

ASAFER AND MORE RESILIENT CANADA An independent assessment of

An independent
assessment of
the draft National
Adaptation Strategy

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The Flood Falls Trail wildfire burns above the Fraser River in Hope, British Columbia, Monday, Sept. 12, 2022. THE CANADIAN PRESS/ Darryl Dyck

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Cover: Jamison Russell, left, of the Blood Tribe Land Management department, reaches for a bucket of mulch on the Kainai First Nation in southern Alberta during their work to protect the grasslands and watersheds near Stand Off, Alta., Wednesday, Oct. 5, 2022.



In November 2022, the federal government released Canada's first National Adaptation Strategy—a major step toward a more coordinated and effective nationwide response to the devastating effects of climate change.

Toward a Safer and More Resilient Canada evaluates the draft National Adaptation Strategy and the accompanying Action Plan against the key elements the Canadian Climate Institute first proposed in May 2022. Those four key elements can be summarized as: clear priorities and goals based on greatest risks, concrete policy measures to achieve them, mechanisms for improved policy coordination and delivery, and a robust framework for monitoring and evaluating progress (Ness and Miller 2022).

In considering each of these four elements, we offer a series of recommendations to ensure Canada's first National Adaptation Strategy rises to the challenge of a warming and increasingly volatile climate. First, we recommend that the federal government clarify how the Strategy's chosen priorities address the biggest climate risks Canada faces. Second, throughout the Strategy and Action Plan, the government should more closely connect the identified goals, objectives, targets, and actions. Third, the government should do more to address fundamental challenges of uncoordinated and fractured governance when it comes to adaptation, which have undermined effective adaptation action in Canada. Finally, the proposed monitoring and evaluation framework should be more closely aligned with the objectives and targets in the Strategy. Our assessment and recommendations are summarized in the following table.

Key element	Strategy does well	improved	Recommendations
Clear priorities and goals based on an understanding of the greatest climate change risks Canada faces.	Establishes clear, high- level, national priorities for adaptation. Sets out quantitative, time- bound targets for national progress.	The Strategy's priorities are not mapped against Canada's top risks. The rationale for selecting the proposed targets is unclear.	 Identify the top risks the Strategy is intended to address. Explain how the goals and objectives will mitigate top risks. Regularly update assessments of top national climate risks to inform updates to the Strategy.
Concrete policy measures and actions to achieve those goals.	The Action Plan sets out concrete federal actions to implement the Strategy.	How Action Plan actions will achieve Strategy objectives is unclear. The new Action Plan investments don't do enough to close Canada's adaptation gap.	 4. Identify priority action areas in the Strategy to guide federal and other action plans. 5. Confirm expanded government investment in adaptation beyond the Action Plan.
3. Mechanisms for improved coordination of adaptation policy and action across federal government departments and between all orders of government.	Highlights the importance of effective governance in delivering on goals and objectives. Clearly acknowledges and explains the federal government role in climate change adaptation.	Absence of new or improved approaches to improve policy coordination or mainstream adaptation considerations in decisions. Lack of clarity about next steps to consult and engage with Indigenous Peoples in implementation.	 Use whole-of-government tools to enhance coordination and mainstreaming of adaptation. Provide additional detail about how federal-provincial/territorial bilateral action plans will be developed and implemented. Provide greater clarity on steps to implement the Strategy and Action Plan in accordance with UNDRIP.
4. A framework for tracking progress, enhancing accountability and continually improving the Strategy and the actions that it guides.	Outlines the beginnings of a national adaptation monitoring and evaluation system. Commits to tracking both policy implementation and policy outcomes.	There is a disconnect between identified M&E indicators and the Strategy's goals, objectives, and targets. A five-year reporting cycle doesn't allow for short-term course correction. Responsibility for monitoring and evaluation is not defined. No detail is provided on how the initial monitoring framework will be expanded to cover the entire Strategy.	 9. Align the M&E indicators with the Strategy's goals, objectives, and targets. 10. Formalize the M&E system by designating responsible federal entities and defining a process for frequent and timely reporting. 11. Provide further detail as to how the M&E system will be expanded over time to address the Strategy's goals, objectives, and targets.

What should be

What the draft

INTRODUCTION

Canada's first National Adaptation Strategy represents a major step toward a more coordinated and effective nationwide response to the devastating effects of climate change. Canada is now joining the ranks of countries around the world that have detailed national plans to protect people and communities from increasing climate damages, in addition to plans to reduce emissions and limit future warming.

The National Adaptation Strategy will be critical in building a resilient Canada. Historically, Canada's approach to climate adaptation has been characterized by decentralized and uncoordinated efforts of different orders of government, the private sector, and civil society groups. These efforts have thus far been incommensurate with the worsening consequences of a warming climate: floods and wildfires, hurricanes and heat domes, droughts and disappearing permafrost. Without a major, nation-wide acceleration of adaptation measures, Canada's adaptation gap—the gap between Canada's steeply rising adaptation needs and the measures that have actually been implemented—will continue to grow, and the impacts of climate change will increasingly put lives and livelihoods at risk.

