf

2 Questions

Menti poll

- On a scale from 1-5, how much of a benefit is it to visualise the strategy in a disclosure?
- How would you express/describe the resilience of the organizations strategy?

Good practices Pillar 3: Risk Management

2 Pillar 3: Risk Management

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

Governance	Strategy	Risk Management	Metrics and Targets
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.	a) Describe the climate-related risks and opportunities the organization has identified over the short, medium, and long term. b) Describe the impact of climate-related risks and opportunities on the organization's businesses, strategy, and financial planning. c) Describe the resilience of the organization's strategy, taking into consideration different climate-related scenarios, including a 2°C or lower scenario.	a) Describe the organization's processes for identifying and assessing climate-related risks. b) Describe the organization's processes for managing climate-related risks. c) Describe how processes for identifying, assessing, and managing climate-related risks are integrated into the organization's overall risk management.	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) 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 organization to manage climate-related risks and opportunities and performance against targets.

2 Good practices in TCFD: Risk Management disclosures (1/10)

Lloyds Banking Group Environmental, Social and Governance Report 2020 (UK)

Risk management

Integration into overall risk management framework

The Group has adopted a comprehensive approach to embedding climate-related risks into our Enterprise Risk Management Framework through:

- Creation of a new principal risk for climate risk, in order to drive dedicated focus and a consistent approach, while enhancing Board-level insight
- Integration of climate risk into our existing principal risks, to ensure comprehensive consideration across all aspects of our business activity

As its own principal risk, climate risk captures the risk that the Group experiences losses and/or reputational damage as a result of climate change, either directly or through its customers. Climate risk is included as both a principal and emerging risk this year given it is such a new and fast-moving area.

As we continue to further embed climate risk into the Group's Enterprise Risk Management Framework, we will ensure that climate-related risks are considered as part of existing processes, aligned to the three lines of defence model. These climate-related risks will be appropriately aggregated together to provide senior management with a consolidated view of the climate risk to which the Group and its sub-groups is exposed across the short (0–1 years), medium (1–5 years) and long term (over 5 years). These timescales align to the *TCFD report playbook* developed by UNEP FI and the Institute of International Finance.

Climate risk is a fast-developing area and the Group's processes will continue to evolve as we embed our approach to managing climate-related risks and opportunities. Dedicated roles and training programmes have been created to strengthen our capacity and capabilities for managing climate risk Group-wide.

CLIMATE-RELATED IMPACTS ACROSS THE GROUP'S RISK TAXONOMY

We have mapped climate change impacts across the different risk types within the Group's risk taxonomy. While the majority of the Group's principal risks are impacted in different ways, we have focused on the impact for the most material risk types, outlined below.

Risk type	Summary of impacts from climate risk
Credit risk	Climate change is likely to result in changes in the risk profile and outlook for our customers, the sectors we operate in and collateral/asset valuations. Changes are likely to be needed to our business and product strategies, as well as our risk appetite response.
Insurance underwriting risk	Changing climate patterns, for example increasing frequency and severity of weather events, are expected to lead to a changing risk profile for our insurance activities. This could lead to an unexpected level of claims or pattern of contract renewals.
Market risk	The financial instruments held across the Group are subject to market risk as the underlying companies may be subject to value erosion due to climate change, for example, from extreme weather events or transition risk impacts.
Conduct risk	Conduct risk may potentially arise from a number of channels, including: • Withdrawing credit lines or services from 'brown' sectors or counterparties • Removal of certain product lines, as they become unsustainable as a result of climate change • Potential 'green washing', as the Group develops new propositions
Operational resilience and operational risk	An acute weather event that affects the Group's operations directly or indirectly could cause disruption to customer service if continuity plans are not adequately developed and tested to ensure they provide a framework for response. The Group's operations are also subject to the low-carbon transition, both through emissions from our property footprint, as well as the Group's supply chain.
Regulatory and legal risk	The Group is subject to an increasing number of regulations where compliance is required, for example, PRA Supervisory Statement 3/19. The Group may be the target of climate-related litigation in respect of its activities and there may be increased scrutiny on how the Group deals with climate-related risks. Any implications of litigation or enforcement could be severe, including potential reputational damage.
Strategic risk	Strategic risk is inherent in the transition required as the Group looks to remain competitive, safeguard its reputation and adapt to the changing expectations of customers and shareholders.

- Clear disclosure of climate-related risks in the context of traditional banking industry risk categories such as credit risk, market risk, liquidity risk, and operational risk.

https://www.lloydsbankinggroup.com/assets/pdfs/who-we-are/responsible-business/downloads/lbg-esg-interactive-210223.pdf

2 Good practices in TCFD: Risk Management disclosures (2/10)

Itau Unibanco Climate Responsibility Report 2021

The traditional risk dimensions which are most impacted by the identified climate risk categories in the risk mapping study by Itaú Unibanco are displayed below.

CLIMATE RISK AND TRANSMISSION CHANNELS: MAPPING OF CLIMATIC RISK FACTORS AND POSSIBLE MATERIALIZATION IN THE BANK'S TRADITIONAL RISK DISCIPLINES

Climatic risk factor and materialization trend (in years)		SER*	Credit	Insurance	Operational	Market	Compliance	Reputation	Strategy
Climate regulations and regulator supervision	Up to 2	▲	▲	▲	▲	▲	▲	▲	▲
Obligation disclosure	Up to 2	▲	▲	▲	▲	▲	▲	▲	▲
Deterioration of the portfolio's credit quality	2 to 5	▲	▲	▲	▲	▲	▲	●	▲
Portfolio climate exposure	2 to 5	▲	▲	▲	▲	▲	▲	▲	▲
Change in pricing of assets and real estate	>10	▲	▲	▲	▲	▲	▲	▲	▲
Climate litigation	5 to 10	▲	▲	▲	▲	▲	▲	▲	▲
Stranded assets	>10	▲	▲	▲	▲	▲	▲	▲	▲
Credit underwriting	5 to 10	▲	▲	▲	▲	▲	▲	▲	▲
Carbon pricing	2 to 5	▲	▲	▲	▲	▲	▲	▲	▲
Carbon reduction, neutralization and removal	>10	▲	▲	▲	▲	▲	▲	▲	▲
Change in environmental legislation	5 to 10	▲	▲	▲	▲	▲	▲	▲	▲
Market barriers and stakeholder requirements	Up to 2	▲	▲	▲	▲	▲	▲	▲	▲
Impact of physical risks	>10	▲	▲	▲	▲	▲	▲	▲	▲
Other secondary consequences of climate risks		▲	▲	▲	▲	▲	▲	▲	▲

* SER – Environmental and Social Risk

Impact on risk dimensions: ▲ very low | ▲ low | ▲ average | ▲ high | ▲ very high

- Clear disclosure of climate-related factors in the context of traditional banking industry risk categories.

https://www.itau.com.br/sustentabilidade/Download.aspx?Arquivo=czN7FUEiAarMfxkiWm9Gaw==

2 Good practices in TCFD: Risk Management disclosures (3/10)

Barclays PLC Climate-related Financial Disclosures 2020 (UK)

Enterprise Risk Management Framework

The ERMF sets the strategic approach for risk management across the firm by defining standards, objectives and responsibilities for all areas of the Group. The ERMF is complemented by frameworks, policies and standards which are mainly aligned to individual Principal Risks. Within the ERMF, the Group has a Climate Change Standard that corresponds to our latest Climate Change Statement to manage reputation risk, including our exposure to sensitive energy sub-sectors. For Credit, Market, Treasury and capital and Operational risk, the Group published a 'Climate Change Financial Risk and Operational Risk Policy' in 2019.

Risks arising from climate change materialise through various channels: 1) through the financial services and support we provide to customers who may themselves be exposed to the risks of climate change; 2) the operation of our own infrastructure, business and premises which may be exposed to both transition and physical risk; and 3) through a deteriorated perception of Barclays if we do not adequately support a transition away from high-carbon activities and consequent loss of our social licence to operate.

