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Adapting to Climate Change is Critical for a Resilient Atlantic Canada Economy

From our research series:
Implications for Atlantic Canada's Economy in the Pursuit of Net-Zero Emissions

Adapting to Climate Change is Critical for a Resilient Atlantic Economy



Highlights

- > Atlantic Canada's climate is changing, with hotter temperatures, more extreme weather and rising sea levels. Flooding is a major risk. Sea level rise is expected to outpace the global average in many of our coastal communities over the next century. Climate-related risks span across industries, but few public studies exist to assess specific industry risks in Atlantic Canada and inform effective adaptation strategies.
- > Insured damages from severe weather events are rising in Canada, with flooding being the costliest disaster. Insured losses from all natural disasters reached a record \$8.5 billion nationally in 2024. This figure does not capture the full extent of losses, as many households and businesses are uninsured for various extreme weather events. Canada's total damages from natural disasters last year were estimated to be \$13.7 billion.
- > Proactive climate adaptation seems to be more cost-effective than reactive measures. Every \$1 invested in key adaptation actions could save up to \$15 in avoided economic losses in Canada, according to the Canadian Climate Institute. Limited analyses hinder a clear understanding of adaptation costs and benefits in our region.
- > Many Canadian business leaders are concerned about climate change impacts, yet fewer than one in four have a formal climate strategy. The cost of adopting a strategy is cited as a major impediment. However, businesses often lack an understanding of the costs of inaction, making adaptation investments less compelling. This report introduces a five-step framework to help businesses begin developing an adaptation strategy.
- > Adaptation efforts in Atlantic Canada, and globally, remain insufficient to reduce climate vulnerabilities. Barriers to greater progress include limited awareness and capacity, incomplete or outdated information, challenges in establishing standardized metrics, and relatively low funding.

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The Atlantic Economic Council is the source for independent research, providing the insights and ideas that are vital to supporting a healthy, inclusive and sustainable Atlantic Canadian economy.

The importance of climate adaptation

Climate change is commonly described as long-term shifts in average weather conditions. Addressing its impacts requires two overarching strategies:

- > **Mitigation:** Reducing greenhouse gas emissions to limit climate change.
 - * Example: Expanding renewable energy sources, like wind and solar, to lower electricity generation emissions.
- > **Adaptation:** Addressing climate change impacts that are already occurring or expected.
 - * Example: Building elevated roads or seawalls to protect communities from rising sea levels and storm surges.

Government climate plans and funding in Canada focus more on reducing emissions. However, adaptation is also important. Existing emissions have locked in certain irreversible climate change impacts, according to the Intergovernmental Panel on Climate Change (IPCC). Also, there is no guarantee that major emitting countries will reduce emissions to net-zero.

Canada's National Adaptation Strategy sets priorities and targets to build climate resilience. It provides a framework for other levels of government to develop strategies based on regional and sectoral needs. Its implementation will be collaborative through Federal, Provincial, and Territorial (FPT) efforts and support for Indigenous adaptation initiatives. Each Atlantic province has adaptation measures in their climate plans.

Businesses also need adaptation plans. Nearly 70% of North American small and medium-sized enterprises (SMEs) expect climate change to disrupt their operations in the near-term. Yet, fewer than 25% of Canadian SMEs have a plan.

The report identifies climate change impacts, industry risks and the costs of weather-related events. It also explores how businesses can prepare for a changing climate and key barriers to advancing adaptation. It ties into our net-zero research series because mitigation and adaptation are necessary to address global warming.

Atlantic Canada’s changing climate

Temperatures are rising across the world. Global warming reached a record high 1.55°C above the pre-industrial period in 2024. Canada is warming about twice as fast as the global average due to having a large land mass at a high northern latitude. The country’s average temperature rose 2.8°C in 2023, above the 1961 to 1990 reference period, to reach the second warmest year on record since 1948. Meanwhile, Atlantic Canada’s average annual temperature was 1.6°C above the reference period in 2023. It was our seventh warmest year since 1948.

