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CLIMATE CHANGE AND THE FINANCIAL SECTOR: SUPPORTING THE NET-ZERO TRANSITION

Hector Fontaine, Managing Consultant, Sustainable Finance Lead, BCS Consulting

Joe Lovatt, Sustainable Finance Senior Consultant, BCS Consulting

Hannah Peter, Sustainable Finance Senior Consultant, BCS Consulting

Webinar

Wednesday, 06 October, 15:00 BST

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A Word From Today's Chairman

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Today’s Agenda

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- 15:00 – 15:05 Chairman’s Introduction
- 15:05 – 15:30 Keynote Presentation
- 15:30 – 15:45 Question & Answer

Today's Speakers

Hector Fontaine

Managing Consultant, Sustainable Finance Lead

BCS Consulting

Joe Lovatt

Sustainable Finance Senior Consultant

BCS Consulting

Hannah Peter

Sustainable Finance Senior Consultant

BCS Consulting

Climate Change and the Financial Sector:
Supporting the Net-Zero transition

Z/Yen FS Club Webinar – October 6th 2021

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Speaker Details

Hector Fontaine

Managing Consultant, Sustainable Finance Lead

Hector is the Sustainable Finance Lead for BCS Consulting. He has deep expertise in risk, finance and sustainability, advising and supporting many of the world's largest financial institutions as well as smaller financial firms in these areas for many years. Hector is a frequent speaker in industry events and has authored numerous ESG publications. In 2018 he directed and co-authored the BCS Consulting ESG Banking Benchmark Report and in 2019 and 2021, Hector directed and co-authored the BCS Consulting TCFD Global Progress Report for the Banking Sector publications. Hector holds an APRM qualification by the Professional Risk Managers' International Association and a masters in Finance from London Business School.

Joe Lovatt

Sustainable Finance Senior Consultant

Joe is a Sustainable Finance Senior Consultant at BCS Consulting. He has a strong background in ESG and risk management. Joe has advised many financial institutions in sustainability topics, particularly in ESG Governance and IT enhancements for effective ESG management. Joe has also supported the development of BCS climate research in areas such as TCFD reporting and PRA compliance.

Hannah Peter

Sustainable Finance Senior Consultant

Hannah Peter is a Sustainable Finance Senior Consultant at BCS Consulting. As both an industry professional and management consultant she has developed deep risk management and ESG experience within financial services. She has a Green Finance Certificate from the Chartered Banker Institute and co-authored the BCS Consulting TCFD Global Progress Report for the Banking Sector publications in 2019 and 2021.

Agenda

1. Why does climate change matter in the financial sector?
2. The regulatory landscape and key industry initiatives
3. The road to Net-Zero
4. Climate disclosures: what progress has been made?
5. Q&A

Climate Change is quickly becoming a key area of focus in the sector

Environmental considerations are becoming extremely important for financial institutions. Key drivers are the following:

1 **Social** pressure from wider stakeholders, expecting financial institutions to adequately assess the environmental impact of financial services on the wider economy and to engage in global environmental initiatives

2 Increasing **regulatory and shareholder** pressure to ensure that financial institutions are factoring the impact of **climate risk** in their own business models, developing capabilities to effectively manage this emerging threat

3 New **financial prospects** in the development of Environmental, Social & Governance (ESG) products to support the transition to a lower carbon economy and the wider Sustainable Development Global Agenda

Sustainable finance has emerged in recent years as the provision of financial services, taking into account environmental and wider social and governance considerations (ESG) for the lasting benefit of clients and society

