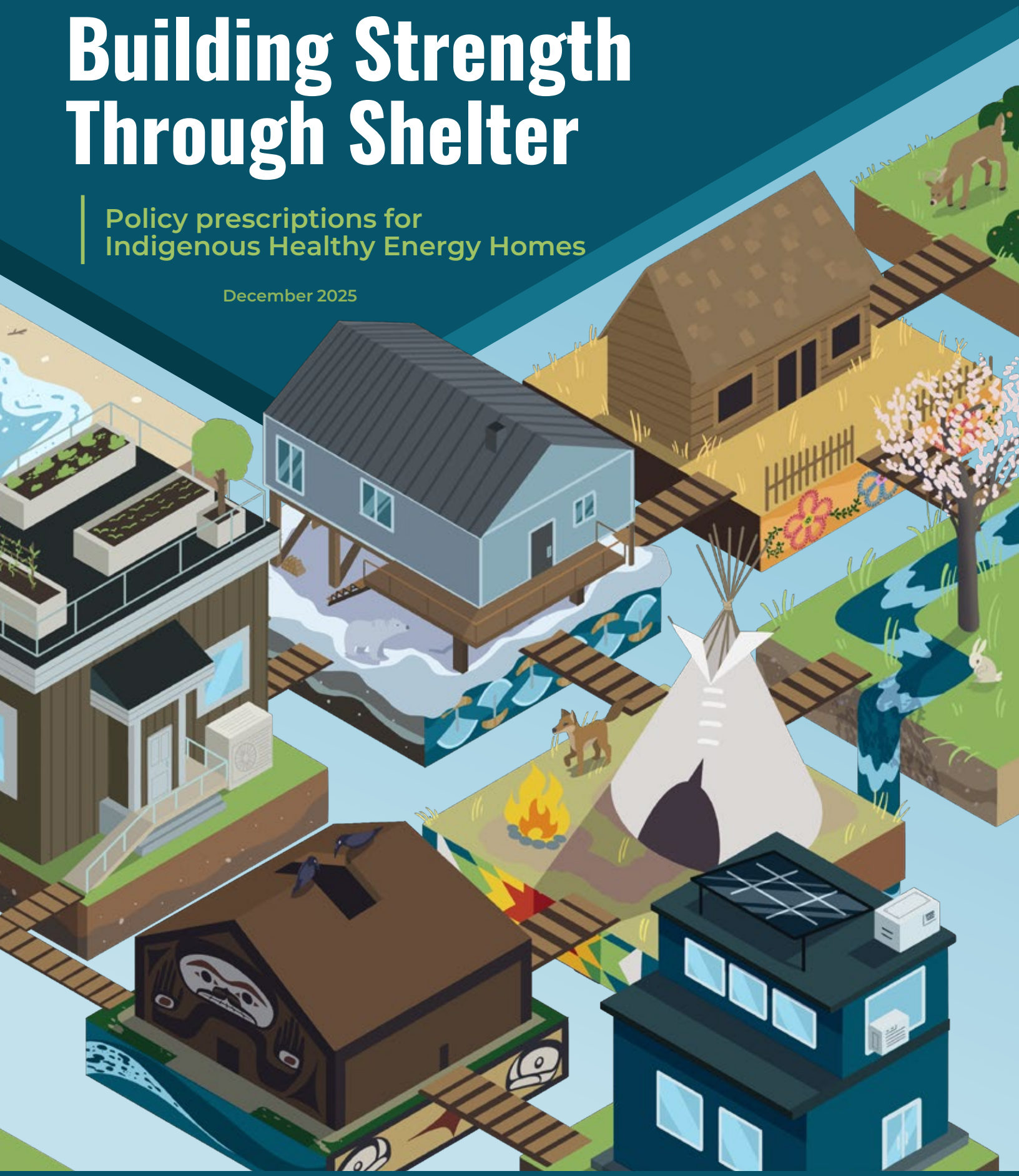
Building Strength Through Shelter

Policy prescriptions for Indigenous Healthy Energy Homes

December 2025



INDIGENOUS CLEAN ENERGY

CANADIAN CLIMATE INSTITUTE | L'INSTITUT CLIMATIQUE DU CANADA

CANADIAN CLIMATE INSTITUTE Indigenous Research

L'INSTITUT CLIMATIQUE DU CANADA Recherche autochtone

SHARED VALUE SOLUTIONS

We would like to extend our deepest gratitude to Leona Humchitt for her significant contributions to this project during her time with us on Earth, and for her continued guidance in spirit. This report is dedicated to her memory with permissions from her family.

We want to honour her constant efforts and immense impacts in advancing climate action; Leona will be remembered as a strong advocate for returning to healthier ways of being among kin and with Mother Earth. She often said, “it’s hard work, but it’s heart work”—a reminder that continues to guide this project and the ongoing journey toward Healthy Energy Homes.

Contents

Cover by Bayja Morgan-Banke, an artist from the Toquaht (Nuu-Chah-Nulth) and Secwépemc (Shuswap) Nations.

Who we are

This report is the result of years of collaboration between the Canadian Climate Institute and Indigenous Clean Energy. It was supported by Shared Value Solutions as well as many knowledge holders, practitioners and advocates who have long carried the struggle for safe housing. We raise our hands to those who came before us and who work on the ground to bring change. As authors, we endeavoured to guide this work in a good way by listening deeply, amplifying stories, and weaving together the knowledge of communities, policy makers, and technical experts. Each partner brought different strengths and positionalities, united by a shared commitment to Indigenous sovereignty, sound climate policy, and community wellness.

CANADIAN CLIMATE INSTITUTE
Indigenous Research
L'INSTITUT CLIMATIQUE DU CANADA
Recherche autochtone

INDIGENOUS CLEAN ENERGY

SHARED VALUE SOLUTIONS

The Canadian Climate Institute

is a fully remote, climate change policy research organization with staff, board members, expert panelists, and advisors located across the country. The Climate Institute is committed to Indigenous reconciliation and a respect for Indigenous sovereignty. Through the Indigenous Research stream, the Institute advances sound climate policies that are consistent with self-determination by centering Indigenous-led research in partnership with Indigenous led-organizations to amplify their expertise and knowledge.

Indigenous Clean Energy (ICE)

is a national non-profit, Indigenous-led organization that focuses on advancing Indigenous leadership and collective action in the clean energy transition through capacity building and project development support for clean energy and efficiency projects. ICE's work takes place on the traditional and ancestral lands of Indigenous Nations across Turtle Island, where energy development has historically been tied to colonial systems that disrupted Indigenous governance, economies, and ways of life. The organization's efforts are rooted in respect for Indigenous sovereignty, self-determination, and the inherent rights of First Nations, Inuit, and Métis peoples. ICE positions itself as a collaborator who walks alongside communities, supporting their visions and amplifying their capacity to lead clean energy transitions in ways that reflect their cultures, values, and worldviews.

Shared Value Solutions (SVS)

is a settler-owned environmental and community development consulting firm with team members serving First Nation, Métis, and Inuit Nations from coast to coast to coast. The head office is based in Guelph, Ont. on the traditional territory of the Attawandaron and within the traditional territory of the Mississaugas of the Credit First Nation. Their office also sits within the lands of the Between the Lakes Treaty #3 (1792) and the Nanfan Treaty (1701) and is close to the Haldimand Tract. They are located within the Grand River Watershed which is shared with the Mississaugas of the Credit First Nation, the Six Nations of the Grand River, and the Saugeen Ojibway Nation. The firm specializes in conducting community-driven research with and for Indigenous communities across Canada, providing expertise in social research, regulatory processes and negotiations, environmental science, geographic information systems, planning, and more. SVS works actively to support First Nations, Inuit, and Métis communities in advancing their rights and interests.

Authors

There are aspects of the authors' backgrounds that strengthen this report, as well as gaps that may limit their insights. We acknowledge that systemic injustices and inequities stemming from historical colonization and ongoing discrimination have positioned certain people and communities at greater risk of physical, social, and economic impacts from climate change and climate policy. This includes Black, Indigenous, and people of colour, lower-income people, 2SLGBTQQIA+ people, people with disabilities, and others. These groups and their experiences are often not adequately represented in climate policy development and implementation.

Maria Shallard, *Canadian Climate Institute*

Maria Shallard is of mixed settler/Pune'luxutth ancestry. She holds undergraduate and master's degrees with a focus on Indigenous and environmental research and is the Director of the Indigenous Research team at the Canadian Climate Institute. Growing up in a family-run construction business, she gained first-hand experience of housing challenges and was also motivated by her personal experience as a renter to create change that leads to healthier homes.

Carlyn Allary, *Canadian Climate Institute*

Carlyn Allary is a Research Associate on the Indigenous Research team at the Canadian Climate Institute and a member of the Red River Métis, part of the Manitoba Métis Federation. She holds a bachelor's degree and is pursuing a master's degree, both from settler universities. Carlyn acknowledges the unique lens and experience she brings as a Métis woman, which shapes how she approaches her work.

Kayla Fayant, *Indigenous Clean Energy*

Kayla Fayant is a Métis woman living on and working from her home community, Fishing Lake Métis Settlement in Alberta. She is a Program Manager on the Bringing It Home team at ICE. Her time spent working and living in her home community has motivated her to create systemic change that leads to healthier living in her community and others.

Chad Bonnetrouge, *Indigenous Clean Energy*

Chad Bonnetrouge is Dene from the Deh Gáh Got'ı̨ę First Nation on Treaty 11 Territory and is currently residing on the territory of Six Nations of the Grand River. He is the Energy Efficiency Program Coordinator at ICE. As an Indigenous youth from the north, he has extensive knowledge and lived experience with Indigenous housing and the impacts of climate change, and he strives to accelerate Indigenous participation in clean energy and energy efficiency.