Governance	Enterprise Risk Management Framework (ERMF)				
	Climate Change Standard	Climate Change Financial Risk and Operational Risk Policy			
	Reputation risk	*Credit risk*	*Market risk*	*Treasury and capital risk*	*Operational risk*
Responsibilities	▪ Outline minimum requirements and controls for Reputation risk management relating to client relationships or transactions. ▪ Outline the expected business behaviours in relation to these issues. ▪ Outline the approach to enhanced due diligence.	▪ Review individual obligors' exposure using Climate Change Lens. ▪ Consider climate change risk appetite in relevant countries and portfolios. ▪ Include in ICAAP. ▪ Oversight by Retail and Wholesale Risk Management Committees, and Board Risk Committee.	▪ Assess and identify all risk factors affecting climate change risk. ▪ Apply stress scenarios, assess stress losses and set risk limits. ▪ Include in ICAAP. ▪ Oversight by Market Risk Committee and Board Risk Committee.	▪ Identify exposure to climate change risks. ▪ Consider key indicators and limits to support risk management. ▪ Include in ICAAP and ILAAP. ▪ Oversight by Treasury and Capital Risk Committee and Board Risk Committee.	▪ Integrate climate change across different risk categories e.g. Resilience and Premises. ▪ Include climate change within risk assessment processes including Strategic Risk Assessment.
Ownership	Global Head of Sustainability and ESG	Prinicipal Risk Delegate	Prinicipal Risk Delegate	Prinicipal Risk Delegate	Prinicipal Risk Delegate

- Great example of (a) within pillar, clear lines of responsibility, and frameworks/policy used.

https://home.barclays/content/dam/home-barclays/documents/investor-relations/reports-and-events/annual-reports/2020/Barclays-TCFD-Report-2020.pdf

2 Good practices in TCFD: Risk Management disclosures (4/10)

UN environment programme 50 1972-2022

Piraeus Bank TCFD Report 2020 (Greece)

Risk identification process in Piraeus Bank Group

Annual Risk Identification Process

- The four stages of the Group's risk identification process: Identification, Evaluation, Management and Monitoring. The process is carried out by the Group Risk Management unit in collaboration with all units and systematizes all possible risks and their degree of importance for the organization (Group Risk Inventory).
- The risk deriving from climate change is embedded in the environmental and social risk, which is included in the operational risk of the Bank. The Bank has recognized the interactions of climate risk with other risk categories (of the 'Group Risk Inventory') and has proceeded to its evaluation, management and monitoring.

Environmental and Social Management System of business financing (ESMS)

- The Bank applies economic, environmental and social criteria in the process of evaluating its business financing. Since 2017, the Credit Policy of the Group takes into account environmental and social risks, in order to minimize the Bank's exposure.
- The Bank performs a technical and financial assessment of the sustainability of green business projects and evaluates new business loans or projects in order to prevent any operational failures or risks.

Environmental Management System (EMS) for the Bank's infrastructure and its operation

- The Bank implements, since 2011, the EMS for measuring, managing and reducing the environmental impacts from its operation. The EMS is certified under the EMAS Regulation and the ISO 14001:2015.
- The Bank operates the subject-specific Database on Environmental Legislation and Case Law (DEL&CL) to monitor environmental and sustainable development legislation.

Climate Risk Management Model

- The Model allows for the monetary assessment of the risks and opportunities arising from climate change, of business borrowers deriving from important economic sectors for the Bank, operating in Greece. The Bank is in a position to manage these risks and opportunities, to focus on specific areas, to take necessary measures or to reshape its financial policy.

- Simple, clear disclosure from explaining processes of identifying climate-related risks.

https://www.piraeusholdings.gr/~/media/Com/2020/Files/Corporate-Responsibility/Environment/2020_TCFD_Piraeus_Bank_EN.pdf

2 Good practices in TCFD: Risk Management disclosures (5/10)

Nedbank Group TCFD Report 2020 (South Africa)

- Example of (b) in pillar, good visualization of climate related risk management process.

https://www.nedbank.co.za/content/dam/nedbank/site-assets/AboutUs/Information%20Hub/Integrated%20Report/2021/2020%20Nedbank%20Group%20TCFD%20Report%20(spreads).pdf

2 Good practices in TCFD: Risk Management disclosures (6/10)

Lloyds Banking Group Environmental, Social and Governance Report 2020 (UK)

DEVELOPING OUR UNDERSTANDING OF CLIMATE-RELATED RISKS AND OPPORTUNITIES

In line with the Group's strategy, and to help integrate climate risk into our risk management framework, we are working to enhance our understanding of the effect climate change will have on our business and clients. The aim is to:

- Continue to develop a robust climate risk management framework
- Create reliable data sources
- Build capacity
- Support clients' efforts to manage their climate risks and opportunities, by providing guidance on the potential impact of climate change on their financial and business profiles

Understanding the consequences of climate change on our portfolios is essential, and will help to inform our ambitions over the short and medium term.

Actions that we have taken to progress our understanding include the following:

- To support our efforts, we engaged two market-leading consultants, renowned respectively for their knowledge of climate change risks and data capabilities to provide an outside perspective and expertise
- We have prioritised four sectors to consider the climate risks and opportunities faced by the Group and our customers, covering: energy, automotive, mortgages and agriculture
- We have dedicated time to run dynamic and interactive workshops, to engage with a range of stakeholders from across the Group to: work collaboratively; reveal insight; help understand the extent of the problem; share research; brainstorm; prioritise areas of focus; and to assist with the development of the appropriate business strategy and risk appetite response to support our clients
- We are developing a process for gathering reliable data to facilitate analysis of the impacts of climate change across industry sectors

Other initiatives to further embed climate risk factors into the risk management activities of the Retail Division include work on the development of a risk mitigation strategy for retail banking activities such as vehicle finance and home loans. The work involves research and analysis to identify and assess the risks, and stress testing to quantify the risk. We are using the insight and knowledge gained from risk identification, assessment and loss modelling to develop and shape risk appetite, and are working on process changes to fully embed climate risk assessment into business origination across our retail banking operations.

In our Insurance business, an assessment of climate-related risks to General Insurance (GI) liabilities is integrated into the internal model governance process. Climate change is identified as a key topic for model review and approval within this process, and specifically, the appropriateness of the view of risk for the weather perils in the context of climate change science. Currently, an adjustment for sea-level rise is applied. This view of risk is integrated into assessments of GI capital requirements, reserving, reinsurance and pricing. It also feeds into the GI quarterly exposure management where GI portfolio exposure arising from weather-related perils is monitored and controlled.

We further expanded our weather modelling capabilities in 2020, with the completion of a knowledge transfer project with the University of Reading to better understand extreme wind and flood risk in the UK.

Management of climate-related risks

We continue to work on existing processes to ensure our approach for climate risk management has suitable Board-level visibility. The Board has approved a Risk Appetite Statement for climate risk, as well as an interim metric to ensure the Group continues to progress activities at pace. We aim to develop further quantitative and qualitative risk appetite metrics as our capabilities evolve, including appropriate consideration across our sub-groups. This is supported by Board-level risk reporting of climate risk.

We have considered and included commentary on climate-related risks as part of our annual Individual Capital Adequacy Assessment Process. We have used expert judgement to assess the financial impacts for key risk types that are sensitive to climate change under a number of different climate scenarios. We will continue to enhance our approach as our scenario analysis capabilities develop.

We continue to refine and enhance the Group's 12 external sector statements, which help articulate appropriate areas of environment and climate-related risk appetite and approach to the risk assessment of our customers.
In defining our sector appetite and strategic ambitions, we are reflecting on areas such as the composition of our portfolio, the business positioning and transition plans of counterparties within the sector, and the likely government and regulatory policy responses. Helping our clients' transition is a key element of the Group's Sustainability strategy. For more information on the Group's external sector statements see page 36.

- Information here follows straight from (a) into (b) with further explanation of management climate-related risks and opportunities.