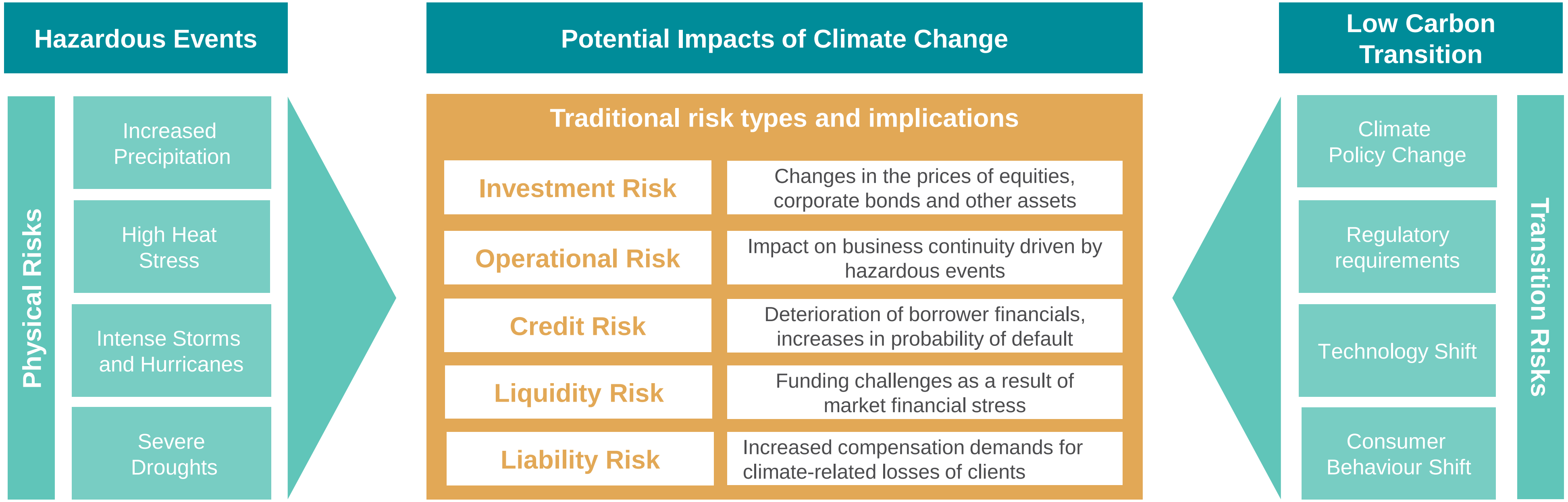
Why does climate change matter in the financial sector?

Climate Change: A new source of risk

Climate change presents risks to the business model of financial services organisations via two main forms: Physical and Transition risks

Physical risks: Increasing severity and frequency of climate-related hazardous events
Transition risks: Adjustment towards a low carbon economy, which will require significant structural changes

Materialisation of these risks can reduce asset values and creditworthiness of borrowers, drive investment losses and undermine business performance



Climate risk has quickly become a driver of traditional risks across the operating model: physical and transition risks become embedded in traditional risk types of the financial sector

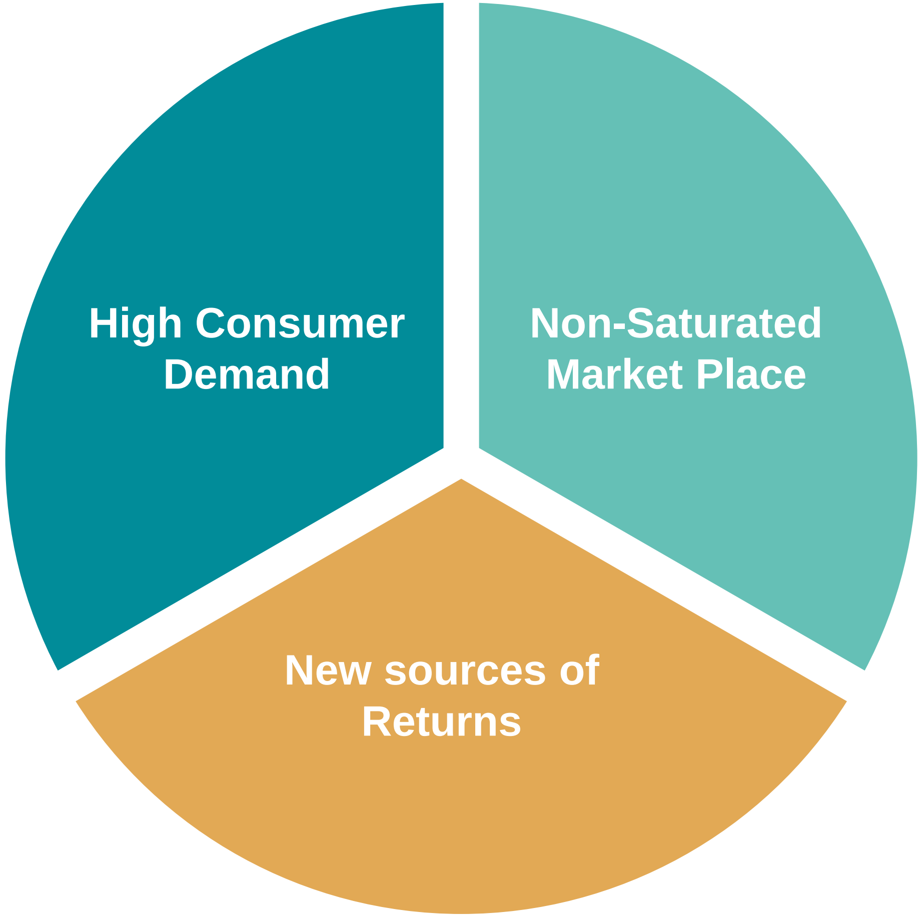
Why does climate change matter in the financial sector?