Joanne Shantz, *Shared Value Solutions*

Joanne Shantz is of predominantly Irish and English settler ancestry and currently resides on the treaty lands and territory of the Mississaugas of the Credit First Nation. She is a Senior Researcher at SVS and has had the privilege of working alongside Indigenous Nations and organizations across Canada on projects related to health and well-being, energy, climate change, and housing.

Olivia Shotyk, *Shared Value Solutions*

Olivia Shotyk is of settler ancestry and currently lives on the treaty lands of the Mississaugas of the Credit First Nation and the traditional territory of the Attiwonderonk and Haudenosaunee. She holds a master's degree in landscape architecture, focused on Indigenous placemaking and design practices. Olivia is an Intermediate Researcher at SVS and has worked with Indigenous communities across Canada on projects related to community planning, socioeconomics, and climate change.

Jeremy Shute, *Shared Value Solutions*

Jeremy Shute is of mixed Irish, Scottish and English ancestry and lives on the treaty lands and territory of the Mississaugas of the Credit First Nation. He is a founding partner of SVS and is a Senior Land Use Planner. He has worked at the interface of community planning, housing, and climate change with Indigenous nations across Canada.

This home in Attawapiskat First Nation, Ont., pictured on April 20, 2016, was deemed not fit for human habitation. (Nathan Denette/The Canadian Press)

Executive summary

Access to safe, healthy, and energy-efficient housing remains a critical challenge for many Indigenous communities across Canada. This report establishes the concept of Healthy Energy Homes and demonstrates the co-benefits of an approach to housing that would improve health for First Nations, Inuit, and Métis people while simultaneously contributing to Canada's net zero objectives and supporting climate resilience.

Despite growing recognition of the links between Indigenous health, energy, and housing, existing government solutions fail to support integrated approaches, leaving policies and funding approaches fragmented, siloed, and often disconnected from local realities. What's more, the long-term health costs and greenhouse gas emissions associated with inadequate housing are not fully valued or considered in decision-making. Additionally, many communities face capacity constraints in developing housing that is safe, healthy, energy efficient, and climate resilient.

As reflected in most Indigenous worldviews, everything is interconnected. Meaningful progress demands co-ordinated, wholistic action that bridges health, housing, climate and energy policy across federal, provincial, and territorial levels in full partnership with Indigenous rights holders.

The term wholistic is used throughout the report in place of holistic, to reflect Indigenous concepts of knowing and being that reflect mind, body, heart and spirit (Absolon 2010; Miles et al 2023).

This report explores Healthy Energy Homes as an approach to Indigenous housing that is grounded in that idea of interconnectedness.

The research is informed by an extensive literature review, a Healthy Energy Homes Virtual Gathering, and semi-structured interviews with experts and practitioners in sectors including housing, health, energy, and governance. Our approach centred on storytelling and focused on Indigenous-authored literature as much as possible.

Innovative finance models can empower Indigenous rights holders to access the resources required to develop Healthy Energy Homes, while supporting intergovernmental efforts to advance Canada's commitments to reconciliation, climate action, and critical infrastructure development. Examples of this approach include the First Nations Market Housing Fund, which builds community capacity to expand home ownership on reserve.

Central to this type of financial approach is a shift from one-time project funding toward long-term, flexible, and self-determined financial partnerships.

This report recommends that governments work collaboratively with Indigenous rights holders to co-develop housing policies that reflect cultural, regional, and community-specific realities centered on wholistic wellness. Progress will require better measurement of housing, health, and climate impacts and benefits, along with more responsive programs and supports that strengthen community capacity.

Project Stewards with Indigenous Clean Energy's Bringing It Home program gather in a sharing circle in a pit house in Osoyoos, B.C., in the summer of 2025. (Cara Garneau/ Indigenous Clean Energy)

Healthy Energy Homes are homes that are energy efficient, climate resilient, and support the well-being of inhabitants. The term conveys a different concept of housing that is centered on the human and community dimensions of housing, energy efficiency, cultural values, and greenhouse gas reduction. In effect, Healthy Energy Homes is the approach we suggest to ensure energy efficiency for deep retrofits and new builds: an approach that supports health outcomes, overall well-being, and emissions reductions.

The Tiny home subdivision located in Tyendinaga, Ont. is pictured during the summer of 2025. (Cara Garneau/ICE)

Together, these solutions point to a clear path forward. Improved co-ordination across governments and innovative, flexible financing can unlock far greater results from the funding currently being spent. While closing First Nations, Inuit, and Métis housing gaps demands investment, co-designed programs and policies ensure that funding goes further and delivers lasting benefits for Indigenous Peoples.

The moment is urgent and the opportunity is clear. With the establishment of Build Canada Homes, a $13 billion federal agency to accelerate affordable housing construction, governments have a chance to improve Indigenous infrastructure. Healthy Energy Homes are not only a housing solution—they are a foundation for community health, climate resilience, and reconciliation. Indigenous communities are already leading the way; what is needed now is enabling, co-ordinated policy action.

Policy recommendations summary

A more detailed version of these policy recommendations can be found on page 56 of this report.

1. **Co-ordinate and integrate government action:** Federal, provincial and territorial governments and their agencies should create explicit coordination mechanisms—such as interdepartmental working groups—with Indigenous governments to integrate policy frameworks, reduce duplication, streamline access to resources, and re-allocate existing funding to support shared goals and benefits.
2. **Co-develop policies and programs with Indigenous leadership:** Federal, provincial and territorial governments and their agencies must co-design policies and programs with First Nations, Inuit, and Métis leadership to ensure cultural relevance and regional adaptability. Co-development strengthens trust, enables tailored solutions, and reflects the principle of self-determination.
3. **Commit to long-term investment agreements:** Federal, provincial, and territorial governments should commit to multi-year funding agreements with Indigenous rights holders. Stable commitments enable long-term planning, the construction of new Healthy Energy Homes, upgrades and retrofits to existing housing, and investment in health measures such as indoor air quality monitoring.
4. **Provide flexible funding options:** Federal, provincial and territorial governments and their agencies should offer a range of funding models that allow Indigenous communities to select the approach most suited to their goals and capacity—whether traditional funding, blended finance, outcome-based agreements, or community-led mechanisms.

5. **Measure the wholistic benefits and impacts of housing:** Federal, provincial and territorial governments and their agencies should ensure that reporting requirements for housing projects capture social, cultural, environmental, and economic impacts—not just project outputs. This approach supports evidence-based decision-making, ensures future funding is better aligned with real outcomes, and reflects the lived experience of communities.
6. **Ensure funding programs are accessible and capacity-responsive:** Federal, provincial and territorial governments and their agencies should ensure funding programs are straightforward and accessible. Application and reporting processes should be simplified, and support training, skill building, and job creation to ensure communities can fully benefit from the opportunities available.

By implementing these policy recommendations, Canadian governments have an opportunity to support Indigenous communities in creating Healthy Energy Homes that are energy efficient, climate resilient, and support the well-being of occupants. Success requires a shift toward meaningful partnerships: long-term, flexible, and co-developed approaches that recognize Indigenous leadership as central to achieving housing, health, and climate outcomes.

Inukjuak, Que., an Inuit community in Nunavik on the eastern shore of Hudson Bay, is pictured in the fall of 2024. (Lina Forero/ICE)

Jason Morningstar, with Indigenous Clean Energy's 20/20 Catalysts Program, conducts a home audit in Wendake, Que. in the fall of 2024. (ICE)

1

Introduction

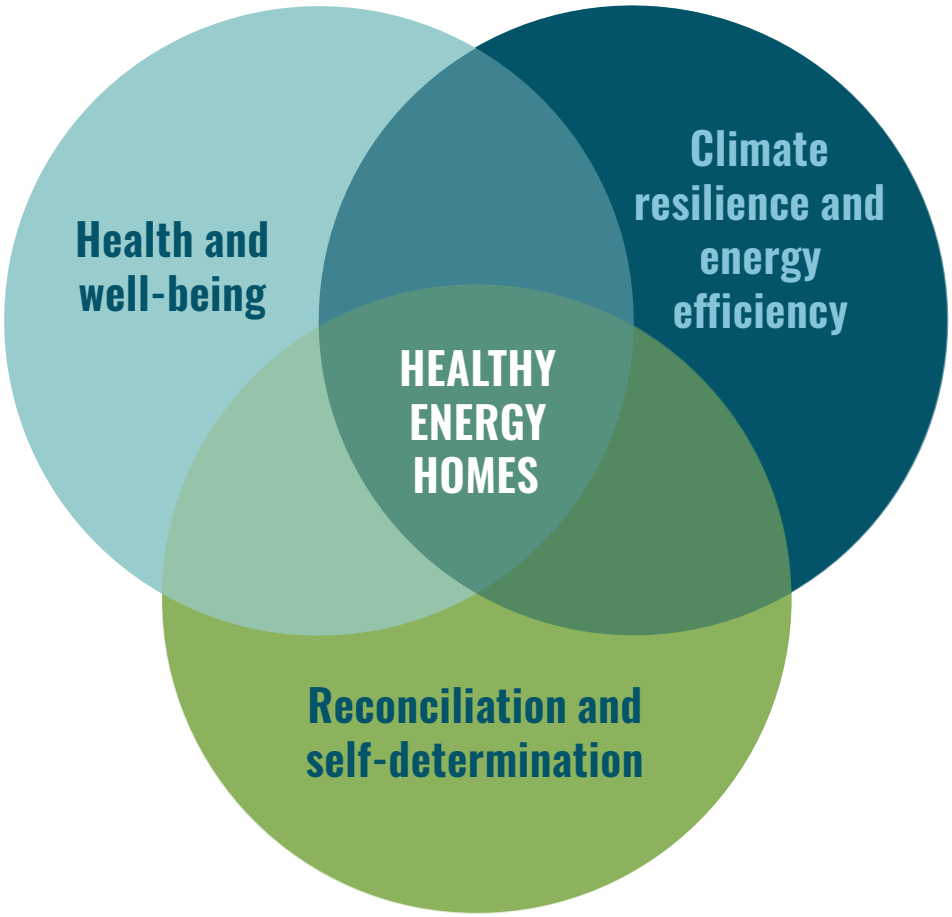
Healthy, safe homes are fundamental to healthy people. Across Canada, inadequate housing is one of the most urgent challenges facing Indigenous Peoples. This inequality reflects the historical and ongoing impacts of colonization, systemic discrimination, and jurisdictional fragmentation. Housing, energy, climate resilience, and health are deeply interconnected, yet policies and programs too often address them in silos.

