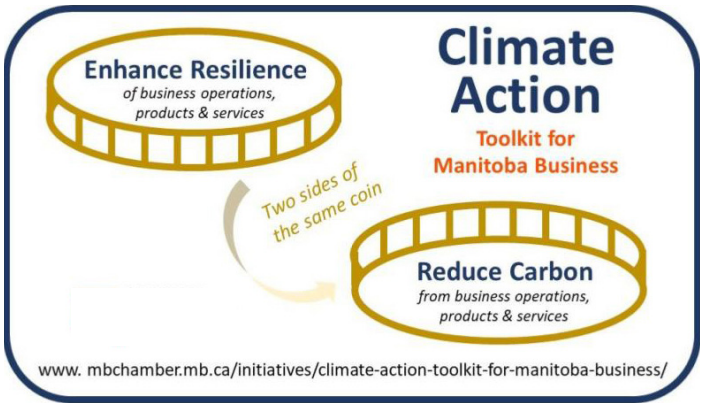
MANITOBA CHAMBERS OF COMMERCE

Climate Action Primer Series

Assessing Climate Risk and Enhancing Resilience

The climate crisis is upon us. Manitoba—particularly northern Manitoba—is already experiencing the effects of climate change along with the rest of Canada. Historical records show that every year since 1998 has been warmer than the 20th century average (Government of Canada, 2022). By the end of the 21st century, Manitoba's summer climate could be much like that of Kansas and northern Texas, a change that "would present our children with an entirely different climate, which would necessitate a complete reworking of how we live and thrive in our environment" (Prairie Climate Centre, n.d.).



Risk and resilience: What is it and why is it important?

Prudent climate action by Manitoba SMEs necessitates assessing risks to your business's home game, i.e., in your operations, facilities & critical infrastructure, and supply chains, as well as risks to your away game, i.e., the products and services you offer. Such risks include:

- **Physical Risks:** Due to the direct physical impacts caused by climate change (i.e., floods, drought, wildfires, extreme heat and wind, etc.)
- **Transition Risks:** Caused by changing socio-economic factors influenced indirectly by climate change, including: regulatory risks (i.e., changes in building codes and efficiency requirements, carbon taxes and emissions trading, climate-related financial disclosures), legal risks (i.e., health & safety issues with facilities not maintained under revised building codes and accepted practices) and reputational risks (i.e., changes in consumer preference for products and services from low-emitters, employee preference to work for corporations that take climate action seriously)

Adapted from MCRT, (2021)

But climate change is not the only risk facing businesses. The COVID-19 pandemic has sensitized Manitoba SMEs to the impacts of unprecedented disasters and the importance of anticipating risk, enhancing resilience, and ensuring business continuity in times of change.

"Comprehensive, all-hazard analyses that establish and consider the full risk landscape — including climate-related and other hazards together — clarify where resources are most needed, help identify solutions that address multiple risks, and improve the understanding of relationships between risks" (Council of Canadian Academies, 2022).

Therefore, it is essential practice for SMEs to consider the combined risks posed by multiple hazards, including climate change, pandemics and a host of other hazards – to assess the full risk landscape and put in place plans to enhance resilience and ensure business continuity in your business's home and away games.

Approaches and Tools for assessing risk and enhancing resilience

Various approaches and tools exist to help SMEs assess their risks and build resilience to climate change and other hazards.

Strategic Foresight

Strategic foresight is a general approach that helps organizations consider multiple plausible futures during strategy-making or business planning.

> **"For 50 years we have developed scenarios to identify emerging global challenges and to guide us through change. From the oil crisis of the 1970s to the financial crash of 2008, scenarios have helped us make crucial choices in uncertain times and tackle tough energy and environmental issues"** *Shell Global*

The Foresight-Insight-Action approach

What is it? Developed by the California-based Institute for the Future, the foresight-insight-action approach is a stepwise and fluid process to help organizations anticipate and prepare for the future (IFTF, 2022):

1. **Prepare** – Gather your evidence, including signals and drivers of change over time (i.e., climate change, state of the economy, technological innovations, etc.)
2. **Foresight** – Develop plausible, compelling, and provocative narratives and visions of multiple futures
3. **Insight** – Generate new ideas and meaningful implications for your organization
4. **Action** – Frame and prioritize possible actions for today, to mitigate risks and leverage opportunities

How can I get started? You don't need to be an expert to begin using strategic foresight. You can start a conversation with your staff using the steps outlined above. A skilled facilitator and expert can also help you get the most out of strategic foresight. **Contact Manitoba Chambers of Commerce for more information.**

