Appendix B

Government of Canada Gouvernement du Canada

Canada

Office of the Superintendent of Financial Institutions

Climate Risk Management

Alternative Formats

- PDF

Accompanying Documents

- News release
- Letter

Type of Publication: Draft Guideline
Category: Sound Business Practices and Prudential Limits
No: B-15
Date: May 2022

A. Overview

Climate change and the global response to the threats it poses have the potential to significantly impact the safety and soundness of federally regulated financial institutions (FRFIs), and the financial system more broadly. These risks, also known as "climate-related risks", are broadly categorized as physical and transition risks.

- "Physical risks" refer to the financial risks from the increasing severity and frequency of extreme climate change-related weather events (i.e., acute physical risks); longer-term gradual shifts of the climate (i.e., chronic physical risks); and indirect effects of climate change such as public health implications (e.g., morbidity and mortality impacts).
- "Transition risks" refer to the financial risks related to the process of adjustment towards a low-greenhouse gas (GHG) economy. These risks can emerge from current or future government policies, legislation, and regulation to limit GHG emissions, as well as technological advancements, and changes in market and customer sentiment towards a low-GHG economy.

Physical and transition risks can also lead to liability risks, such as the risk of climate-related claims under liability policies, as well as direct actions against financial institutions for failing to manage their climate-related risks.

Climate-related risks may manifest over varying time horizons, and are likely to intensify over time, especially if the global economy undergoes a disorderly transition. They can drive financial risks, such as credit, market, insurance, and liquidity risks. They can also lead to strategic, operational, and reputational risks. In severe instances, climate-related risks can threaten the long-term viability of a FRFI's business model.

Building resilience against climate-related risks requires FRFIs to address vulnerabilities in their business model, their overall operations, and ultimately on their balance sheet. This entails forward-looking approaches that are holistic, integrated, and built on reliable empirical data and sound analyses.

A1. Purpose and Scope

The Guideline establishes OSFI's expectations related to the FRFI's management of climate-related risks. It aims to support FRFIs in developing greater resilience to, and management of, these risks. The Guideline applies to all federally regulated financial institutions.

There is no one-size-fits-all approach for managing climate-related risks given the unique risks and vulnerabilities that will vary with a FRFI's size, nature, scope, and complexity of its operations, and risk profile. The Guideline should be read, and implemented, from a risk-based perspective that allows the FRFI to compete effectively while managing its climate-related risks prudently.

A2. Structure of the Guideline

The Guideline is organized into chapters, each with its own focus and principles-based expectations. These chapters are interrelated and mutually reinforcing. For example, enhanced transparency through climate-related financial disclosures (Chapter 2) incentivizes improvements in the quality of the FRFI's governance and risk management practices (Chapter 1).

A3. Outcomes

The Guideline presents the following three expected outcomes for FRFIs to achieve.

1. The FRFI understands and mitigates against potential impacts of climate-related risks to its **business model and strategy**.

2. The FRFI has appropriate **governance and risk management practices** to manage identified climate-related risks.

3. The FRFI remains **financially resilient** through severe, yet plausible, climate risk scenarios, and **operationally resilient** through disruption due to climate-related disasters.

Table of Contents

Chapter 1 - Governance and Risk Management Expectations

This chapter outlines OSFI's governance and risk management expectations for climate-related risks. It complements other OSFI guidance that directly or indirectly addresses various elements of climate risk management. See Annex 1-1 for the list of other OSFI guidance.

I. Governance

Principle 1: The FRFI should incorporate the implications of climate change and the transition to a low-greenhouse gas (GHG) economy to the FRFI in its business model and strategy.

1. The FRFI should identify and understand the impact of climate-related risks on the FRFI's short-term and long-term strategic, capital, and financial plans.[1]
2. The FRFI should develop and implement a Climate Transition Plan (Plan),[2] in line with its business plan and strategy, that guides the FRFI’s management of increasing physical risks from climate change, and the transition towards a low-GHG economy. In developing the Plan, the FRFI should assess the achievability of its Plan under different climate-related scenarios,[3] and how it would measure and assess its progress against the Plan (e.g., internal metrics and targets such as GHG emissions).[4]

Principle 2: The FRFI should have the appropriate governance, policies, and practices in place to manage climate-related risks.

3. Senior Management has overall accountability for the FRFI’s climate risk management.[5] The FRFI should take into account climate-related risks in Senior Management compensation, as appropriate.
4. The FRFI should integrate climate-related risks into its Risk Appetite Framework and Internal Control Framework.[6] Furthermore, the FRFI should reflect climate-related risks in its Enterprise Risk Management (ERM) framework, relevant policies and practices, and articulate the roles and responsibilities of different business lines and Oversight Functions in managing climate-related risks.

Please refer to OSFI’s ***Corporate Governance*** *Guideline* for OSFI’s expectations of FRFI Boards of Directors in regards to business strategy and risk appetite, operational, business, risk and crisis management policies, as well as the management of capital and liquidity.

II. Risk Management

Principle 3: The FRFI should have processes in place to adequately price climate risk-sensitive assets and liabilities and manage these exposures in accordance with the FRFI’s Risk Appetite Framework.