Substandard housing directly contributes to higher rates of respiratory illness, stress, and chronic disease. Issues such as mould, dampness, poor insulation, and lack of reliable heating undermine physical, spiritual, and mental wellness. These housing-related health burdens fall disproportionately on Indigenous families, particularly in remote and northern communities where infrastructure costs are higher and climate risks are more severe. Extreme weather events, shifting ecosystems, and unpredictable seasonal cycles increase risks for homes already in fragile condition.

Our previous report, *Beyond Sustainability: The Power of Indigenous Healthy Energy Homes*, demonstrated that housing, health, and energy cannot be separated. Energy-efficient and clean energy systems are not only climate solutions; alongside housing, they are social determinants of health. Investing in energy-efficient housing reduces emissions, lowers utility costs, improves indoor air quality, and alleviates pressure on healthcare systems. These benefits are particularly important in Indigenous communities, where wellness is understood wholistically and in relation to land, water, and all relations.

FIGURE 1:

Healthy Energy Homes are built around the idea that housing is more than shelter.



This research emphasizes the urgency of both the housing crisis facing Indigenous people across the country and the opportunities for transformative change through collaborative policy-making. However, barriers remain. The overlapping division of responsibilities between federal, provincial, territorial, and Indigenous governments creates uncertainty and gaps in accountability. Funding programs often fail to reflect the realities of Indigenous communities, limiting the potential for long-term, climate resilient solutions. Short-term, low-cost housing responses may address immediate pressures but undermine long-term wellness, resilience, and sustainability. The cost of this failure is measured not only in dollars, but in health impacts including asthma, skin conditions, cancer, mental health crises, and preventable loss of life.

Addressing unhealthy Indigenous housing is consistent with the Truth and Reconciliation Commission's Calls to Action, which urge governments to close the gaps in health outcomes between Indigenous and non-Indigenous Canadians (Government of Canada 2025b); with Canada's *National Housing Strategy Act*, which commits to a human rights-based approach to housing (Government of Canada 2025a); with Canada's commitment to implement the United Nations Declaration on the Rights of Indigenous Peoples, which recognizes Indigenous Peoples' right to adequate housing, the highest attainable standard of physical and mental health, and to participate in decision-making (Government of Canada 2023); as well as with

Canada's commitment to uphold the United Nations Convention on the Rights of the Child, which recognizes every child's right to the highest attainable standard of health (Article 24) and to a standard of living adequate for their development, including housing (Article 27) (United Nations 1989). The World Health Organization also recognizes healthy indoor air quality as a basic right (World Health Organization 2009).

This report calls for a co-ordinated response. Governments at all levels should move beyond fragmented approaches to create integrated policies that recognize housing as a determinant of health and energy as a driver of wellness. For instance, by implementing funding models that reflect community realities and establishing approaches to build capacity that centre Indigenous rights and self-determination, governments can help mitigate the heavy costs of inaction. Additionally, distinction-based approaches are required to respect the diversity of Indigenous communities, and housing solutions should be led by Indigenous leadership.

Healthy Energy Homes represent a way forward: homes that are energy efficient, climate resilient, and support wholistic well-being. The recommendations outlined in this report aim to support provincial, federal, territorial, and Indigenous governments in advancing Indigenous self-determination. They are rooted in the expertise of those working on the ground and reflect the need for systemic change to achieve both reconciliation and durable climate policy.

Grant Sullivan and Gail Lawlor, both with ICE's Bringing It Home initiative, look at an energy-efficient, on-demand electric hot water tank at the Flat Street Tiny Home Subdivision in Tyendinaga First Nation, Ont. in the summer of 2025. (Cara Garneau/ICE)

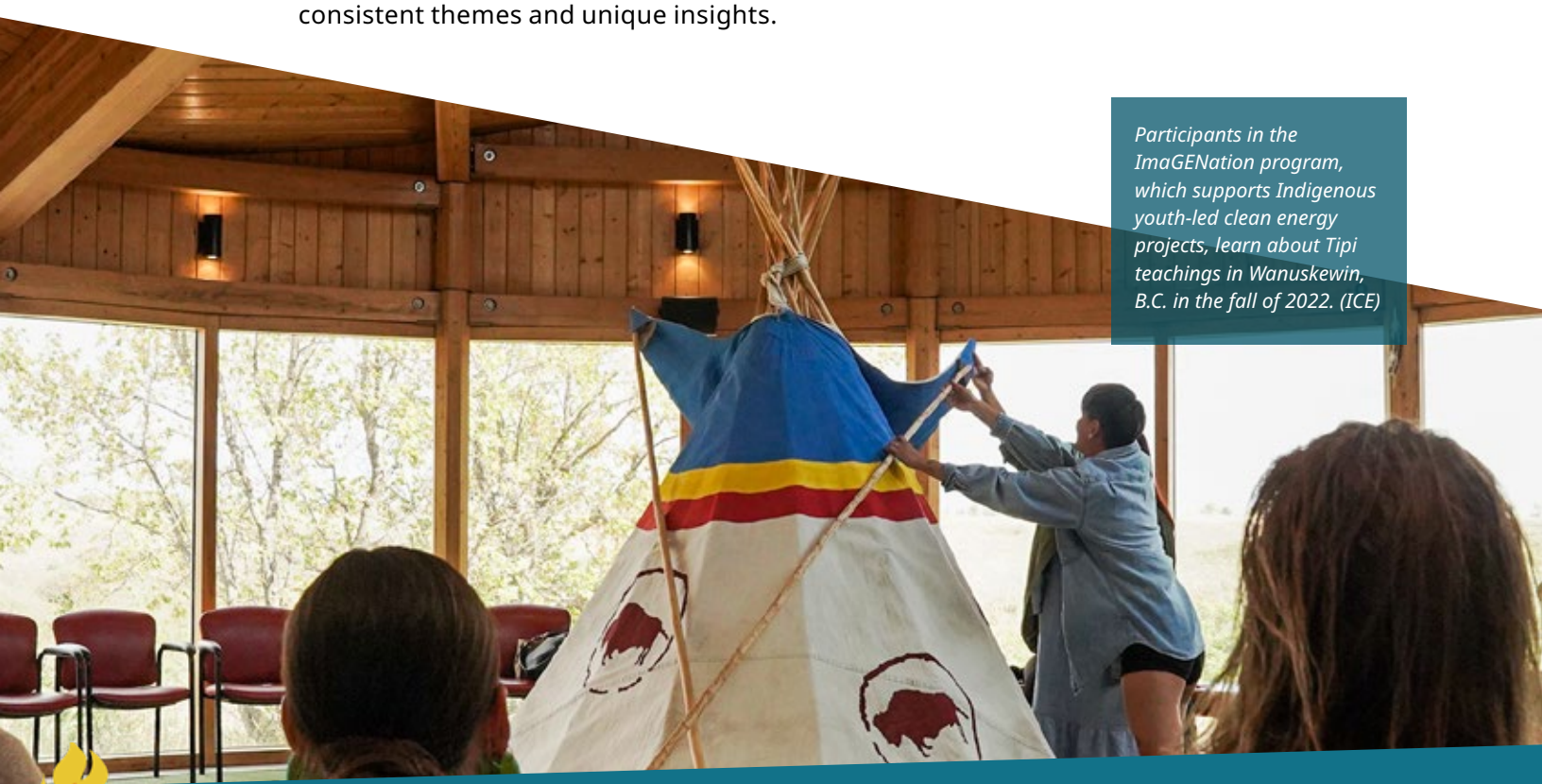
2

Research methods

Our report recognizes that housing is not only a social determinant of health but also integral to cultural continuity, sovereignty, and relationships with the land. We aim to uphold Indigenous data sovereignty, prioritize lived experiences, and ensure First Nations, Inuit, and Métis voices working in this space are centred in the framing our proposed solutions.

This report prioritizes Indigenous-authored literature as much as possible. It is grounded in the analysis of over 100 peer-reviewed sources, a review of grey literature and online materials, the Healthy Energy Homes Virtual Gathering (with 41 participants), and 31 semi-structured interviews conducted over the past two years with Indigenous academics, housing experts, and health practitioners and experts across the country who were identified in part by snowball sampling (Naderifar et al 2017). Our methodological approach is centred on storytelling, which is crucial to the cultural and political resurgence of Indigenous nations (Corntassel et al 2009), relational accountability, community-led validation, and respect for Indigenous governance and ways of knowing in convergence with Western data.

The report compiles and analyzes research conducted through these various methods. Data were synthesized using thematic coding and triangulated across sources to identify consistent themes and unique insights.



Participants in the ImaGENation program, which supports Indigenous youth-led clean energy projects, learn about Tipi teachings in Wanuskewin, B.C. in the fall of 2022. (ICE)

Literature review

The Canadian Climate Institute and Indigenous Clean Energy (ICE) conducted a scoping literature review in Phase 2 of the Healthy Energy Homes Project, which informed the report *Beyond Sustainability: The Power of Indigenous Healthy Energy Homes*. In Phase 6, the research team continued to build on this work with a comprehensive narrative literature review targeting Indigenous-authored sources in addition to other academic and grey literature focused on several key themes of the Healthy Energy Homes project. Researchers identified literature through a thematic scan focused on housing, health, and energy efficiency, supplemented by targeted searches to fill gaps and answer specific questions. Some interview participants also provided recommendations for sources to include in the literature review.