Climate change is also evident through trends in other environmental indicators, like rising sea levels and shifts in precipitation patterns. Human activities are causing climate change, mainly from burning fossil fuels, according to multiple scientific studies.

Changes in Atlantic Canada’s climate are consistent with global warming

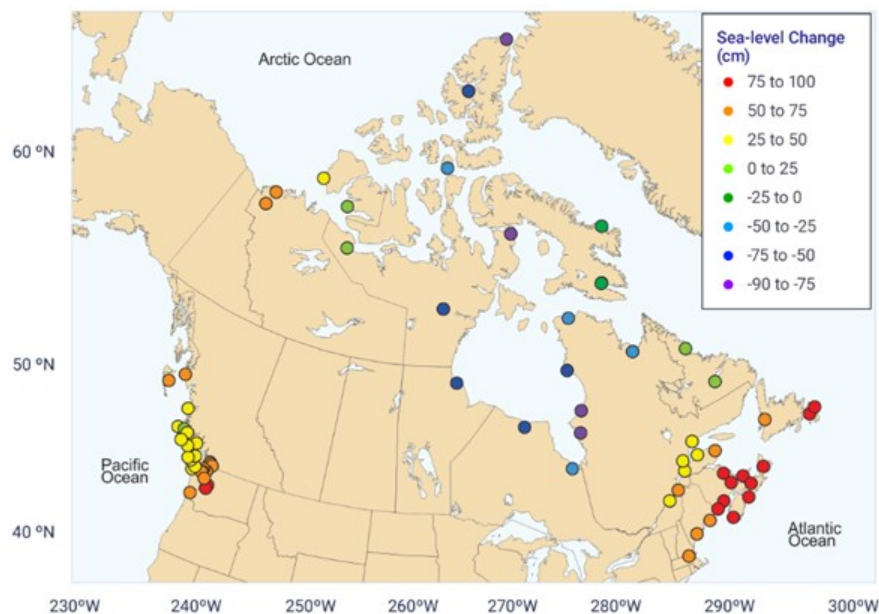
Climate change indicators	Examples of occurrence in Atlantic Canada
Higher temperatures	> Annual mean temperature for the region <u>increased 1.8°C</u> between 1950-2023.
Shifts in precipitation patterns	> Annual levels of precipitation <u>rose 11%</u> from 1948 to 2016. > Summer 2023 had a record-breaking <u>52 rainy days</u> , up from the usual 35, resulting in the highest summer rainfall totals in the Maritimes
More frequent, intense heat waves	> Number of days with temperatures above 25°C <u>have been rising since 1951</u> , in many areas of Atlantic Canada. > A June 2024 heat wave in Atlantic Canada lead to a peak <u>temperature of 10.6°C</u> above normal.
Rising sea level	> Mean annual sea level <u>is trending upward</u> in coastal communities across Atlantic Canada. > The relative sea level <u>rose up to 12 cm</u> in some parts of the region between 2006 and 2020.
More extreme weather events	> Hurricane intensity <u>has been rising</u> in the Atlantic region since the 1980s. > Climate change <u>more than doubled</u> the likelihood of extreme fire weather conditions in Eastern Canada in 2023.

Note: The data show that the climate has been changing in Atlantic Canada. They do not imply that all changes are the direct outcome of human activity. Measuring climate change requires a variety of tools and techniques over long periods of time. Different organizations and practitioners use varying methods, baselines and datasets to calculate the changes in these indicators.

A worsening of these indicators comes with major climate risks. One main risk for Atlantic Canada is coastal flooding. About 128,000 Atlantic Canadians live less than one kilometre from the coast and over 140,000 people reside less than five meters above sea level, according to [the federal government](#).