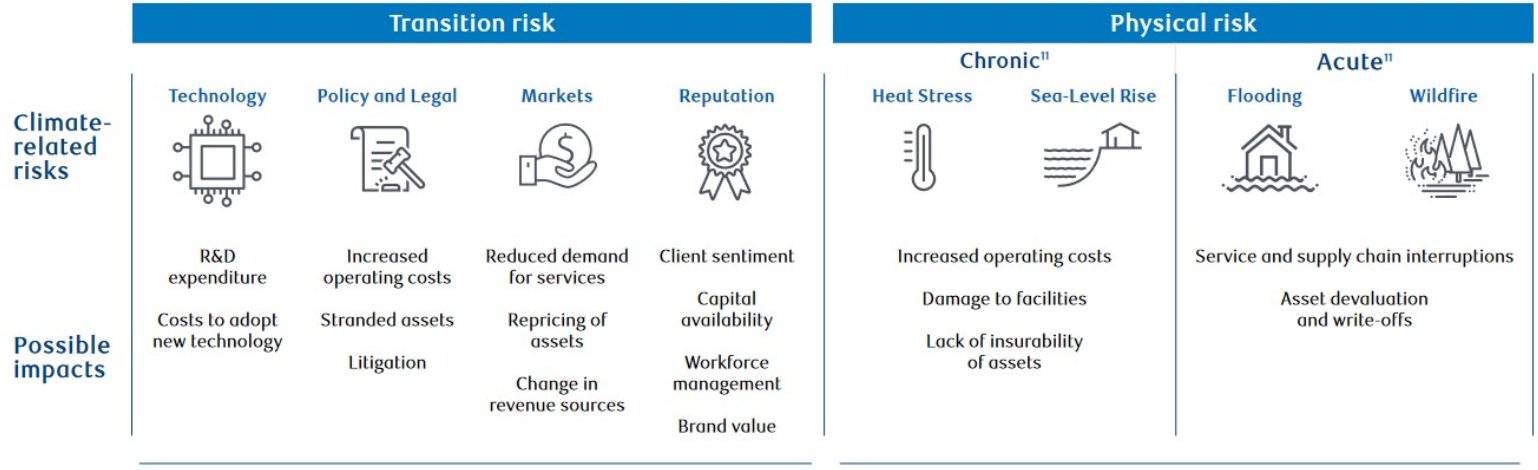
https://www.lloydsbankinggroup.com/assets/pdfs/who-we-are/responsible-business/downloads/lbg-esg-interactive-210223.pdf

2 Good practices in TCFD: Risk Management disclosures (7/11)

Royal Bank of Canada (RBC) 2020 TCFD Report

In line with the TCFD recommendations, RBC identifies climate risk as risks related to the transition to a net-zero economy (transition risks) and the physical impacts of climate change (physical risks). Figure 2, below, provides an overview of climate-related risks and examples of possible impacts to RBC, along with other businesses, and is based on the risk categories identified in the TCFD recommendations.

Figure 2 – Overview of the associated climate-related risks and examples of possible impacts

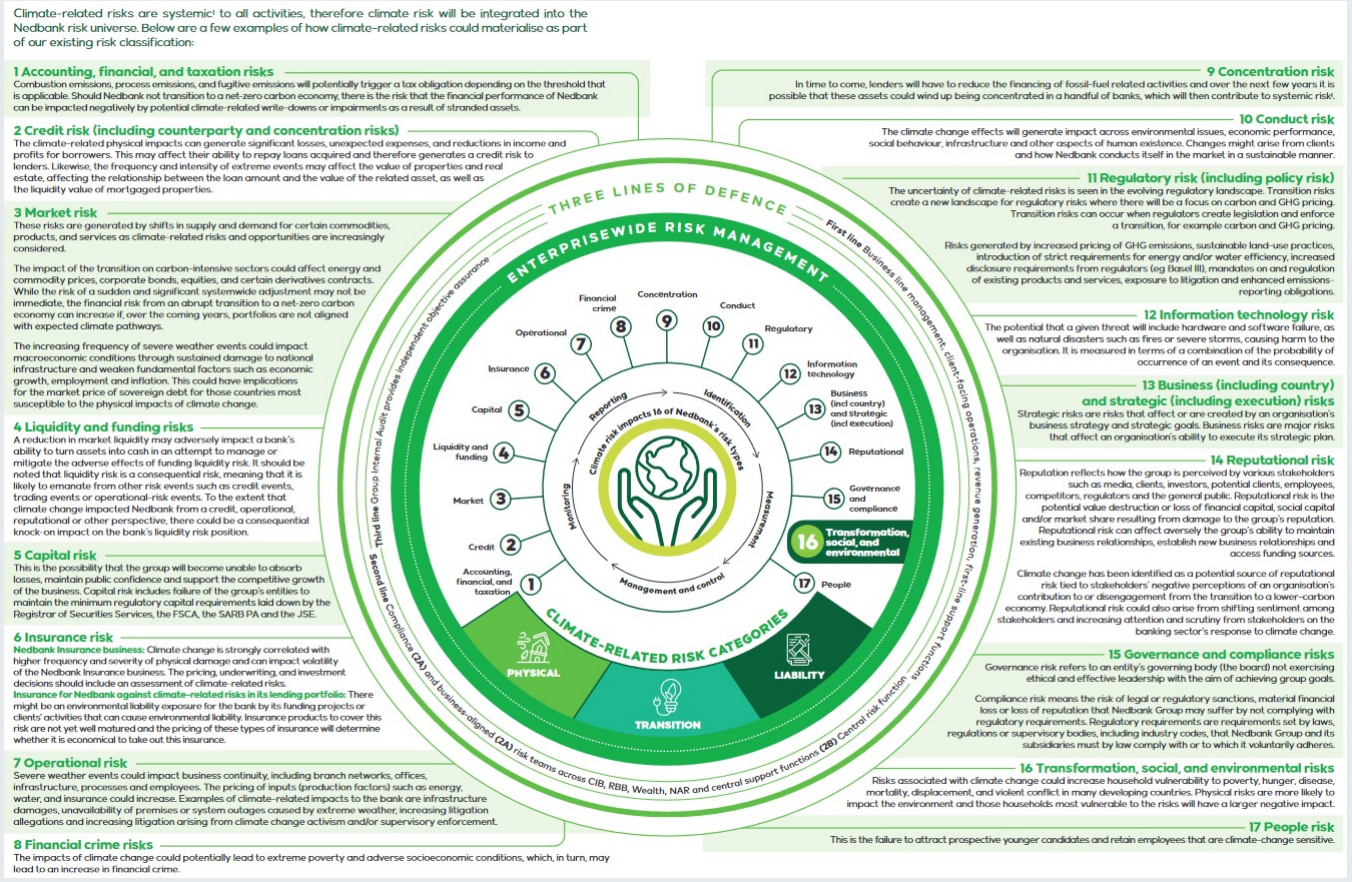


- Concise disclosure of assessed risks and possible impacts.

https://www.rbc.com/community-social-impact/_assets-custom/pdf/RBC-TCFD-Report-2020.PDF

2 Good practices in TCFD: Risk Management disclosures (8/10)

Nedbank Group TCFD Report 2020 (South Africa)



- Detailed demonstration of (c) within pillar with climate-related risks integrated holistically.

https://www.nedbank.co.za/content/dam/nedbank/site-assets/AboutUs/Information%20Hub/Integrated%20Report/2021/2020%20Nedbank%20Group%20TCFD%20Report%20(spreads).pdf

2 Good practices in TCFD: Risk Management disclosures (9/10)

UN environment programme 50 1972-2022

Goldman Sachs 2019 TCFD Report (USA)

Business Activities:

We believe that effective risk management is critical to our success. Accordingly, we have a well-established enterprise risk management (ERM) framework, which is ultimately overseen by our Board. The ERM framework employs a comprehensive, integrated approach to risk management, and it is designed to enable robust risk management processes through which we identify, assess, monitor and manage the risks we assume in conducting our business activities.