Canada's adaptation gap is the result not just of inadequate effort and investment to date, but also a lack of coordination and prioritization. Adaptation measures have not focused consistently on the most important priorities, and at worst have been duplicative of or even at cross-purposes with other such measures. With the release of the draft National Adaptation Strategy, the federal government has signaled that it understands that this status quo cannot continue, that adaptation is a national priority, and that national-level leadership and coordination are required to start closing the gap.



As the Canadian Climate Institute previously outlined in *Closing Canada's Adaptation Gap: Key elements of a National Adaptation Strategy*, a robust national strategy must have four crucial elements. This assessment evaluates the draft National Adaptation Strategy against these elements.

- 1. Clear priorities and goals based on an understanding of the greatest climate change risks Canada faces;
- 2. Concrete policy measures and actions to achieve those goals;
- 3. Mechanisms for improved policy coordination and delivery across federal government departments and between all orders of government; and
- **4.** A robust framework for monitoring and evaluating progress in order to enhance accountability and ensure continued improvement.



ASSESSMENT

This report evaluates the draft National Adaptation Strategy and the accompanying Action Plan against the key elements the Canadian Climate Institute first proposed in May 2022 in *Closing Canada's Adaptation Gap: Key elements of a National Adaptation Strategy*: clear priorities and goals based on greatest risks, concrete policy measures to achieve them, mechanisms for improved policy coordination and delivery, and a robust framework for monitoring and evaluating progress (Ness and Miller 2022). In considering each of these four elements, we offer a series of recommendations to ensure Canada's first National Adaptation Strategy rises to the challenge of a warming and increasingly volatile climate.

KEY ELEMENT 1

Clear priorities and goals based on greatest risks

Climate change is impacting and will continue to impact Canada in many ways, some of which are more profoundly threatening than others. Up to now, Canada has lacked a strategic framework to focus adaptation actions and investments, leading to uncoordinated and ultimately inadequate work on too many fronts. In a review of government action on climate change across Canada in 2018, the Auditors General of Canada highlighted that adaptation actions were often "case by case or ad hoc" because governments had not comprehensively assessed climate change risks and therefore could not prioritize or assign resources to manage risks accordingly (Auditors General 2018). An effective national adaptation strategy assesses and prioritizes climate change risks and charts a course for governments, stakeholders, and rights holders toward a more resilient Canada.



What the draft National Adaptation Strategy does well

The draft National Adaptation Strategy establishes clear, high-level, national priorities for adaptation by identifying five "key systems" where governments and other actors should focus their effort and activity: disaster resilience, health and wellbeing, nature and biodiversity, infrastructure, and economy and workers. Within each of those key systems, the draft Strategy also develops a logic model outlining the collective progress in that system that must be achieved across Canada. It does this by identifying a long-term goal and multiple medium-term objectives that describe the state of climate change resilience that collective adaptation efforts across the country should achieve (see Figure 1 for an example drawn directly from the draft National Adaptation Strategy).

Figure 1: Goals, objectives, and proposed targets for the Strategy's infrastructure "key system"

GOAL		tation to adjust for futu	la are climate-resilient a ure impacts to deliver re vices to all of society.	
	1	2	3	4
OBJECTIVES	Technical standards have been updated or developed to embed climate change in all decisions to locate, plan, design, manage, adapt, operate, and maintain infrastructure systems across their lifecycle.	Public and private infrastructure decision making is informed by system- wide assessments of, and planning for, climate change risks.	Infrastructure decisions prioritize benefits for marginalized populations and communities at highest risk of climate change impacts.	All new investments in infrastructure apply resilience criteria and adopt climate change guidance, standards, and future design data to maximize the long-term benefits of infrastructure outcomes.
PROPOSED TARGETS	By 2030, robust guidance, codes, and standards covering the top climate change risks for key public infrastructure systems are available to be adopted by all infrastructure decision makers.	By 2030, 80 per cent of public and municipal organizations have factored climate change adaptation into their decision- making processes.	None proposed.	Starting in 2024, resilience to climate change impacts is factored into all new federal infrastructure funding programs

Source: Government of Canada 2022a.



The draft National Adaptation Strategy also takes the important additional step of elucidating what must be accomplished within the short and medium term by setting out quantitative, time-bound targets for most objectives. These targets clarify the scale and direction of change the Strategy's objectives demand, and create a quantitative basis for measuring progress. In combination, the draft Strategy's building blocks—key systems, goals, objectives, and targets—form the essential foundation of a national strategic framework for adaptation.

