



northern health
the northern way of caring

2025-2030

Climate Change and Sustainability Roadmap



Commitment statement to Truth and Reconciliation

Northern Health acknowledges with gratitude that our work takes place on the territories of the Tlingit, Tahltan, Nisga'a, Gitksan, Tsimshian, Haisla, Haida, Wet'suwet'en, Carrier (Dakelh), Tse'khene, Dane-zaa, Nihew (Cree), Saulteau, and Dene Peoples.

We also recognize the 11 Métis Chartered Communities across Northern BC, and the Inuit, urban, and away-from-home Indigenous peoples on these lands.

This region holds deep cultural, spiritual, and ecological significance for Indigenous peoples who have stewarded the lands and waters for millennia, along with an understanding of the deep knowledge of the interconnected relationships between people, place, and all living beings.

Northern Health is thankful for the continued opportunity to work in partnership to uphold Indigenous rights to health and to optimize the health and well-being of the Indigenous peoples and communities we serve. As we work toward advancing climate resilience and health, we are reminded that the health of our communities is deeply linked to the health of these territories and ecosystems. Together, may we walk this path with humility and care, building a future that reflects our shared commitment to justice, sustainability, and well-being for all who call these lands home.

Indigenous is a general term inclusive of First Nations, Métis, and Inuit. We acknowledge that inclusive terms have the potential to diminish diversity and the unique realities of different peoples. The use of Indigenous in this case is intended as an inclusive commitment to improving health outcomes for each group.

Executive summary

Roadmap overview

The **Climate Change and Sustainability Roadmap** is a central guiding document for sustainability and climate action for Northern Health for years to come.

It serves several purposes for Northern Health (NH), primarily by:

- » Building a collective path forward for **climate change** and **sustainability** through responding to the Strategic Plan's priorities to:
 - Partner with staff, medical staff, communities, organizations, and researchers to build a climate-resilient health system; and
 - Create more opportunities for Northern Indigenous peoples to shape, and benefit from health promotion and prevention programming through partnership, sharing of data and incorporating Indigenous ways of knowing;
- » Broadening NH's climate change and sustainability work beyond Facilities Maintenance and Environmental Sustainability, Population and Public Health, and Health Emergency Management BC (HEMBC); and
- » Connecting and celebrating the good work happening across and beyond the organization to date. This Roadmap promotes existing initiatives, brings groups together to strengthen NH's collective action, and celebrates the resiliency of Northern communities

The Roadmap is a collaboratively created document outlining the climate and sustainability aspirations of NH, and detailed implementation steps to begin building momentum towards these aspirations. The work is just getting started, as many of the steps ahead intentionally focus on partnership and collaboration on furthering the impacts of climate change and sustainability action across NH and the various communities it serves.

Looking to the future

The following is a description of the desired future state of climate change and sustainability action at NH.

NH envisions a climate-resilient future where health services are delivered with care, in balance with the land, and in partnership with the people we serve. We lead by example—minimizing environmental harm, reducing greenhouse gas emissions, and adapting our systems to meet the challenges of a changing climate. In reciprocal relationship with Indigenous peoples, local communities, and partner organizations, we work to advance health equity, strengthen community resilience, and ensure that our health system supports both human and planetary well-being—now and for generations to come.

Guiding principles

Guiding Principles are the underlying ethical guides for decision-making in this report. Considerations to support these principles are interwoven throughout actions, goals, and statement for the future.

NH has developed a series of Guiding Principles that guide and support the Climate Change and Sustainability Roadmap priorities and actions. These principles are informed by both organizational and provincial priorities and principles.

- » **Advancing Truth, Rights, and Reconciliation**
- » **Embedding equity**
- » **Building meaningful partnerships and collaborations**
- » **Supporting community-led initiatives**
- » **Leading through action**

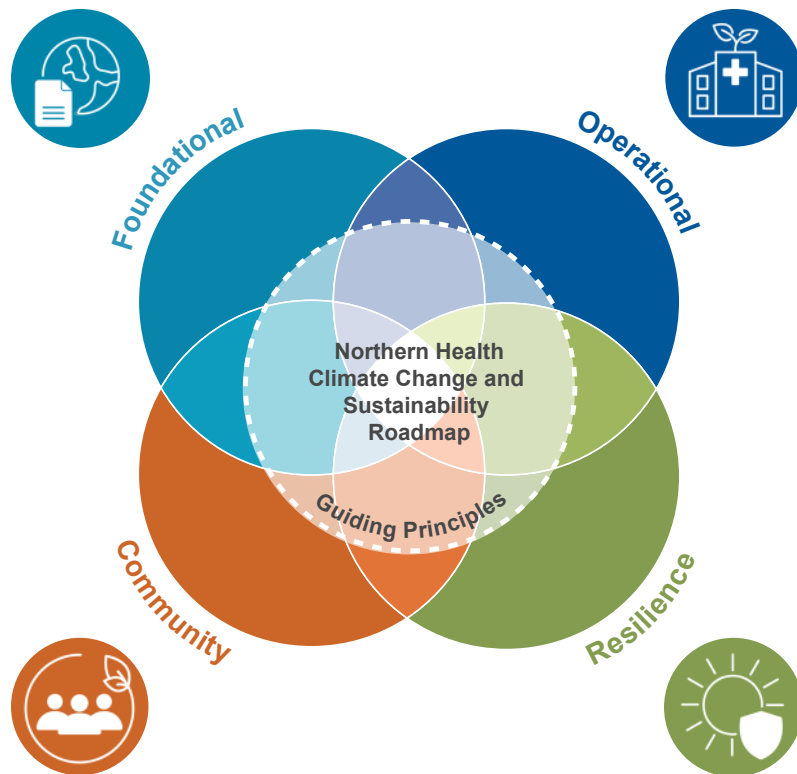
Goal areas

Goal areas and their underlying goals capture NH's climate change and sustainability ambitions through four primary directions for the future.

The following four goal areas, when considered in conjunction with the Guiding Principles, maintain the ideal path forward for the Roadmap.

These are:

- » **Strengthening foundational governance for climate action**
- » **Reducing NH's operational footprint and emissions**
- » **Enhancing climate resilience and preparedness; and**
- » **Empowering community-led climate solutions.**



Each goal area contains both a goal and a series of indicators. Indicators measure progress towards achieving the specific goal areas. Indicators may evolve over time with emergent data and research. Indicators are most appropriate when they are understandable, measurable and meaningful to an organization.

Together, actions sorted under these goals provide a comprehensive framework for transformative change, ensuring that NH not only adapts to a changing climate but also leads in creating a healthier, more sustainable future for the communities NH serves.

Above: A diagram showing the goal areas and guiding principles as fundamental components of the Climate Change and Sustainability Roadmap for NH.

Actions

Actions are detailed approaches to build momentum over the next five years.

Action title	Type	Timeframe	Page
Strengthening foundational governance for climate action (p. 27)			
A1. Establish a climate and sustainability governance and leadership structure	New work	Q2 - Q4 2025; Q1 2026 - Q4 2030 <i>maintenance</i>	28
A2. Determine organizational resources for climate and sustainability goals	Elevating existing work	Q2 2025 - Q4 2026; Q1 2027 - Q4 2030 <i>maintenance</i>	29
A3. Identify climate and sustainability metrics	Elevating existing work	Q1 - Q4 2026	30
A4. Enhance organizational climate and sustainability communication and engagement	New work	Q2 2025 - Q4 2030	31
A5. Integrate sustainability and climate change education and outreach for staff	New work	Q2 2025 - Q2 2027; Q3 2027 - Q4 2030 <i>maintenance</i>	33
Reducing NH's operational footprint and emissions (p. 34)			
A6. Accelerate the integration of environmental sustainability into clinical operations	Elevating existing work	Q1 2026 - Q4 2030	35
A7. Embed sustainable, local and culturally-relevant food in organizational food procurement processes	Elevating existing work	Q1 2027 - Q4 2030	36
A8. Implement procurement strategies to prioritize sustainable, Northern, and Indigenous vendors	Elevating existing work	Q1 2026 - Q4 2029	37
A9. Develop and implement an organizational waste management strategy	New work	Q1 2028 - Q4 2030	38

Note: The timeframe 'Q' refers to calendar year quarters.

Continuing existing work:

Continuing work already underway at NH

Elevating existing work:

Integrating new approaches to work that is already underway

New work:

Novel action to begin during Roadmap process

Action title	Type	Timeframe	Page
Reducing NH's operational footprint and emissions, continued			
A10. Implement water-use reduction and water management strategies	Continuing existing work	Q1 2025 - Q4 2030	39
A11. Reduce NH travel-related emissions	Elevating existing work	Q1 2026 - Q4 2030	40
Enhancing climate resilience and preparedness (p. 41)			
A12. Support the development and integration of surveillance and early warning systems	Elevating existing work	Q1 2026 - Q2 2027	42
A13. Increase application of Climate Risk Assessments by 20%	Elevating existing work	Q1 2025 - Q4 2030	43
A14. Advance internal seasonal readiness planning for NH sites, programs, and services	Continuing existing work	Q1 2025 - Q4 2030	44
A15. Complete Climate Change and Health Vulnerability Adaptation Assessments (CCHVAA)	Continuing existing work	Q1 - Q4 for 2025, Q1 - Q4 2026-2030 <i>maintenance</i>	45
Empowering community-led climate solutions (p. 46)			
A16. Support Northern communities to mitigate, prepare for, respond to, and recover from climate-related emergencies	Elevating existing work	Q2 2025 - Q4 2030	47
A17. Work with Northern communities to strengthen community-led climate action	Continuing existing work	Q1 2025 - Q4 2030	49
A18. Increase the safety and resiliency of drinking water systems	Continuing existing work	Q1 2025 - Q4 2030	50





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Section 1 Introduction

1.1 Context

Why climate and sustainability action is an NH priority

NH knows how important it is to be ready for the impacts of climate change. This means being able to prepare for, respond to, recover from and adapt to climate-related challenges. NH, and this plan, are guided by provincial plans and laws that require health authorities to take action on climate and **sustainability**.

As a health authority, NH already faces big challenges like staff shortages, an aging population and a toxic drug crisis. It might seem like climate action is a distraction from healthcare, but in fact working together on climate and sustainability can help us tackle these issues.

Climate and sustainability action can reduce environmental impacts, improve health and make healthcare systems stronger and more prepared for the future.

Here's why NH cares, and how.

Note: Bolded text in the body of the document corresponds to a definition under Appendix A.

» **Our health and well-being is already affected by climate change.**

Climate change is one of the greatest health challenges of our time. It threatens the foundations of human health and the systems that support it—through more frequent and severe extreme weather events and wildfires, declining air quality, reduced food security, and the spread of infectious diseases. These changes are contributing to increased rates of respiratory distress from wildfire smoke, heat-related illness and injury, and mental health challenges linked to climate-related emergencies such as evacuations and displacement.