Climate Change is also an important opportunity for the sector

New focus on Climate Change and wider ESG provides opportunity for innovation alongside risk and compliance challenges

Increased awareness of climate change and shifting demographics have changed consumer demand:

- Broad range of green financial products now available across banking, investment, and insurance e.g. green savings products, green bonds, green loans and mortgages, green investment funds and climate-related insurance
- Increasing consumer expectations for active financial sector engagement with issuers on ESG topics
- Sums invested into green funds and green solutions continue to reach new records as market continues to grow:
  - Sustainable fund assets hit record $1.7tn in 2020
  - Green bond issuance reached record high of $269 billion in 2020



The regulatory landscape and key industry initiatives

Despite decades of development, the global environmental agenda has only seen increased momentum in recent years

Climate change development agenda	Defining targets (first attempt)	Increased momentum

1980s – '90s

1988:
- Intergovernmental Panel on Climate Change (IPCC) established by UN

1995:
- 1st annual Conference of Parties (COP) for United Nations Framework Convention on Climate Change (UNFCCC) signatories

1990s – '00s

1997:
- Kyoto Protocol sets emissions targets for primarily developed countries at 1990 levels (by 2020)

2000:
- UN Millennium Development Goals adopted

2010:
- COP 16 in Cancun; agreements aim to limit future global warming to below 2 degrees Celsius above pre-industrial levels
- Governments at COP 16 decide to establish a Green Climate Fund

Since 2014

2015-2016:
- G7 commit to phase out fossil fuels by end of 21st century
- UN Sustainable Development Goals adopted
- COP 21 held in Paris; country-specific commitments to limit emissions and achieve 1.5-2.0 degrees Celsius target above pre-industrial levels

2017-2018:
- Task-Force on Climate-related Financial Disclosures (TCFD) releases final recommendations - over 250 large organisations support TCFD
- Thousands of corporates sign up to TCFD

2019-2021:
- The UK announces plan for mandatory TCFD disclosures across the economy by 2025
- Net-Zero commitments made by several countries including the UK, China, and The EU
- The US re-instated as a member of the Paris Climate Agreement

The Paris Agreement has been a key trigger of regulation for the financial sector in Europe and the UK

2015
- Paris Climate Agreement Established
- UN Sustainable Development Goals

2016
- Article 173 - France

2017
- Task Force on Climate Related Financial Disclosures Recommendations Published
- Network for Greening the Financial System

2018
- EU High Level Expert Group on Sustainable Finance

2019
- Finalisation of EU Recommendations for ESG Benchmarks
- UK Green Finance Strategy

2020
- Bank of France Climate Risk Stress Test

2021
- Bank of England Climate Risk Stress Test
- PRA SS3/19 requirements embedded
- Sustainable Finance Disclosure Regulation (SFDR) Level 1 go-live
- EBA Climate Risk pilot

2022
- Amendments to UCITS, AIFMD, MiFID II, Solvency II and IDD expected to begin (October)
- ECB Banking Climate Stress Test
- **TCFD reporting** for premium listed firms in the **UK required on a "comply or explain" basis**
- ECB Climate Supervisory Review
- SFDR level 2 Go Live
- EU Taxonomy disclosure applicability for two environmental objectives

2023
- EU Taxonomy disclosure applicability for remaining four environmental objectives
- UK Green Taxonomy expected to come into force

2024
- NFDR/CSRD expected reporting

There are key milestones approaching that will require organisations to evidence effective climate and wider ESG management in the UK and Europe

SEP 2021

Bank of England climate stress test
Participating firms (systemic institutions) to provide initial submissions on the Climate Biennial Exploratory Scenario (CBES)

END 2021

PRA SS3/19 expectations embedded
PRA expects UK regulated banks and insurance firms to fully embed their approaches to manage climate-related financial risks by the end of 2021

JAN 2022

TCFD to become mandatory for all premium listed UK firms
All premium listed companies will need to disclose climate-related reporting based on TCFD recommendations

JAN & JUL 2022

Phase 1 EU Taxonomy (Jan)
Green Taxonomy Disclosure applicability for climate change mitigation and climate change adaptation objectives (for firms servicing European clients)

SFDR RTS (Jul)
Full Regulatory Technical Standards (RTS) in force for Sustainable Finance Disclosure Regulation (for firms servicing European clients)

OCT 2022

MiFID firms to discuss client sustainability preferences
When an adviser assesses a client's suitability for an investment, they also need to discuss the client's sustainability preferences (required for firms servicing European clients)

JAN 2023

UK Green Taxonomy
Green taxonomy disclosure for firms servicing UK clients expected (following completion of technical standards in 2022)

The road to Net-Zero

The Global Challenge

The Intergovernmental Panel on Climate Change (IPCC) have confirmed that global warming of 1.5°C & 2°C will be exceeded in the 21st Century unless deep reductions in GHG emissions occur in the coming decades. All sectors of society need to decarbonize to collectively reach Net-Zero emissions by 2050.

