

Draft Principles

to Guide the Province of B.C.'s work on

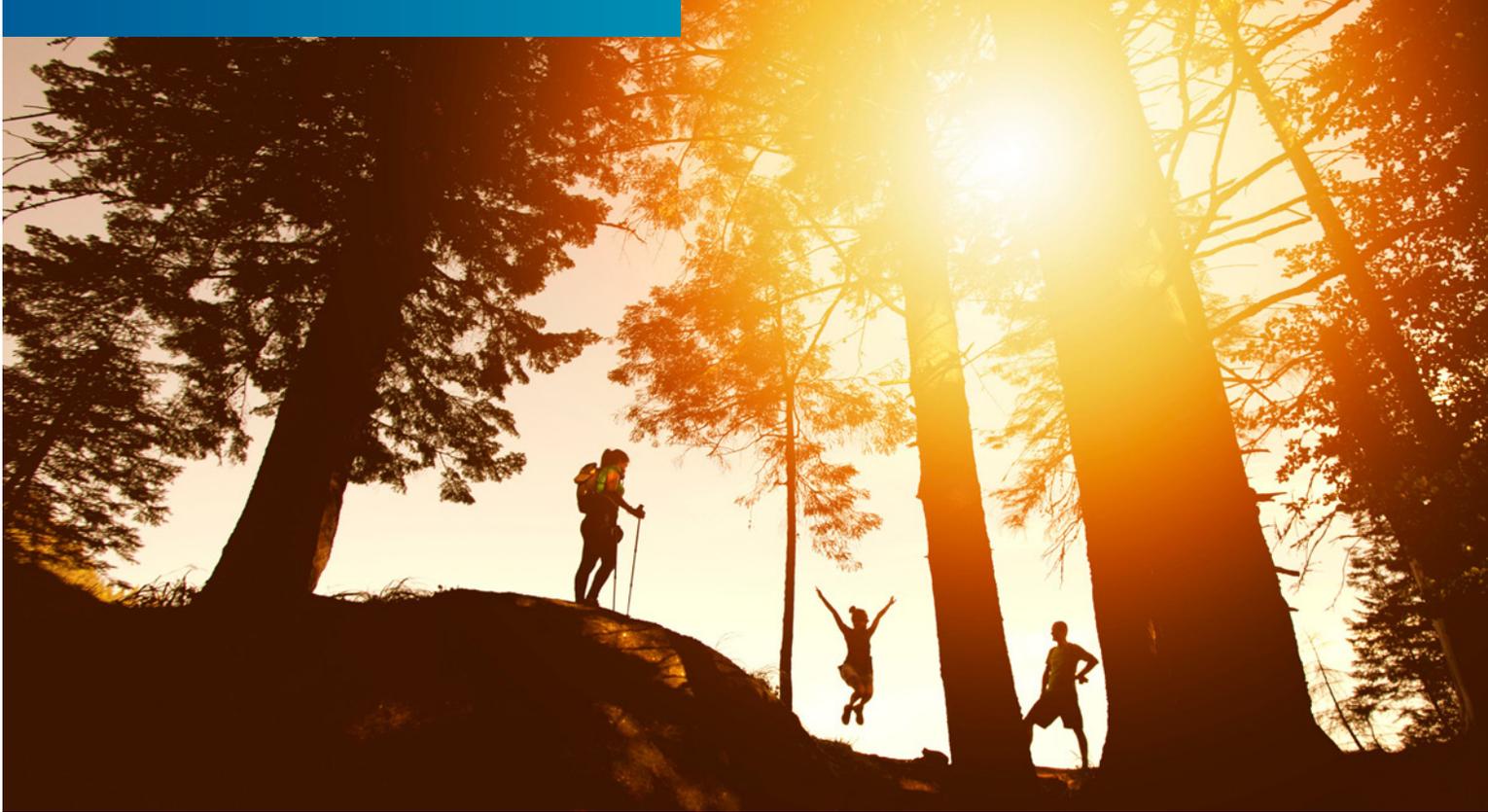
Climate Preparedness and Adaptation





We acknowledge with respect and gratitude

that this report was produced on the territory of the Ləkʷəŋən peoples, and recognize the Songhees and Esquimalt (Xwsepsum), and ƵSÁNEĆ Nations whose deep connections with this land continue to this day.



