Réseau Environnement

Synthesis Report

Consultation on Canada's National Adaptation Strategy

Réseau Environnement

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Background

Réseau Environnement is the largest network of environmental experts in Quebec, and its mission is to be the catalyst of the green economy[1] in the province. It brings together experts from the public, private and academic sectors who work in the water, waste, air, climate change, energy, soil and groundwater, and biodiversity sectors.

Réseau Environnement was hired by Environment and Climate Change Canada (ECCC) to lead the Francophone consultation as part of the development of Canada's National Adaptation Strategy (NAS). The Strategy aims to establish a shared vision for climate change resilience in Canada, identify key priorities for increased coordination, and establish a framework for measuring progress at the national level.

Between May 17 and July 5, 2022, Réseau Environnement held three consultation workshops with public, private and academic stakeholders. The goal of these workshops was to gather ideas and recommendations on short-term (one to five years) actions that could be integrated into the Strategy.

The first workshop was held in person at the Salon des technologies environnementales du Québec on May 17, 2022, at the Quebec City Convention Centre. Approximately 50 stakeholders were in attendance and discussions took place around the five systems in the NAS to facilitate interaction. Each table had a facilitator to initiate discussion and provide input, as well as a note taker to gather feedback from participants. All five of the Strategy's systems were presented at this workshop, with the exception of "Disaster Resilience and Security", due to the lack of time and expertise on the topic.

The other two workshops were held virtually via the Zoom platform on June 21 and July 5, 2022. Both of the workshops began with a video of Minister Steven Guilbault explaining the Strategy's various issues and goals. After the video, ECCC provided a brief presentation to inform participants about the Strategy's consultative process and to further elaborate on the Strategy's goals. Subsequently, the Mentimeter[2] tool was used to enable participants to give their opinion on the topics discussed. This application made it possible for participants to write recommendations online, which were automatically displayed in the presentation for everyone

1. The green economy is an approach for implementing sustainable development (***ISQ, 2020*** [available in French only]). It is an economy that results in improved human well-being and social equity, while significantly reducing environmental risks and ecological scarcities (***UNEP, 2011*** and ***MELCC, 2022*** [MELCC report available in French only]).
2. Mentimeter is an online tool that enables live audience interaction during presentations.

to see. In order to allocate sufficient time for each theme, only two of the Strategy's themes were addressed per workshop.

The themes discussed at the June 21 workshop were "Thriving Natural Environment" and "Strong and Resilient Economy." In addition to the 60 participants in attendance, Charles Latrémouille, Environmental Consultant, and Yves Gauthier, Fellow Chartered Professional Accountant (FCPA), joined the workshop to contribute to the discussions and provide their expertise related to the themes discussed.

The July 5 workshop had 95 participants and the themes discussed were "Health and Well-Being," and "Resilient Natural and Built Infrastructure." Dr. Claudel Pétrin-Desrosiers and engineer Oumoul Sy were invited as experts to contribute to the discussions and share their thoughts on the workshop themes.

The following is a synthesis of the ideas, recommendations and comments that emerged from the three workshops on adapting to climate change. Please note that a number of excellent suggestions to reduce greenhouse gas emissions were made at the workshops. However, the objective of the workshops was to generate ideas for adapting to climate change, and only these have been included in this report.

Figure 1: Workshop #1 of the consultation on Canada's National Adaptation Strategy at the Salon des technologies environnementales du Québec on May 17, 2022, at the Quebec City Convention Centre. Source: Réseau Environnement (2022)