The impacts are not felt equally: children, older adults, people with chronic conditions, those with low-income status, and Indigenous populations may face disproportionate risks, deepening existing health inequities. Climate change also strains **health systems** by increasing demand for care, disrupting infrastructure and supply chains, and placing health workers under hazardous and stressful conditions. Climate and sustainability action can enable NH to better protect health, reduce inequities, and strengthen the **resilience** of communities across the North—ensuring a healthier future for everyone.

» **Our work has a significant carbon footprint.**

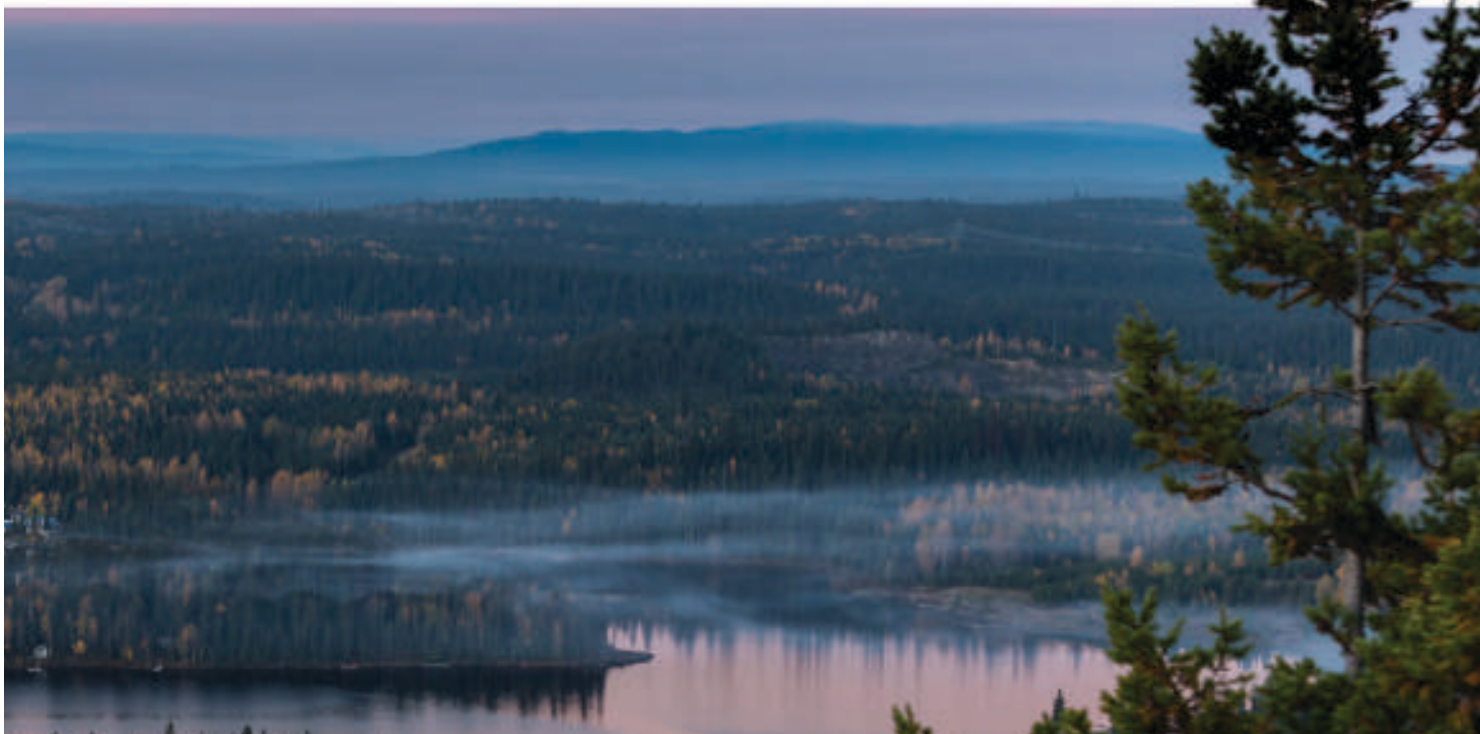
The health sector has a significant environmental impact. It contributes to approximately 5% of global greenhouse gas emissions (GHG), and if it were considered a country, it would be the fifth largest emitter worldwide. Facility reliance on fossil fuels for heating, significant travel distances and waste disposal processes contribute significantly to GHGs. There is significant opportunity to shift NH's practices and systems to be more environmentally sustainable, without compromising health, safety or quality.

Many of the shifts would have the co-benefit of increasing quality, efficiency and resilience particularly during climate-related emergencies. Effective sustainability action can minimize NH's environmental impact, while increasing quality and overall system efficiency.

» **Our commitment to Truth, Rights and Reconciliation is deeply linked to the health of the planet and people.**

While **health systems** have only recently recognized and prioritized the interconnections between the health of the planet and the health of people, Indigenous peoples and communities have understood and protected this relationship for millennia.

Traditional knowledges are intricately connected to the land, and while they cannot be generalized, they can guide community-based, land-informed climate and sustainability action. Climate and sustainability action is an opportunity to work in better partnership with Indigenous peoples and communities, and to better centre Indigenous ways of being and knowing in NH's work.



» **Our direct and indirect costs go up because of climate change and climate events.**

Climate change and climate events strain the health system through increased demand, infrastructure damage, disrupted access, lost productivity and a weakened system. In 2017, the 47 days of wildfire response cost NH approximately \$4.5 million dollars—costs incurred through evacuations, clinics, logistics, human resources and emergency room visits. Even small disruptions have significant impacts. Climate and sustainability action can reduce the risks and costs NH is likely to incur.

» **Our health systems and services are not built for a changing climate or major climate events.**

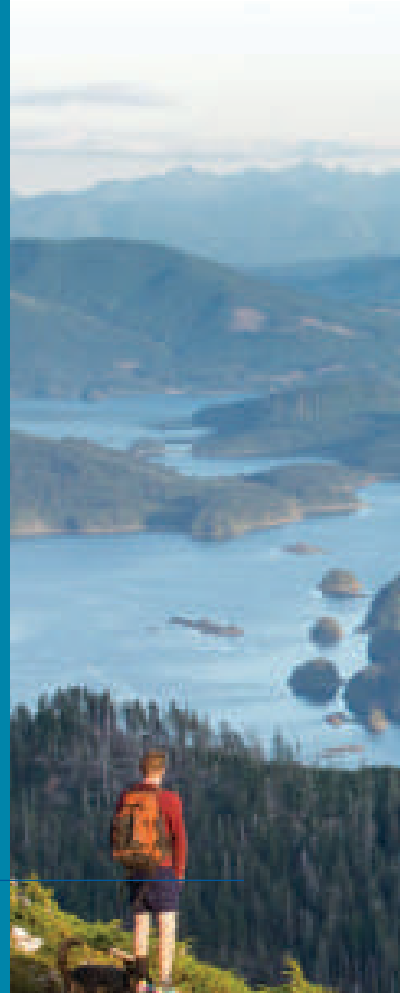
British Columbia is experiencing intensifying weather events, including severe wildfire seasons, seasonal water shortages, heat waves, extreme cold and flooding. These disasters have displaced communities, destroyed vital infrastructure, and challenged daily operations. Small increases in annual temperatures have profound impacts on facilities and their existing equipment—which is either inadequate or not intended to operate at the new required capacity. Climate and **sustainability** action will strengthen business continuity and build resilience during climate emergencies and a changing climate.

» **Our ethical obligation to do no harm is challenged by the harm caused to the environment and human health.**

The Hippocratic Oath, first proposed in the 3rd Century BCE, is the foundational ethical code for medical professionals. It states *primum non nocere*, first do no harm. The health of people and communities depends on the natural environment, and that the healthcare system causes inadvertent harms on the environment. Climate and sustainability action enables healthcare professionals to uphold their commitment to do no harm.

With collaboration, innovation and investment, NH has a unique role to play in reducing greenhouse gas emissions, strengthening the resilience of Northern BC communities, and ensuring that **healthcare facilities** and services are both adaptive and sustainable.

Through proactive planning, partnership, investment, intersectoral collaboration, shared expertise, and a commitment to sustainability, NH and its partners can work together to mitigate the effects of climate change while improving health outcomes and fostering a healthier, more sustainable future for all.