A. Risk Identification, Measurement, and Management

5. The FRFI should have appropriate processes and controls to identify and measure the potential impact of climate-related risks on its portfolio of exposures (e.g., credit, market, operational, insurance, and liquidity) over appropriate time horizons.
6. The FRFI should identify, collect, and use reliable, timely, and accurate climate risk data (e.g., GHG emissions data, geophysical location of exposures) relevant to its business activities to inform risk management and decision-making. Where climate data gaps exist, the FRFI should consider alternative data sources or reasonable proxies to bridge the gap.[7]
7. The FRFI should implement relevant tools and models, including those used for climate scenario analysis,[8] to measure and assess its climate-related risks. Where the FRFI chooses to use tools and models developed by external third parties to support its assessment, the FRFI should sufficiently understand the embedded data, methodology, assumptions, and their limitations.

B. Risk Monitoring and Reporting

8. The FRFI should incorporate climate-related risks into its internal monitoring and reporting of business performance and risk management effectiveness. It should monitor and report on relevant internal metrics, limits, and indicators to assess the effectiveness of its climate risk management. It should also monitor and report on internal targets to assess the FRFI’s progress in managing its physical risk exposures and transition towards a low-GHG economy, consistent with its Plan.
9. The FRFI should develop capabilities to aggregate its climate risk data to identify and internally report on climate-related exposures, including risk concentrations (e.g., geographies, sectors, products, or counterparties). It should also have internal reporting systems that can produce timely, accurate, independent, and objective reporting on these risks to support strategic planning and risk management.

C. Operational Preparedness and Resilience for Climate-Related Disasters

Principle 4: The FRFI should mitigate the impact of climate-related disasters on its critical operations.

10. The FRFI's risk of damage to its physical assets and disruption to critical operations could increase with more extreme weather events, affecting the FRFI's operations. To minimize the impact of these events, the FRFI should consider severe, yet plausible, climate-related disaster scenarios in its decision-making around its operations, as well as its business continuity and disaster recovery planning processes.
11. The FRFI's business continuity and disaster recovery planning processes should address severe, yet plausible, climate-related disaster scenarios where the material third party could fail to continue providing service.

D. Awareness and Capabilities Building

12. The FRFI should monitor developments in climate-related risk quantification (e.g., additional transmission channels for climate-related risks, etc.) and incorporate them into the FRFI's governance and risk management practices, as appropriate. Among other things, the FRFI should continuously enhance its climate data and analytics capabilities to support its climate risk management.

III. Climate Scenario Analysis and Stress Testing

OSFI may develop this section into a separate chapter in a future iteration of the Guideline.

Principle 5: The FRFI should use climate scenario analysis to assess the impact of climate-related risk drivers on its risk profile, business strategy, and business model.

Climate scenario analysis: Climate scenario analysis uses a hypothetical future state of the world to assess the impact of climate-related risks on a FRFI's operations over an appropriate time horizon. These exercises can help the FRFI achieve different objectives in its strategic planning and enterprise risk management, such as:

- Assessing the impact of physical and transition risks on the FRFI's strategy and risk profile, and the resiliency of its business model;
- Identifying relevant climate-related risk factors that can drive the FRFI's financial and non-financial risks, and estimating exposures and potential losses;
- Identifying data, methodology, and assumption limitations; and
- Informing the adequacy of the FRFI's risk management framework.

13. The FRFI should include climate scenario analysis as a part of its Stress Testing Framework.[9] It should conduct climate scenario analysis on a regular basis to inform its strategic planning and enterprise risk management. The FRFI should use results as an input into its capital and financial planning processes, where appropriate.
14. When undertaking climate scenario analyses, the FRFI should consider a range of plausible and relevant scenarios, over various time horizons (i.e., short-, medium- and long-term), when climate-related risks can materialize and drive the FRFI's risks.
15. The FRFI should consider scenarios that encompass both physical and transition risks, and the potential interplay between these two types of risks. The FRFI should also understand the methodology and approaches used, including data and methodological limitations, and assumptions.

OSFI will be developing a standardized climate scenario analysis exercise to assess aggregate exposures to physical and transition risks and compare FRFI approaches to climate scenario analysis. FRFIs will be required to apply these scenarios and report their results to OSFI.

IV. Capital and Liquidity Adequacy

OSFI may develop this section into a separate chapter in a future iteration of the Guideline.

Principle 6: The FRFI should maintain sufficient capital and liquidity buffers for its climate-related risks.

16. The FRFI should incorporate climate-related risks into its Internal Capital Adequacy Assessment Process (ICAAP) or Own Risk and Solvency Assessment (ORSA) process. As part of this process, the FRFI should consider its capital requirements under severe, yet plausible, climate-related scenarios, and climate-related risks that could materialize beyond the FRFI's standard capital planning horizon.[10]
17. The FRFI should incorporate the impact of climate-related drivers on its liquidity risk profile and integrate a range of FRFI-specific and market-wide severe, yet plausible, climate-related stress events when assessing the adequacy of its liquidity

buffers.[11] For example, the FRFI should consider, among other things, the impact of increased drawdowns of deposit balances and credit/liquidity lines for counterparties sensitive to climate-related risks, volatility in insurance claims experience due to climate change, etc.

Chapter 2 - Climate-Related Financial Disclosures

This chapter outlines OSFI's expectations for the disclosure of climate-related risks.