Areas for improvement

The draft National Adaptation Strategy does not explicitly align its identified priorities, goals, and objectives with Canada's top climate change risks. Well-regarded national adaptation strategies and plans from other nations (including the United Kingdom, New Zealand, Germany, the Netherlands, and Finland) select their strategic priorities in response to the climate change risks those nations have assessed as most significant and urgent, and then describe how priority focus areas, goals, objectives, and actions will address these risks. In the absence of such a dedicated assessment, the federal government could synthesize a substantial existing knowledge base regarding climate change risks in Canada, such as the Council of Canadian Academies' report Canada's Top Climate Change Risks (2019).

The rationale for selection of specific targets in the logic framework is also unclear. The process by which these targets are selected is extremely important, as they will have the effect of focusing activity on policies and actions that can hit them—potentially at the expense of other priorities for which targets are not included. For example, the sole target for the health and wellbeing objective, that "people are protected from urgent climate-related health risks such as extreme heat, infectious diseases, foodborne hazards and impacts to traditional foods, poor mental health outcomes and others" (page 22), is to "eliminate deaths from extreme heat by 2040" (page 48, Annex D). Targets are not provided for the other climate change health concerns noted in the objective. The final National Adaptation Strategy should be more transparent regarding how targets were selected, and, if necessary, the federal government should adjust the process for selecting targets to ensure that they focus activity toward appropriate priorities.

Rebecca Sutherland of Pequis First Nation, and Shaine Paul from Red Rose volunteer to sandbag a home at risk of flooding in Peguis First Nation, Manitoba, Wednesday, May 4, 2022. THE CANADIAN PRESS/David Lipnowski



Assessing climate risks in terms of hazard, exposure, and vulnerability is essential for developing adaptation responses that address the social and structural context of risk, such as policies that prevent building in risky areas or that provide health services and supports to the people who need them most. Without this kind of thinking, governments and others can focus only on technical or "end-of-pipe" adaptation actions, such as building expensive infrastructure like dams and sea walls to protect buildings and roads in hazardous locations, when also mitigating the social and structural contributors to risk could make adaptation solutions more effective—and less expensive.

(Death Review Panel 2022). Climate hazards themselves are often exacerbated as a result of societal choices, such as by the paving over of land in urban areas

that increases the speed and magnitude of flooding downstream.

RECOMMENDATIONS FOR KEY ELEMENT 1

To clarify that the National Adaptation Strategy is focused on Canada's top climate change risks, the federal government should:

- 1. Identify the climate change risks that the Strategy and accompanying action plans are intended to address. The Strategy should justify inclusions and exclusions with reference to the existing knowledge regarding the most significant national-level risks, including Canada's Top Climate Change Risks, and provincial, territorial, and sectoral climate change risk assessments. The hazards, exposures, and vulnerabilities comprising each risk should be clearly defined.
- 2. Explain how the goals, objectives, and targets associated with the five "key systems" will guide action that will address Canada's top climate change risks. This should include a mapping of each top risk to specific key systems, goals, objectives, and targets, and a clear rationale for the selection of specific targets.
- 3. Commit to undertaking updated assessments of priority national climate change risks in advance of future updates, to ensure that Canada's National Adaptation Strategy is continuously informed by an evolving and up-to-date understanding of risk. This should include a commitment to standardizing risk assessment processes in Canada so that assessments by provincial and territorial governments and other actors can be easily synthesized and compared over time.

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KEY ELEMENT 2

Concrete policy measures to achieve goals

As the Auditors General highlighted in their assessment (2018), Canada's adaptation gap is in large part the result of federal, provincial, and territorial governments providing inadequate levels of effort and investment in adaptation, and failing to coordinate and prioritize their actions. In addition to providing a framework to focus the adaptation activities of governments and other actors, the National Adaptation Strategy—and the more detailed plans that accompany it—should outline concrete policies and actions that can be implemented beginning immediately to achieve its goals, objectives, and targets. An effective national adaptation strategy moves away from ad hoc responses that might miss important issues, or be redundant or contradictory, by identifying the most important actions to move climate adaptation forward.

What the draft National Adaptation Strategy and federal Adaptation Action Plan do well

The Government of Canada Adaptation Action Plan sets out actions the government will take to help implement the National Adaptation Strategy, including several important new investments. The Action Plan includes several new or enhanced programs and funding commitments in key areas including wildfire prevention and risk reduction, flood mapping, adaptation to extreme heat, accelerating building code updates for climate resilience, climate science, and significant new resources to support adaptation by municipalities and other owners of critical infrastructure. The Plan also inventories all federal adaptation actions, which "provides partners and stakeholders with a clear view of how their efforts will be complemented or supported by federal initiatives" (page vi)—very valuable information for other orders of government and other actors as Canada moves into an era of focused and coordinated adaptation action under the National Adaptation Strategy.