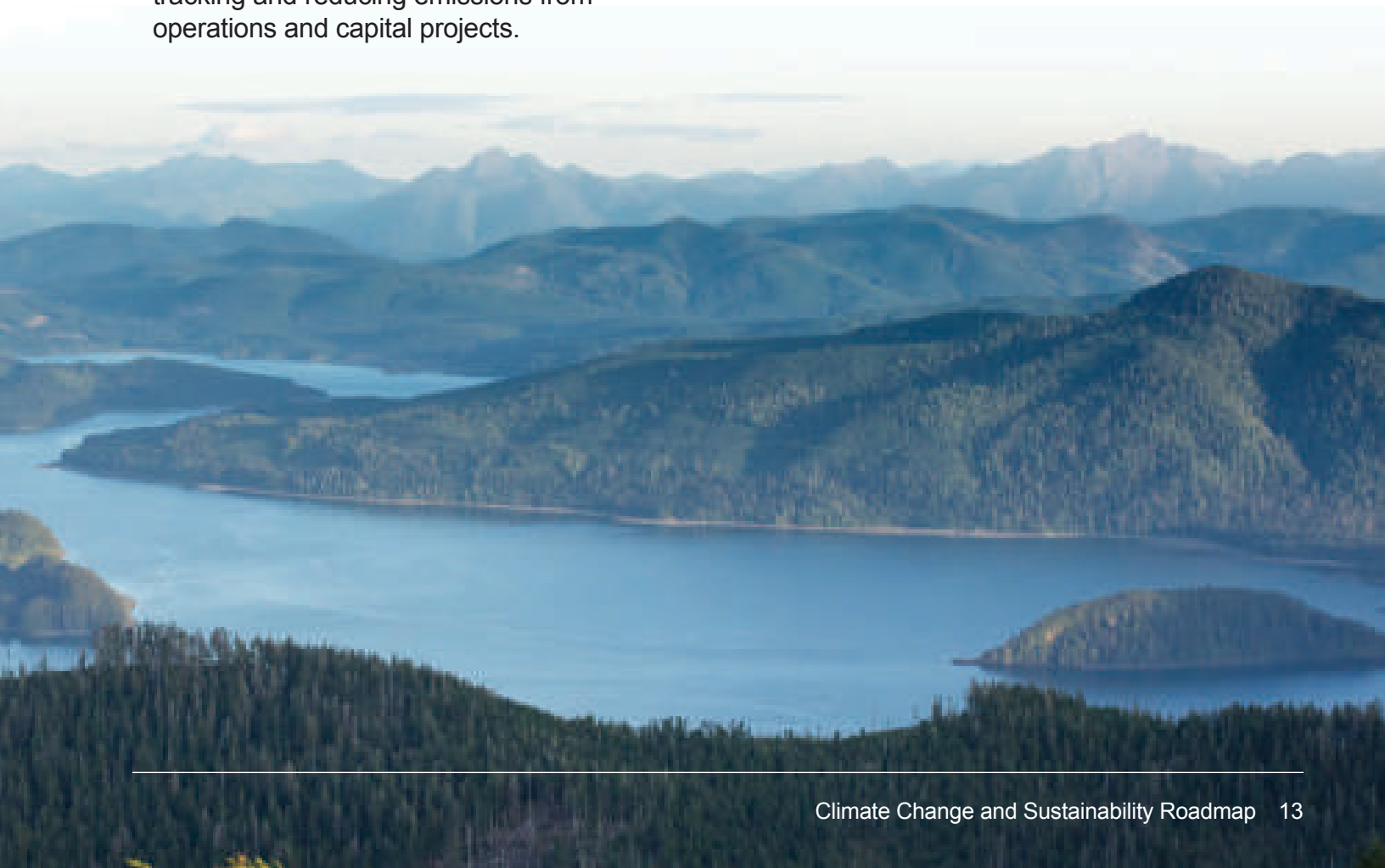
1.2 Climate action at Northern Health

NH has long been engaged in climate action, with numerous initiatives already underway across the organization. This Roadmap is not the beginning; instead, it builds on existing efforts to reduce greenhouse gas emissions, enhance sustainability, and support community resilience in Northern BC. Significant progress is being made at both site-specific and organization-wide levels. Across NH, teams are actively integrating climate considerations into operations, planning, and service delivery:

» The *Facilities Maintenance and Environmental Sustainability* department leads climate accountability reporting, greenhouse gas reduction, and Leadership in Energy and Environmental Design (LEED) implementation—tracking and reducing emissions from operations and capital projects.

» The *Health Emergency Management BC (HEMBC)* team provides emergency management leadership and support to Northern Health. Their efforts contribute towards building a more climate resilient health care system that can effectively mitigate, prepare for, respond to and recover from the impacts of climate-related emergency events.

» The *Population and Public Health* team is advancing climate resilience by assessing climate impacts, building community and organizational knowledge and capacity to prepare and respond, and promoting cross-sectoral collaboration on innovative, evidence-based solutions grounded in cultural safety and health equity.



1.3 Introducing the Roadmap

The Roadmap is intended as a high-level document that will guide NH towards a sustainable future through responsible and effective climate leadership.

The Roadmap will empower staff to proactively respond to the clear and present threat of **climate change** and to promote the pillars of **sustainability** across the organization and in the communities that NH serves.

At its core, the Roadmap seeks to answer the question: How might we inspire NH to integrate climate-resilient and sustainable health practices into its daily operations, community health initiatives, and regional public health efforts?

To achieve this, the development of the Roadmap was structured into three phases:

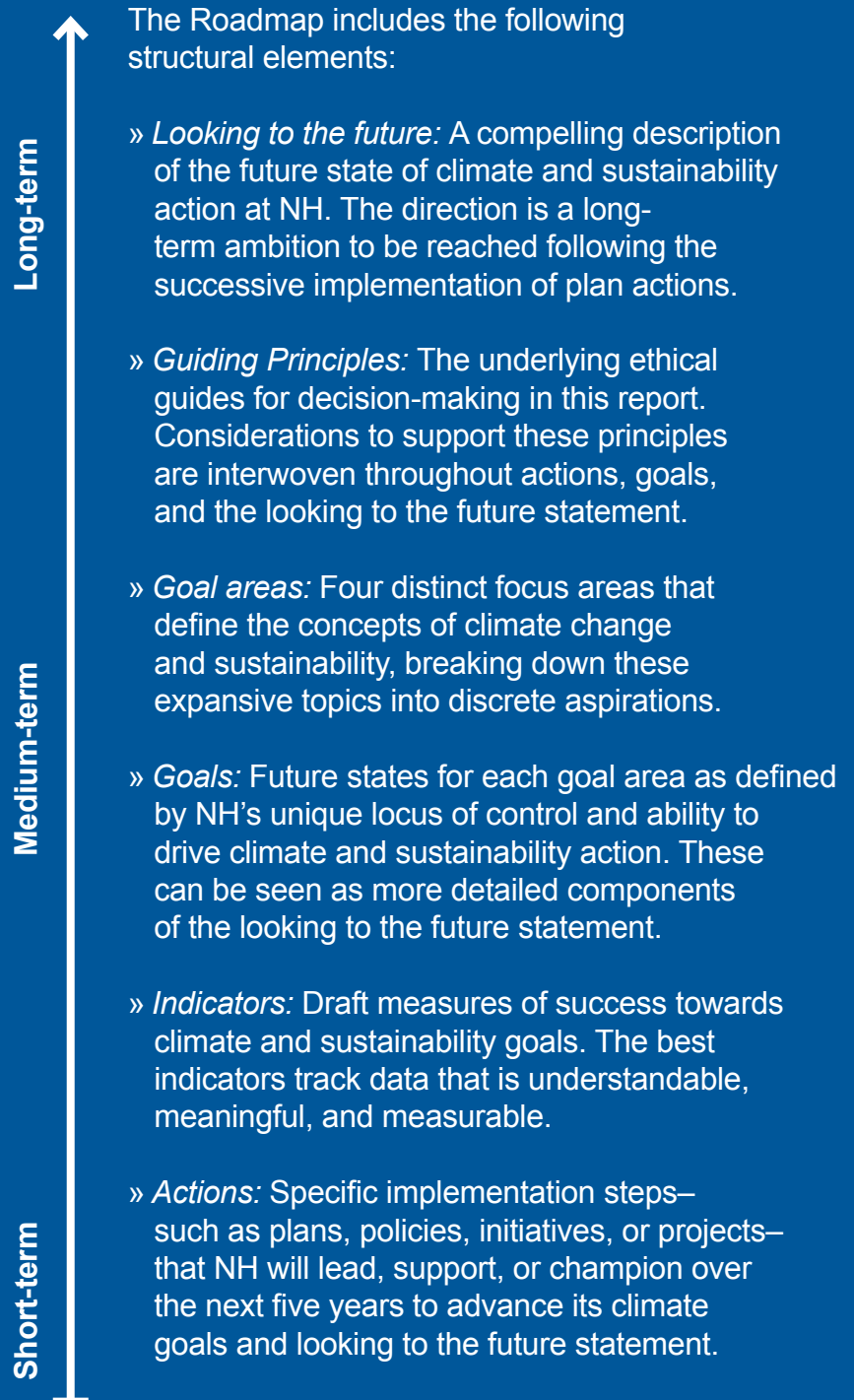
- » *Phase 1: Strategy Review:* Understanding the complexities of NH's current context.
- » *Phase 2: Consultation and Engagement:* Engaging internal and external interested and affected parties to gather insights and identify opportunities.
- » *Phase 3: Planning and Recommendations:* Developing a Roadmap for future action.

The resulting Roadmap is a collaboratively created document outlining the climate and sustainability aspirations of NH, and detailed implementation steps to begin building momentum towards these priorities. The work of partnership is just getting started, with many of the steps ahead intentionally focusing on partnership and collaboration on future action.





Roadmap structure



1.4 Guidance

The strategic direction for the Climate Change and Sustainability Roadmap was informed by several inputs into the planning process.

Each of these inputs were considered and balanced against each other to arrive at the direction for this plan. The five inputs include:

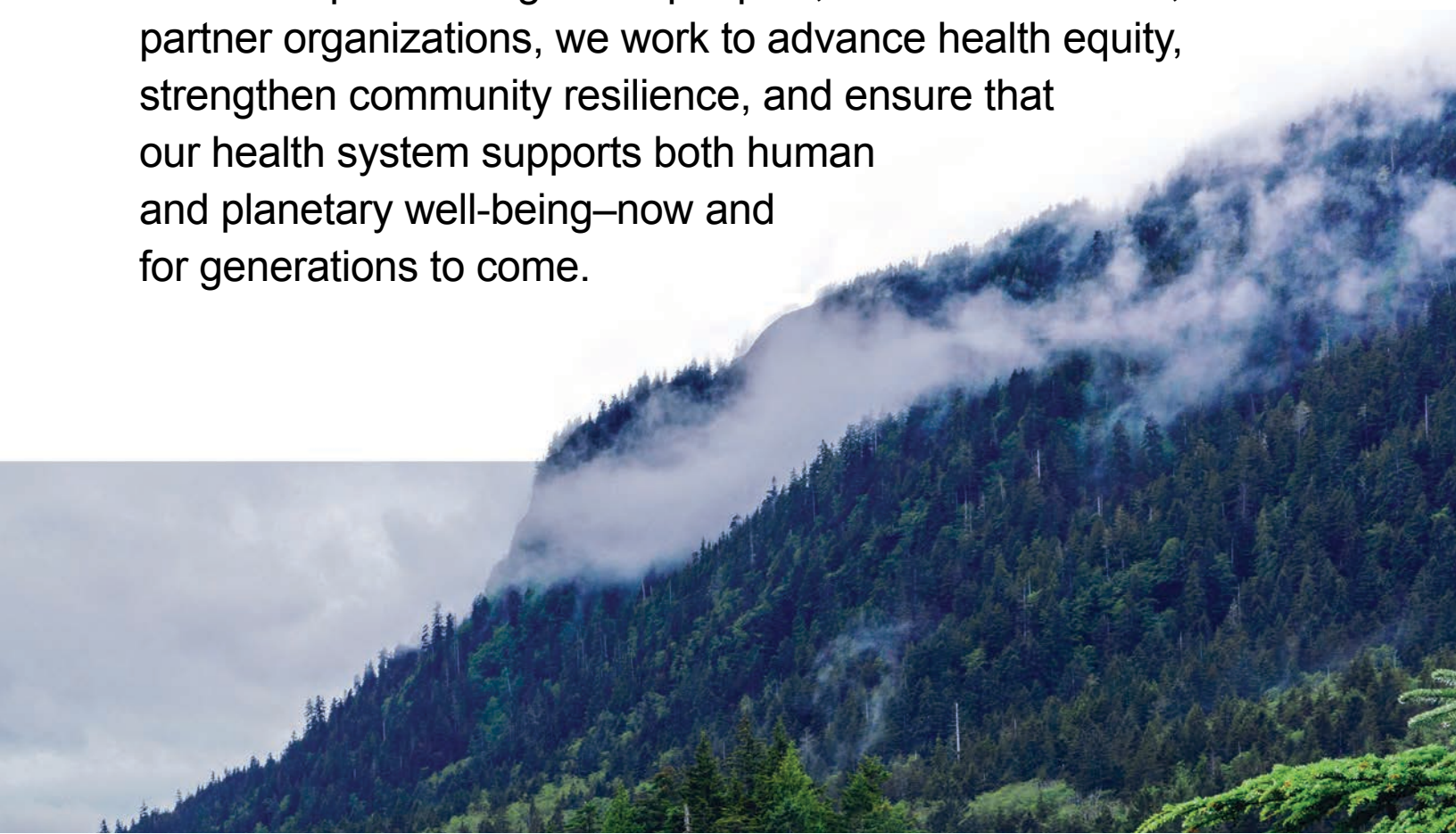
- » *Policy framework:* Key provincial and organizational policies that guide NH's approach to climate change and sustainability were reviewed. This includes the *Climate Change Accountability Act*, BC's *Population and Public Health Framework: Strengthening Public Health Report*, and the *CleanBC Roadmap to 2030*.
- » *Operational realities:* The scope of NH's operations, including facilities, fleet, and clinical services.
- » *Established standards:* Scientific and regulatory standards from federal and provincial governments, academic institutions, research bodies, and non-profit organizations.
- » *Strategic priorities:* Strategic priorities set by NH's Board and Executive Team to guide long-term organizational planning.
- » *Interest-holder feedback:* Input gathered through engagement during the consultation phase, reflecting perspectives on climate change, sustainability, and the future direction of the roadmap.