What is Net-Zero?

The point in which the whole amount of greenhouse gases (GHG) released into the atmosphere by human activity is fully balanced by what is removed. This can achieved by:

- Significant reductions in GHG emissions released to the atmosphere (triggered by more efficient use of resources, new technologies and changes in human behaviour)
- Implementation of GHG absorption mechanisms that remove GHG emissions from the atmosphere

What will it take to reach Net-Zero across the economy?

- Drastic changes in the sourcing of energy, moving away from fossil fuels to rely on renewable energy
- Innovation and technological developments in both science and engineering to minimise GHG impact and enhance GHG absorption capabilities
- Aggressive GHG-reduction targets across sectors
- Changes in consumer behaviours and collaboration
- Climate policies that accelerate the transition to a lower carbon economy and restrict GHG-intensive activities

How do financial companies generate GHG emissions?

Carbon emissions can be segmented into direct emissions from controlled sources (scope 1), indirect emissions from the generation of purchased energy (scope 2) and indirect emissions that occur in the company's value chain (scope 3).

Financial firms have limited scope 1 and scope 2 emissions. However, by lending and investing, financial firms play a significant contribution in generating scope 3 **financed emissions.**

How can firms achieve Net-Zero financed emissions?

Growing numbers of financial institutions are committing to delivering Net-Zero financed emissions by 2050 or 2060.

This may be achieved by supporting clients in their own transition to Net-Zero, pulling capital away from activities that are not consistent with a path to Net-Zero and channelling significant capital towards low carbon solutions, climate mitigation and adaptation.

The path to Net-Zero in the financial sector

About $130 trillion of investment* will be required to reach Net-Zero by 2050, the financial sector can play an important role in re-allocating capital to support this transition, key considerations are the following:

Measurement capabilities

Financial firms must develop measurement metrics for operational emissions and finance emissions, prioritising the most GHG-intensive sectors to reduce finance emissions, aligning with emerging industry standards

FINANCIAL SECTOR

Transition plan

Financial firms must define a transition strategy, setting out actions and climate-related sectoral policies to ensure GHG targets are met.

Examples include corporate engagement objectives, risk appetite adjustments, green lending growth supporting actions, engaging in carbon pricing development, etc

NET-ZERO PATH

Target setting

Firms must Set 2030 and 2050 GHG emission targets that align with Net-Zero pathways across the portfolio, considering a range of scenarios

Progress disclosure

Annually report emissions and progress against targets and actions agreed

**See 2020 Global Renewables Outlook, IRENA.*

Numerous industry initiatives are emerging to support the transition to a Net-Zero economy, considering target setting, corporate engagement and emissions measurement

Climate Action 100+	Investor initiative dedicated to pushing the world’s top emitting companies to take action on the climate crisis. The initiative focuses on the 100 companies with the highest combined direct and indirect emissions
UN Net-Zero Asset Owner Alliance	Coalition of institutional investors committed to align portfolios with a 1.5 degrees scenario, in line with article 2.1 of the 2015 Paris Climate Agreement
Investor Climate Action Plans	The Investor Climate Action Plans, developed by the Investor Agenda, help investors to navigate the many different Net-Zero initiatives that exist and to create ambitious plans of action
Partnership for Carbon Accounting Financials (PCAF)	Accounting framework for lending and investing associated GHG emissions, supported by more than 150 financial institutions
UN Net-Zero Banking Alliance	Coalition of banks committed to aligning their lending and investment portfolios with Net-Zero emissions by 2050. This ambitious commitment sees banks setting an intermediate target for 2030 or sooner, using robust, science-based guidelines
Science-Based Targets	An initiative that aims to develop a global standard for Net-Zero target setting. The initiative showcases defines and promotes best practice in science-based target setting, offers resources to reduce barriers to adoption, and independently assesses and approves companies’ targets
UN Net-Zero Insurance Alliance	Brings together several of the world’s leading insurers and reinsurers to play their part in accelerating the transition to Net-Zero emissions economies. They are committing to individually transition their underwriting portfolios to Net-Zero greenhouse gas (GHG) emissions by 2050

Climate disclosures: what progress has been made?