Work crews clear Erie Shore Drive along the lake near Chatham, Ontario on Friday, August 30, 2019. The area flooded after a storm sent the lake over many of the break walls. THE CANADIAN PRESS/ Geoff Robins



Areas for improvement

The Government of Canada Action Plan does not explain how the policies and programs it outlines will contribute to achieving the goals, objectives, and targets of the National Adaptation Strategy. While the Plan maps each current or proposed federal government action to one or more of the National Adaptation Strategy objectives, there is no rationale provided for why the actions are believed to be the most important and effective ones that the federal government can take to further those objectives. This highlights a gap in the draft Strategy's logic model—that it does not identify the most important types and areas of action that are required to achieve the goals and objectives. For example, an objective of the health and wellbeing key system in the draft Strategy, against which most of the health-related actions in the Action Plan are mapped, states: "people are protected from urgent climate-related health risks such as extreme heat, infectious diseases, foodborne hazards and impacts to traditional foods, poor mental health outcomes, and others" (page 22). While this is clearly a critical objective, no further detail is provided in the draft Strategy as to which of the myriad actions and interventions that are potentially relevant to this objective should be prioritized and implemented. Additional detail in the final National Adaptation Strategy on the types of actions required to achieve the goals, objectives, and targets would create much-needed clarity.

The scale of new action and investment proposed in the Action Plan is inadequate to address the growing national adaptation shortfall. As the new funding in the Action Plan will be spread across timelines as long as 10 years, the \$1.6 billion announced represents only about a \$200 million average annual increase in the federal government's investment in climate change adaptation. Furthermore, when considering that many of the existing programs listed in the Action Plan will run out of allocated funding in the next few years, total federal government funding for adaptation could actually be lower in 2023 than it was in 2022 unless additional commitments are made.

To put the scale of necessary support into context, the Federation of Canadian Municipalities estimates that municipalities alone require upwards of \$5 billion annually to adapt and prepare their communities (Federation of Canadian Municipalities and Insurance Bureau of Canada 2020). The Canadian Climate Institute estimates that the cost of climate change to GDP in 2025 absent adaptation action will be \$25 billion annually, and up to \$100 billion annually by mid-century (Sawyer et al. 2022). And the impacts of British Columbia disasters in 2021 alone are estimated to have cost the provincial and national economies between \$10 and \$17 billion respectively (Lee and Parfitt 2022).

While the federal government cannot be expected to shoulder the financial burden of nationwide adaptation alone, the proposed scale of federal investment in the Action Plan is not yet aligned with the scale of the problem. Minister Guilbeault notes in the foreword that the Action Plan should be considered a "down payment," but no detail is provided regarding how additional federal funding and resources will be allocated to priorities that are not addressed in the current Action Plan. The draft National Adaptation Strategy indicates that action plans will outline priority action for the next five years (page 6) and suggests that these will be updated according to the five-year National Adaptation Strategy renewal cycle (page 33, Figure 10)—which does not reflect the inevitable need for much more action and investment by the federal government within this period.

RECOMMENDATIONS FOR KEY FI EMENT 2

To ensure that the policies and programs in the Government of Canada Adaptation Action Plan and additional future actions are effective in implementing the National Adaptation Strategy, the federal government should:

- 4. Explicitly identify the priority areas of action that are required to achieve the goals, objectives, and targets for each "key system" in the National Adaptation Strategy, drawing on the advice of the Expert Advisory Tables and other stakeholders and rights holders consulted during the development of the Strategy. It should map the existing and proposed new policies and programs in the Government of Canada Action Plan to these priority action areas. The federal government should also ensure that future updates to the Action Plan, the forthcoming federal-provincial/territorial bilateral action plans, and future federal actions are consistent with these priority action areas.
- 5. Confirm in the Action Plan that the government will continually expand its investment in adaptation beyond the amounts currently listed in the Plan, in keeping with the scale of Canada's adaptation needs. This includes renewing important programs for which funding is currently due to expire, when appropriate, as well as deploying new investments to support new policies and actions as required.

KEY ELEMENT 3

Mechanisms for improved policy coordination and delivery

Adaptation action in Canada thus far has been marked by governance challenges, as efforts both within and across different orders of government have been relatively uncoordinated and ad hoc. These governance challenges have contributed to a lack of collective focus on key adaptation priorities, redundant or conflicting policies and actions, a failure to integrate adaptation broadly into government decision making, and a paucity of mechanisms to track progress and create accountability for governments (Henstra 2022). As a result, adaptation progress in Canada has been both inefficient and inadequate (Auditors General 2018). Governing adaptation at a national scale has been difficult for many other countries around the world (Hammill et al. 2021), but the challenge is particularly pronounced in Canada's federated system of government with its complex distribution of power and responsibility between federal and provincial, territorial, and Indigenous governments. An effective national adaptation strategy includes clear guidance and outlines specific mechanisms for improved adaptation governance, both across federal departments and across different orders of government.