A full overview of the methods used to create this report can be found in Appendix B, with research and engagement results found in Appendix C.

Section 2 Plan framework

2.1 Looking to the future

NH envisions a climate-resilient future where health services are delivered with care, in balance with the land, and in partnership with the people we serve. We lead by example—minimizing environmental harm, reducing greenhouse gas emissions, and adapting our systems to meet the challenges of a changing climate. In reciprocal relationship with Indigenous peoples, local communities, and partner organizations, we work to advance health equity, strengthen community resilience, and ensure that our health system supports both human and planetary well-being—now and for generations to come.



2.2 Guiding principles

NH has developed a series of Guiding Principles that guide and support the Climate Change and Sustainability Roadmap priorities and actions.

- » **Advancing Truth, Rights, and Reconciliation:** NH is committed to building a shared path to climate resilience with Indigenous Peoples. NH honours the strengths, perspectives and values in both Indigenous ways of knowing and Western knowledge systems, and seek to reflect both in the climate and sustainability goals and actions.
- » **Embedding equity:** Climate change is making it harder for people to stay healthy—especially those who already face challenges. It also places strain on the factors that shape health, like housing, income and access to care. NH's actions will be inclusive and equitable, work across sectors, and focus on the needs of people who are most affected by the impacts of climate change.
- » **Supporting community-led initiatives:** Northern BC communities are leaders in climate action. As partners, NH will actively promote and support community-led projects in emergency preparedness and climate action.
- » **Building meaningful partnerships and collaborations:** Climate and sustainability action is not the responsibility of the health sector alone. Effective actions will foster and build on strong, reciprocal partnerships internally, with community leaders, and with multi-sectoral knowledge holders. This will ensure NH's actions are coordinated and collaborative with partners, who are collectively working to advance shared goals in environmental stewardship and **climate change adaptation**.
- » **Leading through action:** NH will serve as a leader and anchor institution for climate and sustainability efforts in Northern BC. This includes advocating for and sharing expertise on the health dimensions of planetary health, organizational sustainability, community well-being, and clinical operations. Our leadership will be grounded in accountability and transparent communication with decision-makers, partners, interest-holders, and the public.

2.3 Goal areas

The following four goal areas, when considered in conjunction with Guiding Principles, maintain the ideal path forward for the Roadmap. These are:

- » **Strengthening foundational governance for climate action**
- » **Reducing NH's operational footprint and emissions**
- » **Enhancing climate resilience and preparedness**; and
- » **Empowering community-led climate solutions.**

Each goal area contains both a goal, and a series of indicators. Indicators measure progress towards achieving the specific goal areas. Indicators may evolve over time with emergent data and research. Indicators are most appropriate when they are understandable, measurable and meaningful to an organization.

Together, actions sorted under these goals provide a comprehensive framework for transformative change, ensuring that NH not only adapts to a changing climate but also leads in creating a healthier, more sustainable future for the communities NH serves.



Strengthening foundational governance for climate action

Goal

Create effective governance, data management, and communication systems to support measurable progress for climate action across all levels of the organization.

By establishing clear structures, processes, and accountability mechanisms, NH can ensure that sustainability initiatives are integrated across all levels of the organization. This goal focuses on building the organizational capacity to manage and implement climate action, setting the stage for meaningful and lasting change.

By 2030, NH will:

- » Establish a climate and sustainability governance and leadership structure.
- » Determine organizational resources for climate and sustainability goals.
- » Identify climate and sustainability metrics.
- » Enhance organizational climate and sustainability communication and engagement.
- » Integrate sustainability and climate change education and outreach for staff.



Reducing NH's operational footprint and emissions

Goal

Minimize NH's greenhouse gas emissions and environmental impact across facilities and operations through energy efficiency, renewable energy, reducing consumption, and sustainable procurement.

To demonstrate leadership and minimize NH's ecological footprint, NH must implement concrete actions to reduce emissions, waste, and resource consumption. This goal implements practical changes that can be made within the organization's daily functions and facilities, fostering a culture of sustainability.

By 2030, NH will:

- » Accelerate the integration of environmental sustainability into clinical operations.
- » Embed sustainable, local and culturally-relevant food in organizational food procurement processes.
- » Implement procurement strategies to prioritize sustainable and Northern, and Indigenous vendors.
- » Develop and implement an organizational waste management strategy.
- » Implement water-use reduction and water management strategies.
- » Reduce NH travel-related emissions.



Enhancing climate resilience and preparedness

Goal

Proactively improve NH's operations to respond to the intensifying frequency and severity of extreme weather events in BC.

The intensifying frequency and severity of extreme weather events in BC pose significant risks to the health and well-being of NH's communities. Proactive measures are essential to ensure NH's organization is prepared to respond effectively to these challenges. This goal includes actions that will be taken to protect populations and facilities through enhanced preparedness and resilience.

By 2030, NH will:

- » Support the development and integration of surveillance and early warning systems.
- » Increase application of Climate Risk Assessments by 20%.
- » Advance internal seasonal readiness planning for NH sites, programs and services.
- » Complete Climate Change and Health Vulnerability and Adaptation Assessments (CCHVAA).



Empowering community-led climate solutions

Goal

Support local communities, First Nations and organizations as crucial leaders and partners in health equity and climate readiness.

By supporting their efforts and fostering collaboration, NH can strengthen resilience and promote sustainable development across the region. This goal focuses on building meaningful partnerships and empowering community-driven initiatives to address the unique challenges of climate change in Northern BC.

By 2030, NH will:

- » Support Northern communities to mitigate, prepare for, respond to, and recover from climate-related emergencies.
- » Work in partnership with Northern communities to strengthen community-led climate action.
- » Increase the safety and resiliency of drinking water systems.

Potential goal area indicators

Strengthening foundational governance for climate action

Number of staff and types of roles engaged in climate action across NH

Funding allocated annually to climate and sustainability efforts

Number of staff trained in climate resilience and sustainable healthcare practices

Reducing NH's operational footprint and emissions

Fleet greenhouse gas emissions (tCO₂e)

Building greenhouse gas emissions (tCO₂e, kg CO₂e/m²)

Electricity use converted (GJ)

Carbon intensity per patient served (kg CO₂e/patient)

Percent of waste diverted from landfill (%)

Number of conservation initiatives implemented annually

Hazardous waste generated (kg)

Enhancing climate resilience and preparedness

Percent of healthcare facilities with Climate Risk and Vulnerability Assessments (%)

Percent of healthcare facilities equipped for natural disaster response (%)

Percent of facilities with notification systems for extreme heat or cold event notification (%)

Empowering community-led climate solutions

Number of community-led projects supported

Number of cross-departmental collaborations on climate and sustainability related projects

Section 3 Implementation

3.1 Implementation approach

The Climate Change and Sustainability Roadmap is designed not just as a plan but as an active, evolving framework for integrating sustainability into NH's operations. Implementation is embedded within the Roadmap itself, ensuring that progress is achieved through a structured yet adaptable six-year cycle. This approach recognizes that meaningful change happens gradually and requires collaboration across teams, continuous learning, and a willingness to refine strategies over time. By fostering dynamic ways of working and responding to emerging challenges and opportunities, NH can build sustainability into its core practices while maintaining alignment with regional health priorities.

Each cycle consists of four key steps: **Act**, **Report**, **Assess**, and **Adjust**. The first implementation period spans six years (2025–2030), with a comprehensive review at the end of 2030. These steps are carried out annually to maintain momentum and accountability:

» **Act:** NH will advance sustainability through the key actions outlined in the Roadmap and by leveraging emergent opportunities. By building on existing initiatives and learning from implementation, NH will refine its approach and continue making progress toward long-term climate and sustainability goals.

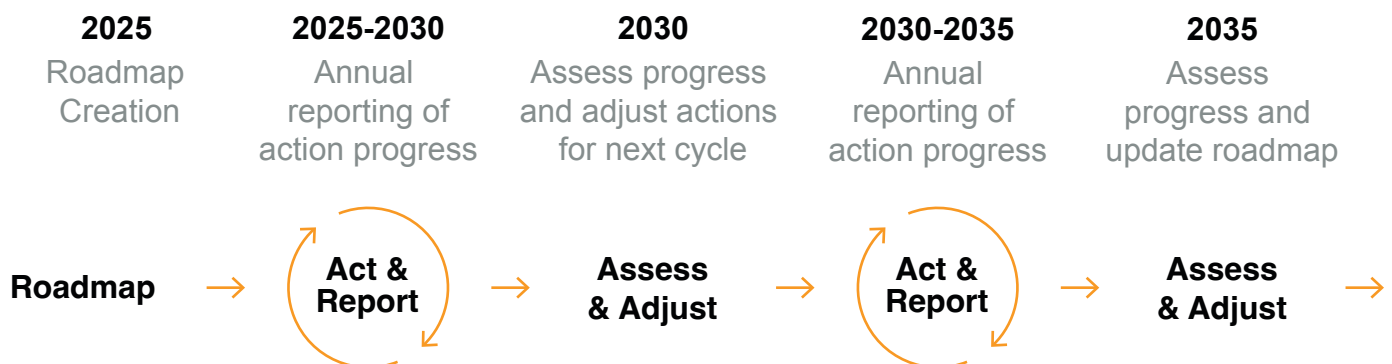
» **Report:** Action owners will prepare and deliver annual progress reports to ensure transparency and accountability. These reports will provide updates to leadership, staff, and interest holders on implementation progress, sustainability performance, and key achievements from the past year.