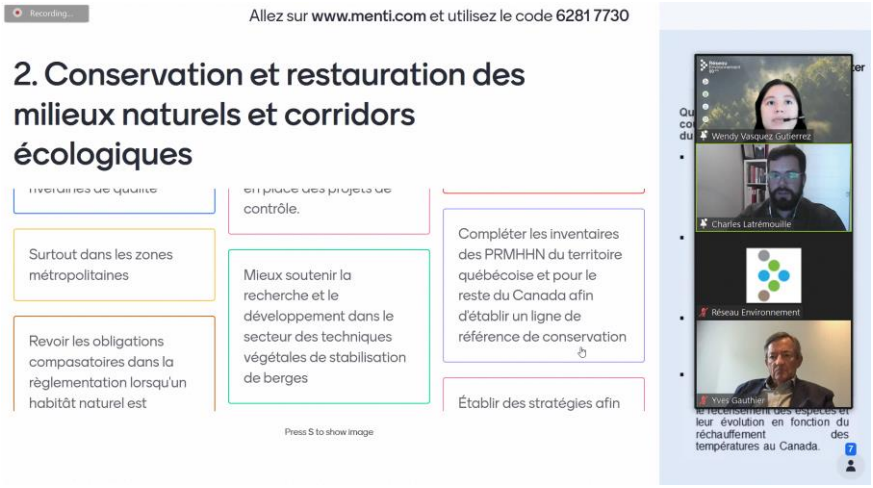


Figure 2: Overview of the presentation at Workshop #2 of the consultation on Canada's National Adaptation Strategy on June 21, for the "Thriving Natural Environment" and "Strong and Resilient Economy" systems. Source: Réseau Environnement (2022)

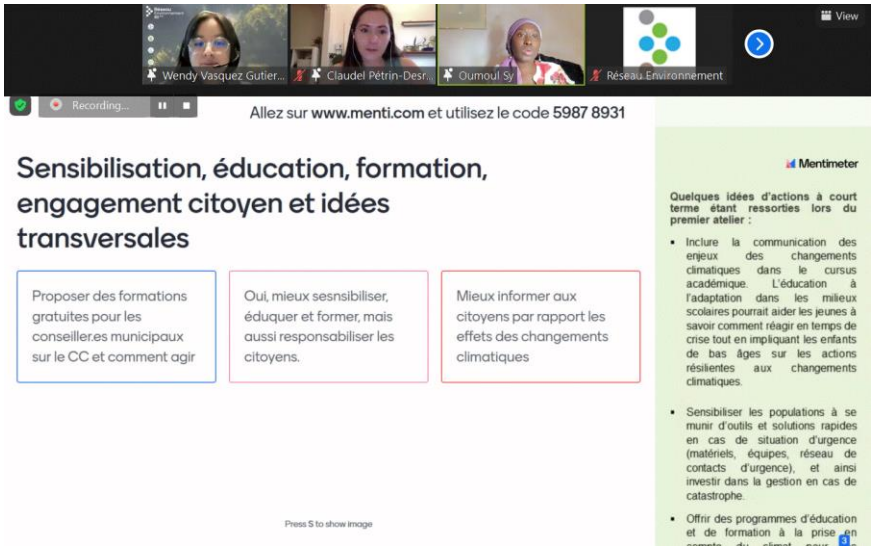


Figure 3: Overview of the presentation at Workshop #3 of the consultation on Canada's National Adaptation Strategy on July 5, for the "Health and Well-Being," and "Resilient Natural and Built Infrastructure" systems. Source: Réseau Environnement (2022)

Recommendations from the consultation

The following recommendations stem from the discussions held at the three workshops organized by Réseau Environnement and address four of the Strategy's themes: "Thriving Natural Environment," "Strong and Resilient Economy," "Health and Well-Being" and "Resilient Natural and Built Infrastructure". Since the mandate involved conducting a public consultation, these recommendations do not necessarily reflect Réseau Environnement's nor ECCC's views, but rather those of the participants. In an effort to avoid the repetition of ideas and produce concise content, the recommendations were reworded and grouped into categories. These categories are based on ideas that emerged from the first workshop and the Letstalkadaptation.ca consultation platform. The various departments involved in the Strategy also participated in developing the second and third workshops.

1. Health, well-being and safety

1.1 Strengthen and prepare health care systems to respond to extreme events

Implement ongoing training for physicians on climate change-related health issues so they can make more thorough diagnoses. In the event of a natural disaster, plan for additional health care sites and prepare the health care system and hospital staff to receive larger numbers of patients.