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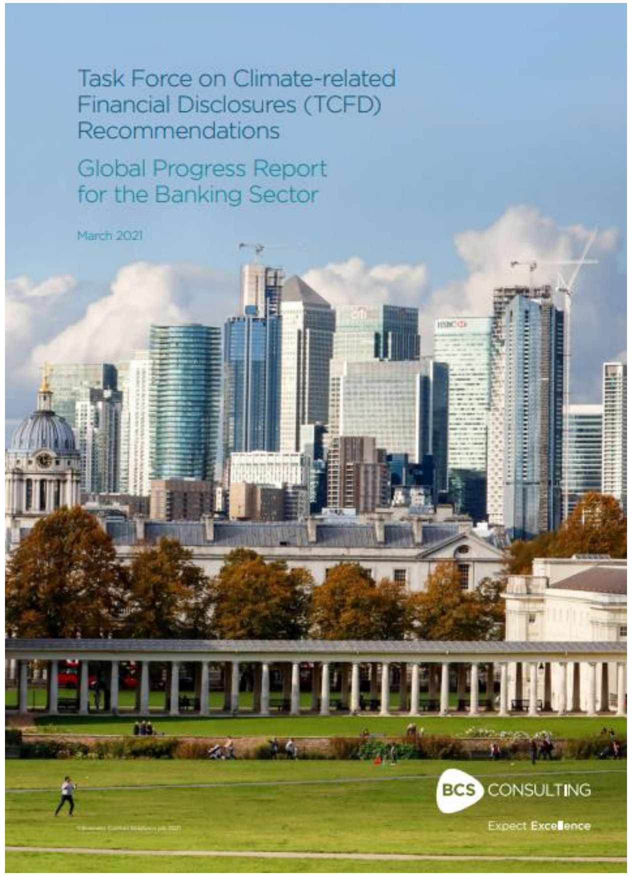
About TCFD: Climate disclosures play an important role in supporting access to better information for investor decision making and in pricing climate risk in the market

TCFD recommendations are structured around four pillars that represent core elements of an organisation's operating model

- The Task Force on Climate-related Financial Disclosures (TCFD) was created by the Financial Stability Board to develop voluntary and consistent climate-related financial risk disclosures for use by companies in providing information to investors, lenders, insurers and other stakeholders
- BCS Consulting published a detailed assessment of progress in the banking sector implementing TCFD recommendations in 2019 and in 2021*(visit bcsconsulting.com to access the full report or click on the image on the right)*
- TCFD framework implementation is being led by **Europe**, US and Asia-Pacific are lagging behind
- The most advanced areas of disclosure are banks' own **environmental operational footprint** and **governance arrangements**, whereas **scenario analysis, impact on strategy and metrics for climate risk management** are the least mature
- There is significant potential to grow coverage of the framework by engaging the **largest banks, especially those headquartered in Asia** as well as central banks and governments



Closure: Key Takeaways

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Key Takeaways

- Climate is becoming an important source of risk for the financial sector, but it is also becoming an opportunity for innovation and to support and influence the transition to Net-Zero

- Achieving Net-Zero by 2050 requires drastic, cohesive action across society including changing consumer behaviour and 'clean' technological developments. The financial sector plays a key role in re-allocating capital to support this transition but also acting as a role-model with firms adapting their own business models

- The regulatory landscape has been quickly evolving to accelerate the transition to a lower carbon economy with increasing focus on accountability and transparency through Climate Disclosures

- TCFD Disclosures in the banking sector are progressing:

  – **Europe is** leading TCFD framework implementation, US and Asia-Pacific are lagging behind

  – The most advanced areas of disclosure are banks' own **environmental operational footprint** and **governance arrangements**, whereas **scenario analysis, impact on strategy and metrics for climate risk management** are the least mature

  – TCFD engagement shows some **signs of stagnation**: more action is required to increase endorsement of the framework by targeting regions beyond Europe

  – There is significant potential to grow coverage of the framework by engaging the **largest banks, especially those headquartered in Asia** as well as central banks and governments

Comments, Questions & Answers

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Thank You For Listening

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Forthcoming Events

- Mon, 11 Oct (15:00-15:45) Innovative Tax Techniques For Employee Share Schemes
- Wed, 13 Oct (15:00-15:45)
- Thu, 14 Oct (15:00-15:45) Asynchronicity & The Future Of The Workplace
- Wed, 20 Oct (09:00-10:00) Launch Of Global Green Finance Index 8
- Mon, 25 Oct (16:00-16:45) Privacy By Design Is Essential To Complementing Regulatory Compliance

Visit https://fsclub.zyen.com/events/forthcoming-events/

Appendix: TCFD Examples of Best Practice in the Banking Sector

Governance

Describe the board's oversight and consideration of climate related risks and opportunities

Board Engagement

BMO's directors are recruited and evaluated based on a skills matrix that includes sustainability experience, and eight of the bank's 14 current independent directors have such experience.