I. Purpose of Disclosure Expectations

1. OSFI reinforces its climate risk management expectations through climate-related financial disclosure expectations. Climate-related financial risk disclosures help OSFI to meet its mandate of protecting depositors, creditors, and policyholders, and contributing to public confidence in the Canadian financial system, by ensuring appropriate information is publicly available to enable understanding of FRFIs' financial condition and the risks to which they are exposed.
2. Stakeholders interested in FRFIs' climate-related financial risk information may also include investors, analysts, and the public at large. By providing this broad group of stakeholders with key risk and risk management information, these disclosures can build confidence in FRFI management, and enable FRFIs to attract, or maintain their access to, capital and liquidity channels. By extension, confidence in FRFIs contributes to the public confidence in, and resilience of, the Canadian financial system.

II. Scope of Application

3. This chapter applies to all FRFIs in the scope of this Guideline, except for subsidiaries of FRFIs that report consolidated results to OSFI.

III. Principles for Effective Disclosure of Climate-Related Risks

4. The fundamental principles set out below provide guidance to FRFIs on OSFI's expectations for climate-related financial risk disclosures. These principles can help achieve high-quality and decision-useful disclosures that enable users to understand the financial impact of climate change on FRFIs. FRFIs should present disclosures that reflect the principles below.
5. The FRFI may encounter tension in the application of the principles set out below, whether between principles or within a single principle.[12] Such tensions are inevitable given the wide-ranging and sometimes competing needs of users and preparers of disclosures. The FRFI should aim to find an appropriate balance of disclosures that reasonably satisfy the recommendations and principles without overwhelming users with unnecessary information.

Principle 1: The FRFI should disclose relevant information.

6. The FRFI should provide information specific to the potential impact of climate-related risks and opportunities on its markets, businesses, corporate or investment strategy, financial statements, and future cash flows.
7. The FRFI should present disclosures in sufficient detail to enable users to assess its exposure and approach to addressing climate-related issues, which is expected to evolve over time as FRFI practices mature.
8. The FRFI should include a statement explaining why a particular risk or issue is not significant, where appropriate.
9. The FRFI should provide information from the perspective of the potential impact of climate-related issues on value creation, considering and addressing the different time frames and types of impacts.
10. The FRFI should avoid generic or "boilerplate" disclosures that do not add value to users' understanding of issues. Furthermore, any proposed metrics should adequately describe or serve as a proxy for risk or performance and reflect how the FRFI manages the risk and opportunities.

Principle 2: The FRFI should disclose specific and complete information. [13]

11. The FRFI should provide disclosures of its exposure to potential climate-related impacts; the potential nature and size of such impacts; the FRFI's governance, strategy, processes for managing climate-related risks, and performance with respect to managing climate-related risks and opportunities.
12. To be sufficiently comprehensive, the FRFI should include historical and future-oriented information in its disclosures to allow users to evaluate their previous expectations relative to actual performance and assess possible future financial implications.

13. For quantitative information, the FRFI should include an explanation of the definition and scope applied (e.g., key assumptions used for future-oriented data) and use data that is consistent with what is used in its investment decision-making and risk management. The FRFI should explain any data limitations it faces and the impact of those data limitations on disclosure.

14. Any scenario analyses should be based on data or other information used by the FRFI for investment decision-making and risk management.[14] Where appropriate, the FRFI should also demonstrate the effect on selected risk metrics or exposures to changes in the key underlying methodologies and assumptions, both in qualitative and quantitative terms.

Principle 3: The FRFI should disclose clear, balanced, and understandable information.

15. The FRFI should present disclosures that communicate financial information that serves the needs of a range of users (i.e., sufficiently granular to inform sophisticated users but also provide concise information for those who are less specialized.)

16. The FRFI should show an appropriate balance between qualitative and quantitative information and use text, numbers, and graphical presentations in its disclosures as appropriate.

17. The FRFI should include fair and balanced narrative explanations that provide insight into the meaning of quantitative disclosures, including the changes or developments they portray over time.

18. The FRFI should provide straightforward explanations of issues in its disclosures. Terms used in the disclosures should be explained or defined for a proper understanding by the users.

Principle 4: The FRFI should disclose reliable, verifiable, and objective information.

19. The FRFI should provide high-quality reliable information in its disclosures. This information should be accurate and neutral—i.e., free from bias.

20. The FRFI should adequately explain future-oriented disclosures that involve the FRFI's judgment and ensure such disclosures are reasonable and supported. To the extent possible, the FRFI should base its disclosures on objective data and use best-in-class measurement methodologies, which would include common industry practice as it evolves.

21. The FRFI should report information that is verifiable (e.g., assumptions related to future-oriented information should be traceable to their sources). Disclosures should be defined, collected, recorded, and analyzed in such a way that the information reported is verifiable to ensure it is high quality. While independent external assurance is not required at this time, the disclosures should be subject to internal governance processes that are the same or substantially like those used for financial reporting.

Principle 5: The FRFI should disclose information appropriate for its size, nature, and complexity.

22. The volume and level of detail of disclosure should be higher for a FRFI that is larger, has more varied business lines and geographic locations, or is systemically important, than for other FRFIs.

Principle 6: The FRFI should disclose information consistently over time.

23. The FRFI should disclose consistently over time to enable users to understand the development and/or evolution of the impact of climate-related issues on the FRFI's business and allow for inter-period comparisons.

24. The FRFI should explain changes in disclosures and related approaches or formats (e.g., due to shifting climate-related issues and evolution of risk practices, governance, measurement methodologies, or accounting practices).