Our coastlines are vulnerable to flooding due to [sea level rise, storm surge and erosion](#). Relative sea level rise is of particular concern. Projected relative increases in many coastal areas are higher than the global absolute median due to geophysical processes causing land to sink. Many Atlantic coastal communities could see sea level rise 75-100 centimeters under a high emissions scenario by 2100. The global median sea level rise is 74 centimeters. The relative sea level in Labrador is expected to rise only slightly because [land in that area is gradually rising](#).

Several Atlantic coastal communities are projected to face the highest sea level rises in Canada



Note: Projected relative sea-level changes shown at 2100 for the median of a high emission scenario at 69 coastal locations in Canada and the northern US. Values range from a sea-level fall of 84 cm to a sea-level rise of 93 cm and are relative to the average conditions in the 1986–2005 period.

Source: Copied from [Canada's Changing Climate Report](#), using data from James et al. (2014, 2015) and Lemmen et al. (2016).

Potential risks for Atlantic Canada's industries

Atlantic Canada's economy faces significant vulnerabilities due to climate change. The table below highlights a few key risks by industry—mostly negative, with some positive. Many of these risks are already materializing and would likely intensify if global warming continues. Some local industries and companies are addressing their climate risks, but public research on industry-specific risks across our region remains limited. Understanding these risks is important for prioritizing adaptation planning and research.

Industries	Atlantic GDP 2023 (%)	Examples of key risks
Agriculture	2.5	<ul style="list-style-type: none"> > Higher temperatures <u>increase pests, diseases and ecosystem shifts</u>. > Longer growing seasons and higher temperatures <u>may boost crop yields and enable new agricultural opportunities</u>. > Increased drought and flooding risks <u>affect yields and production</u>. > Changing rainfall patterns could disrupt planting and harvesting cycles.
Forestry	1.7	<ul style="list-style-type: none"> > Rising temperatures disrupt forest ecosystems, <u>reducing certain species growth and abundance</u> and increasing wildfire risk. > <u>Longer growing seasons</u> may enhance product and market diversification. > More frequent <u>pest infestations from invasive species</u> weaken forests, increasing vulnerability to disease and wildfires.
Fishing	2.5	<ul style="list-style-type: none"> > Higher environmental stress, lower water quality, and harmful algae blooms <u>threaten aquaculture</u>. > Ocean acidification and warming are expected to <u>reduce fish stocks and fisheries' resilience</u>. > Warmer waters may introduce <u>new commercial species</u>. > <u>Species migration further north</u> may shift fisheries or increase travel distances.
Mining, oil and gas	5.4	<ul style="list-style-type: none"> > More intense, frequent storms could disrupt <u>offshore activities</u>. > <u>Mining, marine and coastal infrastructure</u> damages due to extreme weather and rising sea levels. > <u>Supply chain vulnerabilities</u> from changing conditions, extreme weather events.
Electrical utilities	2.8	<ul style="list-style-type: none"> > Extreme weather events can disrupt supply chains, damage infrastructure, and potentially cause more prolonged outages. > Faster tree growth raises operational and cost risks from vegetation encroaching on power lines. > Rising peak energy demand during cold snaps and heat waves can put pressure on the grid.