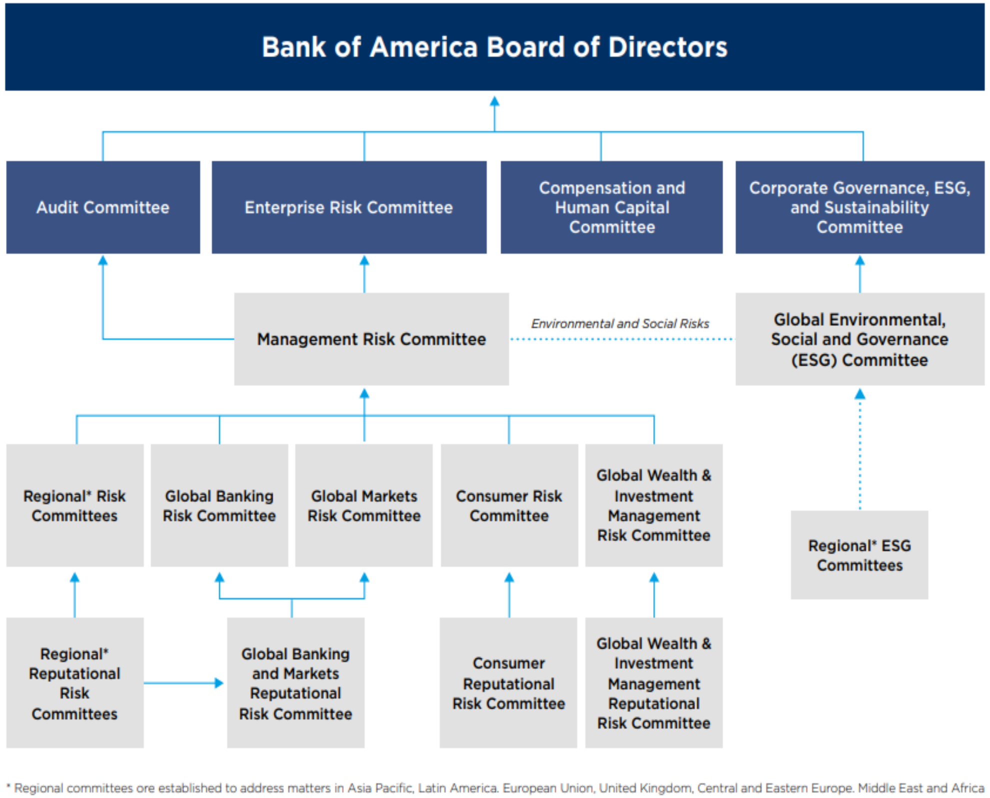
Excerpt from BMO's Group Climate Report 2019.

Describe management's role in assessing and managing climate related risks and opportunities

Executive Engagement

Citigroup have incorporated sustainability and climate-related goals into several executive scorecards, which are key elements of performance review and form the basis for executive compensation. Several senior executives and members of their teams have climate-related performance objectives.

Excerpt from Citigroup's 2020 TCFD Report.



Excerpt from Bank of America's TCFD Report 2019.

Examples of emerging best practice

Strategy

Describe and explain the impact of climate-related risks and opportunities on the organisation's businesses, strategy, and financial planning across different time horizons (short term, medium term, long term)

Engagement & Collaboration

HSBC partnered with climate change **experts at the Massachusetts Institute of Technology (MIT) to produce exploratory transition Scenarios.**

Excerpt from HSBC's Annual Report 2019.

Strategic Planning

Barclays has provided a clear view of its business plans for the short (0-1 years), medium (1-5 years), and long term (5-30 years). The bank has outlined examples of climate transition and physical risks for each time horizon and provided details on its strategy to support the transition to a low-carbon economy

Excerpt from Barclays ESG Report 2019.

Policy & Commitments

Deutsche Bank has set sectoral risk appetite limits and applied several restrictions under its Environmental and Social (ES) Policy Framework to reduce its support for fossil fuels.

Excerpt from Deutsche Bank's Annual Report 2019.

Training

Credit Suisse provided training in sustainability risk management to around 540 employees in client-facing roles, control functions, or relevant specialist units in 2019.