» **Assess:** Throughout each implementation cycle, time will be allocated to evaluate progress, identify ongoing challenges, and assess available and emerging resources. This step ensures that successes are recognized, obstacles are addressed, and insights from assessment inform the next phase of work.

» **Adjust:** Given the dynamic nature of **health systems** and environmental sustainability, the Roadmap must remain responsive to changing conditions. By incorporating insights from annual reviews and the six-year milestone assessment, NH will refine strategies, integrate new opportunities, and ensure alignment with organizational and community priorities.



By fostering dynamic ways of working and responding to emerging challenges and opportunities, Northern Health can build sustainability into its core practices while maintaining alignment with regional health priorities.



Starting in 2025, the Roadmap action owners and their teams will participate in annual reviews to track progress and identify necessary adjustments. These adjustments may include refining action timelines, adopting new implementation methods, integrating interest holder driven changes, and leveraging new funding or workforce capacity.

Implementation of the Roadmap is an ongoing process—one that evolves through annual cycles of action, reflection, and adjustment. Rather than a rigid plan, this strategy enables NH to adopt sustainability in a way that is both practical and forward-looking.

Through iterative improvements, cross-team collaboration, and responsiveness to new developments, NH will strengthen its capacity to advance climate resilience and sustainability. By embedding implementation within the Roadmap, NH ensures that sustainability efforts remain effective, relevant, and adaptable to the evolving needs of the organization and the communities it serves.

3.2 Action sequencing

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3.3 Action structure

There are 18 actions in the Roadmap and each action includes the following information:

- » *Description:* A detailed explanation of the action, which may include supplementary context information that provides clarity as to why it is included in the Roadmap.

» *Goal alignment:* An illustration of the action’s alignment with one or more of the Roadmap’s goals, including its primary goal.

» *What done looks like:* The state in which the action can be considered complete.
- » *Accountable:* The lead department or group responsible for the completion of the action. The lead department is not always the implementer of the action, but may instead convene or facilitate partnerships in order to fulfill their role in action delivery.

NH will implement the 18 actions outlined in this Roadmap between 2025-30, following the Implementation Approach outlined in section 3.1.

LEGEND



Under the **Goal Alignment** header, a coloured circle indicates a primary goal area alignment, and a coloured ring a supporting goal area alignment. If a goal area is not listed under an action, there is no corresponding relationship.

3.4 Detailed actions



GOAL AREA Strengthening foundational governance for climate action

Effective governance, data management, and communication systems underlie all successful initiatives. By establishing clear structures, processes, and accountability mechanisms, NH can ensure that sustainability initiatives are integrated across all levels of the organization.

This goal focuses on building the organizational capacity to manage and implement climate action, setting the stage for meaningful and lasting change.





Goal alignment

-  **Strengthening foundational governance for climate action**
-  Reducing NH's operational footprint and emissions
-  Enhancing climate resilience and preparedness
-  Empowering community-led climate solutions

Action 1

Establish a climate and sustainability governance and leadership structure

Description

A new governance and leadership structure will guide, monitor and report on climate change and sustainability management within the organization. To effectively advance NH's climate and sustainability goals, this work requires strategic oversight, coordinated action and accountability across the organization. NH will adopt a climate and sustainability governance and leadership committee, with supportive staffing as appropriate, to enhance collaboration, support implementation, streamline processes, and strengthen integration and engagement.

The climate and sustainability governance and leadership committee will bring together regional and local programs through structured processes to generate, prioritize, plan, and implement changes that improve personal and community health, clinical care, and support services.

Accountable

» NH Executive

What done looks like

There is an active and adequately resourced cross-organizational structure that sets direction, supports coordination, monitors implementation and reports on progress of climate and sustainability activities across NH.



Goal alignment

-  **Strengthening foundational governance for climate action**
-  Reducing NH's operational footprint and emissions
-  Enhancing climate resilience and preparedness
-  Empowering community-led climate solutions

Action 2

Determine organizational resources for climate and sustainability goals

Description

To meet the goals and actions outlined in this Roadmap, NH will need to determine sufficient resourcing through business plans, advocacy and partnership. Increasing available resources involves action through multiple avenues. NH will develop business plans and options to support the goals, which will consider leveraging existing resources and additional commitments through internal and external channels.

NH will also foster intersectoral partnerships, to strengthen collaborative action across Northern BC. With many actors advancing climate action across the North, NH will also strengthen partnerships and collaboration, knowing that coordinated action increases the impact of finite resources.

Accountable

» Climate and sustainability governance and leadership committee

What done looks like

NH has developed business plans and partnerships that strengthen the overall human and financial resourcing of climate and sustainability action.



Goal alignment

-  **Strengthening foundational governance for climate action**
-  Reducing NH's operational footprint and emissions
-  Enhancing climate resilience and preparedness
-  Empowering community-led climate solutions

Action 3

Identify climate and sustainability metrics

Description

Indicators and metrics related to climate and sustainability action will allow NH to measure, understand and improve the impact of efforts over time. NH will compile a set of measurable indicators that align with existing priority reporting, which enable assessment and reporting of progress over time. This approach will enhance awareness, accountability, and inform future performance targets.

A comprehensive indicator program will track and measure progress across all goal areas, providing regular updates for internal monitoring and public accountability. The program will also assess the risks and costs of implementation versus inaction. Accountability for this indicator program will be reinforced through the governance structure established under Action 1.

Accountable

» Climate and sustainability governance and leadership committee

What done looks like

There is a clear metric framework for understanding the impact of NH climate and sustainability work, based on routine analytic reports. Findings are shared internally and externally, drive quality improvement, and inform future planning, targets and actions.



Photo credit: Patricia Williamson

Goal alignment

-  **Strengthening foundational governance for climate action**
-  Reducing NH's operational footprint and emissions
-  Enhancing climate resilience and preparedness
-  Empowering community-led climate solutions

Action 4

Enhance organizational climate and sustainability communication and engagement

Description

Effective communication and engagement plays a critical role in ensuring NH's climate and sustainability action is impactful, coordinated, and scoped to the Health Authority's areas of expertise. Developing and publishing this Roadmap is an important first step in clearly articulating organizational commitments, ambitions and activities. NH will also enhance its climate-oriented online presence, with coordinated information and storytelling about past, present and future initiatives. In addition to sharing information, NH will articulate clear communication pathways to support connection, participation, and learning across the organization and across the North.

Equally as important as sharing information out is an active commitment to engagement and learning. NH is one of many actors contributing towards climate and sustainability action across Northern BC, and as such NH is committed to engaging with, and learning from, internal and external partners throughout the implementation period to ensure our actions are aligned and coordinated with current and future work. Through strong collaboration and partnership, NH can amplify climate action across the North, and ensure the organization's collective resources and skills are used effectively and to their highest impact.

Accountable

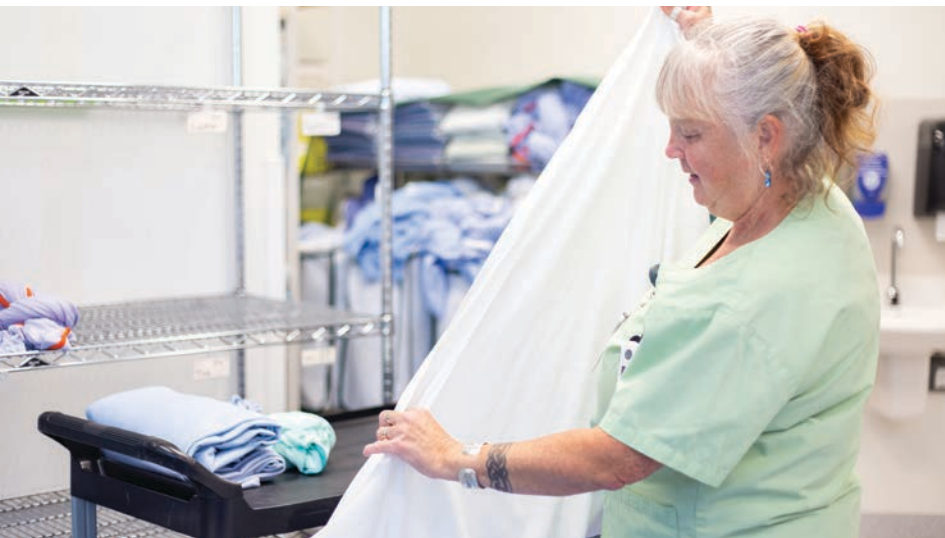
- » Climate and sustainability governance and leadership committee

What done looks like

NH consistently and dynamically communicates its climate and sustainability actions to internal and external audiences, in ways that are tailored to key audiences. Interested and affected parties feel informed about organizational efforts, and have the opportunity to shape and participate in the actions that impact or matter to them. The actions in this Roadmap are progressed in partnership with internal and external actors, and NH is making meaningful contributions to the Northern BC climate and sustainability landscape.



Photo credit: Shelley Fisher



Goal alignment

- **Strengthening foundational governance for climate action**
- Reducing NH's operational footprint and emissions
- Enhancing climate resilience and preparedness
- Empowering community-led climate solutions

Action 5

Integrate sustainability and climate change education and outreach for staff

Description

Sustainability action can be accelerated by building the capabilities and capacity of current and prospective staff to engage in climate action. Organizational staff are uniquely positioned with their knowledge and passion to lead innovative change within their roles, and with the individuals and communities they serve. Investing in staff will also support recruitment and retention by demonstrating NH's commitment to social and environmental impact, strengthening staff pride and connection.

To empower staff, NH will build a shared understanding of the relationship between climate change, sustainability, health system services, and public health. The organization will clearly articulate its commitment, goals, roles, and responsibilities while creating pathways for staff to share ideas, participate in initiatives, and lead projects across their careers. NH will enhance staff capacity to engage in climate action by fostering knowledge, skills, and leadership opportunities.

Accountable

» Climate and sustainability governance and leadership committee

What done looks like

NH staff understand the relationship between climate action, **health systems** and the health of the population, and feel empowered to take meaningful action within their roles. There are established training programs and pathways for NH staff throughout their career, with supportive structures in place to support continuing professional development and/or through inclusion in departmental orientation procedures. This approach and support is communicated to prospective employees through recruitment processes and onboarding.



Photo credit: Sarah Sabo



GOAL AREA Reducing NH's operational footprint and emissions

NH facilities and operations play a significant role in NH's climate and sustainability impact. To demonstrate leadership and minimize NH's ecological footprint, concrete actions to reduce emissions, waste, and resource consumption must be implemented. This goal implements practical changes that can be made within the organization's daily functions and facilities, fostering a culture of sustainability.