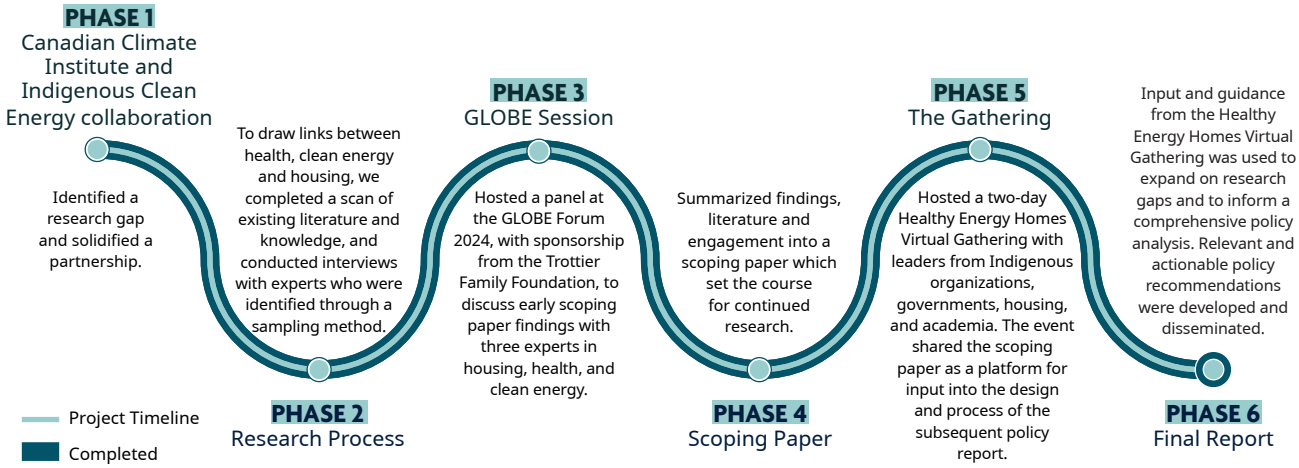
This literature review provided a broad understanding of the intersections of housing, health, energy efficiency, and climate change for Indigenous Peoples. It also contributed to answering research questions, identifying gaps, and guiding the development of interview questions. The outcomes and lessons learned are woven into the analysis and recommendations, alongside the results and responses from a Healthy Energy Homes Virtual Gathering and key informant interviews.

Healthy Energy Homes Virtual Gathering

In November 2024, the Canadian Climate Institute and Indigenous Clean Energy (ICE) hosted the two-day Healthy Energy Homes Virtual Gathering, bringing together 41 experts from across housing, energy, governance, and health sectors. Participants, who were identified through recommendations from interviews in Phase 2 of the Healthy Energy Homes project, discussed ways to address barriers to sustainable housing, develop and strengthen connections in the space, and inform policy analysis and recommendations for delivering Healthy Energy Homes in Indigenous communities.

FIGURE 2:

Healthy Energy Homes project timeline.



The gathering was discussion-based, using breakout rooms facilitated by the Climate Institute and ICE staff to encourage conversations related to financing Healthy Energy Homes and necessary policy interventions. Over the course of the gathering, which used the Chatham House Rule, two poll questions were posed to participants. Participants selected their top three responses to the following questions:

1. When we think about what it would take to meet this challenge (of Healthy Energy Homes), which barriers are the most fundamental? What rises to the top as most important?
2. What are your top three policy interventions?

The results of the polls are reflected in the body of this report. Key themes and challenges discussed throughout the gathering included:

- Geographic and infrastructure barriers facing Indigenous communities.
- Financial constraints.
- Capacity and knowledge gaps within Indigenous communities.
- Lack of cultural considerations in existing programs and processes.
- Challenges navigating complex policy and regulatory systems.

Following the event, the Climate Institute and ICE captured the results of these discussions in the *Virtual Gathering Report*, which is integrated here alongside information from the literature review and interviews. A summary version of the *Virtual Gathering Report* was distributed to attendees, who were given an opportunity to provide feedback.

Interviews

From February to September 2025, the Climate Institute and ICE, in partnership with Shared Value Solutions, conducted a series of 19 virtual key informant interviews with experts working in Indigenous health, energy, and housing, or at any intersection of those sectors. The research team identified participants based on their experience and expertise (informed by recommendations), ensuring a balance of Indigenous leadership, community members, and organizations, as well as non-Indigenous experts with insight into topics related to Indigenous housing, health, and energy.

Interviews followed a semi-structured format, using an interview guide while also allowing interviewers to adapt based on the participants' areas of expertise to allow for storytelling. The research team asked an introductory question to understand participants' backgrounds and direct the interview. Interview questions generally focused on accountabilities across governments, funding and financing, and Indigenous health.

The interviews were recorded using Zoom's built-in recording function and with the help of two note-takers from the Canadian Climate Institute and Indigenous Clean Energy. Participants were given the option to decline recording, the use of their names, and/or the use of direct quotes in this report. Participants also had the opportunity to review direct quotes to ensure they were appropriately represented.

Study limitations and gaps

The research team made its best efforts to mitigate gaps in this project. However, all research has inherent limitations that are important to acknowledge in interpreting and applying the findings.

In completing this work, we recognize the distinct cultures, histories, and identities of First Nations, Inuit, and Métis and acknowledge that these distinctions result in different experiences with health, energy, housing, and government accountabilities in general. Where possible, we have discussed research and findings specific to First Nations, Inuit, and Métis. However, the availability and scope of data pertaining to each group varies by each of the topics discussed. Throughout the report, we have also used "Indigenous communities" or "Indigenous Peoples" to speak to broader trends or reflect the way statistics and information were presented by the original sources (see Glossary).

The interviews completed for this project reflect several geographic gaps, with participants limited to Manitoba, Saskatchewan, Newfoundland and Labrador, Ontario, Prince Edward Island, the Northwest Territories, and British Columbia. Because experiences can vary widely between provinces and territories, it is important to acknowledge the limited number of Eastern and Northern perspectives included in this research. This report also does not include in-depth coverage of a number of important perspectives that speak to unique experiences related to Indigenous health, energy, and housing: those of youth, Elders, and 2SLGBTQI+ community members.

In characterizing the Healthy Energy Homes policy landscape to determine government accountabilities and identify key barriers, it is important to acknowledge that this field is extremely complex and in flux, as funding programs and initiatives evolve. Therefore, this report provides a general overview of the current state of policies related to Healthy Energy Homes and associated accountabilities, but does not delve into the nuance of additional details such as the roles of individual provincial, territorial, and Indigenous governments—as that would require further research.

Finally, our own lived experiences, levels of privilege and positionality factor into this report and we have included a reflexive statement from each of the authors to acknowledge any biases and influences we may have as settler and Indigenous scholars.

People check on homes and look for stranded dogs during flooding in Peguis First Nation, Man. on May 4, 2022. (David Lipnowski/The Canadian Press)

3

The overlooked link between housing, health, and climate

Unhealthy homes, including those that are overcrowded, energy inefficient, and in disrepair can pose a serious risk to residents.

The First Nations Health Authority and the Aboriginal Housing Management Association (AHMA) identify housing as an integral determinant of health and emphasize that housing is health care (First Nations Health Authority 2024).

Yet housing, health, energy, and climate are often treated separately, with climate and energy considerations viewed as add-ons rather than integral to addressing housing and healthcare challenges. As the effects of climate change intensify, more frequent and extreme weather events can magnify the health risks and other challenges associated with poor-quality, energy-inefficient homes. Climate change can reinforce the cycle of housing and climate vulnerability by cutting building seasons short, creating transportation difficulties, and causing reliance on outside labour and materials (Wale et al 2024).

For Indigenous Peoples, who are already disproportionately experiencing the effects of climate change, the need to accelerate emission reductions and deploy Healthy Energy Homes is increasingly urgent. Integrating housing, health, energy, and climate solutions is essential to improving Indigenous well-being and community resilience.

Hidden health costs of inadequate housing

> ***"The health promotion side is harder to quantify, but people's ability to stay with their medical treatment plan—where they need to receive support in their home—or medication plan is also a benefit and contributes to long-term healthcare savings. This is a broader return."***
> *—Dr. Michael Schwandt, Medical Health Officer, Vancouver Coastal Health*

There is abundant peer-reviewed evidence that shows substandard housing conditions contribute to health issues including bronchitis, tuberculosis, and skin infections while also reducing sleep quality and straining domestic relationships, mental health, and the ability of community members to succeed in school and at work.

Poor housing conditions are a main contributing factor to negative health outcomes in Indigenous communities (Priest et al 2012; Wale et al 2024). People living in housing that is in need of repair, overcrowded, full of excess moisture or poorly ventilated can face serious physical health concerns, some of which require hospitalization or ongoing treatment and care. Inadequate housing conditions can also cause mental distress, hopelessness and despair, and impact individual and community well-being more broadly (House of Commons 2017).

Despite these well recognized connections, the importance of addressing housing issues to improve health outcomes for Indigenous communities is often both overlooked and undervalued.

Inadequate housing contributes to poor health

> ***"If we could provide good quality homes that improved health, we can start addressing upstream health needs."*** *—Dr. Linda Larcombe, Professor, Internal Medicine, Max Rady College of Medicine, University of Manitoba*

There are numerous pathways through which poor housing conditions can cause, contribute to, or exacerbate existing health issues and illnesses. Most commonly, interview participants spoke about the impact of mould on community members, which can grow and spread as a result of inadequate ventilation or moisture build-up, especially in kitchens and bathrooms, as well as through overcrowding. Mould can cause or exacerbate skin, allergy, eye, respiratory, and gastrointestinal problems, including upper and lower respiratory tract infections and other issues (Kovesi et al 2022; Climate Central 2023; Orr et al 2024; Canada Mortgage and Housing Corporation 2024; Wale et al 2024).