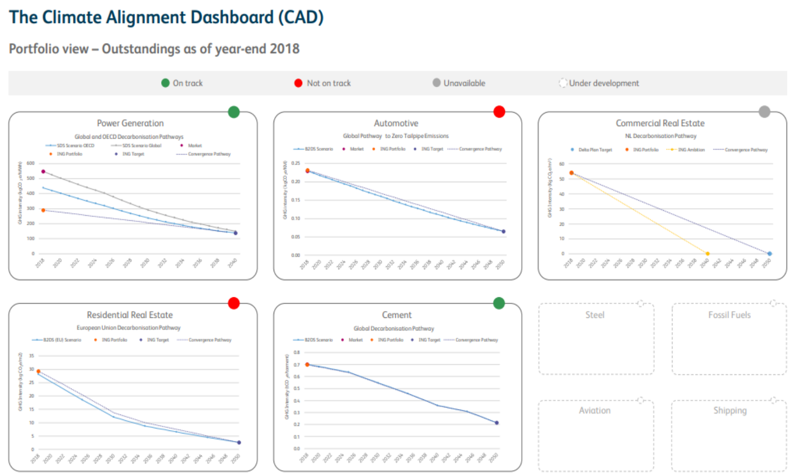
Excerpt from Credit Suisse's Annual Report 2019.

Describe the resilience of the organization's strategy, taking into consideration different climate-related scenarios, including a 2°C or lower scenario

Scenario Analysis

UBS has assessed a selection of climate sensitive sectors using the Paris Agreement Capital Transition Assessment (PACTA) methodology. The analysis compares the technology mix of the UBS corporate lending portfolio against the global corporate economy

Excerpt from UBS Climate Strategy 2020.



Excerpt from ING's Terra progress report 2019.

Examples of emerging best practice
Risk Management

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

Transition and Physical Risk

The **Macquarie Group** generated physical and transition climate risk vulnerability heat maps for lending and equity portfolios across sectors and geographies

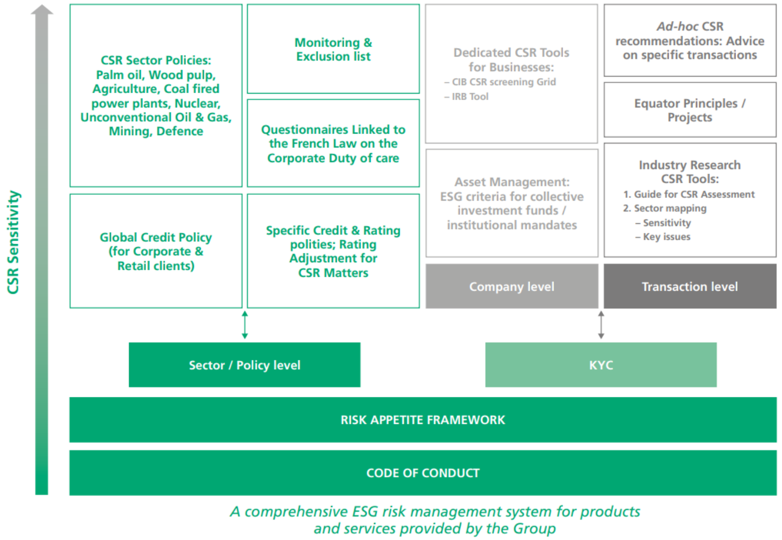
Excerpt from Macquarie Group's ESG Report 2020.

Risk Management Framework

Citigroup's Environmental and Social Risk Management (ESRM) Policy sets a framework to assess the potential climate risks and impacts of the clients and projects financed by the bank. Its project-related finance approach aligns with the Equator Principles, including an alternatives analysis of less carbon-intensive technologies for all transactions that exceed 100,000 tons of carbon dioxide emissions and a risk assessment of negative impacts from physical climate risk.

Excerpt from Citigroup's 2020 TCFD Report.

Excerpt from Macquarie Group's ESG Report 2020.



Excerpt from BNP Paribas's 2019 TCFD Report.

Examples of emerging best practice

Metrics and Targets

Disclose the metrics and targets used by the organization to assess climate-related risks and opportunities in line with its strategy and risk management process.	Disclose Scope 1, Scope 2, and, if appropriate, Scope 3 greenhouse gas (GHG) emissions, and the related risks.

Environmental Financing Metrics

BMO has outlined exposures for sectors that could be considered relevant for climate risk purposes and aims to avoid overexposure to these sectors by maintaining a well-diversified portfolio. Exposures in each sector are reported as a percentage of the total portfolio net loans and acceptances. In addition, the bank reports its total lending value linked to carbon-related assets and its percentage contribution relative to total loan portfolio.