How can I learn more about how to apply strategic foresight in my organization? Training is available from a variety of sources, free and for fee:

- **Foresight Essentials Training from the California**-based Institute for the Future. Visit: https://legacy.iftf.org/foresightessentials
- **Seeing FAR: Foresight-Adaptability-Risk**, from the Winnipeg-based Novel Futures Corporation. Free online webinar recording available at https://novelfutures.com/facilitation

Risk Management and Business Continuity

Risk Management goes beyond strategic foresight and includes a more formal assessment and prioritization of risks using qualitative or quantitative techniques. The international standard, ISO 31000, outlines principles and processes for managing all types of risk in an organization. And there are ways to apply risk management that are tailored to climate change (see below).

Furthermore, a **Business Continuity Plan** is "a documented collection of procedures and information that is developed, compiled, and maintained in readiness for use in an incident to enable an organization to continue to deliver its critical products and services at an acceptable predefined level" (DRI International, n.d.). The international standard, ISO 22301, specifies requirements for putting in place an overall Business Continuity Management System.

Climate Change Risk Assessment (CCRA)

What is it? Consistent with ISO 31000 and specific to climate change, CCRA is a process used to help organizations identify their climate change-induced risks from emerging climate change impacts (MCRT, 2021). The process typically involves: (i) identifying climate hazards and anticipated impacts across a business's core operations, value chain, and broader business network; (ii) analyzing risks by estimating the severity of impact and likelihood of occurrence; (iii) evaluating and prioritizing risk levels; and (iv) identifying adaptation options and creating a strategy for implementation.

How can I get started? The process of foresight-insight-action as noted earlier is a good informal start to risk management in your organization, but to take the next step to more formal risk management and business continuity, you'll need to either seek the advice of an expert or build internal capacity for doing so. Understanding the ISO 31000 standard for Risk Management is a good place to start.

How can I learn more about Climate Change Risk Assessment? Training is available from a variety of sources:

- **Climate Change Risk Assessment for Manitoba Northern Businesses.** Free online webinar recordings available at: https://climatewest.ca/mcrt-northern-business-modules/
- **Business Continuity Planning and Climate Change for Manitoba Businesses.** Free online webinar recording available at: https://climatewest.ca/mcrt-northern-business-modules/
- **The PIEVC Protocol.** Online training for this climate change risk assessment methodology for built and natural infrastructure and assets is available for a fee at https://climateriskinstitute.ca/2020/10/22/course-pievc-protocol/

Example of risk assessment and resilience building

Businesses and organizations across Manitoba are already assessing risk and building resilience in their home and away games.

Practice	Case Example
Climate Change Risk Assessment & Strategic Foresight	The University of Winnipeg's Northern Sustainable Prosperity Initiative, together with Stantec Engineering, and the International Institute for Sustainable Development undertook a climate change risk assessment of the **Manitoba-Nunavut Supply Chain Corridor** in 2015. The PIEVC protocol was used to assess climate risks for the freight services hub in Thompson, the inland marine system at the Port of Churchill, and the airport at Rankin Inlet. A key insight of the initiative's strategic foresight exercise was the possibility of a "double whammy effect", whereby climate change puts direct physical stress on northern supply chain infrastructure at the very same time that it brings about an increase in demand due to ice-free commercial shipping lanes in the Arctic.
Scenario Planning	For stakeholders in the **food processing industry in Manitoba**, the Rural Development Institute at Brandon University, together with Novel Futures Corporation, led a scenario planning exercise in 2013 to explore potential future drivers of change to the sector (i.e., demographics, government policy, and the economy...in terms of profitability along the supply chain and currency exchange rates) and how stakeholders could help leverage opportunities and manage risks over time.
Strategic Foresight	**Chartered Professional Accountants (CPA) Manitoba** undertook a foresight exercise in 2017 with its Board members and senior staff to update its strategic plan. Four plausible scenarios of the future in Manitoba were developed to help identify strategic initiatives and investments over the coming decade that would best position CPA Manitoba to succeed in the face of emerging opportunities and threats.

The MCC Climate Action for Manitoba Business Initiative

Led by the Manitoba Chambers of Commerce (MCC), in collaboration with Novel Futures Corporation, the International Institute for Sustainable Development, and the Manitoba Environmental Industries Association, and with funding from the Government of Manitoba's Conservation and Climate Fund, the MCC Climate Action initiative builds awareness and capacity among Manitoba's small-and-medium sized enterprises (SMEs) in Assessing Climate Risk and Enhancing Resilience, Reducing Carbon Emissions via the Circular Economy; and Using Nature-based Solutions