- **Firmwide policy guidelines** for carbon-intensive sectors and activities, such as coal-fired power generation, palm oil, and oil & gas are included in our Environmental Policy Framework (EPF). The EPF was updated in December 2019 to restrict certain carbon-related business activities and to strengthen our work with clients to help them with their climate transition.
- Upfront **business selection** and **due diligence processes** that include 14 key sector and cross-sector guidelines, and worst-case-loss calculations for physical commodities in certain carbon-intensive sectors, complement the EPF. These guidelines and tools are leveraged across the various activities of the firm at the business selection stage and through designated committee review processes. There are escalation mechanisms and protocols undertaken at each stage. Where relevant, we also incorporate extreme weather and flooding event probability into worst-case-loss calculations for certain transactions. See Environmental and Social Risk Management for more information.
- **Risk Identification and Scenario Design**, which is a periodic process that we undertake to review the materiality of evolving risks in our business activities over a two-year forward-looking horizon, includes the assessment of impact from climate change.

In addition, our ongoing risk monitoring from credit, liquidity, and market risk management teams, mark-to-market portfolio valuations, dynamic hedging, and insurance requirements where relevant, enables overall position management and exposure reduction where potential material risks are identified.

- High-level statements of holistic integration of risk management.

https://www.goldmansachs.com/investor-relations/corporate-governance/sustainability-reporting/tcfd.pdf

2 Good practices in TCFD: Risk Management disclosures (10/10)

Lloyds Banking Group Environmental, Social and Governance Report 2020 (UK)

Climate scenario analysis
As the understanding and importance of climate risk progresses, climate scenario analysis is becoming an essential risk management tool. Scenario analysis assists the identification, measurement and ongoing assessment of climate risks that pose threats over the longer term, and the potential threats to the Group's strategic objectives.

The complex, forward-looking and long-term nature of climate risks and the inherent uncertainty about future events make it difficult to assess them using standard risk modelling methodologies. Climate scenario analysis provides a flexible 'what-if' style methodological approach that is better suited to exploring the risks that could crystallise in possible future scenarios.

Climate scenario analysis also allows identification of extreme yet plausible risks that challenges the Group's business model and helps understand the possible range of climate consequences and management actions. Accordingly, such analysis is an iterative process in that the conclusions of an exercise can provide risk insights that in themselves may trigger additional investigation and strategy refinement.

To embed climate scenario analysis, the Group has developed a climate scenario analysis framework to guide the consistent use of this method.

CLIMATE SCENARIOS DEVELOPED

Three different climate scenarios have been developed, together with a third-party consultant, representing possible pathways to different climate change outcomes. These were not intended to represent a best forecast of how the transition will occur but enable the Group to explore credible pathways to 2° and 4° worlds.

The scenarios developed were a 2° orderly transition to less than 2° warming by 2100; a 2° disorderly transition to less than 2° warming by 2100; and a 4° 'business as usual' scenario.

This suite of scenarios is functionally aligned to the climate scenarios described in the Bank of England's discussion paper, *The 2021 biennial exploratory scenario on the financial risks for climate change*. They are also broadly similar in outcome to the representative orderly, disorderly and hot house scenarios published in June 2020 by the Network for Greening the Financial System. Our climate scenarios will develop over time as climate scenario analysis embeds across all relevant activities.

2° orderly
This scenario describes a globally coordinated response to climate change that sees the world quickly decarbonise in an orderly and efficient manner, therefore limiting transition and physical risks.

This scenario features, among other aspects, a global carbon price, major expansion of renewables, electrification of heat, transport and industry, and development of carbon capture and storage capabilities at scale.

Although Paris compliant, increased physical risks relative to the present day remain in this scenario.

2° disorderly
In this scenario, the world does not respond to climate change before 2030 and then takes sharper corrective actions to limit global heating impacts, resulting in higher initial transition risks as much sharper intervention occurs around 2030 in order to get decarbonisation back on track for a less than 2°C heating outcome by 2100.

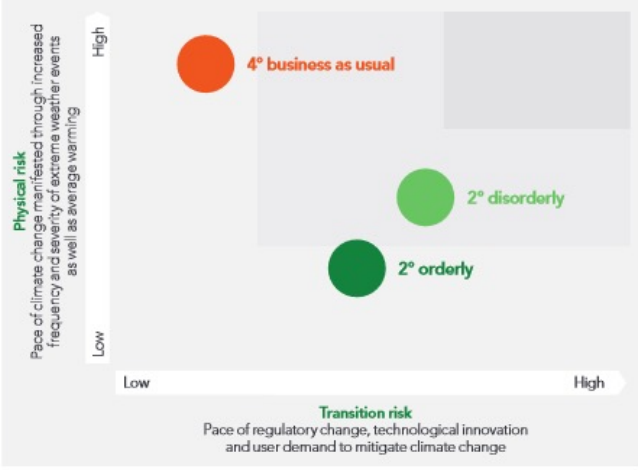
This scenario features a global carbon price, major expansion of renewables, electrification of heat, transport and industry and, again, development of carbon capture and storage techniques.

Although Paris compliant, as the scenario anticipates increased temperatures, physical risks increase relative to the present day.

4° business as usual
In this scenario, the world does not respond to climate-related change at all and technology deployment is driven purely by relative economics.

This scenario features no carbon pricing, continued thermal power generation (especially in developing markets), some renewable capacity expansion and some electrification of transport.

This scenario implies greater physical risks as heating rises by 4°C, largely manifesting after 2050.



https://www.lloydsbankinggroup.com/assets/pdfs/who-we-are/responsible-business/downloads/lbg-esg-interactive-210223.pdf

2 Questions

Menti poll

- On a scale from 1-5, how efficient do you find it to cluster the climate-related risks in the context of traditional banking industry risks categories? Like credit risks, market risk, liquidity risk etc.

Good practices Pillar 4: Metrics and Targets

2 Pillar 4: Metrics and Targets

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

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.	a) Describe the climate-related risks and opportunities the organization has identified over the short, medium, and long term. b) Describe the impact of climate-related risks and opportunities on the organization's businesses, strategy, and financial planning. c) Describe the resilience of the organization's strategy, taking into consideration different climate-related scenarios, including a 2°C or lower scenario.	a) Describe the organization's processes for identifying and assessing climate-related risks. b) Describe the organization's processes for managing climate-related risks. c) Describe how processes for identifying, assessing, and managing climate-related risks are integrated into the organization's overall risk management.	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) 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 organization to manage climate-related risks and opportunities and performance against targets.

2 Good practices in TCFD: Metrics and Targets disclosures (1/11)

Sumitomo Mitsui Trust Holdings TCFD Report 2020/2021 (Japan)

The Group is striving to reduce its environmental impacts in the form of both inputs such as electricity and gas used for business activities and outputs like CO_2 emitted as a result of those activities. As SuMi TRUST Bank is subject to the Act on the Rational Use of Energy, we calculate the volume of energy consumption and CO_2 emissions at all of our offices across Japan using a common system. Annual emissions in fiscal 2019 came to 31,327 t-CO_2, a 38.1% reduction compared to the peak of 50,605 t-CO_2 recorded in fiscal 2013. The large buildings in the Tokyo metropolitan area that house SuMi TRUST Bank offices are subject to the mandatory reductions in CO_2 emissions prescribed under the Tokyo Metropolitan Ordinance on Environmental Preservation. Even in the second plan period, our reductions far exceeded the mandatory levels.