What the draft National Adaptation Strategy does well

The draft National Adaptation Strategy highlights the importance of effective governance to deliver on its goals and objectives. In part, it does this by including governance and leadership as a foundational element with its own cross-cutting objectives (page 31–32). In addition, the federal government acknowledges in the Strategy that adaptation efforts in Canada to date have been disjointed and have resulted in inadequate outcomes, and that it must play a leadership role in resolving these shortcomings.

The draft Strategy speaks to the importance of policy mainstreaming—the practice of integrating adaptation considerations across government decisions and functions. It commits the federal government to "mainstream adaptation considerations in broader policies and programming, including through strengthening of governance mechanisms within and between governments and sectors" (page 34). The Action Plan also includes important actions like implementing the Integrated Climate Lens to assess the "adaptation and mitigation implications of government policies, programs and initiatives"—an important step toward policy mainstreaming (page 73).

The federal government clearly acknowledges and explains its role, and the role of others, in climate change adaptation. The government signals in both the draft National Adaptation Strategy and in the Action Plan that it is prepared to take action on matters of exclusive federal jurisdiction as well as to collaborate with other governments, stakeholders, and rights holders as required in areas of joint responsibility or outside of the federal mandate. Furthermore, the draft Strategy recognizes the need to engage Indigenous Peoples as rights holders and to support self-determined actions, acknowledges the importance of moving forward in accordance with the standards set out in the United Nations Declaration on the Rights of Indigenous Peoples (UNDRIP), and commits to co-leadership of the Indigenous Climate Leadership initiative.

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Areas for improvement

While sending the right signals about improving adaptation governance, the draft National Adaptation Strategy stops short of outlining a plan to do so. The federal government acknowledges that adaptation governance in Canada needs to improve, but the draft Strategy does not propose new structures and mechanisms to effectively coordinate and mainstream adaptation. Despite the stated commitment in the Strategy to improve adaptation mainstreaming and strengthen governance mechanisms within the federal government (page 34), the Integrated Climate Lens and Greening Government Strategy (Action Plan, page 73) alone will not be adequate, and stronger tools will need to be employed (see Box 2, "Tools for mainstreaming and coordinating adaptation policy"). Similarly, the Strategy provides little clarity on how coordination between government departments and different orders of government will actually be improved, beyond a brief statement of commitment to develop bilateral action plans with the provinces and territories.



BOX 2

Tools for mainstreaming and coordinating adaptation policy in the federal government

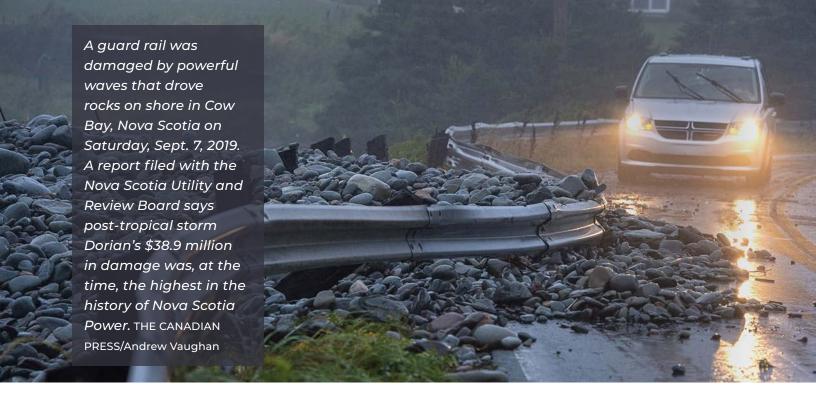
In the Climate Institute scoping paper A Whole-of-Government Approach to Climate Adaptation, Dr. Daniel Henstra presents new tools that the federal government could deploy to internally codify expectations, facilitate implementation, and enhance accountability for achieving adaptation objectives. For example, the federal government could legislate adaptation objectives and requirements to update the National Adaptation Strategy, to develop and update federal and bilateral action plans, and to report on progress on a regular cycle. This is similar to what is done in other countries (Government of Canada 2021; Government of the United Kingdom 2008; Government of New Zealand 2019; Government of Japan 2018) and what has begun to be done in some provinces (Government of British Columbia 2019; Government of Nova Scotia 2021). It is also analogous to the accountability and transparency framework for reducing greenhouse gas emissions in the Canadian Net-Zero Emissions Accountability Act. In addition, the government could establish a central adaptation policy unit connected to a central agency, such as the Privy Council Office or Treasury Board Secretariat, to institutionalize cooperation on adaptation priorities across different departments and monitor policy mainstreaming. It could also issue a central policy directive that would send the message that adaptation is a pan-governmental priority and encourage the development of adaptation expertise across all government departments. For more information, see Henstra 2022.

The language in the draft National Adaptation Strategy is unclear with respect to the federal government's commitment to consult and engage with Indigenous Peoples. While the federal government acknowledges in the draft Strategy the need to uphold Indigenous rights and proceed in accordance with UNDRIP (pages 17; 31-32), the document is unclear on what specific steps the government will take to do so.