The use of heating devices like wood stoves, which many Indigenous households rely upon, can also expose inhabitants to particulate matter and indoor air pollutants (Indigenous Clean Energy 2021; Kantamneni and Haley 2024). Abundant peer-reviewed research shows that inadequate housing can contribute to respiratory diseases including tuberculosis, pneumonia,

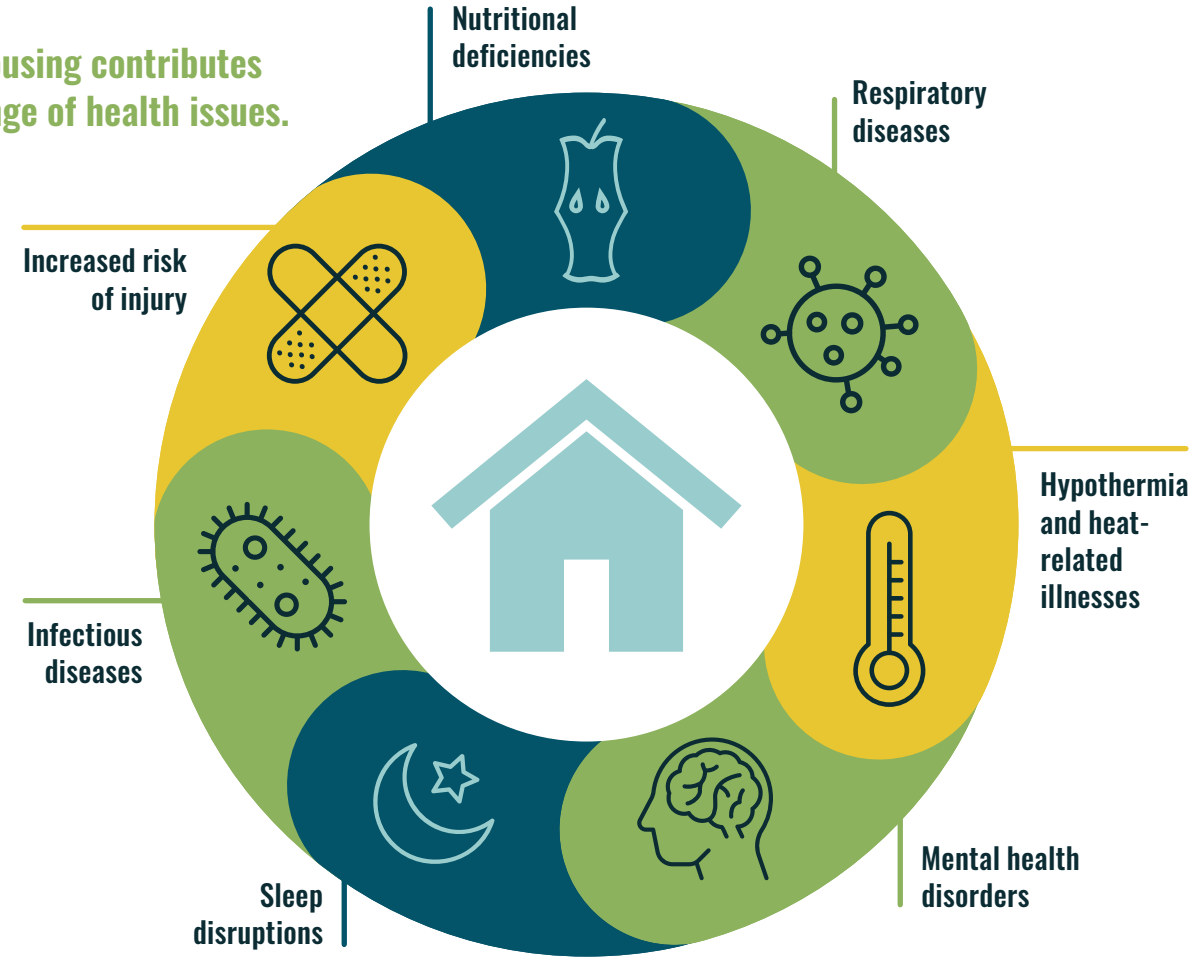
bronchitis, and asthma, and pose a greater risk for infectious illnesses like influenza (Dales et al 1991; National Collaborating Centre for Indigenous Health 2017; Stout 2018; Rennie et al 2019; Riva et al 2020; Kovesi et al 2022; Loppie and Wien 2022; Orr et al 2024).

On the other hand, adequate housing can provide the resources required (e.g. electricity, refrigeration) for those with complex medical needs or those undergoing treatment to manage their condition and stick to their treatment plans.

Housing is not just a "box" that provides protection; it plays an important role in cultural activities, social connection, family life, preparing and sharing food, providing stability, a sense of pride, and independence. Overcrowding in homes is linked to stress, anxiety, depression, food insecurity, sleep disruption or deprivation, and lower educational success in children (Riva et al 2014; National Collaborating Centre for Indigenous Health 2017; Riva et al 2020; Reed et al 2024). A lack of access to housing, or poor quality of housing, is also associated with higher risk of violence, substance abuse, and suicide (Standing Committee on Indigenous and Northern Affairs 2018; Loppie and Wien 2022; Reed et al 2024). One interview participant noted how an unhealthy home environment or chronic illness as a result of poor housing can contribute to presenteeism, meaning that community members may be attending work or school but are not as engaged or productive because they are not feeling well.

FIGURE 3

Poor housing contributes to a range of health issues.



Up until recently, a family was living in this mould-infested home, pictured on April 23, 2024, in Janvier, Alta. Chard Métis Nation partnered with Cenovus Energy Inc. to complete much-needed housing upgrades in the community. (Amber Bracken/The Canadian Press)

In addition, many of the same issues that link housing to poor health outcomes are also present in schools and childcare settings serving Indigenous communities, further exacerbating the disproportionate health risks Indigenous youth face (Canadian Partnership for Children's Health and Environment 2024; Canadian Partnership for Children's Health and Environment and Canadian Environmental Law Association 2024). Experiencing these impacts in both home and school settings means that many Indigenous children spend the majority of their childhood in indoor spaces that undermine, rather than support, their health.

Poor-quality housing can also put communities at risk of environmental hazards such as radon gas, which is the number one cause of lung cancer in non-smokers in Canada (Health Canada 2025). The risk of exposure can be elevated in poorly constructed or poorly situated homes due to factors including inadequate ventilation, cracks in foundation walls or floor slabs, gaps around service pipes, support posts, window casements, and floor drains (Larcombe et al 2022; Orr et al 2024; Health Canada 2025). At the same time, tighter, more energy-efficient homes can inadvertently worsen radon exposure by trapping gases indoors and reducing air exchange. Incorporating radon mitigation measures during construction can prevent higher concentrations and should be prioritized in new builds.

Housing-related healthcare costs remain unvalued

Housing-related health issues in Indigenous communities remain a critical and under-recognized policy gap in Canada and the costs add up. There are direct costs, such as hospitalizations, physician and emergency room visits, medications, as well as indirect costs such as lost productivity, lost caregiver time, and mental health impacts. Studies suggest these indirect costs are estimated to be roughly equal to or higher than direct costs (Hostland 2015; Ismaila et al 2019).

Interview participants shared how many Indigenous communities or First Nations, Inuit, and Métis people living in more rural or remote areas lack accessible healthcare services nearby, requiring costly and often disruptive travel to urban centres for basic care. It is also well documented that systemic racism and discrimination within the healthcare system contribute to experiences of inaccessible, incomplete, and unsafe care (Barbo and Alam 2024).

The disproportionate health impacts experienced by Indigenous Peoples as a result of inadequate housing not only put great strain on the individuals and families experiencing them, but also on the healthcare system and resources available. One study comparing the hospitalization rates for respiratory illness found that rates were 1.9 times higher for Métis, 2.1 times higher for First Nations living off-reserve, 3.3 times higher for First Nations living on reserve, and 2.7 times higher for Inuit, compared to non-Indigenous Canadians (Carrière et al 2016).

Inuit infants have some of the highest reported rates of hospital admissions due to lower respiratory tract infections, for which poor ventilation and overcrowding are contributing factors (Banerji et al 2001; Banerji et al 2009; Banerji et al 2013; Banerji et al 2016). The total cost per admission for lower respiratory tract infections can range from $23,203 in Nunavik (Quebec) to $63,686 in the Kivalliq Region (Nunavut) (Banerji et al 2013). Estimates also show that the average health system cost of managing a tuberculosis case in Canada is $17,506, though costs in some cases can be as high as $131,780 (Campbell et al 2022). Indigenous Peoples also experience disproportionately high rates of tuberculosis, in part due to inadequate housing, contributing to health inequities and high healthcare costs (Public Health Agency of Canada 2024).

Indigenous Peoples are overrepresented in Canada's homeless population by a factor of 10 and individuals facing homelessness are admitted to the hospital up to five times more than the general population.

A lack of housing can also contribute to healthcare system strains connected to homelessness, with Indigenous Peoples overrepresented in Canada's homeless population by a factor of 10 and individuals facing homelessness admitted to the hospital up to five times more than the general population (National Collaborating Centre for Indigenous Health 2017).

> ***"It costs roughly an order of magnitude more to treat lung cancer than to mitigate home radon, not including the additional travel costs for northern or remote communities."*** *—Darius Mali, Senior Engineer, C-NRPP Certified in radon measurement and mitigation, Geosyntec Consultants*

The potential health benefits and cost savings associated with Healthy Energy Homes remain unvalued, despite research showing that housing is a key factor in Indigenous health and well-being. Developing Healthy Energy Homes can help address the health issues outlined in this report by improving ventilation, upgrading heating systems, and transitioning to clean energy, but the subsequent savings in healthcare costs is not measured or reported on as an outcome of housing projects or associated funding programs (Riva et al 2014; National Collaborating Centre for Indigenous Health 2017; Indigenous Clean Energy 2021). Participants with experience accessing different funding programs emphasized that what gets measured gets done while also explaining that reporting requirements for what gets measured are often rigorous and very specific. This limited approach fails to reflect the actual benefits and cost savings associated with Healthy Energy Homes that spin-off from having better quality housing.