Energy Consumption and CO_2 Emissions (Domestic Offices)

Energy use		FY2015	FY2016	FY2017	FY2018	FY2019
Total energy consumption (heat amount)	GJ	846,829	801,370	736,011	688,949	677,157
Total energy consumption (crude oil equivalent)	k	21,848	20,675	18,989	17,774	17,470
Energy consumption intensity	k /m²	0.051	0.049	0.047	0.048	0.047
Electric power	thousand kWh	71,206	66,742	60,444	56,003	54,753
Utility gas	thousand m³	2,153	2,107	1,996	1,869	1,893

CO_2 emissions		FY2015	FY2016	FY2017	FY2018	FY2019
Greenhouse gas emissions	t-CO_2	43,816	40,833	37,068	33,504	31,327
Adjusted greenhouse gas emissions	t-CO_2	43,470	40,393	36,240	32,864	30,840
Emissions intensity	t-CO_2/m²	0.103	0.098	0.093	0.090	0.085
Adjusted emissions intensity	t-CO_2/m²	0.102	0.097	0.091	0.088	0.084
Scope 1 emissions	t-CO_2	5,002	4,907	4,575	4,362	4,421
Scope 2 emissions	t-CO_2	38,813	35,925	32,493	29,142	26,906

Scope of calculations: Offices of SuMi TRUST Bank in Japan subject to the Act on the Rational Use of Energy. Group companies, including Sumitomo Mitsui Trust Asset Management, are tenants in some office buildings.
Calculation methods: Pursuant to the methods prescribed under the Act on the Rational Use of Energy (some figures may not add up due to rounding).

- Clear statement of metrics used in assessing climate-related risks, disclosure of 5-year historic data makes it easier to identify trends.

https://www.smth.jp/english/-/media/th/english/sustainability/report/2020/TCFD-E-all.pdf

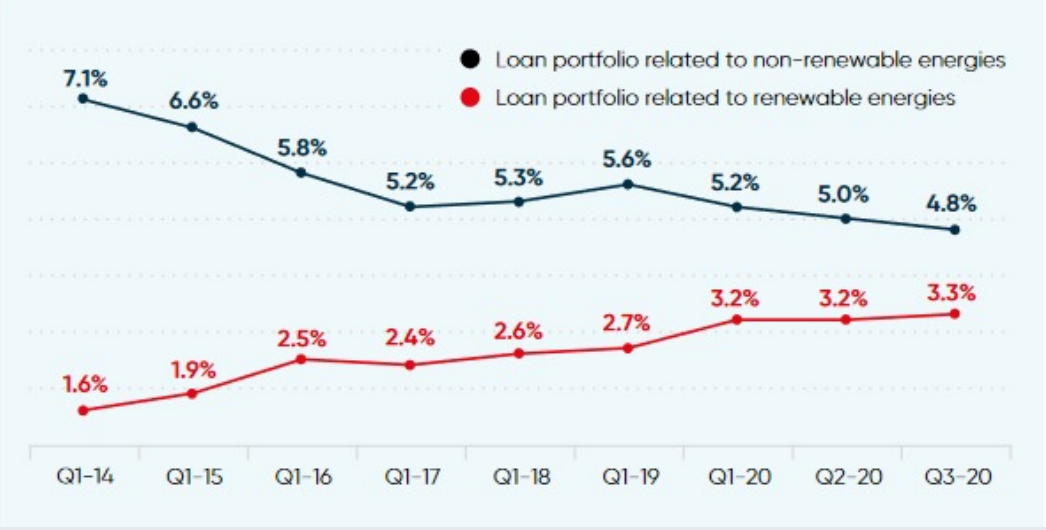
2 Good practices in TCFD: Metrics and Targets disclosures (2/11)

National Bank TCFD Report 2020 (Canada)

Metrics Used to Assess Climate-related Risks and Opportunities

Financing Activities

Exposure to non-renewable energy is an important metric when it comes to identifying climate-related risks and opportunities. As at July 31, 2020, non-renewable energy accounted for only 4.8% of the loan portfolio's total exposure, compared to 7.1% as at January 31, 2014. The chart on the right represents the loan portfolio's exposure to renewable and non-renewable energy as a percentage of our total credit risk exposure[4].



- Visualisation of key climate-related metrics can improve stakeholder confidence as well as identify trends.

https://www.nbc.ca/content/dam/bnc/a-propos-de-nous/responsabilite-sociale/pdf/2020-tcfd-report.pdf

2 Good practices in TCFD: Metrics and Targets disclosures (3/11)

UN environment programme 50 1972-2022

DBS Sustainability Report 2020 (Singapore)

	2020[1]						
	Singapore	Hong Kong	China	Taiwan	India	Indonesia	Total[2]
Energy							
Total energy consumption (MWh)[3]	**58,987**	**10,216**	**4,116**	**7,678**	**6,419**	**11,091**	**98,507**
(a) From non-renewables (MWh)	58,516	10,216	4,116	7,609	6,411	11,053	97,921
(b) From renewable production (MWh)	471	0	0	69	8	38	586
Purchased Renewable Energy Certificates (MWh)	5,694	10,919	3,581	0	0	0	20,194
Emissions							
Total emissions (tCO_2e)[4,5]	**25,058**	**7,484**	**2,594**	**3,874**	**6,660**	**9,054**	**54,724**
(a) Scope 1 emissions (tCO_2e)[6]	299	236	83	1	95	278	992
(b) Scope 2 emissions (tCO_2e)[7]							
i. Gross (location-based)	16,648	6,367	2,280	3,488	5,163	6,778	40,724
ii. Net (market-based)	14,322	0	0	3,488	5,163	6,778	29,751
(c) Scope 3 emissions (tCO_2e)[8]	8,111	881	231	385	1,402	1,998	13,008
Emission intensity by revenue ((tCO_2e/SGD million)[9]	2.68	2.95	4.63	7.39	17.71	13.84	8.20
Water							
Total water consumption (m^3)[10]	**46,337**	**8,124**	**6.556**	**45,959**	**20,285**	**47,635**	**174,896**
Municipal water consumption from water stressed regions (m^3)[11]	0	0	3,968	0	19,033	3,318	26,319
Municipal water consumption from non-water stressed regions (m^3)	46,337	8,124	2,588	45,959	1,252	34,844	139,104
Well water consumption from water stressed regions (m^3)[10]	0	0	0	0	0	615	615
Well water consumption from non-water stressed regions (m^3)	0	0	0	0	0	8,859	8,859

- Emissions metrics disclosed surrounded by water and energy metrics enable a stronger analysis of a bank's environmental practices.

https://www.dbs.com/iwov-resources/images/sustainability/reporting/pdf/DBS%20Sustainability%20Report%202020.pdf?pid=sg-group-pweb-sustainability-pdf-dbs-sustainability-report-2020

2 Good practices in TCFD: Metrics and Targets disclosures (4/11)

Bank of Ireland Annual Report 2020

Climate-related metrics and targets in our operations

In May 2018, we signed up to Business in the Community Ireland's (BITCI) Low Carbon Pledge and committed to reducing our carbon emissions intensity (Scope 1 and 2) by 50% by 2030. We have now met this target having achieved a 77% reduction in carbon emissions intensity (on a 2011 baseline), using m2 as intensity metric (in absolute terms we have achieved an 82% carbon emissions reduction) as illustrated in the graph below. As part of our new action plan, we have now committed to making our own operations Net Zero by 2030.

We recognise that the climate impact of our operations goes beyond carbon emissions from fuel consumption and electricity purchased. Therefore, we have measured our Scope 3 emissions from our own operations in 2020, which is laid out in the table below.

Priorities for disclosure in 2021

- Develop a suite of metrics and KPIs to further inform our climate strategy.
- Accurately capture our baseline emissions across our portfolios.
- Update on our progress towards setting SBTs, which we plan to set by no later than the end of 2022.
- Begin to assess our performance against the targets that we set.