DRAFT PRINCIPLES TO GUIDE THE PROVINCE OF B.C.'S WORK ON CLIMATE PREPAREDNESS AND ADAPTATION

Our climate is changing and B.C.'s Climate Preparedness and Adaptation Strategy is helping to ensure we're ready for it. The strategy strengthens our capacity to anticipate and respond to extreme weather events like increasing wildfires, more frequent flooding, longer summer droughts and heatwaves, while also helping us to adapt to changes that happen more slowly like loss of habitat, changes in growing seasons and sea level rise.

The following six principles have guided our choice of actions in the strategy and will continue to inform our work going forward. The principles were developed with input from people across B.C. and help ensure we're considering existing social conditions and challenges as we plan and prepare for climate change.

These principles, together with the draft Climate Preparedness and Adaptation Strategy, will be open for public comment until August 12, 2021. Please email your comments to ClimateReadyBC@gov.bc.ca or visit engage.gov.bc.ca/climatereadybc for more information.

VISION

B.C. is a climate resilient society prepared for, and adapting to, the impacts of a changing climate

GUIDING PRINCIPLES

Shared path with
Indigenous peoples

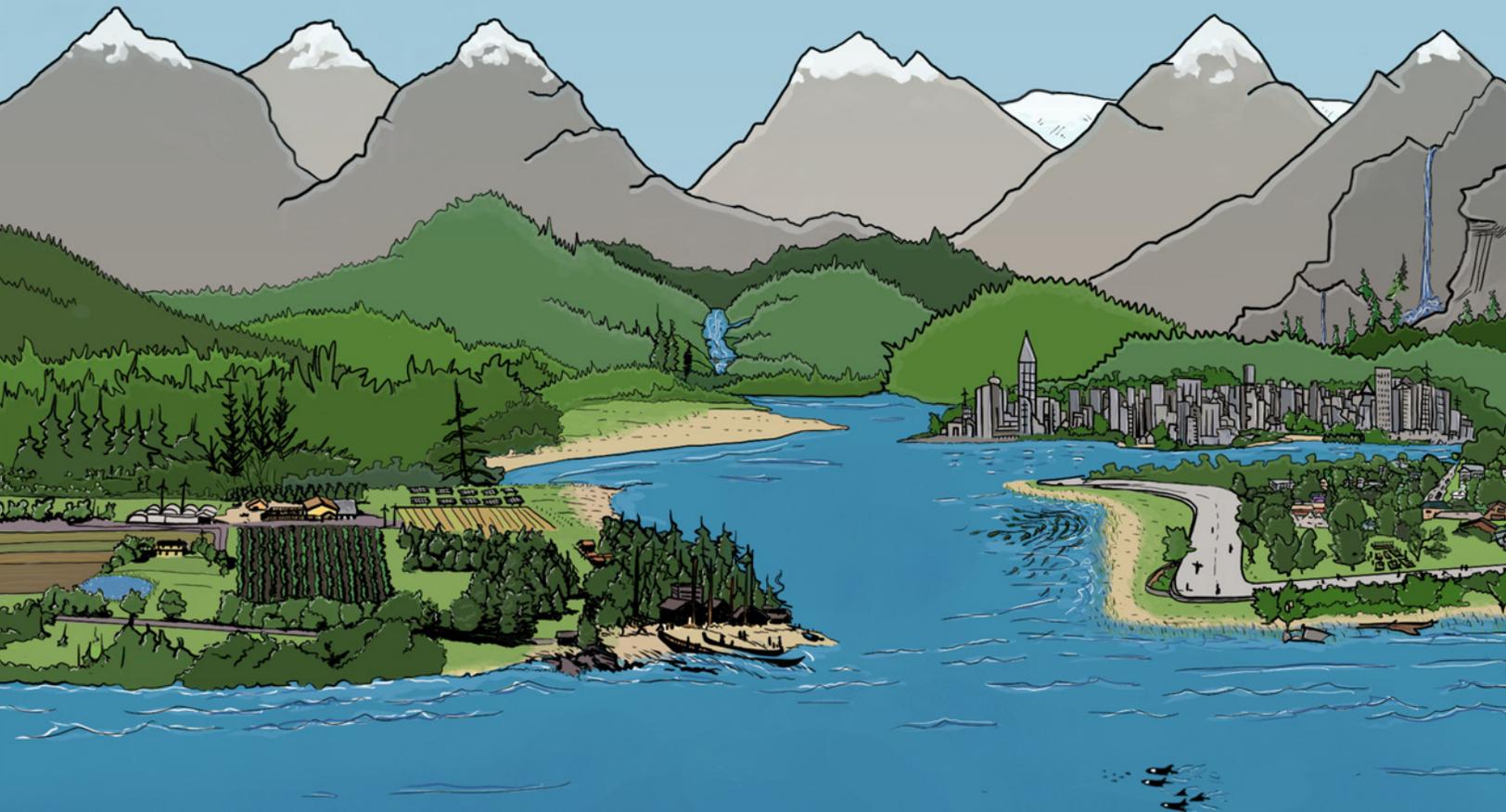
Equity-informed
approach

Nature-based
solutions

Health and
wellbeing

Aligning adaptation
& emissions reduction

Proactive
business case



DRAFT GUIDING PRINCIPLES

The following six principles have guided our choice of actions in the draft strategy and will continue to inform our work going forward. The principles were developed with input from people across B.C.

1. Build a Shared Path to Climate Resilience with Indigenous Peoples

The Province recognizes that our relationships with Indigenous peoples need to evolve and we are committed to building a shared path to climate resilience in true partnership with Indigenous peoples.

2. Take an Equity-Informed Approach

Enhancing climate resilience for everyone in B.C., regardless of where and how they live, requires a just approach that integrates equity considerations into climate adaptation responses.

3. Enhance Health and Well-being for All

There are many opportunities to choose adaptation actions that reduce health risks, like increased asthma and mental health issues, related to climate change while also improving community resilience and well-being.

4. Promote Nature-Based Solutions to Enhance Community Resilience