Industries	Atlantic GDP 2023 (%)	Examples of key risks
Construction	7.2	<ul style="list-style-type: none"> > High winds and flooding pose <u>risks to construction sites and activities</u>. > <u>Rebuilding efforts</u> after natural disasters can generate jobs and income. > Extreme heat <u>raises health risks</u> on job sites and disrupts activity. > Warmer temperatures extend the construction season. > <u>Building costs rise</u> as structures are redesigned to withstand extreme weather.
Manufacturing	0.7	<ul style="list-style-type: none"> > <u>Supply chain disruptions</u> and infrastructure damage from extreme weather events. > High temperatures and humidity could <u>reduce productivity</u>. > Droughts may <u>stress water supplies</u> critical for manufacturing.
<u>Wholesale and retail trade</u>	9.2	<ul style="list-style-type: none"> > Supply chain interruptions from climate-related disruptions in manufacturing and shipping. > Rising insurance and operational costs due to climate-related damages. > Climate disruptions and adaptation efforts may increase demand for rebuilding materials and emergency supplies.
Transportation	3.3	<ul style="list-style-type: none"> > <u>Infrastructure damage</u> from extreme heat and flooding affecting roads, railways, and ports. > <u>Shipping route disruptions</u> due to extreme weather, leading to delays and higher costs. > <u>Fuel price volatility</u> driven by climate-related energy disruptions.
Finance and insurance	5.4	<ul style="list-style-type: none"> > <u>Rising insurance payouts</u> due to extreme weather events. > <u>Higher premiums</u> to cover increasing climate-related insurance payouts. > Insurers may <u>cease or limit coverage</u> in areas prone to natural disasters.
Real estate	13.5	<ul style="list-style-type: none"> > Rising rebuilding and supply chain costs could push <u>property prices higher</u>. > <u>Rising insurance costs</u> in areas prone to climate-related events may shift demand to lower-risk locations. > Extreme weather events could <u>lower property values, create market volatility</u>, and lead to longer selling times.
Professional and business services	6.7	<ul style="list-style-type: none"> > Increased demand for <u>climate expertise and advisory services</u>. > Extreme weather can <u>disrupt operations</u>, delaying projects raising supply chain costs. > <u>Declining business investment</u> to address damages to infrastructure and lower productivity.

Industries	Atlantic GDP 2023 (%)	Examples of key risks
Education	6.5	<ul style="list-style-type: none"> > Extreme weather can damage schools and disrupt classes. > New and expanded programs to support emerging green jobs and skills.
Health	10.5	<ul style="list-style-type: none"> > Frequent, severe heat waves raise <u>risks of heat-related illnesses</u>. > Climate-related displacement of individuals can negatively <u>impact mental health and well-being</u>. > Extreme weather <u>can disrupt health facility operations and services</u>.
<u>Tourism</u>	5.8	<ul style="list-style-type: none"> > Longer, warmer summers may attract visitors escaping extreme heat elsewhere. > Extended warm seasons can boost agritourism and outdoor recreation. > Shorter, milder winters could harm the winter tourism sector. > Rising sea level, flooding and increased storms <u>threaten coastal tourism assets, both natural and manufactured</u>.
Public administration	11.6	<ul style="list-style-type: none"> > Taxes could increase to <u>pay for damages</u> while revenue falls if the economy slows. > More frequent disasters could <u>increase spending</u> on crisis management, recovery, and infrastructure repairs. > The federal government identified <u>three key channels</u> of climate-related financial risk to public administration: assets, program and service delivery, and public servants.

Atlantic Canada's fishing, farming and forestry industries are among the most vulnerable to climate change. They heavily rely on stable weather conditions to function. These industries are vital to many rural communities, generating significant indirect and induced effects. Climate events that disrupt their operations also harm related activities, like processing and manufacturing. For example, forestry industry risks pose challenges to forest management, timber supply, employment, traditional Indigenous wood products and ecosystem benefits. One benefit is that forests absorb and store carbon. However, Canadian forests are currently emitting more carbon than they absorb due to factors such as wildfires and insect outbreaks.

Climate-related disruptions to electricity and transportation infrastructure have widespread impacts. Frequent, prolonged power outages from natural disasters disrupt households and businesses. For example, Hurricane Fiona (2022) caused outages for about 80% of Nova Scotia Power customers, with restoration for 95% of customers within nine days. Outages also disrupt communication and emergency response when cell towers fail. When roads or bridges wash out, personal and commercial transportation is hindered.

Climate change adaptation in the electricity sector

The electricity sector is managing and planning for more frequent and severe weather events that disrupt services and damage infrastructure. Hurricanes Dorian (2019) and Fiona (2022) resulted in record-breaking impacts to Prince Edward Island's and Nova Scotia's electrical infrastructure. Hurricane Fiona left an estimated 600,000 Atlantic customers without power.