IV. Implementation Date

25. The FRFI is expected to implement the disclosures required by this Guideline in Annexes **2-1** and **2-2** effective fiscal periods ending on or after October 1, 2023. The FRFI may voluntarily early adopt disclosure expectations.

    See **Annex 2-3** for the Conceptual Roadmap to Full Complement of OSFI Climate-Related Financial Risk Disclosure Expectations.

V. Location and Timing of Disclosures

26. The FRFI may exercise discretion regarding the location of the disclosures expected by this Guideline. Possible locations include but are not limited to: Report to shareholders[15] (if disclosed to the public), or a stand-alone report (e.g.,

Environmental, Social, and Governance, or "ESG", Report, Climate Risk Report, Pillar 3 Report). The FRFI may exercise discretion in signposting disclosure expectations of this Guideline to publicly available reports of its choice.

27. The FRFI is expected to make the disclosures required by this Guideline publicly available (i.e., on the FRFI's company website) no later than 180 days after fiscal year-end, as applicable.

VI. Frequency of Disclosure

28. The frequency for the disclosures required by this Guideline is *annual*. The FRFI may voluntarily present the required disclosures on more frequent basis.

VII. Disclosure Format

29. The format for the disclosures required by this Guideline is *flexible*. The FRFI may present the required information in the format that best suits the FRFI.

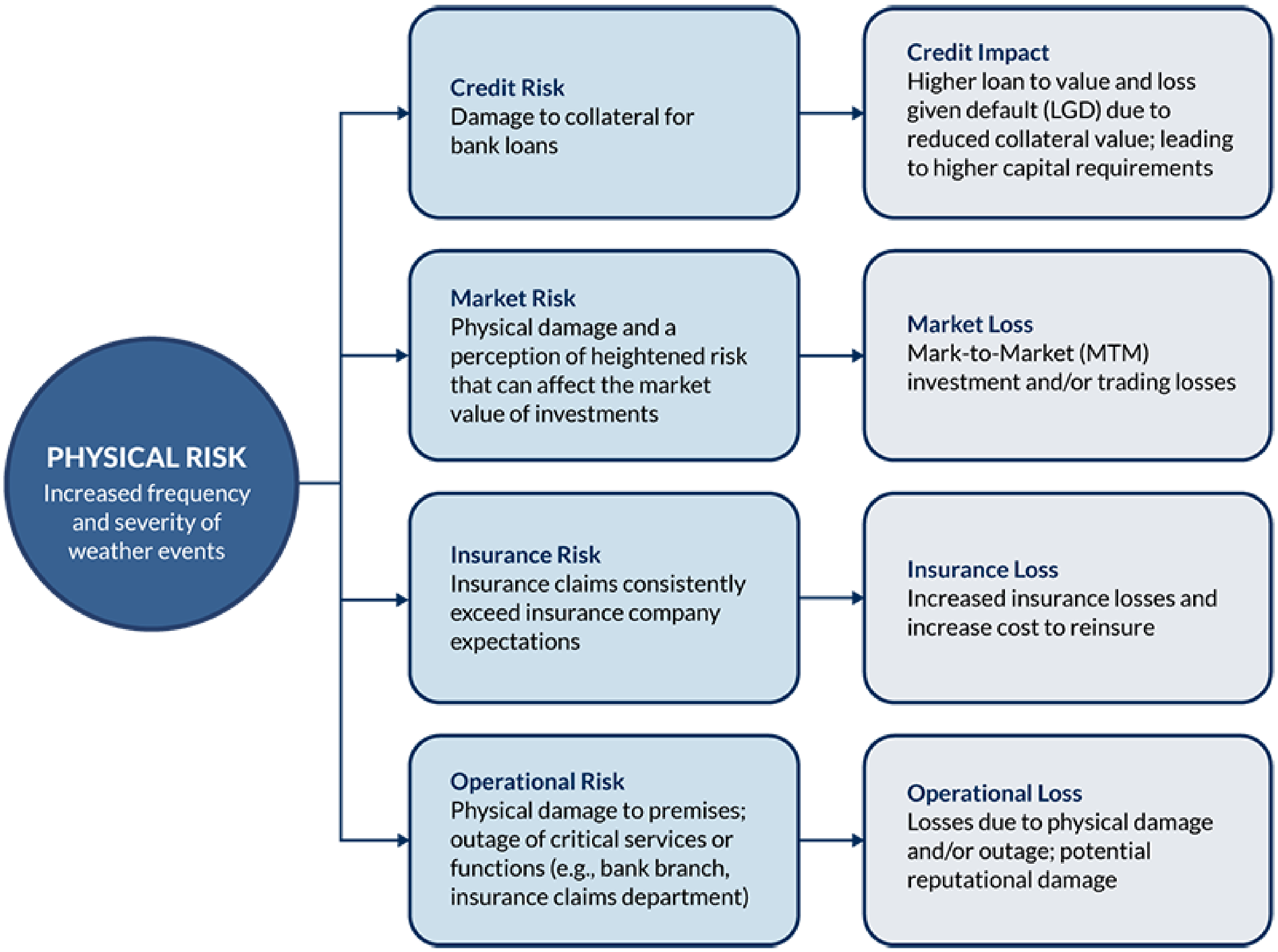
Annexes

Annex 1-1 - Other OSFI Guidance

This Guideline complements other OSFI guidance that directly or indirectly addresses various elements of climate risk management, including but not limited to:

1. ***Corporate Governance*** *Guideline*, which sets out OSFI's expectations of Board of Directors and FRFI management on corporate governance.
2. **Guideline B-10: *Outsourcing of Business Activities, Functions and Processes***, which sets out OSFI's expectations on FRFI management of risks associated with third-party arrangements.
3. **Guideline E-18: *Stress Testing***, which sets out OSFI's expectations on the use of stress testing for senior management to use in making business strategy, risk management and capital management decisions.
4. **Guideline E-19: *Own Risk and Solvency Assessment*** (ORSA), which sets out OSFI's expectations of an insurer's own assessment of its risks, capital needs and solvency position, and for setting Internal Targets, based on an insurer's ORSA.
5. **Guideline E-19: *Internal Capital Adequacy Process*** (ICAAP), which sets out OSFI's expectations of federally regulated deposit-taking institutions' own assessment of the adequacy of their capital.
6. **Guideline E-21: *Operational Risk Management***, which sets out OSFI's expectations on FRFIs' management of operational risk.
7. **Guideline E-23: *Enterprise-wide Model Risk Management for Deposit-Taking Institutions***, which sets out OSFI's expectations on institutions' establishment of sound policies and practices for an enterprise-wide model risk management framework.

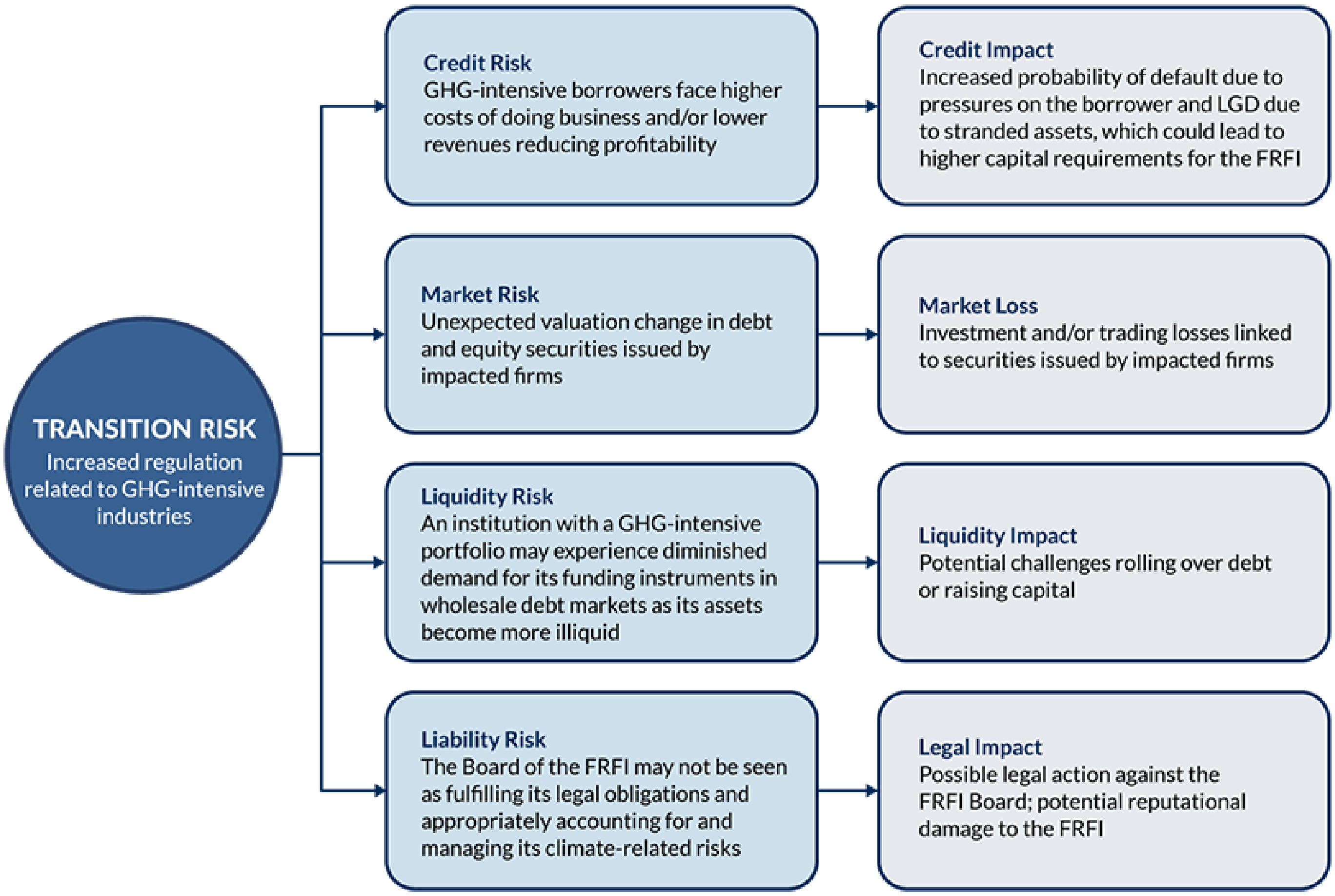
Annex 1-2 - Examples of Climate-Related Transmission Channels



