

Hey! What's New? 2025-100

Climate Risk Management, Adaptation and Resilience

An article on Deloitte Canada's webpage points out that, across Canada, "we are witnessing an alarming increase in extreme weather events. Hurricanes now threaten our eastern provinces, heatwaves are pushing further north, and wildfires burn through communities at an unprecedented rate. Canada's warming trend – twice the global average – means the disruptions are mounting. The insurance industry alone has seen a fivefold increase in climate-related losses since the 1980s. More than one-third of Canadians report having been touched directly by extreme weather such as forest fires, heat waves, floods or tornadoes."

The article says, however, that "as businesses are confronted with the growing threat of disruption, they also have the chance to build resilience by investing in proactive measures that address climate risks head-on."

Along with the changes in the weather, the economic costs of climate-related events in Canada are on the rise, the article warns. "The physical and financial impacts are staggering, with insured losses from severe weather hitting \$3.1 billion in 2023. Uninsured losses, disruptions to supply chains and damage to critical infrastructure also compound the problem, placing immense pressure on businesses, government and individuals."

But we don't have to wait for the next disaster, it continues. "Tools for understanding your short- and long-term exposures to climate-related risks, such as meteorological modelling, stochastic forecasting, geospatial imaging, climate risk modelling and more advanced tools enable businesses to assess vulnerabilities and take targeted actions that minimize risks to prevent financial losses. By understanding risk prioritizing mitigation, businesses can not only protect their assets, but also gain a competitive advantage in a climate-challenged world."

To adapt to the changing climate, the article advises, "Canadian businesses need to adopt a comprehensive strategy that integrates the best available tools and technologies. From geospatial imaging to climate risk modeling, these solutions offer a way to anticipate future threats and mitigate damage. Businesses can use these tools to prioritize actions based on cost-benefit analysis, ensuring that every dollar invested in resilience will pay off when the next extreme event hits." The tools include:

- **Short-term forecasting:** "Leverage meteorological data and models, LIDAR, geospatial imaging, meteorological data, wildfire behaviour models, digital twins, etc. to stochastically predict short-term exposures over the near term up to 30 days."
- **Long-term forecasting:** "Leverage climate data and models for hazards such as wildfires, floods, hail, storms, sea level rise, etc. to understand long-term exposures."
- **Mitigation prioritization and planning:** "Develop mitigation strategies to address your largest exposures, considering both short- and long-term vulnerabilities in your operations."

By integrating the insights gained from the use of these tools into organizational strategy and operations, the article notes that businesses can fortify their defenses against climate-related risks.

“While the risks are real, so too are the opportunities. Investing in resilience not only shields businesses from future climate-related losses, but also creates long-term value. Leaders who act now will stand out in an era of transformative change, positioning their organizations as resilient, responsible, and ready for the challenges of tomorrow. The question isn’t whether you should adapt, but how quickly and effectively you can do so.”

For more check out [Climate risk management, adaptation and resilience | Deloitte Canada](#).