1.2 Improve mental health in schools

Redesign school systems to include a stronger focus on mental health. For example, provide ongoing psychological health care and workshops in schools on how to talk about fears and emotions related to climate change. In addition, encourage children to believe in their future by showing them that we are actively working towards adapting to the impacts of climate change.

1.3 Make tools for mental health accessible and facilitate access to nature

Democratize and make various tools that promote good mental health and limit the effects of eco-anxiety more accessible (e.g., healthy lifestyle habits, psychological support, communication workshops, etc.). Ensure that mental health and eco-anxiety are not regarded as an individual problem, but rather as a societal problem by providing collective solutions. Offer free psychological counselling for those who feel they need it, starting in adolescence. Positive effects from nature on mental health have also been demonstrated, particularly in relation to eco-anxiety. Therefore, it would be beneficial to offer free admission to provincial and federal parks, and to prescribe patients to forest bathing. It would also benefit health care practitioners and patients if the health care system allowed budgets for urban greening projects.

1.4 Warn populations in advance of extreme weather events and develop a communications plan
Inform the public about extreme events that may occur in their region and ensure that practical information is available regarding what steps to take according to the different types of potential extreme events. Set up an alert system for the main hazards related to natural disasters, and identify vulnerable people (e.g., seniors, persons with disabilities or persons with mobility limitations) to plan their evacuation in the event of an emergency. It would be beneficial to encourage strengthening social ties in communities and to encourage intergenerational exchanges for greater citizen coordination.

In addition, establish support and funding programs to assist citizens in making changes to their homes (e.g., renovations, improvements, etc.) so they are better prepared for extreme weather events, and work with insurers to better anticipate events and support disadvantaged populations.

1.5 Support populations during extreme weather events
Create outreach groups to inform and direct people to 24-hour shelters, where they can be safe, eat and drink, and receive psychological support if needed. During heat waves, provide support, supervision and facilitation, as well as longer access to public washrooms, water access (e.g., pools, splash pads) and showers in municipal parks. Consider the role of public places such as schools and libraries in providing cool spaces for the public. These places could accommodate people who need to take a shower, charge their phones, to cool down, etc. Ensure that these sites are equipped with back up generators and/or renewable energy. These sites could also act as distribution centres, for example, they could house a bank of portable air conditioners available to citizens in extreme heat events.

1.6 Support populations following extreme weather events
Establish mentoring and psychological support programs for affected individuals and communities.

2. Urban planning and infrastructure

2.1 Enhance green space to make life more pleasant
Create more spaces where citizens can socialize in cool, green spaces such as parks. Facilitate adaptation to climate change in cities by focusing on green infrastructure and phytotechnology, and by adopting measures to combat heat islands (e.g., in schoolyards). It would be beneficial to establish a greening policy and require flat white and green roofs on buildings in addition to promoting the greening of the facades with climbing vines.

2.2 Enhance green space to save energy

In general, for green projects to become more cost-effective, it is necessary to consider greening from an energy saving perspective (e.g., greening to replace air conditioning) and require that companies and public institutions factor in all their project costs, including negative impacts on the environment and health. It would also be beneficial to use ecofiscal tools as a lever to develop communities in a sustainable and health-friendly way. Another way to enhance green space is to remove as much concrete from urban spaces as possible to allow rainwater infiltration and have more permeable areas in cities.

2.3 Limit urban sprawl

In order to conserve as much natural space as possible, we need to improve urban planning, limit urban sprawl, and densify our communities. This can be achieved by promoting public transit and active transportation, limiting parking spaces, and promoting pedestrian-friendly cities. Incentives to use public transit should include making it more affordable and providing economic benefits to businesses that provide transit passes to their employees.