Attendees of our Healthy Energy Homes Virtual Gathering in November 2024 also emphasized the importance of storytelling to highlight the wholistic benefits related to Healthy Energy Homes: stories are essential to bring housing projects to life and demonstrate value in addition to metrics.

Climate risks and energy gaps

As the effects of climate change continue to intensify, First Nations, Inuit, and Métis are on the frontlines, experiencing and actively responding to the impacts of climate change. As pressure mounts to reduce greenhouse gas emissions, there is a parallel need for housing in Indigenous communities that can effectively adapt to a changing climate. However, the importance of climate and energy considerations, such as building Indigenous housing that is energy efficient and uses clean energy sources, continues to be left out of the equation. In fact, building homes with these considerations in mind is often viewed as more expensive and in conflict with the need to build more homes for less money (Wale et al 2024). This view fails to effectively recognize the severity of the impacts of climate change on Indigenous housing, and the value of energy efficiency and clean energy projects as solutions.

Climate change is a growing issue in Indigenous housing

Many of the challenges related to inadequate housing, such as poor indoor air quality, mould growth, and temperature regulation, will be magnified by more frequent and severe wildfires, precipitation, flooding, heat waves, and other climate change-induced events.

Indigenous Peoples are disproportionately affected by climate change impacts (Wale et al 2024) and the time and funding required to co-ordinate both risk mitigation and housing planning creates an additional challenge.

Several participants also expressed concerns about wildfire smoke entering homes, which is anticipated to worsen in the context of climate change. Poorly constructed and aging homes have a higher infiltration rate of wildfire smoke, exposing occupants to air pollutants and leading to higher rates of hospitalization and emergency visits (Barn 2014; Chen et al 2021).

Carrol Johnston stands where her house used to be before a wildfire destroyed it in East Prairie Métis Settlement, Alta., on July 4, 2023. (Jeff McIntosh/The Canadian Press)

Locals drive by a building that has sloped due to complications from thawing permafrost in Nain, N.L. on May 12, 2023. (Darren Calabrese/The Canadian Press)

Interviewees also discussed challenges with temperature regulation, describing that in the North in particular, a lack of passive ventilation, window screens, and air conditioning makes it difficult to manage warmer conditions. Another participant noted that in their Nation, rising temperatures have resulted in more community members experiencing heat stroke.

A lack of cooling during extreme heat events can also cause an increase in hospitalizations, health complications, and mortality, as seen during the 2021 Western Canada heat dome, which caused more than 600 heat-related deaths (British Columbia Coroners Service 2022; Beugin et al 2023; Kantamneni and Haley 2024).

Participants also spoke about impacts as a result of thawing permafrost and coastal erosion, with one interviewee sharing that residents in their community were forced to relocate due to erosion and flooding. Similarly, the report *Adapt Nunatsiavut: An Inuit Approach to Climate Change Mitigation and Adaptation* (2025) highlights that thawing permafrost is causing ground instability and the destabilization of buildings and other infrastructure, posing urgent risks for housing safety, community resilience, and ultimately health. In addition, climate change can further exacerbate radon gas risk in northern regions, where thawing permafrost creates more porous soils, allowing gases to move more easily (Rathebe et al 2025).

Without adequate time and funding to integrate risk assessments into housing planning, communities may be forced to build without a full sense of where permafrost melt or other hazards are occurring, resulting in new homes built in areas of heightened climate vulnerability.

Not only is current housing ill-equipped for climate risks and emissions mitigation, the residential construction industry itself is also vulnerable to shifting extremes as a result of climate change. As one interview participant shared, with winter road seasons becoming shorter each year, it has become increasingly challenging to transport fuel and building materials to communities. Another individual described how, in recent years, drought conditions reduced water levels on the Mackenzie River to such an extent that it prevented barges from carrying building materials.

Alfred Higginbottom, of the Skuppah Indian Band, a Nlaka'pamux First Nations government, watches as a wildfire burns on the side of a mountain in Lytton, B.C. on July 1, 2021. (Darryl Dyck/The Canadian Press)

In warmer seasons, wildfires can also disrupt the transport of materials needed to build, repair, and maintain existing and new homes. This impacts the procurement and provision of housing, highlighting that wildfire impacts are not limited to evacuations and destruction of the existing built environment. Indigenous people are 30 times more likely to be affected by wildfires than non-Indigenous Canadians, and more likely to suffer adverse health impacts (Natural Resources Canada 2024a). The long-standing infrastructure challenges for remote Indigenous communities are compounded by these adverse events.

Energy efficiency and clean energy projects are treated as add-ons

> ***"Lots of groups … are very much interested in and believe in the value of energy efficiency when it comes to affordable housing. But if I have to choose between making a project go ahead and someone gets a home, versus maximizing the energy efficiency I can include, I have to prioritize providing a home … that is our reality."*** *—Sheldon Pollett, Executive Director, Raising the Roof*

As climate change magnifies risks, households with heat loss or leakage, poor insulation, inefficient heating and hot water systems, and broken windows will continue to have to spend more money on heating and cooling their homes, exacerbating financial burdens and reinforcing energy poverty (Indigenous Clean Energy 2021). Despite the need to address energy efficiency from the perspectives of well-being, cost, and emissions reductions, energy efficiency programs or upgrades are often viewed by funders and government agencies as separate from, or an add-on to housing instead of being necessary to integrate into design, planning, and construction.

That leaves many Indigenous communities in a situation where they have to prioritize energy efficiency and clean energy projects against other urgent priorities, including health and housing, rather than being empowered to take a co-ordinated approach. Interview participants discussed the challenges with integrating energy efficiency or clean energy into housing initiatives, emphasizing that while they see great value in these projects it can be difficult to prioritize implementing them or convincing homeowners to implement them. That can be especially true in the context of other pressing needs in the community when funding and other resources are limited. In some communities, it can be difficult to justify spending funds on energy projects when the need for more housing units is so great, and these are viewed and funded as separate initiatives. One participant emphasized that the reality for their community is that if they have to choose between building a home for a community member and maximizing energy efficiency, they have to prioritize providing a home.

Compounding issues of energy efficiency, some Indigenous communities remain reliant on diesel fuel to power their homes, which is not only more expensive for consumers compared to renewable energy but also contributes to greenhouse gas emissions and air pollution (Lovekin and Heerema 2019). Interview participants emphasized that Indigenous communities are ready and eager to advance affordable and clean energy solutions, but financial, policy, and capacity barriers continue to impede action. One interview participant spoke about the potential for heat pumps in individual homes to help maintain safe temperatures; however, the large up-front costs, even with rebates available, are well beyond the options available for many people and communities, especially when viewed as separate priorities from health and housing.

Although most houses in Inukjuak, Que. have transitioned to electric heating, the community still requires funding to convert the remainder, like this one, seen with a diesel tank outside. (Photo courtesy of Aphrodite Salas/Concordia University)

CASE STUDY:

Asthma and Healthy Energy Homes

"Our homes contain triggers that could potentially exacerbate our asthma symptoms. Indoor air quality is often overlooked when in fact it is a key factor in asthma management" *—Jeffrey Beach, CEO, Asthma Canada*

In Canada, asthma is the third most common chronic disease and a leading cause of hospital admissions each year, accounting for over 80,000 emergency room visits annually (Asthma Canada 2024). For First Nations, Inuit, and Métis, the prevalence of asthma is approximately 40 per cent higher than among non-Indigenous Canadians (Asthma Canada 2021). Asthma risk increases in homes with overcrowding, mould and moisture build-up, poor indoor air quality from smoke and other pollutants, and with a lack of adequate ventilation and air filtration systems (National Collaborating Centre for Indigenous Health 2017; Chen et al 2021; Climate Central 2023). A 2019 study showed that after relocating to better quality housing, Inuit participants reported significantly reduced psychological distress and were less likely to report asthma-related symptoms (Riva et al 2019).

Globally, the direct and indirect costs associated with asthma are among the highest for chronic diseases because of both the significant healthcare utilization and associated physical, mental, social, and professional impacts (Bahadori et al 2009; Ismailia et al 2013). In Canada, asthma is the leading cause of absenteeism from school and the third-leading cause of work loss (Ismailia et al 2013).

In 2020, the total predicted direct costs of asthma in Canada were estimated at $1.3 billion per year with indirect costs even higher at $1.71 billion per year (Ismaila et al 2019). The cost of asthma in Canada is estimated to reach $4.2 billion annually by 2033 (Asthma Canada 2024). In his PhD thesis, Craig Rodney Hostland estimates that in Canada, the total direct, indirect, and external impact costs for not remediating the homes of high-use (severe and persistent) asthmatics affected by mould and dampness are projected at $1.2 billion per year (Hostland 2015). The cost analysis further projects that remediation programs could generate approximately $800 million in annual savings.

While economic burden and cost saving estimates for First Nation, Inuit, and Métis asthmatics are not available, it is clear that improving Indigenous housing would help reduce asthma triggers and symptoms, lower both direct and indirect healthcare costs, and alleviate substantial strain on the healthcare system. Deploying Healthy Energy Homes in Indigenous communities can directly support asthma prevention and management and is particularly important given that First Nation, Inuit and Métis are disproportionately affected by asthma, partly due to experiencing some of the country's most unhealthy and inadequate housing conditions. They also face greater climate change impacts, which are expected to raise asthma-related costs by increasing exposure to triggers such as wildfire smoke, allergens, and mould after flooding (American Lung Association 2019; Climate Central 2023).