Goal alignment



Reducing NH's operational footprint and emissions



Strengthening foundational governance for climate action

Action 6

Accelerate the integration of environmental sustainability into clinical operations

Description

NH clinical operations, which include hospital care, primary and community care, long-term care, mental health, public health, and surgical services, have direct and indirect impacts on the organization's overall environmental sustainability. Best practices and organizational targets will be established, and local champions will be empowered through supportive roles and structures.

Accountable

» Energy and Environmental Sustainability

What done looks like

NH has defined key clinical sustainability targets and priority initiatives, and is actively moving towards these targets with both local and regional leadership and support.



Goal alignment

- **Reducing NH's operational footprint and emissions**
- Enhancing climate resilience and preparedness
- Empowering community-led climate solutions

Action 7

Embed sustainable, local and culturally-relevant food into food procurement processes

Description

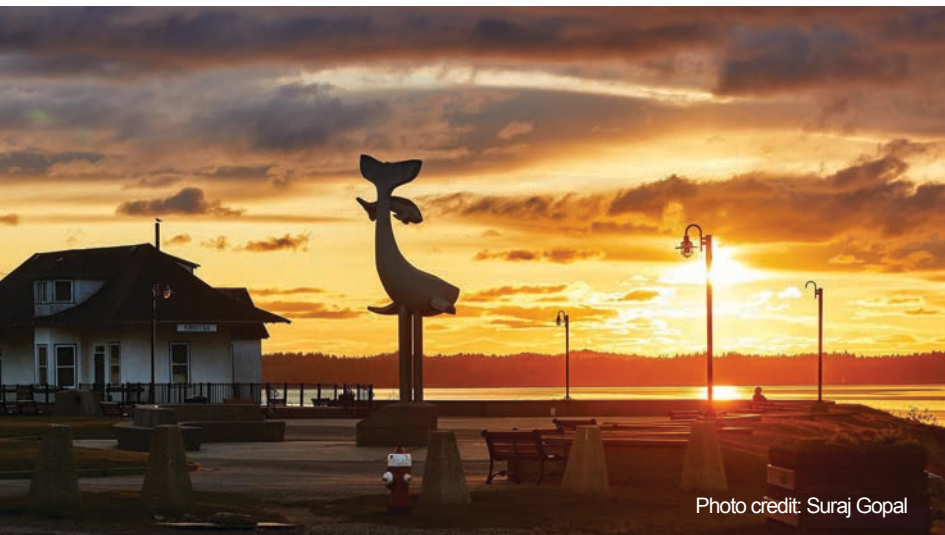
The food served in NH facilities plays a vital role in health, healing, and well-being. NH is committed to embedding sustainability values into food procurement processes in collaboration with internal teams and Provincial Health Services Authority (PHSA). This work will build on existing efforts and require strong partnerships—particularly with First Nations communities—to ensure menu options are appropriate, available, and culturally relevant. NH will also work closely with Indigenous Health, Environmental Health and regional dietitians to uphold safety and nutritional standards. Through this collaboration, NH aims to support food systems that reflect sustainability, cultural respect, food sovereignty, and community priorities.

Accountable

» Energy and Environmental Sustainability

What done looks like

An approach to incorporating safe, sustainable, local, culturally-relevant and reliable food has been collaboratively established, and is available and adaptable to NH facilities. NH core menus have components that include local and traditional foods. There is a growing connection between NH and food networks across the organization.



Goal alignment

- Reducing NH's operational footprint and emissions
- Strengthening foundational governance for climate action
- Enhancing climate resilience and preparedness
- Empowering community-led climate solutions

Action 8

Implement procurement strategies to prioritize sustainable, Northern, and Indigenous vendors

Description

NH is committed to advancing sustainable procurement by working with PHSA to prioritize Northern, Indigenous, and environmentally responsible vendors and products. By choosing goods and services that reduce waste and support local practices, NH can lower its operational footprint and contribute to healthier communities. NH will continue to identify and communicate its procurement priorities and targets to ensure they are reflected in purchasing decisions. In parallel, NH is engaging with Northern BC vendors to help build their capacity and increase their participation in regional procurement opportunities.

Accountable

» Energy and Environmental Sustainability

What done looks like

Climate change and sustainability considerations are embedded into current and future PHSA procurement policies and contracts.

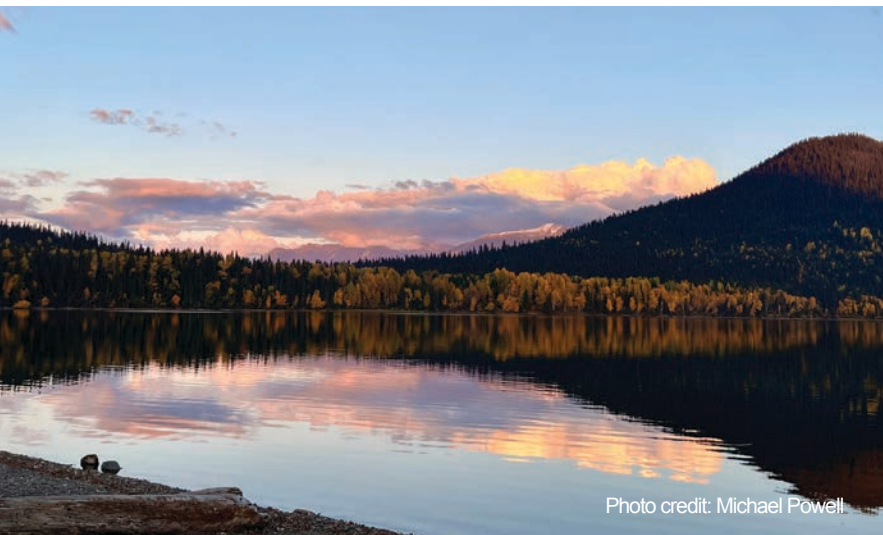


Photo credit: Michael Powell

Goal alignment

- **Reducing NH's operational footprint and emissions**
- Strengthening foundational governance for climate action
- Empowering community-led climate solutions

Action 9

Develop and implement an organizational waste management strategy

Description

Standardized waste management practices will support a shift in attitudes and understanding of proper waste disposal. NH will develop an organizational strategy to improve sustainable waste management practices, including reduction, reuse, recycling, and safe disposal of chemicals, toxins, medication, and bio-hazardous waste. This strategy will assess current practices, identify sustainability opportunities reflective of a Northern landscape, and support the implementation of necessary changes. Staff education and capacity building will be integral to advancing responsible waste management practices.

Accountable

» Energy and Environmental Sustainability

What done looks like

NH's waste management strategy integrates climate and sustainability considerations, efficient waste management practices have been implemented across facilities, and staff are aware of sustainable waste management practices.



Goal alignment



Reducing NH's operational footprint and emissions

Action 10

Implement water-use reduction and water management strategies

Description

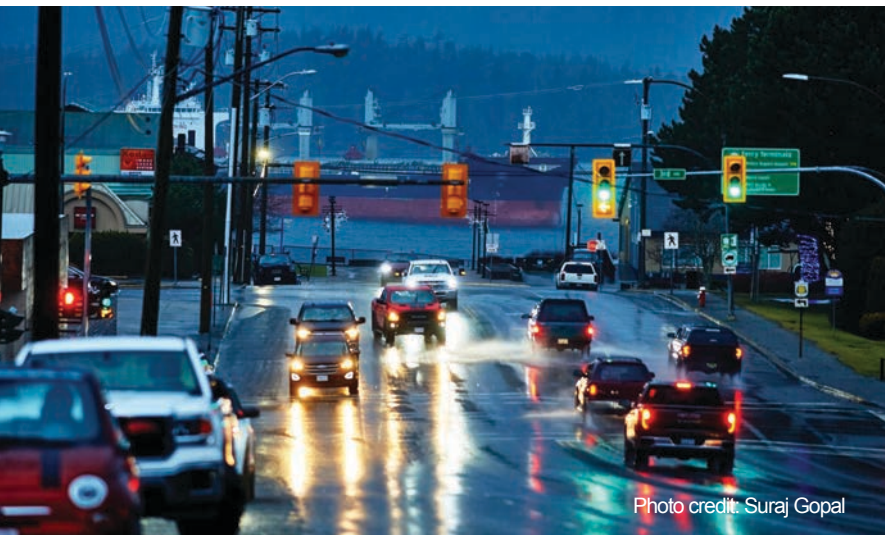
'Increasing awareness and understanding of water-saving practices in facility design and operations will support staff in helping to lower NH's overall environmental footprint. NH will implement design strategies to reduce water consumption while maintaining water safety standards. Water-use data will inform effective monitoring and management. Response protocols will be developed to quickly address water-related emergencies, with a focus on protecting at-risk populations and identifying alternative water sources.

Accountable

» Facilities Maintenance and Environmental Sustainability

What done looks like

Water reduction and quarterly tracking strategies (e.g. water meters) are further implemented to detect anomalous water usage that is not compliant with water conservation and water reuse credits for applicable green building rating systems.



Goal alignment

- Reducing NH's operational footprint and emissions
- Empowering community-led climate solutions

Action 11

Reduce NH travel-related emissions

Description

Reducing NH travel-related emissions will require approaches that reflect Northern BC's landscapes and opportunities. The NH region covers 600,000 square kilometers and offers health services in over two dozen communities. NH will reduce travel-related emissions by leveraging data to identify effective interventions for service delivery suited to Northern BC's geography and infrastructure.

This includes prioritizing electric and hybrid vehicles where suitable, enhanced shared transportation solutions such as NH Connections, leveraging technology to enable virtual work, implementing strategies to reduce travel-related emissions, and increasing staff awareness of sustainable travel choices.

Accountable

» Facilities Maintenance and Environmental Sustainability

What done looks like

NH has developed a strategy and targets for travel-related emission reductions, and NH staff are aware of this strategy, the targets and the role they play in working towards them.