Atlantic electrical utilities primarily focus on vegetation management as an adaptation strategy. Vegetation management includes routine tree trimming and removal near power lines to reduce power outages. Newfoundland Power, Maritime Electric, Nova Scotia Power and New Brunswick Power implement such programs. These programs are important for service reliability. New Brunswick Power reported that trees were responsible for 84% of outages in 2018.

Vegetation management costs are rising alongside more extreme weather and faster tree growth from warmer temperatures

\$ millions

	2023	2024	2025F
Maritime Electric	2.4	6.5	7.4
New Brunswick Power	13.4	17.7	18.8
Nova Scotia Power	32	45	45

Note: F = forecast

Sources: A few estimates are from Nova Scotia Power and Maritime Electric webpages; other estimates provided directly from the utility companies. New Brunswick Power's 2025 forecast does not include storm costs.

Underground power lines can enhance system reliability and reduce the need for vegetation management. However, they are significantly more costly to install than overhead lines. Nova Scotia Power states that the cost is about 10 times higher. Also, they can result in longer restoration times during outages. Most power lines across Atlantic Canada are above ground.

Regulators typically approve utility adaptation and mitigation initiatives based on being least-cost and enhancing reliability. Newfoundland and Labrador has an added environmentally responsible criteria. Similarly, the new Nova Scotia Energy Board will be required to consider the province's environmental goals when making regulatory decisions.

The costs of managing and preparing for extreme weather events

Adaptation strategies are generally divided into reactive and proactive measures. Reactive actions address immediate needs and damages resulting from climate impacts. They are taken when climate events are imminent or after they occur. Proactive actions, also known as anticipatory adaptation, focus on long-term planning and prevention. They are taken in advance of expected climate impacts to reduce vulnerabilities.

Effective adaptation requires a combination of reactive and proactive measures

Reactive examples:

- > **Adapting infrastructure:** Repairing damaged roads, bridges and power lines after storms or floods.
- > **Disaster recovery and relief:** Providing aid or financial support (public or private) after natural disasters like floods, hurricanes or wildfires.
- > **Restoring damaged ecosystems:** Rehabilitating forests or wetlands after weather events cause damage.

Proactive examples:

- > **Building resilient infrastructure:** Elevating buildings in flood-prone areas or designing coastal infrastructure to withstand storms.
- > **Urban planning:** Implementing land-use regulations that prevent development in floodplains or areas prone to wildfires.
- > **Ecosystem protection:** Restoring wetlands to act as natural buffers against floods or investing in reforestation to protect against soil erosion.

What are the costs of extreme weather damage and recovery?

The rising frequency and intensity of weather-related events pose challenges to Canada's economic growth, with response costs totaling billions of dollars annually. The total remediation and restoration cost from weather-related disasters accounted for roughly 1% of Canada's annual real GDP growth in the 1970s and 1980s, according to the [Canadian Climate Institute \(CCI\)](#). CCI estimates that annual disaster costs escalated to 5%-6% of annual real GDP growth in the last decade or so.