2.4 Adapt cities to future lake and river levels

Upgrade wastewater management infrastructure to handle higher water flows. It is also recommended to keep the data and mapping of flood zones and wetlands up to date, make them accessible to everyone, and ensure that no new construction occurs in flood zones. It is also necessary to initiate the preventive removal of infrastructure in flood-prone areas. Lastly, it may be beneficial to implement federal regulations to reduce the amount of stormwater captured in water treatment plants.

2.5 Review and update the building code

Update the building code to reflect the various types of potential crises due to climate change, thereby making buildings more resilient.

2.6 Conduct an inventory of vulnerable infrastructure

Using this inventory, develop alternatives to reduce the risk to vulnerable infrastructure. Ensure that vulnerabilities are well communicated and focus on nature-based solutions.

2.7 Train experts in vulnerable infrastructure

Develop training programs to create a broad portfolio of experts specializing in adapting vulnerable built environments. Currently, very few experts have the knowledge and experience required to work on infrastructure.

2.8 Include all stakeholders in discussions on urban planning

It would be beneficial to establish partnerships between municipalities and universities to further research on innovative solutions, with a particular focus on urban and local agriculture. It would be worthwhile to promote participatory urban planning and use collective intelligence to have a realistic response of the needs of populations. It is also necessary to consider the inequities that climate change adaptation can create and to ensure that adaptation measures are designed to be inclusive and equitable (e.g., having an infrastructure network that is well-suited for seniors and vulnerable citizens). Lastly, annual summits and a pan-Canadian round table on urban planning and governance would be beneficial in planning cities for the future.

2.9 Promote best practices in municipalities

Conduct communication campaigns on strategies and innovations carried out by Canadian municipalities and provide them with more tools to manage and maintain their natural infrastructure.

2.10 Review criteria for capitalizing green infrastructure

Change the criteria for capitalizing green infrastructure in municipalities to make tree and perennial planting fully capitalizable, regardless of the plant portion of a project.

3. Conservation, protection and restoration of natural environments and ecological corridors

3.1 Conduct a species inventory

Conduct a species inventory (e.g., of plants and animals) and set up an open database to identify species and their evolution in response to global warming in Canada.

3.2 Strengthen the protection of natural environments

Increase the compensatory regulations when a natural habitat is disturbed and establish new strategies to ensure compliance with various pieces of legislation on the protection of natural environments. For landowners, facilitate processes to revegetate and renaturalize shorelines on their properties.

4. Economy, consumption and resource management

4.1 Promote a circular economy, and local consumption and production

To limit dependence on international supply chains, which could be affected by adverse climate events, encourage people to eat local and seasonal food. Encourage and incentivize businesses to use local resources and circular economy approaches through special grants and programs.

4.2 Foster sustainable and resilient natural resource practices

Implement a forestry regime and fisheries management that takes into account the current and future impacts of climate change. Develop resilient agriculture that is adapted to Canada's future climate and has lower fertilizer and pesticide requirements (e.g., encourage multi-seed use and permaculture).

4.3 Install water meters

To limit the impacts of more frequent droughts, hold users accountable and use water meters to manage consumption.

4.4 Develop more green infrastructure grants

Make green infrastructure eligible for grants and consider upgrading projects through grants to make infrastructure greener (e.g., green renovation grant).

5. Resilient communities and outreach

5.1 Foster the emergence of resilient communities

Encourage citizen participation in the implementation of adaptation actions and promote local knowledge-sharing and self-help initiatives (e.g., platform for reusing and sharing of goods, exchanging of services, and circular economy initiatives). Support communities to have access to adaptation tools, especially for air conditioning, and the development of green spaces. Facilitate resources sharing, for example, by using apps that make it possible to borrow construction tools and cars at low costs.

5.2 Take low-income families into account

Tailor climate change adaptation incentives and funding programs to low-income individuals and families so that economic inequality is not a barrier to adaptation.

5.3 Raise public awareness on climate change issues

Raise awareness of the various climate change issues through social media and networks and share information to increase knowledge and promote citizen action (e.g., to reduce food waste). It would also be beneficial to raise citizens' awareness of climate hazards through informative displays that indicate degrees of risk, for example, by creating a visual representation of rising water levels on a building with colours that show the risk of potential flooding. It is also essential to train decision-makers so that they can make informed decisions about climate action.