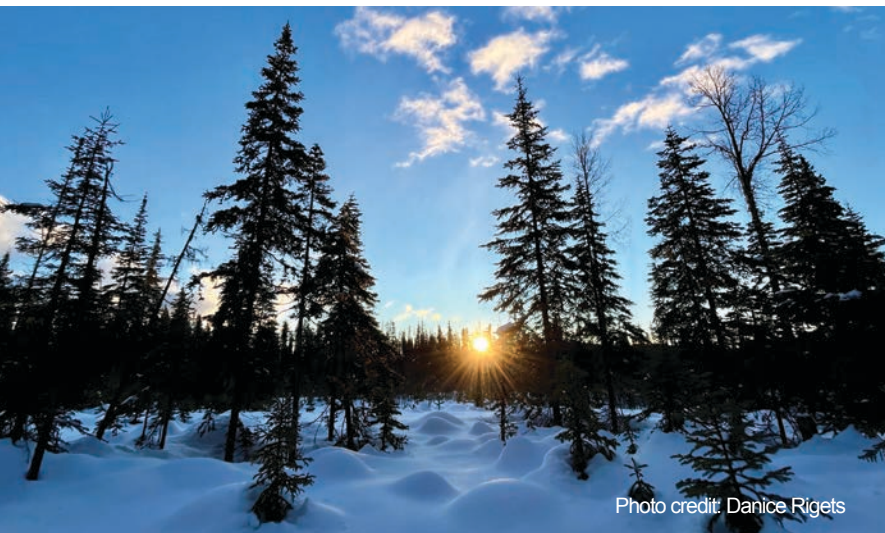


Photo credit: Heather Nelson



GOAL AREA Enhancing climate resilience and preparedness

The intensifying frequency and severity of extreme weather events in BC pose significant risks to the health and well-being of NH's communities. Proactive measures are essential to ensure NH is prepared to respond effectively to these challenges. This goal includes actions that will be taken to protect populations and facilities through enhanced preparedness and resilience.



Goal alignment

- **Enhancing climate resilience and preparedness**
- Strengthening foundational governance for climate action

Action 12

Support the development and integration of surveillance and early warning systems

Description

Mitigating the health impacts of extreme climate-related events requires a collaborative and proactive approach. To address this NH will support the development and integration of monitoring, surveillance, and early warning systems led-by provincial and regional partners, with a particular focus on extreme temperatures and wildfire smoke. This work will align with provincial and regional initiatives and systems, while also advocating for improvements where needed by amplifying community voices and concerns.

Additionally, NH will implement a system to track health-related impacts of extreme temperatures and wildfire smoke. Both the systems themselves and internal communication pathways will be strengthened to ensure timely access to relevant monitoring, forecasting, and surveillance data. Where appropriate and feasible, data will be shared with partners to the extent possible.

Accountable

» Climate and sustainability governance and leadership committee

What done looks like

There are routine surveillance products that enable effective communication about priority climate-related hazards, and their impacts to human health and the health system. These products are used by internal and external audiences, to inform practice and operations.



Photo credit: Ashley Simpson

Goal alignment



Enhancing climate resilience
and preparedness

Action 13

Increase application of Climate Risk Assessments by 20%

Description

The current provincial Environmental Social Governance Framework for Capital outlines the need for Climate Risk Assessments to be completed for new construction and major renovations. NH will align with the provincial Environmental Social Governance Framework for Capital, ensuring that Climate Risk Assessments are conducted where required. An incremental approach will be taken, with 20% of projects committing to a Climate Risk Assessment by year five. Lessons learned from early assessments will inform future projects, building a repository of Climate Risk Assessments to adapt over time.

Accountable

» Capital Planning, Facilities
Operations and Logistics

What done looks like

20% of major capital projects
at the end of year 5 have
climate risk assessment
reports completed.



Photo credit: Patricia Williamson

Goal alignment

- Enhancing climate resilience and preparedness
- Strengthening foundational governance for climate action

Action 14

Advance internal seasonal readiness planning for NH sites, programs and services

Description

Internal collaboration at NH will strengthen the organization's ability to respond to extreme climate events and hazards. 'HEMBC and NH will work in partnership to ensure that facilities, programs, and services are adequately prepared for anticipated and unanticipated climate-related events. Through these efforts, clinical operations will be strengthened to respond effectively to extreme climatic events.

HEMBC will enhance existing site supports by maintaining emergency codes, staff training, Emergency Operations Centre (EOC) and Incident Command Centre training, EOC liaison support, and risk and threat communication. Inspections, site surveys, and FireSmart practices will be explored as organizational capacity allows.

Accountable

» HEMBC

What done looks like

Measures of success for ongoing operation seasonal readiness have been developed and met, and sites have up to date codes for seasonal readiness. Staff at NH sites are aware of code updates and regularly participate in local seasonal readiness discussions.



Goal alignment



Enhancing climate resilience
and preparedness

Action 15

Complete Climate Change and Health Vulnerability and Adaptation Assessments (CCHVAA)

Description

CCHVAAs are processes through which NH seeks to better understand the current and potential health impacts that are related directly and indirectly to a changing climate. These processes prioritize understanding the unique susceptibilities and strengths (or adaptive capacity) that exist across Northern communities and the health system, to strengthen NH's efforts and overall resilience.

NH will complete and publish iterative CCHVAAs for the NH region, in collaboration with key partners. The CCHVAAs will prioritize health equity principles to support a more comprehensive understanding of the populations and communities most at risk to the impacts of climate change across the NH region. The CCHVAAs will also prioritize meaningful partnership with Northern Indigenous communities, guided by a Two-Eyed Seeing approach that supports learning from and respectively bringing together Indigenous worldviews and Traditional Ecological Knowledge with Western approaches to inform a more holistic understanding of climate-related health impacts and opportunities for positive action.

Accountable

» Population and Public Health

What done looks like

Complete and publish iterative CCHVAAs. The findings from the CCHVAAs will be shared through a variety of knowledge translation products, and will inform future planning and action.



GOAL AREA Empowering community-led climate solutions

Local communities, First Nations and organizations are crucial leaders and partners in climate action. By supporting their efforts and fostering collaboration, NH can strengthen resilience and promote sustainable development across the region. This goal focuses on building meaningful partnerships and empowering community-driven initiatives to address the unique challenges of climate change in Northern BC.



Goal alignment

- Empowering community-led climate solutions
- Enhancing climate resilience and preparedness

Action 16

Support Northern communities to prepare for, mitigate, respond to, and recover from climate-related emergencies

Description

Many organizations, including NH, are involved in supporting Northern BC communities to understand and reduce disaster risk, enhance preparedness, ensure effective response, and recover from climate-related emergencies.

NH will continue to build and work in partnership with local governments, Indigenous communities and organizations, emergency management organizations, service providers and other partners, in order to strengthen our collaborative actions as they relate to priority climate-related hazards, including but not limited to extreme temperatures, wildfires, and wildfire smoke.

Using the **Sendai Framework** as a guide, NH will implement an integrated approach to disaster risk reduction and emergency management. NH will also work in partnership to develop culturally safe plans and policies that incorporate and address health equity at each stage of the emergency management cycle, with particular attention to susceptible populations and giving balance and attention to planning and recovery. During response, NH will strengthen roles, responsibilities, communication pathways and operational plans, to ensure timely access to knowledge and resources in emergency situations. Across our efforts, NH will attend to both the acute and long-term health impacts of climate emergencies, with particular emphasis on mental wellness, trauma-informed care, and community resilience.

Accountable

» Population and Public Health

What done looks like

NH and Northern communities effectively work together to prepare for, respond to, recover from and mitigate climate-related emergencies.



Photo credit: Kaitlyn Greer



Photo credit: Patricia Williamson

Goal alignment

-  **Empowering community-led climate solutions**
-  Strengthening foundational governance for climate action

Action 17

Work with Northern communities to strengthen community-led climate action

Description

Communities across Northern BC are advancing climate action through a wide range of channels, activities and plans. NH will strengthen partnerships with Northern BC communities to enhance collective climate impact, and ultimately strengthen the health and wellness of Northern BC communities.

As a partner, NH will focus on articulating and offering meaningful support that bolsters community-led action. This includes providing climate and health in all policy support, relevant data, tools and knowledge, funding for community action, and provincial advocacy for Northern climate solutions. Integral to this collaboration is effective internal coordination, cultural safety, human resources, and capacity.

Accountable

» Population and Public Health

What done looks like

Northern Health and northern BC communities have strong partnerships, and are working together to enhance the health and wellbeing of northern communities through climate action.



Goal alignment

-  **Empowering community-led climate solutions**
-  Enhancing climate resilience and preparedness

Action 18

Increase the safety and resiliency of drinking water systems

Description

The impacts of climate change, including drought and extreme weather, challenges the availability, safety and resiliency of Northern drinking water systems. In partnership with Northern communities and operators, NH will support drinking water operators in planning for drought, extreme weather events, and other climate-related water impacts. Drinking water officers will provide education and consultation to ensure compliance with provincial regulations, working with operators to enhance community water system resilience over the next five years.

Where appropriate, NH will also support efforts related to source water protection by collaborating with partners and communities to promote upstream safeguards for drinking water.

Accountable

» Population and Public Health

What done looks like

NH continues to have a strong relationship with drinking water system owners, operators, and purveyors, who are increasingly aware and prepared for the implications of increasing extreme weather conditions.

Section 4 Closing

The NH Climate Change and Sustainability Roadmap represents a significant step toward embedding climate resilience and environmental stewardship within the health system. By integrating sustainability into operations, governance, and community partnerships, NH is committing to a broader definition of building healthy communities.

This Roadmap is not just a plan—it is a call to action. Achieving these goals will require collaboration across NH's many teams, partnerships with Indigenous communities, and sustained engagement with staff, patients, and external interested and affected parties. The outlined actions serve as a foundation, but adaptability, continuous learning, and leadership will be critical in addressing the evolving challenges of climate change.

Through the principles of reconciliation, equity, collaboration, community, and accountability, NH has an opportunity to lead by example in creating a sustainable, climate-resilient health system. Together, NH and its many partners, can build a healthier, more sustainable future for the people and communities of Northern BC.



Section 5 References

British Columbia

BC Green Care. n.d. *BC Green Care*. <https://bcgreencare.ca/>.

BC Health Authorities. 2020. *Climate Resilience Guidelines for BC Health Facility Planning and Design*. BC Health Authorities.

Government of British Columbia. 2021. *CleanBC Roadmap to 2030*. Victoria, BC: Government of BC.

—. 2021. *Climate Preparedness and Adaptation Strategy Actions for 2022-2025*. Victoria, BC: Government of BC.

—. 2023. *Modernized emergency management legislation*. February 8. <https://www2.gov.bc.ca/gov/content/safety/emergency-management/emergency-management/legislation-and-regulations/modernizing-epa>.

—. 2024. "Preliminary Strategic Climate Risk Assessment - Province of British Columbia." July 25. <https://www2.gov.bc.ca/gov/content/environment/climate-change/adaptation/disaster-and-climate-risk-and-resilience-assessment/risk-assessment>.

—. Ministry of Health. 2021. "Chapter 11: Environmental Sustainability and LEED Gold Certification." In *Health Capital Policy Manual*. Victoria, BC: Government of BC.

—. 2021. "Chapter 12: Carbon Neutral and Climate Resilient Health Care Facilities." In *Health Capital Policy Manual*. Victoria, BC: Government of BC.

British Columbia, continued

Northern Health. "Government direction—NHA mandate letter." February 19.

Vancouver Coastal Health and Fraser Health. 2022. "Climate Change and Health Adaptation Framework."