RECOMMENDATIONS FOR KEY ELEMENT 3

To effectively coordinate adaptation action across federal departments and other orders of government in order to deliver on the priorities, goals, and objectives of the National Adaptation Strategy, the federal government should:

- 6. Create mechanisms within the federal government to clarify roles and responsibilities, improve coordination, mainstream adaptation in decision making, and establish accountability for National Adaptation Strategy progress. Specifically, the federal government should consider establishing a central adaptation policy unit and issuing a central policy directive that establishes adaptation as a government-wide policy priority. The government could also consider other measures, for example legislating requirements for objective setting, regular updates, action plans, and progress reports.
- 7. Provide additional detail on how governments will develop and implement the proposed federal-provincial/territorial bilateral adaptation action plans, including arrangements for coordinating implementation and funding with provincial and territorial governments, and securing joint accountability.
- 8. Provide greater clarity on what specific steps the federal government will take to implement the strategy and action plan in accordance with the principles of UNDRIP.



KEY ELEMENT 4

A robust framework for monitoring and evaluating progress

Most advanced national adaptation strategies and plans around the world include monitoring and evaluation (M&E) systems (Lesnikowski and Leiter 2022). M&E systems are essential for tracking whether the policies and actions resulting from national strategies are delivering on their goals and objectives. This tracking has two key purposes: First, it generates data and information that can help make governments accountable for delivering on national adaptation strategies and plans. Second, an effective M&E system can help policymakers to understand the effects of their decisions and improve policies—and the national adaptation plans and strategies themselves—in response to lessons learned. An effective national adaptation strategy includes a monitoring and evaluation system to track adaptation actions and their outcomes and facilitate continuous improvements in the strategy.

A robust national adaptation strategy M&E system should measure both whether policies are being implemented, and also whether those policies are actually reducing climate change risks and impacts. This requires clear targets and indicators of adaptation progress and of climate change resilience that address the full scope of the Strategy's goals and objectives. In addition, effective M&E systems require a strong mandate from governments, ideally provided through legislation. Global experience indicates that a legislated mandate for monitoring and reporting enhances the durability of M&E systems and buy-in across government departments and agencies (Lesnikowski and Leiter 2022).

What the draft National Adaptation Strategy does well

First and foremost, the draft Strategy takes the obvious but important step of getting started: it outlines the beginnings of a national M&E system as part of the strategy itself, rather than simply committing to one and leaving all of the details to be developed later. The draft Strategy highlights that monitoring and evaluation is a "critical part" of adaptation (page 49), signaling that M&E is integral to the National Adaptation Strategy and not just an administrative tracking tool. And while the proposed M&E framework is limited and incomplete, the federal government has committed in the Strategy to ongoing improvement of the framework over time.

The draft Strategy also states that the framework will include process and output indicators to measure whether actions are being implemented, as well as outcome indicators that measure Canada's climate change resilience and adaptation success. Such a mix is consistent with international best practice (Lesnikowski and Leiter 2022), driving accountability for implementation while also supporting a process of continuous learning that will improve adaptation policies and actions over time. In addition, the chosen indicators apply data already being collected by the federal government for other purposes, allowing the government to begin tracking progress immediately using existing methods.

The draft Strategy starts to create a clear, measurable basis the M&E system can use to monitor progress. It sets concrete, quantitative targets that define the desired direction and scale of progress with respect to some of the objectives in the strategy, which is essential to be able to measure whether those objectives are being achieved.

Areas for improvement

The draft Strategy fails to connect the proposed initial set of indicators for the M&E framework to its own goals, objectives, and targets. While there are benefits of getting started immediately on monitoring by choosing indicators that can be measured using data that is already collected by Statistics Canada and other federal government entities, those indicators do not intuitively align with the Strategy's goals and objectives, and no explanation of the alignment is provided. Furthermore, none of the proposed M&E indicators align directly with the quantitative targets in the draft Strategy, despite the fact that the latter have been crafted specifically to permit measurement of adaptation progress.

The proposed five-year reporting cycle is too long to allow for course corrections that may be necessary as the National Adaptation Strategy is implemented. A five-year cycle may be appropriate for more comprehensive progress reporting that encompasses policy outcomes, as it takes time for policy to have its intended effect, but output indicators can and should be tracked and reported on a shorter time scale. In addition to allowing for timely course corrections where necessary, shorter reporting cycles would also create greater transparency for the public (Lesnikowski and Leiter 2022).

The draft Strategy does not describe how the federal government will actually execute the M&E framework. It does not assign clear responsibility to specific departments or agencies for conducting monitoring, aggregating the data, evaluating and reporting progress, and using the information to improve subsequent federal adaptation actions or updates to the strategy. And no formal legal mandate has been proposed to commit the federal government to monitoring, evaluating, and reporting on progress, which makes the M&E system vulnerable to lapsing or becoming outdated when there is a change in government or an update to the strategy (Ness and Miller 2022).