5.4 Raise awareness of climate change issues among children

Involve young children in the implementation of climate change resilience actions and incorporate information on climate change issues into the academic curriculum. Focus on educating people to take concrete actions (e.g., individual and collective action).

5.5 Facilitate access to climate information

Promote the creation and operation of a national window to access climate science information. This window could also provide access to support programs to prepare for and adapt to climate change.

6. Indigenous communities

6.1 Listen to Indigenous communities

Take into account the land claims of Indigenous communities for environmental conservation and adapt ideas about their relationship to nature.

6.2 Provide special programs for Indigenous communities

Develop support and assistance programs for Indigenous communities with vulnerable infrastructure such as those built on permafrost.

Réseau Environnement's recommendations

The following are Réseau Environnement's thoughtful recommendations for optimizing the next steps in the development and implementation of the Strategy.

1. *Iterative process*

We support the importance of developing a draft NAS and presenting it to stakeholders for feedback prior to the release of the final Strategy. The suggested changes will have the advantage of being concrete and specific, allowing for further refinement of certain aspects of the Strategy.

2. *Monitoring of the Strategy*

We suggest establishing goals that are measurable and can be evaluated throughout the implementation of the Strategy to assess the progress of actions and their impacts.
In addition, to enable stakeholders to monitor the results of actions, we recommend that data be collected and disclosed in a transparent manner. For example, it would be beneficial if the various data could be accessed by the public.
We also recommend an annual review of the NAS, based on the results and impacts of actions taken in the previous year. This review will make it possible to highlight the Strategy's strengths, but more importantly, the areas that need to be improved, so that the Strategy can be enhanced if necessary.

3. *Co-operation*

We recommend continuing to work with stakeholders and involve them on a regular basis, particularly during annual reviews of the Strategy. We would like to reiterate the importance of ensuring that the public adheres to the measures and, above all, that the measures actually meet their needs.

4. *Outreach, education and training*

We would like to emphasize the importance of raising the general public's awareness of the impacts of climate change so they can adapt to climate hazards and be able to take the necessary action in case of an extreme event. Furthermore, if the public is aware and truly informed about the risks of climate change, they will be more inclined to modify their behaviours to minimize the impacts on the environment.

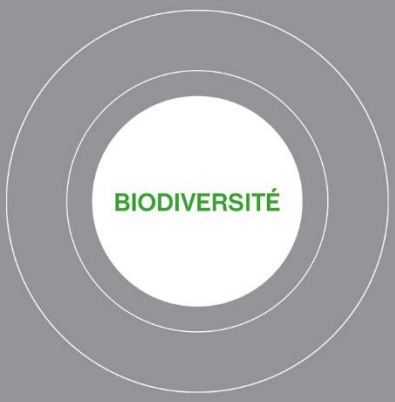
However, these measures will only have a greater impact if the decision-makers and people who have the power to make changes are also made aware and educated. We suggest that training and awareness sessions be offered to decision-makers so that they have the tools and knowledge to take the appropriate actions.

Conclusion

To conclude, Réseau Environnement is proud that its expertise and network have been used to enhance the content of Canada's National Adaptation Strategy on Climate Change. Through the three workshops organized, Réseau Environnement was able to bring together more than 200 experts and gather more than 100 recommendations on the themes of "Thriving Natural Environment," "Strong and Resilient Economy," "Health and Well-Being" and "Resilient Natural and Built Infrastructure."

Réseau Environnement thanks all the participants who joined us to share their ideas, recommendations and feedback on the Strategy. We would also like to thank the Tact Conseil team for their expertise and support throughout the process. Lastly, we would like to extend a special thank you to the Environment and Climate Change Canada team for their co-operation and trust throughout the consultation process.

Réseau Environnement remains available to continue the work under way, deepen reflections on the themes and contribute to the development of Canada's first National Adaptation Strategy.



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