Nature-based solutions are actions that can protect, sustainably manage and restore ecosystems in ways that benefit people as well as biodiversity and ecosystem function.

5. Align Emissions Reduction with Climate Adaptation

Strategically aligning actions for climate adaptation and greenhouse gas emissions reduction can enhance the effectiveness of both while also avoiding risks and generating economic, ecological, and social benefits.

6. Take a Proactive Approach: The Business Case for Adaptation

Managing climate risk is part of building an innovative and resilient economy and ensuring that B.C. maintains a competitive business environment in the climate of the future.

To read a full description of the principles and provide comment, please visit:

engage.gov.bc.ca/climatereadybc.

Build a Shared Path to Climate Resilience with Indigenous Peoples

Indigenous peoples have upheld holistic relationships with the lands and waters in their territories to sustain the well-being of their communities, cultures, environment and economies for generations. This has given rise to rich knowledge systems and ways of living in relationship with the natural world that are an important source of strength and resilience, and a critical foundation for adapting to the impacts of our changing climate.

The natural world is currently facing unprecedented and accelerating challenges due to climate change, increasing human activity, and competing pressures on the land base. These challenges, combined with the ongoing impacts of colonization, pose direct threats to the well-being and ways of life of Indigenous peoples and exacerbate existing inequalities. Through engagement, Indigenous participants highlighted the ways climate change threatens their cultures, identities and languages, as well as their health and livelihoods.

The Province recognizes that our relationships with Indigenous peoples need to evolve and is committed to building a shared path to climate resilience in true partnership that enhances the foundation laid in developing this strategy. The Province recognizes that actions to prepare for and respond to climate change will take place on the territories of Indigenous Nations. We will work in partnership to bring the changing climate, and our responses to it, into our work with Indigenous Nations, including by planning together for a resilient future. This work is guided by the Constitution Act, 1982 that recognizes and affirms existing Aboriginal and treaty rights and title, the *B.C. Declaration on the Rights of Indigenous Peoples Act*, and the Truth and Reconciliation Commission’s Calls to Action.