Richard Joseph, a registered energy advisor, inspects a wood stove while conducting a mock EnerGuide evaluation at a home in the Penticton Indian Band, B.C. as a part of ICE's Project Accelerator Program in May 2025. (Kayla Fayant/ICE)

4

Institutional barriers to healthy homes

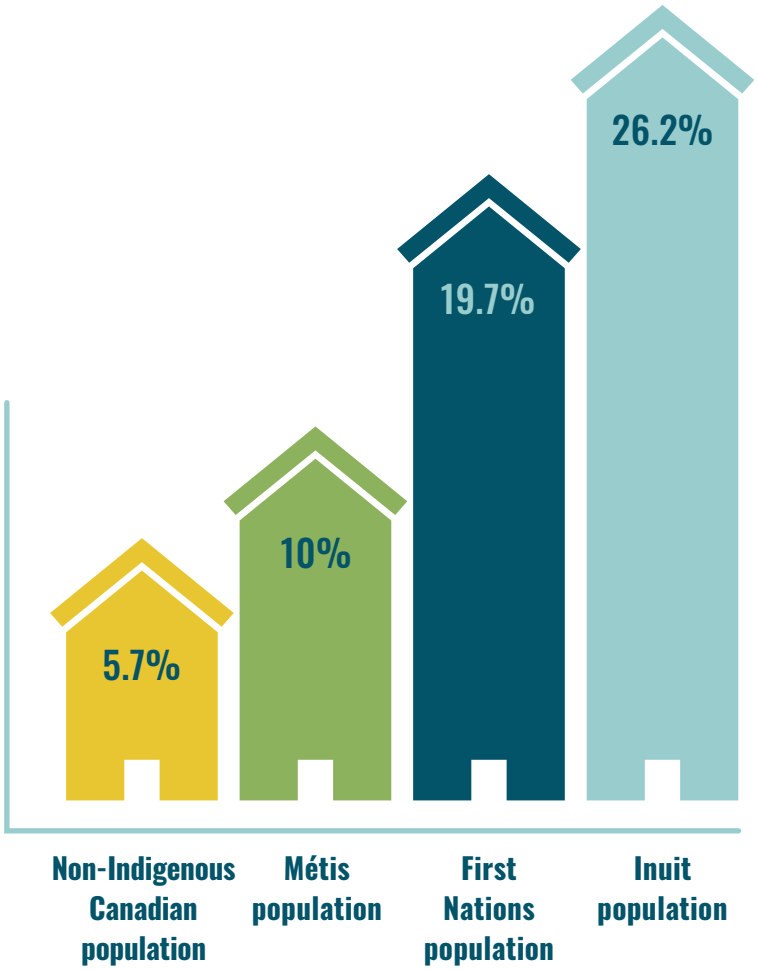
Laws, policies, institutional practices, and governance processes shape and structure social determinants of health (Balestry 2025). In the context of housing, Indigenous Peoples have lived on the land in seasonal patterns since time immemorial, but colonial policies including forced relocation and the establishment of reserves forcefully disrupted these settlement patterns and the overall well-being of First Nations, Inuit, and Métis communities (Shared Value Solutions 2024).

The crisis of inadequate housing has persisted for generations, driven by inequalities and chronic underfunding (Kovesi et al 2022; Orr et al 2024). While 5.7 per cent of the non-Indigenous population in Canada live in dwellings in need of major repairs, these conditions are experienced by approximately 19.7 per cent of First Nations, 26.2 per cent of Inuit, and 10 per cent of Métis (Statistics Canada 2022).

Despite the urgent need to improve Indigenous housing conditions and deploy Healthy Energy Homes, institutional barriers to action persist. Addressing these challenges more wholistically is critical for developing actionable and co-ordinated solutions.

FIGURE 4:

Indigenous people disproportionately live in homes in disrepair.



Source: Statistics Canada, 2022

Fragmented accountability

> ***"Everybody has a piece of the solution for housing and if we work together, we can co-ordinate our efforts … it frees us up from having to be everything for everybody."*** *—Travis Seymour, Chief Executive Officer, First Nations Market Housing Fund*

Accountabilities related to Healthy Energy Homes in Canada are complex and vary based on distinctions between First Nations, Inuit, and Métis including: off- and on-reserve contexts, community or Nation-specific governance frameworks or agreements, and regional differences (Shared Value Solutions 2024). Federal, provincial, territorial, municipal, and Indigenous governments across Canada are each involved in health, energy, and housing initiatives to some extent, adding further complexity. This fragmentation can inhibit policy integration, add administrative and bureaucratic burdens, and create obstacles for synergies between Indigenous health, energy, and housing. Further, for Indigenous communities and organizations seeking to navigate the policy landscape to serve their self-determined interests, these complexities can create a level of uncertainty surrounding government accountabilities as they relate to Indigenous housing.

Split government accountabilities lead to uncoordinated solutions

> ***"Awayr di bon rilasyon di travayl avek li zotoriti di munisipal dju governmen si tinporten paski si kon a paw saw, y la tolten di burokrasi, y la tolten di obstak."*** *—Will Goodon, Minist di Lojmen ipi di la Propryiti Minajmen, Federasyon Di Michif dju Manitoba (Michif language, French dialect)*

> ***"Having good working relationships with the municipal level of government is key because if you don't have that, there's always red tape, there's always roadblocks."*** *—Will Goodon, Minister of Housing and Property Management, Manitoba Métis Federation*

Interview participants from various Indigenous communities and organizations noted that all levels of government are involved in housing and health to some extent. One participant described the situation as everyone holding a different piece of the puzzle, with some pieces being redundant instead of fitting together. Several other participants echoed that communication between different agencies and levels of government is not always guaranteed or reliable. At the federal level alone, accountabilities related to Indigenous health, energy, and housing are split between Indigenous Services Canada, Canada Mortgage and Housing Corporation, Housing, Infrastructure and Communities Canada, Crown-Indigenous Relations and Northern Affairs Canada, Environment and Climate Change Canada, Health Canada, and the Public Health Agency of Canada.

The Crown has a fiduciary relationship with Aboriginal Peoples in Canada, though specifically how this relationship plays out in the context of health, energy, and housing policy for First Nations, Inuit, and Métis is less clear (Hurley 2000). In 2016, the Supreme Court affirmed that Métis and non-status First Nations fall under federal jurisdiction, confirming the federal government's constitutional responsibility for these groups (Supreme Court of Canada 2016). However, many have criticized the lack of action, including one Métis interview participant who said progress has been slow. Likewise, groups including the Assembly of First Nations (AFN) have characterized the underfunding of First Nations housing and the existence of the First Nations infrastructure gap as a failure of Canada's existing fiduciary duties (LeBlanc et al 2023). In 2023, more than 100 First Nations brought class action litigation against the Attorney General of Canada for breaching fiduciary duties, the honour of the Crown, and the Canadian Charter of Rights and Freedoms by failing to address the housing crisis on reserves (McCarthy Tétrault 2025). One interview participant noted that the persistent inadequacy of on-reserve housing has contributed to significant migration of community members to urban areas, further disrupting community cohesion and perpetuating colonial patterns of displacement.

The federal government's level of involvement in Indigenous housing, health, and energy varies across portfolios and across Indigenous identities and geographies. Generally, the Canadian government provides housing programs and services to status First Nations people living on reserve (Shared Value Solutions 2024).

For Inuit and Métis, the landscape of federal involvement differs. Though Canada has played a role in Inuit housing historically, these responsibilities have been transferred to other orders of government, with the federal government's role being limited largely to the provision of funding (Dyck and Patterson 2017). Throughout Inuit Nunangat, housing authorities—often at the provincial and territorial level—play a significant role in delivering housing programs (Shared Value Solutions 2024). An interview participant from the Northwest Territories shared that more funding tends to be allotted to First Nation, Inuit, and Métis Nations with resolved land claims or self-government agreements, and that those stuck in the land claim process may be unable to access the same amount of funding for health and housing programs.

Similarly, the federal government supports Métis housing through specific partnerships and agreements with various Métis groups, enabling them to serve their own citizens (Crown Indigenous Relations and Northern Affairs Canada 2021; Crown Indigenous Relations and Northern Affairs Canada 2022).

Urban Indigenous housing has a history of jurisdictional ambiguity, resulting in a patchwork of governmental responses with significant gaps.

The federal government also provides funding support for Indigenous energy initiatives across Canada, especially in remote and diesel-dependent Indigenous communities that are isolated from Canada's larger energy infrastructure (Natural Resources Canada 2025).

In general, urban Indigenous housing has a history of jurisdictional ambiguity, resulting in a patchwork of governmental responses with significant gaps (Breton 2020). The existence of these gaps was underscored by several interview participants, who said various non-profits or other organizations often step in to serve urban Indigenous communities and work to meet their needs related to Healthy Energy Homes.

Similar to the housing sector, the federal government plays a role in providing support for Indigenous health in partnership with other levels of government. One area where accountabilities differ for Indigenous Peoples is under Jordan's Principle, which is intended to ensure that First Nations children access necessary health supports through whichever relevant government is approached (i.e. provincial, territorial, or federal) and that issues of jurisdiction are worked out later to ensure that children's health is not in jeopardy due to bureaucratic processes (Indigenous Services Canada 2025).

It is important to note, however, that Indigenous Services Canada (ISC) updated eligibility through Jordan's Principle in 2025 to exclude the purchase, construction, or structural renovation of a home (First Nations Health Consortium 2025). This exclusion demonstrates how current funding models fail to reflect Indigenous worldviews, where housing is deeply interconnected with child welfare and well-being. For Métis, off-reserve First Nations, and non-status First Nations, health services and benefits are generally provided by provinces and territories, which provide universally accessible and publicly insured health services to all residents (Indigenous Services Canada 2024).