Finally, the draft Strategy does not clarify how and when the proposed initial M&E system will be improved to comprehensively address the Strategy's goals, objectives, and targets, and which departments or agencies will bear responsibility for this work. Addressing this gap is important to ensure that the government does not inadvertently get locked into the current set of limited indicators despite its stated commitment to update the system—including adding more indicators—going forward.

RECOMMENDATIONS FOR KEY ELEMENT 4

To build an M&E framework that can effectively track progress against the goals and objectives of the National Adaptation Strategy and allow for enhanced policy learning and accountability, the federal government should:

- 9. Align the Strategy's M&E framework with its logic framework. Every indicator in the M&E framework should be clearly linked to the priorities, goals, and objectives for each "key system" in the Strategy. Each of the proposed targets should have an indicator in the M&E system, even if data cannot yet be collected.
- 10. Formalize monitoring and evaluation by designating responsible federal government entities and by defining a process for frequent and timely progress reporting. The reporting process should include longer cycles of detailed, comprehensive reporting as well as more frequent reporting that facilitates important short-term course corrections. These responsibilities and evaluation and reporting timelines will be most effective if they are legally binding (further to recommendation 6).
- 11. Provide further detail in the National Adaptation Strategy as to how the M&E system will be improved and expanded over time to comprehensively address all of the Strategy's goals, objectives, and targets, including specifying federal departments or agencies that will be responsible and timelines for completing this expansion.

St Jean Baptiste, Manitoba, which runs along highway 75, is protected against Red River flooding by a dike south of Winnipeg, Sunday, May 15, 2022. THE CANADIAN PRESS/John Woods



The draft National Adaptation Strategy takes significant strides forward in tackling the key barriers to effective adaptation policy in Canada and creating a foundation for more ambitious and strategic action. As such, it marks a potential turning point in Canada's efforts to protect people and their livelihoods from the impacts of a rapidly changing climate. What remains to be done now, in finalizing the Strategy, is for the federal government to add greater detail and clarity in key areas, and to tie these elements together to build a more cohesive framework for action. In particular, the federal government should clarify how the strategy's chosen priorities address the biggest climate risks Canada faces, and more closely connect the objectives and targets with both the actions that flow from them and with the framework for measuring progress.

Key element

Clear priorities and goals based on an understanding of the greatest climate change risks Canada faces.

What the draft Strategy does well

Establishes clear, highlevel, national priorities for adaptation.

Sets out quantitative, timebound targets for national progress.

What should be improved

The Strategy's priorities are not mapped against Canada's top risks.

The rationale for selecting the proposed targets is unclear.

Recommendations

- Identify the top risks the Strategy is intended to address.
- 2. Explain how the goals and objectives will mitigate top risks.
- Regularly update assessments of top national climate risks to inform updates to the Strategy.

- Concrete policy measures and actions to achieve those goals.
- The Action Plan sets out concrete federal actions to implement the Strategy.

How Action Plan actions will achieve Strategy objectives is unclear.

The new Action Plan investments don't do enough to close Canada's adaptation gap.

- Identify priority action areas in the Strategy to guide federal and other action plans.
- Confirm expanded government investment in adaptation beyond the Action Plan.

Key element

Strategy does well

What should be improved

Recommendations

3. Mechanisms for improved coordination of adaptation policy and action across federal government departments and between all orders of government.

Highlights the importance of effective governance in delivering on goals and objectives.

What the draft

Clearly acknowledges and explains the federal government role in climate change adaptation.

Absence of new or improved approaches to improve policy coordination or mainstream adaptation considerations in decisions.

Lack of clarity about next steps to consult and engage with Indigenous Peoples in implementation.

- 6. Use whole-ofgovernment tools to enhance coordination and mainstreaming of adaptation.
- 7. Provide additional detail about how federalprovincial/territorial bilateral action plans will be developed and implemented.
- 8. Provide greater clarity on steps to implement the Strategy and Action Plan in accordance with UNDRIP.

4. A framework for tracking progress, enhancing accountability and continually improving the Strategy and the actions that it guides.

Outlines the beginnings of a national adaptation monitoring and evaluation system.

Commits to tracking both policy implementation and policy outcomes.

There is a disconnect between identified M&E indicators and the Strategy's goals, objectives, and targets.

A five-year reporting cycle doesn't allow for shortterm course correction

Responsibility for monitoring and evaluation is not defined.

No detail is provided on how the initial monitoring framework will be expanded to cover the entire Strategy.

- 9. Align the M&E indicators with the Strategy's goals, objectives, and targets.
- 10. Formalize the M&E system by designating responsible federal entities and defining a process for frequent and timely reporting.
- 11. Provide further detail as to how the M&E system will be expanded over time to address the Strategy's goals, objectives, and targets.