Text Description: Physical Risk

Physical Risk: Increased frequency and severity of weather events

- **Credit Risk**: Damage to collateral for bank loans
  - **Credit Impact**: Higher loan to value and loss given default (LGD) due to reduced collateral value; leading to higher capital requirements
- **Market Risk**: Physical damage and a perception of heightened risk that can affect the market value of investments
  - **Market Loss**: Mark-to-Market (MTM) investment and/or trading losses
- **Insurance Risk**: Insurance claims consistently exceed insurance company expectations
  - **Insurance Loss**: Increased insurance losses and increase cost to reinsure
- **Operational Risk**: Physical damage to premises; outage of critical services or functions (e.g., bank branch, insurance claims department)
  - **Operational Loss**: Losses due to physical damage and/or outage; potential reputational damage



Text Description: Transition Risk

Transition Risk: Increased regulation related to GHG-intensive industries

- **Credit Risk**: GHG-intensive borrowers face higher costs of doing business and/or lower revenues reducing profitability
  - **Credit Impact**: Increased probability of default due to pressures on the borrower and LGD due to stranded assets, which could lead to higher capital requirements for the FRFI
- **Market Risk**: Unexpected valuation change in debt and equity securities issued by impacted firms
  - **Market Loss**: Investment and/or trading losses linked to securities issued by impacted firms
- **Liquidity Risk**: An institution with a GHG-intensive portfolio may experience diminished demand for its funding instruments in wholesale debt markets as its assets become more illiquid
  - **Liquidity Impact**: Potential challenges rolling over debt or raising capital
- **Liability Risk**: The Board of the FRFI may not be seen as fulfilling its legal obligations and appropriately accounting for and managing its climate-related risks
  - **Legal Impact**: Possible legal action against the FRFI Board; potential reputational damage to the FRFI

Annex 2-1 - Disclosure Expectations for FRFIs

OSFI's climate-risk related financial information disclosure expectations include:

1. Expectations based on the Financial Stability Board's **Task Force on Climate-Related Financial Disclosure (TCFD) Framework** and the International Sustainability Standards Board's (ISSB) **Exposure Draft on Climate Related Disclosures**:
   - Governance;

- Strategy;
- Risk Management;
- Metrics and Targets;
- Greenhouse Gas (GHG) Emissions;
- **ISSB Cross-Industry Metrics**[16];
- ISSB Industry-Specific Metrics for Banks and Insurers[17];

2. Other expectations:

- Climate Transition Plan[18];
- Net-Zero[19] Commitment(s), if the FRFI has made one or more, whether through the **Net-Zero Banking Alliance**, **Net-Zero Insurance Alliance**, or other industry-led Net-Zero alliance.

See **Annex 2-2** for Minimum Climate-Related Financial Risk Disclosure Expectations, by FRFI Category, which provides detailed disclosure expectations and applicability of initial disclosure expectations by FRFI category.

See **Annex 2-3** for the Conceptual Roadmap to Full Complement of OSFI Climate-Related Financial Risk Disclosure Expectations.[20]

Regarding calculation and disclosure of GHG Emissions, FRFIs are expected to use the **GHG Protocol** or a comparable reporting standard.

Regarding calculation and disclosure of the portion of Scope 3 GHG emissions associated with the FRFI’s loans and investments, the FRFI are expected to use the Partnership for Carbon Accounting Financials’ (PCAF’s) **Global GHG Accounting and Reporting Standard for the Financial Industry (the PCAF Standard)** or a comparable industry-accepted approach.

Annex 2-2 - Minimum Climate-Related Financial Risk Disclosure Expectations, by FRFI Category

Disclosure Category - Governance

Disclosure Element	Disclosure Requirement	Applicability of Disclosure Requirements, by FRFI Type				
		D-SIBs [a]	Category 1 SMSBs [b]	Category 2 or 3 SMSBs [b]	IAIGs Headquartered in Canada [c]	All Other Federally Regulated Insurers [d]
a)	Describe the board of directors’ oversight of climate-related risks and opportunities.	✓	✓	✓	✓	✓
b)	Describe management’s role in assessing and managing climate-related risks and opportunities.	✓	✓	✓	✓	✓

Disclosure Category - Strategy

Disclosure Element	Disclosure Requirement	Applicability of Disclosure Requirements, by FRFI Type				
		D-SIBs [a]	Category 1 SMSBs [b]	Category 2 or 3 SMSBs [b]	IAIGs Headquartered in Canada [c]	All Other Federally Regulated Insurers [d]
a)	Describe the climate-related risks and opportunities the FRFI has identified over the short, medium, and long term.	✓	✓	✓	✓	✓
b)	Describe the impact of climate-related risks and opportunities on the FRFI's businesses, strategy, and financial planning.	✓	✓	✓	✓	✓

Disclosure Element	Disclosure Requirement	Applicability of Disclosure Requirements, by FRFI Type				
		D-SIBs [a]	Category 1 SMSBs [b]	Category 2 or 3 SMSBs [b]	IAIGs Headquartered in Canada [c]	All Other Federally Regulated Insurers [d]
c)	Describe the resilience of the FRFI's strategy, taking into consideration different climate-related scenarios, including a 2°C or lower scenario.	N/A[e]	N/A[e]	N/A[e]	N/A[e]	N/A[e]