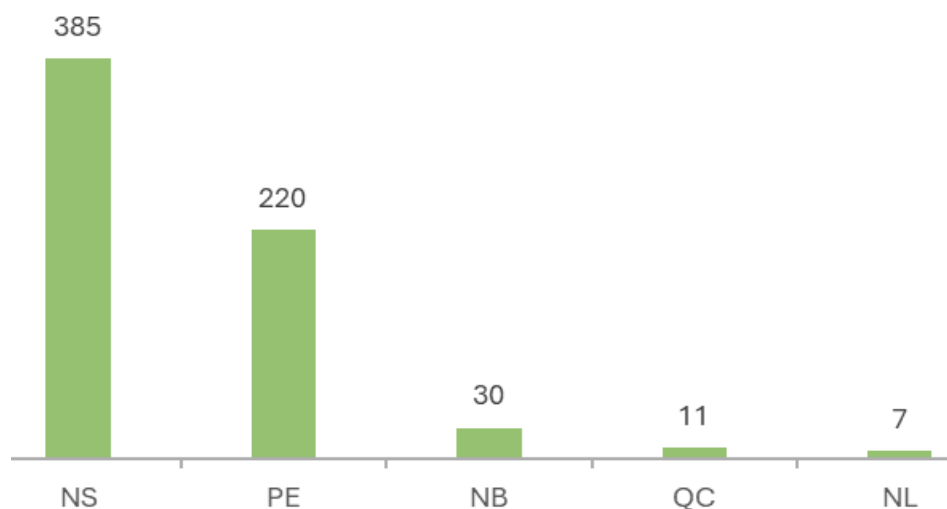
Flooding is the most frequent and costly weather-related disaster. Floods averaged \$800 million in insured losses annually in Canada from 2013 to 2023. Last year, our country's two costliest floods totaled \$1.1 billion in insured damages.

Insurance claims are a reactive form of climate adaptation, helping individuals and businesses recover from damages after an event occurs. Insured damages from severe weather events are generally rising in Canada. Every year since 2020 has ranked among the country's 10 highest insured losses from severe weather. The costliest was 2024 at over \$8.5 billion. Greater frequency and severity of weather-related losses are impacting insurance affordability and availability, according to the Insurance Bureau of Canada.

Insurance claims do not reflect the full extent of climate damages, as many households and businesses lack insurance for various extreme weather events. Many residents affected by Hurricane Fiona in 2022 were located in high-risk flood areas and flood plans and therefore did not have flood insurance. The federal government created a Hurricane Fiona Recovery Fund to address impacts that were not covered under insurance or other programs. Atlantic provinces also set up Fiona funding programs to support recovery efforts.

Hurricane Fiona is Atlantic Canada's costliest extreme-weather event at \$660 million in insured damage

Hurricane Fiona insurance payouts (\$ millions)



Note: The provincial values are in 2021 dollars and not exact totals. The Insurance Bureau of Canada states that payouts were above each of these numbers.

Source: Insurance Bureau of Canada

Canada's losses from natural disasters in 2024 totaled US\$10 billion, or C\$13.7 billion, the highest since at least 1980. Provincial disaster financial assistance programs, supported by federal Disaster Financial Assistance Arrangements (DFAA), help cover some uninsurable losses. Total DFAA payouts to provinces averaged \$793 million annually over the past decade. The federal government warns that the annual cost could exceed \$1 billion "in the future" due to more severe and frequent disasters.

Disaster recovery costs will rise significantly if global emissions increase throughout this century. A 2020 report prepared for CCI projects that Atlantic Canada will incur annual climate change damages averaging \$330 million (in 2023 dollars) from 2040-2069 under a high-emissions scenario. However, these costs are likely underestimated. They are not inclusive of all repair costs from natural disasters and rely on data that do not fully reflect Atlantic Canada's unique infrastructure, economic and climate challenges. Few publicly available reports break down climate change cost projections by province, making it difficult to understand how damage or recovery costs may evolve in our region.

Is proactive adaptation more cost-effective than reactive measures?

Growing climate-related damages and costs indicate a need for proactive adaptation measures. Investing \$1 in such measures now can yield \$13 to \$15 in avoided damages and economic losses nationwide over time, according to CCI.

Protecting the Chignecto Isthmus from climate change

The Chignecto Isthmus is the only road and rail connecting Nova Scotia and New Brunswick. An estimated \$100 million per day of trade activity relies on this transportation corridor. Sea level rise and storm surges pose a flooding risk to critical infrastructure within the Isthmus—the Trans-Canada Highway, Canadian National rail line, electricity transmission lines and agricultural marshland.