TCO_2/M^2 Reduction 77%

Bank of Ireland 2011 - 2020

Metric	Unit	2020	2019
Scope 1			
Fuel consumption	tCO2e	5,579	6,100
Scope 2			
Purchased electricity (market based)	tCO2e	659	12,429
Scope 3 *(material for own operations as set out below)*	tCO2e	2,203	5,056
- Business Travel	tCO2e	1,954	4,818
- Waste	tCO2e	32	52
- Purchased Goods & Services	tCO2e	217	186
% of electricity renewably sourced	%	93	-

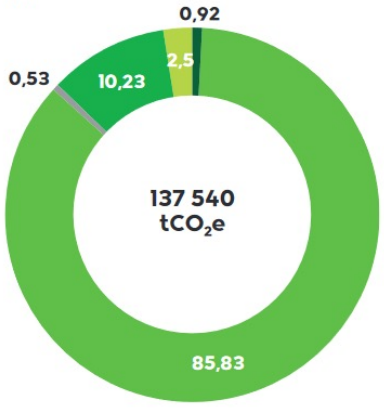
- Concise example of (b) within pillar; visualisation, tabulation, explanation of emissions metrics and priorities disclosure.

https://investorrelations.bankofireland.com/app/uploads/BOI-Annual-Report-2020.pdf

2 Good practices in TCFD: Metrics and Targets disclosures (5/11)

Nedbank Group TCFD Report 2020 (South Africa)

NEDBANK GROUP 2020 CARBON FOOTPRINT
(%)



- Scope 1: Diesel, refrigerants, etc
- Scope 2: Electricity
- Scope 3 Office paper
- Scope 3: Commuting
- Scope 3: Business travel

Scope 1 emissions
Scope 1 emissions decreased by 14,01% and remained less than 1% of the overall carbon footprint. A larger decrease could have been realised if it was not for aircon gas refilling and standby generators being used during load-shedding.

Scope 2 emissions
Our energy use in the form of electricity, continued to be the predominant source of emissions in 2020, constituting about 86% of our overall carbon footprint. We continue to target reduced energy consumption through a variety of initiatives and the new targets were set. It is encouraging to note that own generation from renewable sources remains steady at 668 MWh for 2020. Overall fossil-fuel-based electricity consumption per FTE was reduced through less occupancy due to Covid-19 lockdown regulations and our ongoing facilities consolidation project. The result is that the overall energy (electricity) consumption was reduced by 11,50% year on year to 3 963 kWh per FTE (2019: 4 477 kWh per FTE) for the period under review. The major focus for future energy reduction initiatives remains on implementing the lessons from our campus sites to drive similar reductions across our non-campus sites.

Scope 3 emissions
Approximately 13% of the total 2020 GHG emissions was the result of reported scope 3 activities. Scope 3 emissions showed a YOY decrease of 66,44% as major scope 3 components, like employees commuting and business travel, decreased during the lockdown periods. It remains to be seen if these reductions can be maintained as Covid-19 restrictions are lifted or reduced in 2021. As these commuting emissions are not under our direct control, they are considered separately from emissions as a direct result of our operations. Nedbank includes employee commuting in its carbon footprint whereas most other companies exclude this component. This should be taken into account when doing a like-for-like analysis.

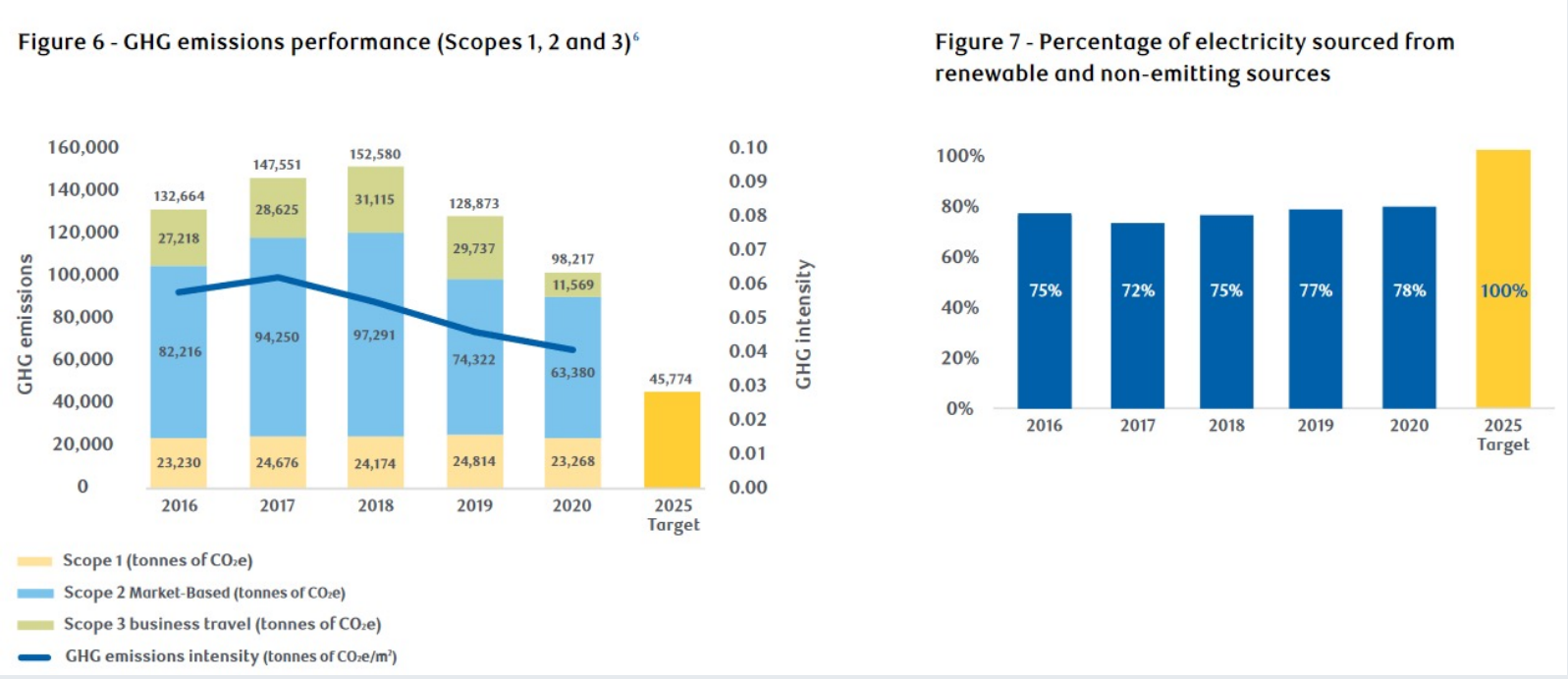
Our comprehensive Business Travel Policy includes green travel guidelines to ensure the most sustainable travelling practices are allowed. During 2020 the use of tele- and videoconferencing practices was vastly increased and all employees will be encouraged to use these alternatives to face-to-face meetings that require carbon-intensive road or air travel.

- Deeper explanation of current state of Scope 1, Scope 2 and Scope 3 emissions.

https://www.nedbank.co.za/content/dam/nedbank/site-assets/AboutUs/Information%20Hub/Integrated%20Report/2021/2020%20Nedbank%20Group%20TCFD%20Report%20(spreads).pdf

2 Good practices in TCFD: Metrics and Targets disclosures (6/11)

Royal Bank of Canada (RBC) 2020 TCFD Report



- Demonstration of historical data, and future targets for emissions and power mix.

https://www.rbc.com/community-social-impact/_assets-custom/pdf/RBC-TCFD-Report-2020.PDF

2 Good practices in TCFD: Metrics and Targets disclosures (7/11)

Prudential plc Environmental, Social and Governance Report 2020 (UK)

Group Position

A summary of our Scope 1, 2 and 3 emissions is provided below. The table also includes a total for Scope 3 data in relation to air travel, water and waste.

Emissions Source (tCO_2e)	2020	2019	Change
Gross emissions			
Scope 1	5,637	7,332	-23.1%
Scope 2 – Market based	43,203	49,092	-12.0%
Scope 2 – Location based	43,120	48,900	-11.8%
Scope 3	2,164	6,248	-65.4%
Total: Scopes 1 & 2*	48,840	56,424	-13.4%
Total: Scopes 1, 2 & 3†	51,004	62,672	-18.6%
Carbon intensity			
kg per m^2 – Scopes 1 & 2	96.24	105.38	-8.7%
Tonnes per employee – Scopes 1 & 2	2.61	3.14	-16.9%
kg per m^2 – Scopes 1, 2 & 3	100.51	117.05	-14.1%

* Market based emissions.
† Assured Scope 3 emissions.