Disclosure Category - Risk Management

Disclosure Element	Disclosure Requirement	Applicability of Disclosure Requirements, by FRFI Type				
		D-SIBs [a]	Category 1 SMSBs [b]	Category 2 or 3 SMSBs [b]	IAIGs Headquartered in Canada [c]	All Other Federally Regulated Insurers [d]
a)	Describe the FRFI's processes for identifying and assessing climate-related risks.	✓	✓	✓	✓	✓
b)	Describe the FRFI's processes for managing climate-related risks.	✓	✓	✓	✓	✓
c)	Describe how processes for identifying, assessing, and managing climate-related risks are integrated into the FRFI's overall risk management.	✓	✓	✓	✓	✓

Disclosure Category - Metrics and Targets

Disclosure Element	Disclosure Requirement	Applicability of Disclosure Requirements, by FRFI Type				
		D-SIBs [a]	Category 1 SMSBs [b]	Category 2 or 3 SMSBs [b]	IAIGs Headquartered in Canada [c]	All Other Federally Regulated Insurers [d]
a)	Disclose the metrics used by the FRFI to assess climate-related risks and opportunities in line with its strategy and risk management process.	✓	✓	N/A[e]	✓	N/A[e]
b)	Describe the targets used by the FRFI to manage climate-related risks and opportunities and the issuer’s performance against these targets.	✓	✓	N/A[e]	✓	N/A[e]

Disclosure Category - GHG Emissions

Disclosure Element	Disclosure Requirement	Applicability of Disclosure Requirements, by FRFI Type				
		D-SIBs [a]	Category 1 SMSBs [b]	Category 2 or 3 SMSBs [b]	IAIGs Headquartered in Canada [c]	All Other Federally Regulated Insurers [d]
a) i)	Disclose the FRFI's Scope 1 GHG emissions and the related risks.	✓	✓	✓	✓	✓
a) ii)	Disclose the FRFI's Scope 2 GHG emissions and the related risks.	✓	✓	✓	✓	✓

Disclosure Element	Disclosure Requirement	Applicability of Disclosure Requirements, by FRFI Type				
		D-SIBs [a]	Category 1 SMSBs [b]	Category 2 or 3 SMSBs [b]	IAIGs Headquartered in Canada [c]	All Other Federally Regulated Insurers [d]
a) iii)	Disclose the FRFI's Scope 3 GHG emissions and the related risks.	✓	✓	N/A[e]	✓	N/A[e]
b)	Disclose the reporting standard used by the FRFI to calculate and disclose the GHG emissions referred to in (a).	✓	✓	N/A[e]	✓	N/A[e]
c)	If the reporting standard referred to in (b) is not the GHG Protocol, disclose how the reporting standard used by the FRFI is comparable with the GHG Protocol.	✓	✓	N/A[e]	✓	N/A[e]

Disclosure Category - ISSB Cross-Industry Metrics

Disclosure Element	Disclosure Requirement	Applicability of Disclosure Requirements, by FRFI Type				
		D-SIBs [a]	Category 1 SMSBs [b]	Category 2 or 3 SMSBs [b]	IAIGs Headquartered in Canada [c]	All Other Federally Regulated Insurers [d]
a)	Physical risks — the amount and percentage of assets or business activities vulnerable to physical risks.	✓	✓	N/A[e]	✓	N/A[e]
b)	Transition risks — the amount and percentage of assets or business activities vulnerable to transition risks.	✓	✓	N/A[e]	✓	N/A[e]
c)	Climate-related opportunities — the proportion of revenue, assets or other business activities aligned with climate-related opportunities, expressed as an amount or as a percentage.	✓	✓	N/A[e]	✓	N/A[e]

a Consistent with other OSFI Guidance, OSFI identifies D-SIBs as Bank of Montreal, Bank of Nova Scotia, Canadian Imperial Bank of Commerce, National Bank of Canada, Royal Bank of Canada, and Toronto-Dominion Bank.

b SMSB Category (i.e. Category 1, 2 or 3) as defined in OSFI's SMSB Capital and Liquidity Requirements Guideline.

c The term "IAIGs" refers to Internationally Active Insurance Groups. "IAIGs headquartered in Canada" refers to Sun Life Assurance Company of Canada, Manufacturers Life Insurance Company, Canada Life Assurance Company, and Intact Financial Corporation.

d "All other federally regulated insurers means federally regulated insurers other than Internationally Active Insurance groups headquartered in Canada." The term federally regulated insurer includes life insurers and property and casualty insurers, domestic insurance companies and foreign insurance companies in respect of their insurance business in Canada, registered reinsurers, and fraternal benefit societies. For complete definitions of "registered reinsurer," please refer to Guideline A - Life Insurance Capital Adequacy Test and the P&C-1 Annual Return Instructions, as applicable. Note that these definitions include federally approved provincial / territorial reinsurers.

e Not required for initial implementation of disclosure expectations. See **Annex 2-3** for roadmap to full complement of disclosure expectations.

Annex 2-3 - Conceptual Roadmap to Full Complement of OSFI Climate-Related Financial Risk Disclosure Expectations

2025 – Year of Required Implementation

Disclosure Category	Incremental Disclosure Expectation
Incremental ISSB Cross-Industry Metrics (All FRFIs)	Capital deployment: the amount of capital expenditure, financing or investment deployed toward climate-related risks and opportunities, expressed in CAD.
Incremental ISSB Cross-Industry Metrics (All FRFIs)	Internal carbon prices: the price per metric tonne of GHG emissions used internally by an entity, including how the entity is applying the carbon price in decision-making (for example, investment decisions, transfer pricing, and scenario analysis), expressed in the CAD per metric tonne of CO2 equivalent.
Incremental ISSB Cross-Industry Metrics (All FRFIs)	Remuneration: the proportion of executive management remuneration affected by climate-related considerations in the current period, expressed in a percentage, weighting, description, or amount in CAD.