Nova Scotia and New Brunswick are working to advance planning activities for a capital infrastructure solution consisting of raising existing dykes and building new ones to protect the Isthmus. The total project cost is estimated to be \$650 million.

The two provinces initiated a legal process seeking an option on whether the federal government has responsibility to maintain the infrastructure that protects Chignecto. They argue that, under the Constitution Act, the federal government is responsible for interprovincial transportation infrastructure. The federal government offered the provinces \$325 million, 50% of the project cost, through the Disaster Mitigation and Adaptation Fund.

Nova Scotia and New Brunswick continue to plan and prepare for the project while funding sources for the capital project are determined. Nova Scotia is constructing a soil barrier as a contingency measure.



No recent studies provide comprehensive estimates of proactive adaptation costs for Atlantic Canada. [One report](#) suggests \$3.6 billion is needed annually for municipal infrastructure adaptation in our region, representing two-thirds of the national total. This figure, however, is based on a relatively small dataset. The gap between our and other regions could shrink if more communities were included. The lack of robust, localized cost projections reinforces a need for more research to better understand adaptation funding requirements.

A [2025 CCI report](#) provides provincial cost projections for residential flooding. It recommends building homes away from high-risk flood areas to substantially reduce future damage. This recommendation aligns with a [2016 study](#) stating that "planned retreat" and elevating infrastructure are the most cost-effective strategies for managing flooding and erosion risks along Atlantic Canada's coasts. Planned retreat minimizes long-term damage by relocating vulnerable communities and assets away from high-risk areas. [CLIMAtlantic](#) offers resources to help Atlantic coastal communities and property owners plan for climate change effects.

Preparing businesses for a changing climate

Business leaders are increasingly concerned about climate change. A [2024 Deloitte survey](#) found that 85% of Canadian executives "worry all or most of the time" about climate change—a sharp rise from under 60% in 2023. Many companies are taking steps towards sustainability, like improving energy efficiency and reducing emissions. However, [fewer than one-quarter](#) of Canadian SMEs have formalized climate plans. Globally, the picture is similar, with only [one in five companies](#) having plans to address climate risks.

The cost of adopting an adaptation plan and competing business priorities are commonly cited as key barriers. Unfortunately, businesses often lack easy access to relevant climate risks and the potential costs of inaction. Adaptation investments can become more compelling when companies compare upfront expenses with long-term savings from avoided disruptions and damages. However, the amount of long-term savings is not guaranteed and adaptation must be viewed as an ongoing process because our future climate path is highly uncertain.

Beyond risk management, climate adaptation can also create new business opportunities. Certain industries may see some benefits from changing conditions, as highlighted in our section on potential risks for Atlantic Canada's industries. This could include developing new products or services tailored to emerging climate-related needs. Engaging in adaptation planning helps businesses identify these opportunities and build resilience in a changing economy.

Our [net-zero report on green investments](#) outlined a pathway for businesses to reduce their carbon footprint. In this report, we introduce a five-step framework for businesses unsure of how to begin creating an adaptation strategy. Adaptation planning can be complex. Businesses may benefit from guidance from industry associations, local governments or specialized organizations. [CLIMAtlantic](#) is a regionwide climate services organization, and it provides access to data, projections and adaptation options. Some businesses, like [Deloitte](#) and [CBCL](#), offer paid consulting services. CLIMAtlantic's [network map](#) identifies many academic, research, private and non-profit organizations in the region that can support businesses in their adaptation efforts.