Canada

Environment and Climate Change Canada. 2022. *Canada's National Adaptation Strategy Building Resilient Communities and a Strong Economy*. Ottawa, ON: Government of Canada.

Health Canada. 2022. *Health of Canadians in a Changing Climate: Advancing our Knowledge for Action*. Ottawa, ON: Government of Canada.

Public Health Agency of Canada. 2022. *Chief Public Health Officer of Canada's Report on the State of Public Health in Canada 2022: Mobilizing Public Health Action on Climate Change in Canada*. Ottawa, ON: Public Health Agency of Canada.

Other documentation

Canadian Medical Association. 2022. *Environmentally Sustainable Health Systems in Canada*. Ottawa, ON: Canadian Medical Association.

CASCADES. 2022. *Organizational Readiness for Sustainability*. Toronto, ON: CASCADES.

Other documentation, continued

Chambers, Jeanne C., Craig R. Allen, and Samuel A. Cushman. 2019. “Operationalizing Ecological Resilience Concepts for Managing Species and Ecosystems at Risk.” *Frontiers in Ecology and Evolution* 7: 241.

Klein, Richard, Saleemul Huq, Fatima Denton, Thomas Downing, Richard Richels, John Robinson, and Ferenc Toth. 2007. “Inter-relationships between adaptation and mitigation.” In *Climate Change 2007: Impacts, Adaptation and Vulnerability. Contribution of Working Group II to the Fourth Assessment Report of the Intergovernmental Panel on Climate Change*, by M Parry, O Canziani, J Palutikof, P van der Linden and C Hanson, 745-777. Cambridge, UK: Cambridge University Press.

National Health Service (NHS) England. 2020. *Delivering a ‘Net Zero’ National Health Service*. London, United Kingdom: NHS England.

Romanello, M. et al. 2022. “The 2022 report of the Lancet Countdown on health and climate change: health at the mercy of fossil fuels.” *The Lancet* 400 (10363): 1619-1654.

United Nations Framework Convention on Climate Change. 2015. “Adoption of the Paris Agreement,” <http://unfccc.int/resource/docs/2015/cop21/eng/l09r01.pdf>.

United Nations World Commission on Environment and Development. 1987. “Our Common Future: Report of the World Commission on Environment and Development.” New York: United Nations, <https://sustainabledevelopment.un.org/content/documents/5987our-common-future.pdf>.

Whitmee, S., Haines, A., Beyrer, C., Boltz, F., Capon, A.G., de Sousa Dias, B.F., et al. 2015. “Safeguarding human health in the Anthropocene epoch: Report of the The Rockefeller Foundation–Lancet Commission on Planetary Health”. *The Lancet Commissions–The Rockefeller Foundation–Lancet Commission on Planetary Health*, 386: 10007, p. 1973-2028.

World Health Organization. 2019. *WHO Framework for Climate - Resilient and Environmentally Sustainable Health Care Facilities—An Assessment Tool*. Geneva, Switzerland: World Health Organization.

World Health Organization. 2020. *WHO Guidance for climate-resilient and environmentally sustainable health care facilities*. Geneva, Switzerland: World Health Organization.

Appendix A Definitions

Climate change adaptation: Adjustment in natural or human systems in anticipation of the adverse effects of climate change, moderating potential harm, or exploiting beneficial opportunities.¹

Climate change mitigation: Human intervention to make the impacts of climate change less severe through the reduction in sources, or enhancement of sinks of greenhouse gasses (GHG) into the atmosphere.²

Climate resilient and environmentally sustainable healthcare facilities: anticipate, respond to, cope with, recover from and adapt to climate-related shocks and stresses, while minimizing negative impacts on the environment and leveraging opportunities to restore and improve it, so as to bring ongoing and sustained health systems to their target population and protect the health and well-being of future generations.³

Climate vulnerability: The predisposition for health to be adversely affected by climate change. NOTE: that climate vulnerability is not a label for communities or populations.⁴

Co-benefits: The positive effects that a policy or measure aimed at one objective might have on other objectives.⁵

Health systems include an ensemble of all public and private organizations, institutions and resources mandated to improve, maintain or restore health as well as incorporate disease prevention, health promotion, and efforts to influence other sectors to address health concerns in their policies.⁶

Healthcare facilities: provide direct health treatment procedures for patients, and include hospitals and healthcare clinics. In the context of emergencies, healthcare facilities are hospitals, primary healthcare centres, isolation camps, burn patient units, feeding centres and others.⁷

Greenhouse Gas Protocol (GHGP) scopes:

» **Scope 1:** Direct emissions from owned or directly controlled sources, on site.

» **Scope 2:** Indirect emissions from the generation of purchased energy, mostly electricity.

» **Scope 3:** All other indirect emissions that occur in producing and transporting goods and services, including the full supply chain.⁸

Resilience: the capacity of social, economic and environmental systems to cope with a hazardous event, trend or disturbance, responding or reorganizing in ways that maintain their essential function, identity and structure while also maintaining the capacity for adaptation, learning and transformation.⁹

Sendai Framework: endorsed following the 2015 Third UN World Conference on Disaster Risk Reduction (WCDRR), the Sendai Framework advocates for:

“The substantial reduction of disaster risk and losses in lives, livelihoods and health and in the economic, physical, social, cultural and environmental assets of persons, businesses, communities and countries.

It recognizes that the State has the primary role to reduce disaster risk but that responsibility should be shared with other stakeholders including local government, the private sector and other stakeholders.”¹⁰

Social determinants of health: The social determinants of health (SDH) are the non-medical factors that influence health outcomes. They are the conditions in which people are born, grow, work, live, and age, and the wider set of forces and systems shaping the conditions of daily life. These forces and systems include economic policies and systems, development agendas, social norms, social policies and political systems.

Sustainability: Meeting the needs of the present without compromising the ability of future generations to meet their own needs.

-
1. Klein, Richard, Saleemul Huq, Fatima Denton, Thomas Downing, Richard Richels, John Robinson, and Ferenc Toth. *Inter-relationships between adaptation and mitigation*.
 2. Ibid.
 3. World Health Organization. *Guidance for climate-resilient and environmentally sustainable healthcare facilities*.
 4. Public Health Agency of Canada. 2022 *CPHO Report - Mobilizing Public Health Action on Climate Change in Canada*.
 5. Ibid.
 6. World Health Organization.
 7. Ibid.
 8. NHS England. *Delivering a 'Net Zero' National Health Service*.
 9. World Health Organization.
 10. United Nations Office for Disaster Risk reduction. *What is the Sendai Framework for Disaster Risk Reduction?*

Appendix B Methods

The development of the Roadmap follows a structured, collaborative, and iterative process designed to align with NH's organizational priorities while engaging a diverse range of interest holders. Given the complexities of climate change, public health operations, and NH's role in influencing communities, the process is designed to balance technical expertise with broad-based engagement.

Phase 1: Project foundations

The first phase of the process built a foundational understanding of the current state of climate change and sustainability action at NH. A current state assessment was developed through policy research, a review of guiding federal and provincial policies, assessment of existing organizational policies, procedures, and initiatives, and development of data walks to analyze key insights.

Additionally, the project team gathered feedback from staff regarding their personal experiences with efforts to promote meaningful change in support of climate action and sustainability. This comprehensive understanding guided the engagement process and served as the foundation for developing the Roadmap's planning framework.

Phase 2: Consultation and engagement

The second phase of Roadmap planning engaged NH staff and key external interest holders to gather insights and feedback on the current and potential future state of sustainability and climate change action for NH. Interest holders shared feedback through workshops, an online questionnaire, and targeted interviews. The engagement process and consultation included the following activities:

Current state workshop

A workshop was hosted to inform key interest holders about the project, fostering collaboration through data sharing and engagement exercises. This session incorporated a data walk and system mapping exercise to develop a comprehensive understanding of the existing climate and sustainability landscape within NH.

Key objectives:

- » Share key data, findings, and insights with impacted individuals and organizations.
- » Establish a clear understanding of the current context.
- » Identify gaps, bottlenecks, and insights through system mapping.
- » Inspire individual and collective action.

Online questionnaire

An online survey was shared to NH staff to understand attitudes, priorities, and trends related to climate change and sustainability within NH's scope of influence.

Key objectives:

- » Capture sentiment and trends for NH staff/internal parties.
- » Identify areas of alignment and gaps in NH's sustainability planning.
- » Inform Roadmap development with quantitative insights.

Future-focused workshops

Four tailored workshops engaged NH interest holders to explore sustainability and climate change response strategies within NH and the NH region. These sessions facilitated knowledge-sharing and relationship-building across diverse groups.

Key objectives:

- » Broaden understanding of climate change and sustainability perspectives.
- » Identify and prioritize sustainability actions for NH.
- » Strengthen collaboration among interest holders.

One-on-one interviews

Structured conversations with subject matter experts within NH's leadership provided deeper insight into key challenges and opportunities within NH's sustainability efforts.

Key objectives:

- » Gather expert insights on sustainability and climate resilience.
- » Identify gaps and refine NH's approach.
- » Identify areas of potential partnerships across the organization.
- » This engagement process provided NH with a strong foundation for shaping its sustainability Roadmap, ensuring alignment with organizational needs and regional priorities.

Phase 3: Planning and recommendations

The third phase of the Roadmap process focused on refining and finalizing the strategic direction by addressing key gaps, integrating established and emerging policy frameworks, and incorporating interest holder insights. This phase culminated in an actionable Roadmap that reflects NH's current sustainability priorities and their future opportunities for climate action.

A key component of this phase was an intensive three-day Strategy Sprint, which gathered key NH leadership members to co-develop the looking to the future statement, goals, guiding principles, and actions for the Roadmap. The Sprint was structured to encourage shared ownership, foster collaboration, and secure leadership buy-in across the organization.

Participants refined the direction emerging from previous phases, ensuring that the Roadmap's goals and actions were responsive to NH's unique context and challenges. Feedback and modifications were incorporated into the draft framework, refining the goals for the future, looking to the future statement, Guiding Principles, and supporting actions.

To ensure broad organizational alignment and inclusivity, a validation survey was distributed to key interest holders who were unable to participate in prior engagement activities due to various constraints.

This step allowed for an additional layer of review, ensuring that the final Roadmap reflected diverse perspectives across NH. The insights gathered from the validation survey were instrumental in refining the final elements of the Roadmap, ensuring it is both ambitious and practical in addressing NH's sustainability objectives.

The NH Climate Change and Sustainability Roadmap has been a collaborative, iterative process integrating diverse perspectives to create a well-informed, strategic approach to sustainability. By engaging interest holders through various methods, NH has developed an actionable plan that strengthens its role as a leader in sustainable health system practices and ensures resilience in the face of evolving environmental challenges.

Appendix C Current state

The Northern Health Climate Change and Sustainability Roadmap Current State Highlight Deck is available at [this link](#).





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