2026 – Year of Required Implementation

Disclosure Category	Incremental Disclosure Expectation
ISSB Industry-Specific Metrics (Banks) [limited to Climate-related risks]	Commercial, industrial and residential credit exposure to climate risks, by industry, in CAD
ISSB Industry-Specific Metrics (Banks) [limited to Climate-related risks]	Description of approach to incorporation of climate risk factors in credit analysis
ISSB Industry-Specific Metrics (Insurers) [limited to Climate-related risks]	Investment Management: Total invested assets, by industry and asset class, in CAD
ISSB Industry-Specific Metrics (Insurers) [limited to Climate-related risks]	Investment Management: Description of approach to incorporation of climate risk factors in investment management processes and strategies.
ISSB Industry-Specific Metrics (Insurers) [limited to Climate-related risks]	Policies Designed to Incentivize Responsible Behavior: Net premiums written related to energy
ISSB Industry-Specific Metrics (Insurers) [limited to Climate-related risks]	Policies Designed to Incentivize Responsible Behavior: Net premiums written related to energy efficiency and low carbon technology.

Disclosure Category	Incremental Disclosure Expectation
ISSB Industry-Specific Metrics (Insurers) [limited to Climate-related risks]	Climate Risk Exposure: Probable Maximum Loss (PML) of insured products from weather- related natural catastrophes in CAD.
ISSB Industry-Specific Metrics (Insurers) [limited to Climate-related risks]	Climate Risk Exposure: Total amount of monetary losses attributable to insurance payouts from (1) modeled natural catastrophes and (2) non-modeled natural catastrophes, by type of event and geographic segment (net and gross of reinsurance) in CAD.
ISSB Industry-Specific Metrics (Insurers) [limited to Climate-related risks]	Climate Risk Exposure: Description of approach to incorporation of environmental risks into (1) the underwriting process for individual contracts and (2) the management of firm-level risks and capital adequacy.

2027 – Year of Required Implementation

Disclosure Category	Incremental Disclosure Expectation
Scope 3 GHG Emissions	For Category 2 and 3 Banks and Other Federally Regulated Insurers
Physical Risk Scenario Analysis	All FRFIs
Transition Risk Scenario Analysis	All FRFIs

---

1 Climate-related risks can affect FRFIs through micro- and macro-economic transmission channels. Refer to **Annex 1-2** for examples of these channels.

2 Refer to the Financial Stability Board's Task Force on Climate-Related Financial Disclosures ***Guidance on Metrics, Targets, and Transition Plans*** for additional guidance on Climate Transition Plans elements to consider.

3 Refer to **Section III – Climate Scenario Analysis and Stress Testing**

4 Refer to **Chapter 2** for internal metrics and targets FRFIs should consider.

5 For foreign entities operating in Canada on a branch basis, OSFI looks to Branch Management to oversee operations in Canada.

6 Refer to OSFI's ***Corporate Governance*** *Guideline* for additional information on these areas.

7 Where proxies are used, the FRFI should exercise prudence and consider a margin of conservatism to address this uncertainty.

8 Refer to **Section III – Climate Scenario Analysis and Stress Testing**

9 Refer to OSFI's E-18: ***Stress Testing***

10 Refer to OSFI Guideline E-19: ***Internal Capital Adequacy Assessment*** and Guideline E-19: ***Own Risk and Solvency Assessment***.

11 Refer to OSFI Guideline E-18: ***Stress Testing.***

12 For example, the FRFI may update a methodology or increase the level of detail disclosed to improve the relevance of disclosure, at the expense of consistency of disclosure. Tension can also arise within a single principle. For example, Principle 4 states that disclosures should be verifiable, but assumptions made about future-oriented disclosures often require significant judgment by FRFI management that is difficult to verify.

13 As data quality, availability and scenario analysis capabilities improve, OSFI expects to issue updated climate risk-related financial disclosure expectations in the future with increased expectations. See Conceptual Roadmap to Full Complement of OSFI Climate-Related Financial Risk Disclosure Expectations (subject to change) in **Annex 2-3**.

14 Refer to **Annex 2-3** related to disclosure expectations related to FRFI scenario analysis.

15 "Report to Shareholders" includes the Primary Financial Statements (Statement of Financial Position, Statement of Profit or Loss and Other Comprehensive Income, Statement of Changes in Equity, Statement of Cash Flows), Notes to the Financial Statements and Management's Discussion & Analysis.

16 Refer to **Annex 2-2** for the list of required Cross-Industry Metrics.

17 Refer to **Annex 2-3** for the list of Industry-specific Metrics.

18 Refer to **Chapter 1** of this Guideline for additional guidance in this area.

19 Where "Net-Zero" means emitting no greenhouse gas emissions or offsetting emissions, for example, through actions such as employing technologies that can capture carbon before it is released into the air, per **Canada's Climate Plan**

20 Non-internationally active FRFIs have a longer period over which to phase in the full complement of disclosure requirements.

Modified Date: 2022-05-31