Five-step framework: creating a business climate adaptation strategy

1. Conduct a climate risk assessment. Conduct analyses and engage with stakeholders to identify operational risks, negative and positive, across various time frames and climate scenarios.
Consider factors such as: <ul style="list-style-type: none">> Physical risks: Extreme weather events, rising sea levels and heat waves.> Potential business impacts: financial, operational and safety. Stakeholders may include: <ul style="list-style-type: none">> Internal: employees, executives, board members.> External: customers, suppliers, investors.
2. Evaluate potential climate actions. Assess the financial costs and benefits of measures to address key climate risks.
3. Re-engage stakeholders. Discuss findings from risk and financial assessments with key stakeholders to help formulate the adaptation strategy.
4. Set clear, measurable goals and actions. Define adaptation objectives based on the outcomes of steps 1-3 and establish mechanisms to: <ul style="list-style-type: none">> Assign roles and responsibilities.> Improve coordination across the organization.> Track progress through key performance indicators (KPIs).
5. Monitor and adjust. Maintain flexibility to ensure the strategy remains relevant over time.
Periodically: <ul style="list-style-type: none">> Review progress against goals using KPIs.> Updated climate risk assessments.> Refine actions based on emerging risks, unforeseen events and new data or technologies.> Provide updates to stakeholders.

Challenges to greater progress on adaptation

Adaptation efforts in Atlantic Canada, and globally, remain insufficient to reduce climate vulnerabilities, despite growing climate risks and the cost-savings of early intervention. We already highlighted two business obstacles to greater adaptation progress—cost and competing priorities. Some broader limitations relate to awareness and capacity, available information, standardized metrics, and funding.

Limited awareness and capacity

- > A 2022 poll shows that only 55% of Canadians feel well informed about climate change, with Atlantic respondents feeling the least informed at 47%.
- > SMEs and small local governments often lack the necessary knowledge and time to assess climate risks specific to their industries and location.

Incomplete or outdated information

- > A lack of easily accessible or timely climate risk information can make informed adaptation decisions difficult. For example, outdated flood and wildfire hazard maps leave many unaware of the risks when buying, building or renting in high-risk areas.
- > Limited public data and recent analyses on climate adaptation costs and benefits, nationally and locally, hinder accurate estimations of financial impacts and effective investments.
- > Challenges in quantifying factors like human health and ecosystem effects make it hard to measure the full economic implications of climate impacts and risks.

Challenges in establishing standardized metrics

- > The federal government's national adaptation indicators aim to track progress across Canada but do not account for variations in climate impacts between and within provinces.
- > Tailored approaches are needed at the community level due to unique climate vulnerabilities, complicating the creation and application of uniform metrics.
- > Business adaptation actions can differ widely by geography and industry, limiting the applicability of standardized guidance and impeding knowledge sharing.

Lower shares of funding for adaptation initiatives

- > 5% of global climate finance (private and public) was for adaptation in 2021-2022, down from 7% in 2019-2020.
- > 4% of federal climate spending in Canada supports adaptation. Assessing provincial adaptation investment is difficult due to funding being spread across multiple departments and programs.
- > Federal and provincial government spending is crucial for successful adaptation. SMEs and local governments typically lack resources to implement these initiatives, which often need to be tailored to local and business-specific contexts.



IMPLICATIONS FOR ATLANTIC CANADA'S ECONOMY IN THE PURSUIT OF NET-ZERO EMISSIONS

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Key takeaways

Governments

- > Improve communication of climate change and adaptation information, including available programs, to businesses, municipalities, and industry associations.
- > Evaluate whether more climate funding and action should focus on proactive adaptation due to the increasing frequency and recovery costs of severe weather events.
- > Explore financing options and partnerships to help businesses invest in proactive adaptation, ensuring adequate support for those facing high climate risks.
- > Enhance intergovernmental and Indigenous collaboration to align expertise, improve efficiency and strengthen climate resilience.
- > Ensure adaptation is an integral part of economic policymaking and fiscal planning, rather than a separate or limited concern.

Businesses

- > Use our five-step framework to help identify climate risks and opportunities for your business and what you should do about them.
- > Seek specific guidance from specialized organizations, industry associations or municipal governments to tailor each step of the framework to your needs.
- > Consider starting with low-cost measures like creating an emergency response plan or improving drainage around facilities.
- > Explore funding options for adaptation initiatives by consulting your financial institution or business association.