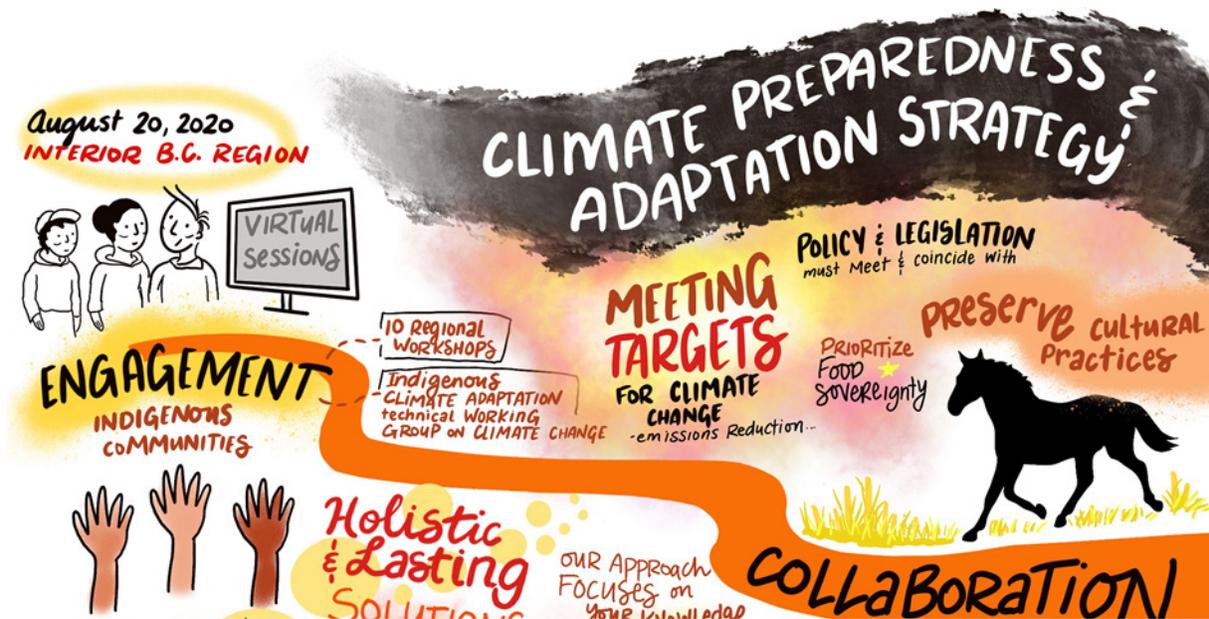


Image: Michelle Buchholz, Cassyex Consulting

Take an Equity-Informed Approach

Research and experience show that certain population groups are likely to experience greater impacts from climate change and can also be impacted differently by responses to adapt to it. We all have a range of identity factors including race, gender, age, income level, employment status, and ability, among many others. Different intersecting identity factors can affect how a person or group is impacted by climate change. In addition, climate change is experienced within pre-existing systems of inequity and discrimination, such as colonialism and systemic racism, that result in harm and make it even more challenging to prepare and adapt.

The degree to which people or communities are likely to experience the negative impacts of climate change depends on how exposed they are to climate hazards (e.g., low-lying coastal communities are at greater risk of flooding from sea level rise), how affected they may be by changing conditions (e.g., elderly people and children have increased risk to heat stress, while those with asthma are more affected by wildfire smoke) and their capacity to adapt or respond (e.g., low income households are less likely to afford air conditioning to reduce heat risk, or to have insurance or financial resources to be relocated and temporarily or permanently housed after an extreme weather event).

Enhancing climate resilience for everyone in B.C., regardless of where and how they live, requires a just approach that integrates equity considerations into climate adaptation responses.

To help ensure policies and budget decisions address systemic discrimination, the Province uses a process called **Gender Based Analysis Plus** to assess how diverse groups of people may experience policies, programs and initiatives. The “plus” acknowledges the need to go beyond gender to consider other factors like race, ethnicity, religion, age, and mental or physical disability. As we implement actions from the Climate Preparedness and Adaptation Strategy, this lens will be used to reduce unintended consequences to Indigenous communities, diverse populations and rural and remote communities.