- Disclosure of Scope 1, Scope 2 and Scope 3 with accompanying carbon intensity.

https://www.prudentialplc.com/~/media/Files/P/Prudential-V3/reports/2020/esg-report-2020.pdf

2 Good practices in TCFD: Metrics and Targets disclosures (8/11)

Standard Life Aberdeen Investments 2020 TCFD Report (UK)

2018 32,218 tCO2e		
Scope 1	Gas	6%
	Car	2%
	F-Gas	1%
Scope 2	Electricity	21%
	District Heating	1%
Scope 3	Flights	68%
	Transmission and distribution	1%

2019 19,669 tCO2e		
Scope 1	Gas	6%
	Car	2%
	F-Gas	1%
Scope 2	Electricity	24%
	District Heating	1%
Scope 3	Flights and rail	65%
	Transmission and distribution	1%

2020 14,433 tCO2e		
Scope 1	Gas	7%
	Car	1%
Scope 2	Electricity	24%
Scope 3	Flights and rail	13%
	Working from home	55%
	Transmission and distribution	1%

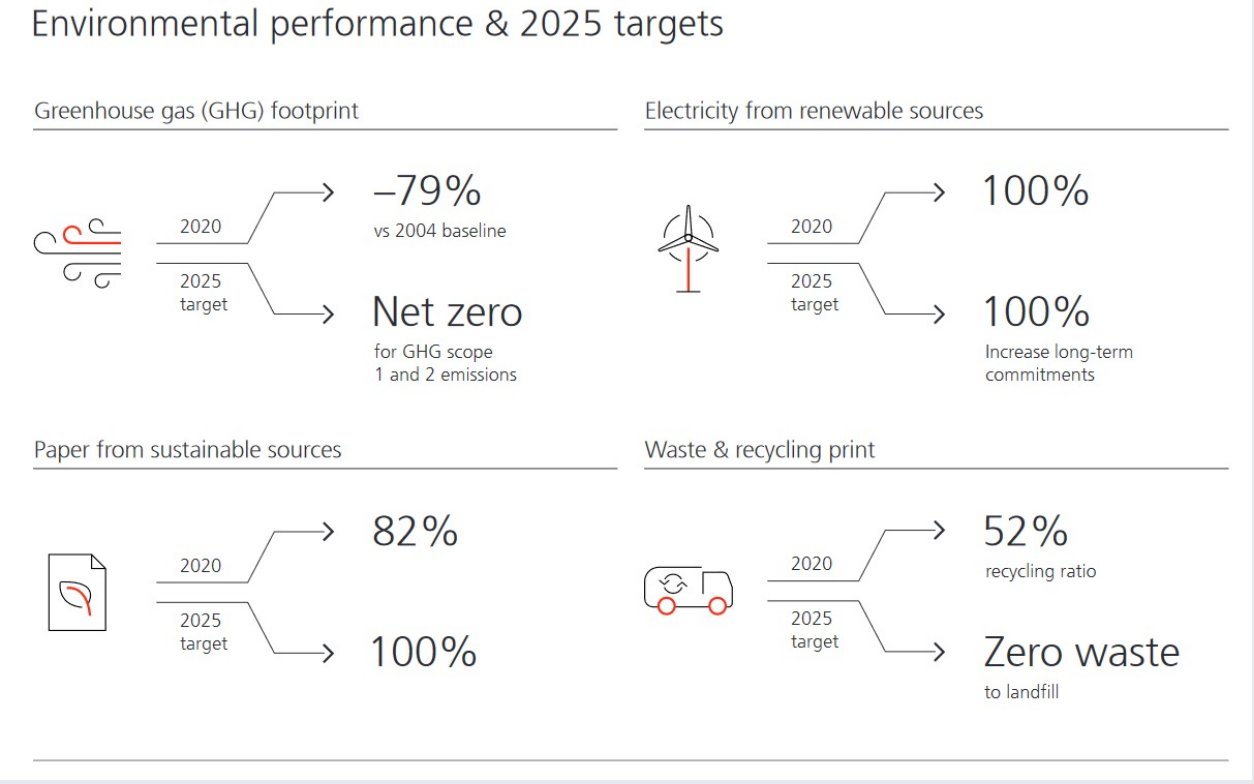
Targets and pledges	Scope	Status
50% reduction in operational emissions by 2025	Scopes 1 and 2 and Scope 3 (business travel, working from home, T&D)	55% reduction
Energy reduction	50% reduction in energy use	42% reduction
50% reduction in tCO2e/FTE by 2030	Scopes 1 and 2	50%
Carbon neutral	Scopes 1 and 2 and Scope 3 (business travel, working from home, T&D)	Achieved as of 2020
100% renewable electricity	For locations where we procure	98%

- Example of (c) within pillar; statement of targets, where they are applicable, and their current status.

https://www.aberdeenstandard.com/docs?editionId=8add93e9-5b15-42da-a6f3-bee24b615677

2 Good practices in TCFD: Metrics and Targets disclosures (9/11)

UBS Sustainability Report 2020 (Switzerland)



- Nicely presented climate-related key performance indicators with accompanying targets.

https://www.ubs.com/global/en/ubs-society/our-documents.html

2 Good practices in TCFD: Metrics and Targets disclosures (10/11)

Citi Group TCFD Report 2020 (USA)

ENVIRONMENTAL IMPACT REPORT: PROGRESS AGAINST 2020 GOALS*

100% use of renewable electricity for facilities globally	**30%** reduction in energy consumption *(compared with 2005 baseline)*	**30%** reduction in water consumption *(compared with 2005 baseline)*	**33%** of global real estate portfolio LEED-certified	**60%** diversion rate of waste to landfill *(compared with 2005 baseline)*	**10%** of water used coming from reclaimed or recycled sources
PROGRESS **86%** *(on track to meet goal by end of 2020)*	PROGRESS **35%**	PROGRESS **35%**	PROGRESS **27%** *(on track to meet goal by end of 2020)*	PROGRESS **63%**	PROGRESS **6%**