REFERENCES

Auditors General. 2018. Perspectives on Climate Change Action in Canada—A Collaborative Report from Auditors General. https://www.oag-bvg.gc.ca/ internet/English/parl_otp_201803_e_42883.html?wbdisable=true#hd2g

Council of Canadian Academies. 2019. *Canada's Top Climate Change Risks*. Ottawa (ON): The Expert Panel on Climate Change Risks and Adaptation Potential, Council of Canadian Academies. https://cca-reports.ca/wp-content/uploads/2019/07/Report-Canada-top-climate-change-risks.pdf

Death Review Panel. 2022. Extreme Heat and Human Mortality: A Review of Heat-Related Deaths in B.C. in Summer 2021. Report to the Chief Coroner of British Columbia. https://www2.gov.bc.ca/assets/gov/birth-adoption-death-marriage-and-divorce/deaths/coroners-service/death-review-panel/extreme_heat_death_review_panel_report.pdf

Federation of Canadian Municipalities and Insurance Bureau of Canada. 2020. *The Cost of Climate Adaptation at the Local Level*. https://data.fcm.ca/documents/reports/investing-in-canadas-future-the-cost-of-climate-adaptation.pdf

Government of British Columbia. 2019. *Climate Change Accountability Amendment Act 2019*. https://www.bclaws.gov.bc.ca/civix/document/id/bills/billsprevious/4th41st:gov38-3

Government of Canada. 2021. *Canadian Net-Zero Emissions Accountability Act.* https://laws-lois.justice.gc.ca/eng/acts/c-19.3/fulltext.html

Government of Canada. 2022a. Canada's National Adaptation Strategy: Building resilient communities and a strong economy. https://www.canada.ca/en/services/environment/weather/climatechange/climate-plan/national-adaptation-strategy/full-strategy.html

Government of Canada 2022b. *Government of Canada Adaptation Action Plan.* https://www.canada.ca/content/dam/eccc/documents/pdf/climate-change/climate-plan/national-adaptation-strategy/GCAAP-Report-EN.pdf

Government of Japan. 2018. *Climate Change Adaptation Act.* https://www.japaneselawtranslation.go.jp/en/laws/view/3212/en#:~:text=Article%201The%20 purpose%20of,and%20cultural%20life%20of%20the

Government of New Zealand. 2019. *Climate Change Response (Zero Carbon) Amendment Act 2019*. https://www.legislation.govt.nz/act/public/2019/0061/latest/LMS183736.html

Government of Nova Scotia. 2021. *Environmental Goals and Climate Change Reduction Act*. https://nslegislature.ca/legc/bills/64th_1st/3rd_read/b057.htm

Government of the United Kingdom. 2008. *Climate Change Act 2008*. https://www.legislation.gov.uk/ukpga/2008/27/contents

Hammill, Anne, Jo-Ellen Parry, Christian Ledwell, and Angie Dazé. 2021. *Toward a National Adaptation Strategy for Canada: Key insights from global peers.* International Institute for Sustainable Development. https://www.iisd.org/system/files/2021-06/national-adaptationstrategy-canada.pdf

Henstra, Daniel. 2022. A Whole-of-Government Approach to Climate Adaptation: Mainstreaming adaptation and improving coordination in government decision-making. Canadian Climate Institute. https://climateinstitute.ca/wp-content/up-loads/2022/07/A-whole-of-government-approach-to-climate-adaptation.pdf

Reisinger, Andy, Mark Howden, Carolina Vera, et al. 2020. The Concept of Risk in the IPCC Sixth Assessment Report: A Summary of Cross-Working Group Discussions. IntergovernmentalPanel on Climate Change. Geneva, Switzerland. https://www.ipcc.ch/site/assets/uploads/2021/02/Risk-guidance-Fl-NAL_15Feb2021.pdf

Lee, Marc, and Ben Parfitt. 2022. A Climate Reckoning: The economic costs of BC's extreme weather in 2021. Canadian Centre for Policy Alternatives. https://policyalternatives.ca/sites/default/files/uploads/publications/BC%20Office/2022/11/ccpa-bc_Climate-Reckoning_web.pdf.

Lesnikowski, Alexandra, and Timo Leiter. 2022. Assessing Progress on Climate Adaptation in Canada: Building blocks and best practices for a robust monitoring and evaluation system. Canadian Climate Institute. https://climateinstitute.ca/wp-content/uploads/2022/07/Assessing-progress-climate-adaptation-canada.pdf

Ness, Ryan, and Sarah Miller. 2022. Closing Canada's Adaptation Gap: Key Elements of a National Adaptation Strategy. Canadian Climate Institute. https://climateinstitute.ca/wp-content/up-loads/2022/05/closing-canada-s-adaptation-gap.pdf

Sawyer, Dave, Ryan Ness, Caroline Lee, and Sarah Miller. 2022. *Damage Control: Reducing the costs of climate impacts in Canada*. Canadian Climate Institute. https://climateinstitute.ca/reports/damage-control/

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