Excerpt from BMO's Group Climate Report 2019.

Environmental Operational Metrics

Credit Suisse manages and discloses greenhouse gas emissions (scope 1, 2, 3) from its in-house operations based on an ISO 14001-certified environmental management system, provides a breakdown of the sources of its energy consumption, and outlines its strategy for global greenhouse gas neutrality.

Excerpt from Credit Suisse's Annual Report 2019.

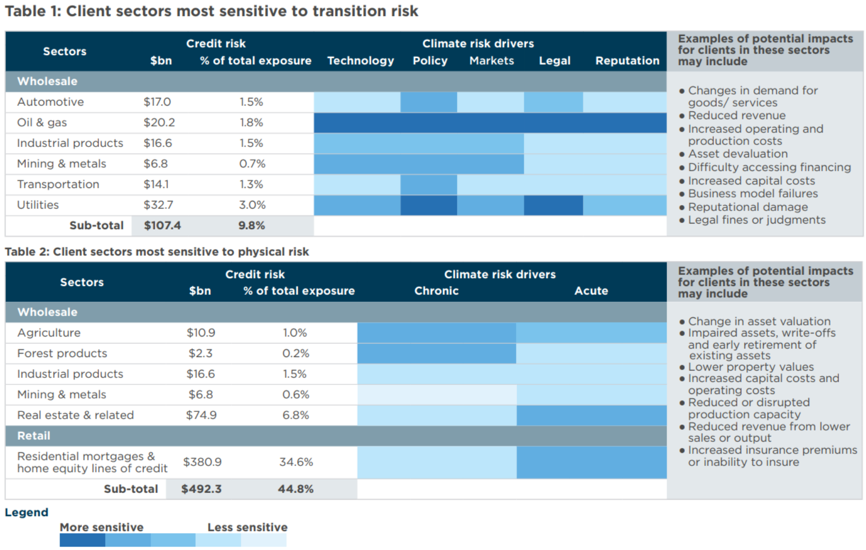


Table 1: Client sectors most sensitive to transition risk

Sectors	Credit risk $bn	Credit risk % of total exposure	Climate risk drivers: Technology	Policy	Markets	Legal	Reputation	Examples of potential impacts for clients in these sectors may include
Wholesale								• Changes in demand for goods/ services • Reduced revenue • Increased operating and production costs • Asset devaluation • Difficulty accessing financing • Increased capital costs • Business model failures • Reputational damage • Legal fines or judgments
Automotive	$17.0	1.5%						
Oil & gas	$20.2	1.8%						
Industrial products	$16.6	1.5%						
Mining & metals	$6.8	0.7%						
Transportation	$14.1	1.3%						
Utilities	$32.7	3.0%						
Sub-total	$107.4	9.8%						

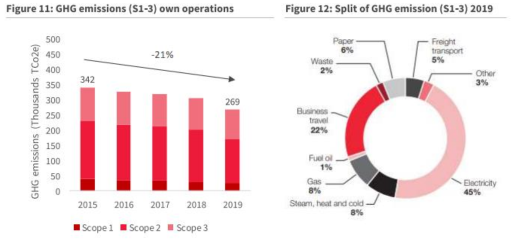
Table 2: Client sectors most sensitive to physical risk

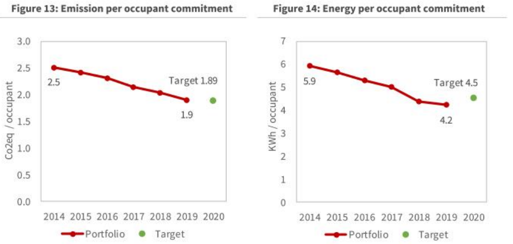
Sectors	Credit risk $bn	Credit risk % of total exposure	Climate risk drivers: Chronic	Acute	Examples of potential impacts for clients in these sectors may include
Wholesale					• Change in asset valuation • Impaired assets, write-offs and early retirement of existing assets • Lower property values • Increased capital costs and operating costs • Reduced or disrupted production capacity • Reduced revenue from lower sales or output • Increased insurance premiums or inability to insure
Agriculture	$10.9	1.0%			
Forest products	$2.3	0.2%			
Industrial products	$16.6	1.5%			
Mining & metals	$6.8	0.6%			
Real estate & related	$74.9	6.8%			
Retail					
Residential mortgages & home equity lines of credit	$380.9	34.6%			
Sub-total	$492.3	44.8%			

Legend

More sensitive — Less sensitive

Excerpt from Royal Bank of Canada's TCFD Report 2019.





Excerpt from Société Générale's Climate Disclosure 2020.

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