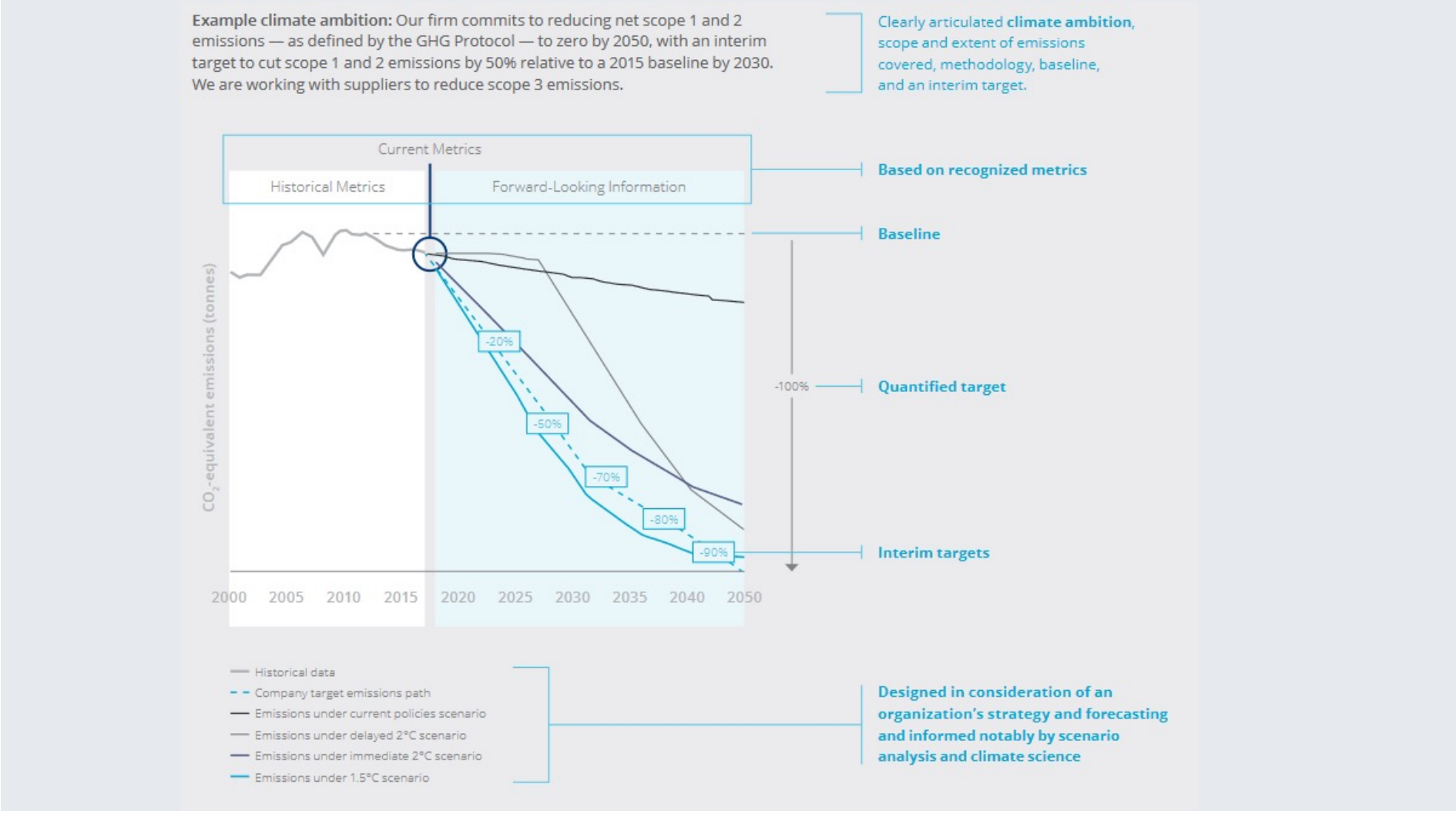
**As of year-end 2019. Reduction targets are based on a 2005 baseline. Final 2020 numbers will be reported in our 2020 Global ESG Report.*

- Good example of (c) within pillar ; concise disclosure of environmental impacts, targets and progress towards those targets with stated baseline.

https://www.citigroup.com/citi/sustainability/data/finance-for-a-climate-resilient-future-2.pdf?ieNocache=431

2 Good practices in TCFD: Metrics and Targets disclosures (11/11)

Proposed Guidance on Climate-related Metrics, Targets, and Transition Plans (June 2021)



https://assets.bbhub.io/company/sites/60/2021/05/2021-TCFD-Metrics_Targets_Guidance.pdf

2 Questions

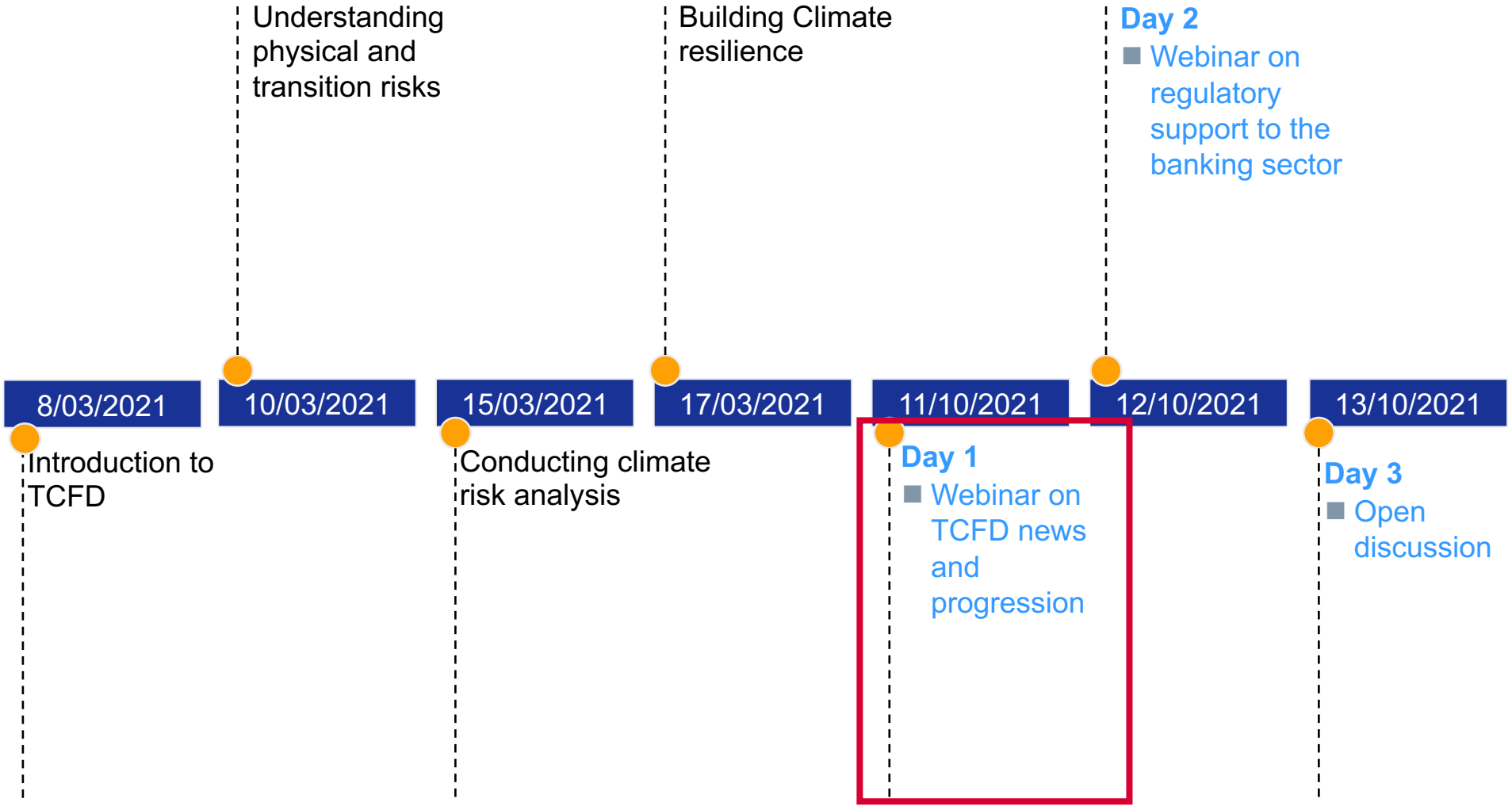
Menti poll

- Would you prefer a table or bar charts to disclose your scope 1, 2 and 3 emissions?
- On a scale from 1-5, how important is it for you to link the current scope 1, 2 and 3 emissions to the company's overall target in the disclosure?

Session #3

Conclusion and next steps

3 Next steps


Understanding physical and transition risks
Building Climate resilience
Day 2
Webinar on regulatory support to the banking sector
8/03/2021
10/03/2021
15/03/2021
17/03/2021
11/10/2021
12/10/2021
13/10/2021
Introduction to TCFD
Conducting climate risk analysis
Day 1
Webinar on TCFD news and progression
Day 3
Open discussion

3 Questions

Discussion questions

- How is your institution using the insights of climate risk analysis? What are ways you would like to use this information in the future?
- Who “owns” climate risk at your institution? What departments are involved in working on this issue?
- What outstanding questions do you have about the UNEP FI transition and physical risk methodologies?


QUESTIONS
ANSWERS

Thank you for your attention!

If you have any questions about today's content our UNEP FI's TCFD Programs, please do not hesitate to reach out!

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UNEP FI

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Appendix