Image: City Green Solutions

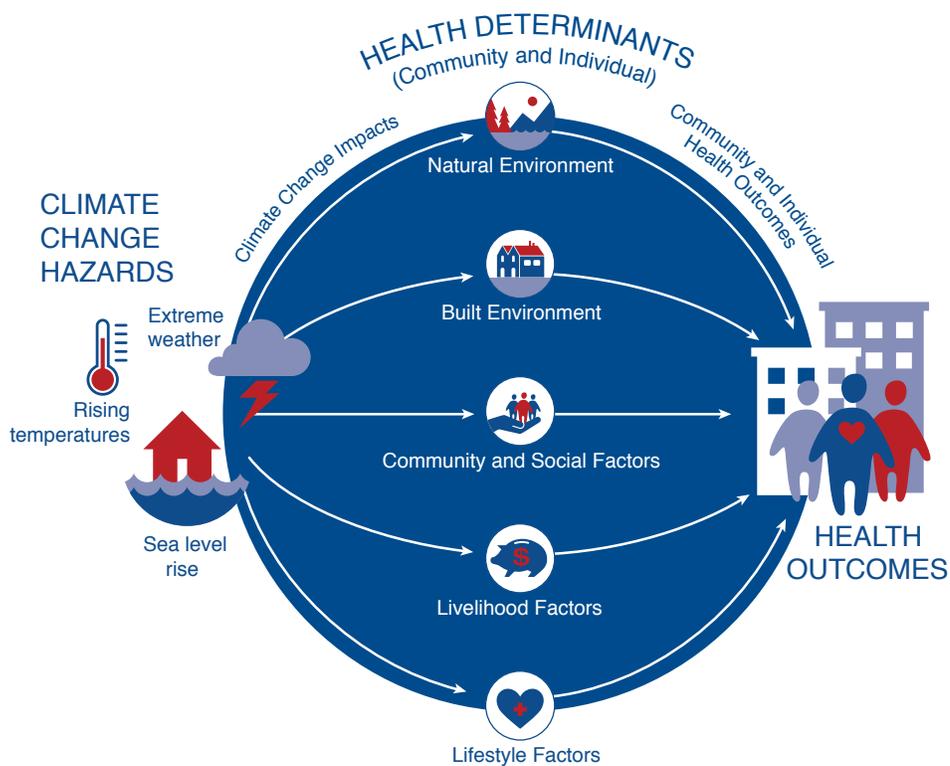
Enhance Health and Well-being for All

The World Health Organization has identified climate change as the biggest global health threat of the 21st century. In B.C., many people have recently experienced climate-related events such as floods, droughts and wildfires, which have impacted their health through injury, illness and death, as well as mental health impacts like stress, anxiety and trauma. In our engagement with people around B.C., 80% of people who responded said they had been directly affected by wildfire smoke, and 30% had experienced floods. Of the impacts people have already been experiencing, mental and physical health impacts were felt to be of greatest concern.

add to the risks of domestic violence in homes and communities across B.C. Food and water security – closely linked to health – also have the potential to be impacted by changes such as the arrival of new pests and diseases, extreme weather and increases in both water- and vector-borne illnesses.

There are many opportunities to choose adaptation actions which can reduce climate change-related health risks while improving community resilience and well-being. Investing in healthier, sustainable and more resilient communities will help our province to thrive in the climate of the future.

Stressful and traumatic experiences associated with climate change can negatively impact mental health and addictions-related issues and



Climate change hazards and their impacts on health determinants and health outcomes

Promote Nature-Based Solutions to Enhance Community Resilience

Our climate is a complex system that interacts with land, water, ecosystems and people to create the conditions for all of life. Humans are part of these larger systems and depend on them to survive and thrive. At the same time, risk arises from the ways in which past decisions, or current choices conflict with the way these systems function. For example, in the past many Indigenous communities were moved to reserves in floodplain areas, creating a risk that will increase as the climate changes. In other situations, individuals may choose to construct houses along the waterfront as this is a beautiful place to live. But this creates risk because those houses are now in a location that may also be prone to flooding as river levels change or ocean levels rise. In contrast, choosing to instead enhance natural shoreline functions, relocate settlements or leave areas free of buildings, prevents these risks and at the same time strengthens ecosystem resilience.

Nature-based solutions are actions to protect, sustainably manage and restore ecosystems in ways that benefit people as well as biodiversity and ecosystem function. Research shows that healthy ecosystems are inherently resilient and adaptable and have many lessons that can inspire solutions to the changing climate. Nature-based solutions can offer lower cost ways of adapting to climate change. For example, watersheds with healthy forest ecosystems can reduce the impacts of downstream flooding during extreme rainfall events, sometimes more effectively and inexpensively than engineered structures, while providing many other benefits. Solutions that restore and strengthen ecosystems and work with nature can play a key role in managing climate risks and developing resilience.

Investing in Healthy Watersheds

Watersheds are coming under growing pressure from climate change with increasing wildfires, droughts and floods alongside low salmon runs. That's why the Province is investing \$27 million to improve the health and resiliency of B.C.'s watersheds. As part of B.C.'s Economic Recovery Plan, this investment will create short-term jobs and economic opportunities to help accelerate B.C.'s economic recovery while also preparing for the impacts of climate change.



Align Emissions Reduction with Climate Adaptation

Scientists are clear that we must reduce global greenhouse gas emissions significantly to prevent the impacts of climate change from becoming unmanageable. At the same time, we know that the climate will continue to change for decades because of greenhouse gases already in the atmosphere. We therefore need to both proactively develop resilience to impacts that can't be avoided (adaptation) and continue to reduce emissions to minimize future impacts (mitigation).

Strategically aligning climate adaptation and emissions reduction can enhance the effectiveness of both strategies, avoid risks, and generate economic, ecological, and social benefits. For example, enhancing the resilience of forest ecosystems for future climate conditions also contributes to reducing CO₂ levels in the atmosphere while reducing erosion, mitigating flood risk, filtering drinking water, supporting jobs, contributing to human health and supporting biodiversity.

When we invest in renewable energy infrastructure, we need to ensure that it is built in ways that are resilient to the future climate. Similarly, we want to minimize or reduce greenhouse gas emissions in the adaptation options we choose, so that we don't contribute further to the impacts we are adapting to. Keeping both adaptation and mitigation in mind in our decision-making will help to develop effective responses that lead to more sustainable, less expensive outcomes in the long run.

Forest Carbon Initiative

Through the Forest Carbon Initiative, B.C. is leading the way on integrating climate change adaptation principles into wildfire reforestation, while sequestering carbon from the atmosphere to mitigate climate change. This includes developing resources to support the selection of tree species that will be more suited and resilient to the changing climate and wildfires as well as changing planting practices to promote ecosystem health and reduce flood risk.



Take a Proactive Approach: The Business Case for Adaptation

The Province recognizes that managing risks caused by climate change is part of building an innovative and resilient economy and ensuring that B.C. maintains a competitive business environment in the climate of the future. Using a climate change lens to plan and act now will help to reduce expensive future impacts and cost us less in the long run, while also generating additional benefits. For example, a study by the BC Ministry of Transportation found that investing in building the resilience of highway infrastructure in the Pine Pass to future climate conditions would cost less for taxpayers in the long run than delaying action and paying for impacts down the road.

The costs of inaction on climate adaptation are high and increasing over time. Severe weather caused \$1.3 billion in insured damage across Canada in 2019, with 8 of the top 10 highest loss years on record taking place since 2010.¹ Here in B.C. we've also seen higher than normal costs associated with climate change-driven events. Wildfire suppression cost \$615 million in 2018 and \$649 million in 2017. And a study found that a potential flood in the Lower Mainland could be the costliest climate-related natural disaster in Canadian history, with more than \$30 billion in losses.²

Beyond avoiding future losses, the return on investment for early adaptation and resilience measures is high and exists for many different economic sectors. These measures



Forest fire smoke over Vancouver, 2015

can also generate positive economic gains, while simultaneously providing social and environmental benefits. The Global Commission on Adaptation estimates that a \$1.8 trillion investment in resilience and adaptation measures globally could generate \$7.1 trillion in total net benefits.³ The Canadian Institute for Climate Choices reported that experience in Canada suggests that prevention pays off, with small investments to reduce vulnerability to climate risks potentially delivering broad-based social, economic, and environmental benefits.⁴

The Province is taking action to better understand the financial implications of climate-related risks and the benefits of acting early. This includes working with the Federal Government to ensure that federal funding programs support B.C.'s priorities for effective climate adaptation investments. We know that there are financial and economic costs to delaying action on mitigating and adapting to a changing climate, and real benefits to being proactive.

1 Insurance Bureau of Canada, 2020. [ibc.ca/ab/resources/media-centre/media-releases/severe-weather-caused-1-3-billion-in-insured-damage-in-2019](https://www.ibc.ca/ab/resources/media-centre/media-releases/severe-weather-caused-1-3-billion-in-insured-damage-in-2019)

2 Lower Mainland Flood Management Strategy Phase 1 Reports, 2016. fraserbasin.bc.ca/Phase_1_Results.html

3 Global Commission on Adaptation, 2019. [gca.org/reports/adapt-now-a-global-call-for-leadership-on-climate-resilience](https://www.gca.org/reports/adapt-now-a-global-call-for-leadership-on-climate-resilience)

4 Canadian Institute for Climate Choices, 2020. climatechoices.ca/wp-content/uploads/2020/12/Tip-of-the-Iceberg_-_CoCC_-_Institute_-_Full.pdf



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or visit engage.gov.bc.ca/climatereadybc for more information.