The accountability of municipal and local governments as they relate to Healthy Energy Homes in Indigenous communities are even more varied across Canada, with some acting as strong partners and others not meaningfully involved. In discussing their experiences, interview participants generally agreed that the overall direction related to housing and energy initiatives comes from the federal, provincial, and territorial levels, followed by municipalities. Generally, municipalities were viewed as strong allies with urban Indigenous housing, or with Indigenous Nations and communities who did not have reserve lands.

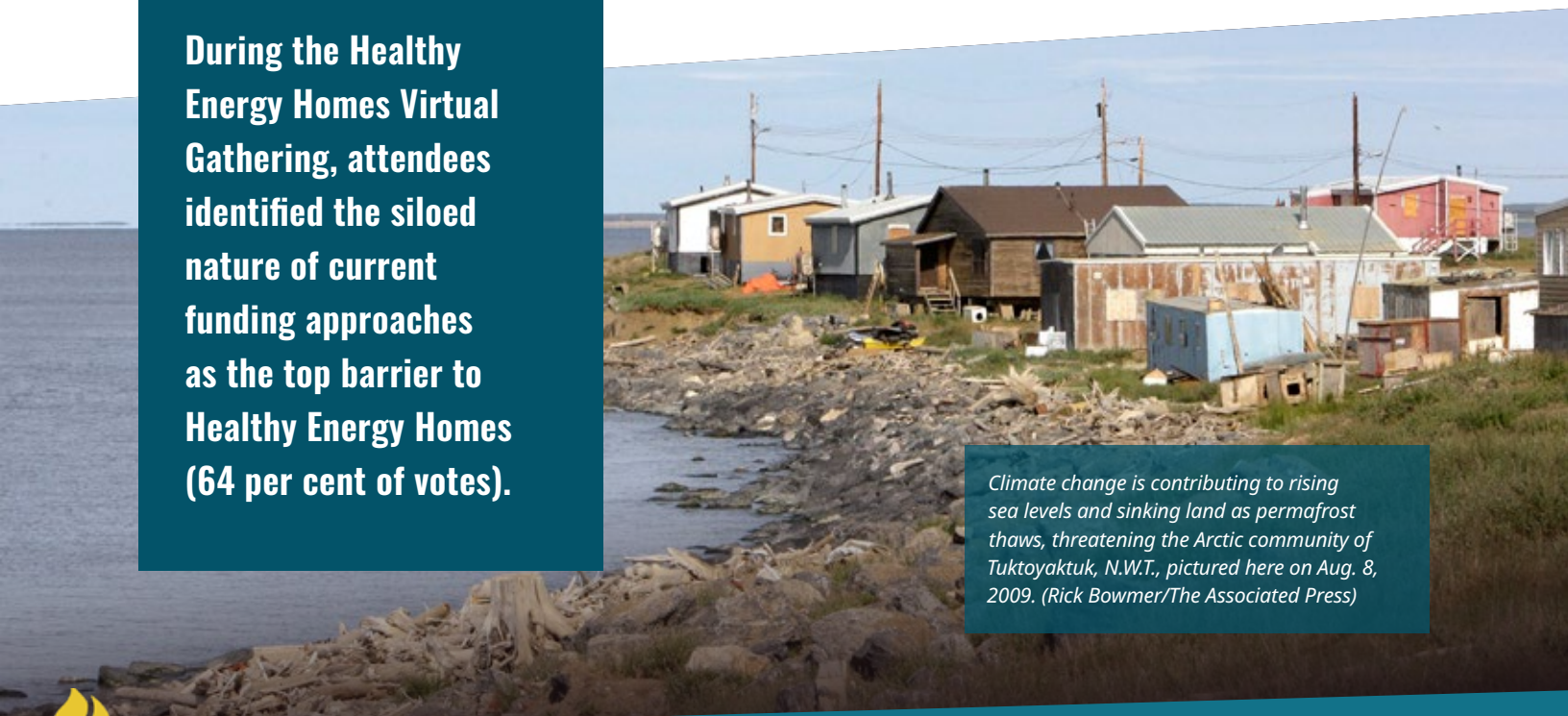
A common theme across interviews was that, over time, the federal government has delegated more of its responsibilities to the provinces and territories with varying degrees of success. Some participants viewed this transfer as the federal government "passing the buck" and described experiencing additional challenges including new layers of bureaucracy, and lack of clarity around where available resources now exist and how best to access them. A participant also expressed their concern that, if federal commitments change as a result of the priorities of political mandates, this may influence provincial mandates as well. Additionally, both the literature review and interviews highlighted that the federal silos related to health, energy, and housing policy also exist at the provincial and territorial levels.

Bureaucracy undermines health, energy, and housing

> ***"We can't address climate change holistically if we separate it into silos."***
> *—Cole Chretien, Environmental Policy Analyst, Métis Nation Saskatchewan*

Jurisdictional silos are undermining the integration of health, energy, housing, and climate resilience—core pillars of sustainable community well-being. Interviewees and existing research consistently highlight this fragmentation as a major barrier for Indigenous communities.

During the Healthy Energy Homes Virtual Gathering, attendees identified the siloed nature of current funding approaches as the top barrier to Healthy Energy Homes (64 per cent of votes).



Climate change is contributing to rising sea levels and sinking land as permafrost thaws, threatening the Arctic community of Tuktoyaktuk, N.W.T., pictured here on Aug. 8, 2009. (Rick Bowmer/The Associated Press)

Despite well-documented evidence that housing is a key social determinant of health, policies and programs often fail to reflect that fact. Interview participants underscored that safe, stable, and healthy housing is fundamental to improved outcomes across a wide range of areas, including child welfare, mental and physical health, educational attainment, employment, social connection, and overall community well-being.

The upfront capital costs of Healthy Energy Homes should not be perceived as outweighing the broader systemic savings and long-term wholistic benefits of an integrated relationship between energy efficiency, housing quality, and health.

Participants shared first-hand examples of how substandard housing increases pressures on health and social systems: Elders entering long-term care prematurely due to unaffordable housing repairs; mould contributing to chronic respiratory illnesses and other health conditions; wildfire smoke compounding indoor air quality issues; and the high costs of emergency responses to homelessness. These examples highlight the urgent need for policy approaches that reflect the interdependence of housing, health, and energy—and that support integrated, community-led solutions.

> ***"Mould, that's the biggest killer in our community, I believe."*** *—Gary Wilson, President and Chair of AHMA, Board Member of the National Indigenous Collaborative Housing Inc, Chief Executive and Economic Development Officer of Tiičma Enterprises*

During the Virtual Gathering, one of the key themes identified by the majority of attendees was the siloed nature of current funding approaches, such as healthcare budgets. In Canada, a significant portion of healthcare spending is directed to Indigenous health issues related to inadequate housing. For example, in 2021, the incidence of active tuberculosis was about 450 times higher among Inuit, 54 times higher among First Nations, and 7 times higher among Métis compared with Canadian-born, non-Indigenous people (Public Health Agency of Canada 2024). Crowded and inadequate housing is a significant contributor to this health disparity (Jetty 2020). Research shows that increasing investment to address housing issues like mould, dampness, and overcrowding is an effective way to reduce both respiratory symptoms and the frequency of urgent clinical visits (Hostland 2015; Riva et al 2020).

> ***"Profit will sometimes guide policy decisions."*** *—Michael Sadler, Executive Director, First Nations Housing and Infrastructure Council*

The piecemeal way in which accountability for Indigenous health, energy, and housing is split between various levels of government and agencies makes it challenging for Indigenous communities and organizations to access the support they need. Several participants shared the difficulties of navigating layers of bureaucracy, which increase administrative costs and create burdens for Indigenous organizations, slowing access to funds and other support.

In fact, the Standing Committee on Indigenous and Northern Affairs has reported that the federal government's transfer of funding to provinces or territories has created inconsistent support across Canada (Standing Committee on Indigenous and Northern Affairs 2022).

Participants in the Healthy Energy Homes Virtual Gathering also reported inconsistencies in systems and approaches even within levels and branches of government.

Indigenous communities and organizations know what solutions are needed, but face difficulty implementing them when they encounter governmental redundancy and "red tape."

Misalignment of funding programs with Indigenous realities

> ***"There's a huge gap from what the needs are and what the government has actually funded or committed to funding."*** *—Travis Seymour, Chief Executive Officer, First Nations Market Housing Fund*

The types and amount of funding available to Indigenous Nations, communities, and organizations for Healthy Energy Homes varies by geography and over time. Interview participants familiar with processes for accessing funding explained that it primarily flows based on federal mandates to provincial, territorial, and municipal governments. They emphasized that election cycles and shifting federal government mandates can influence offers of housing grants and other supports.

For First Nations, Inuit, and Métis, funding availability can also vary based on whether communities have reserve lands, their own governance structures, and other nuances related to how they are recognized by the federal government. Funding programs often fail to recognize that each community has distinct needs to address, instead taking a one-size-fits-all approach. Compounding this issue, funding rules often limit how resources can be used, preventing communities from pursuing innovative solutions or focusing on outcomes rather than specific activities.

Inconsistent, insufficient, and generic programs fail to recognize unique needs

> ***"We used to be experts in housing before all the colonizers got here. We adapted or we'd die, and we built housing that would be resilient to the geographical areas that we were living in, and we gotta do the same thing here."*** *—Michael Sadler, Executive Director, First Nations Housing and Infrastructure Council*

Policies and programs administered by governments in Canada often apply a uniform or pan-Indigenous approach to Indigenous Peoples regardless of whether they are First Nations, Inuit, or Métis. Further, policies and programs often fail to account for specific needs and contexts such as differences in geography, Treaty, and whether communities have a land base or reserve lands.

In some cases, for example, federal funding is provided through targeted programs for Indigenous people living off reserve. However, one interview participant noted that funding for people living on reserve lands is usually around triple the amount of funding available for people in Nations without reserve lands.

Additionally, of the funding programs available, there is a lack of consistent, long-term support needed to build Healthy Energy Homes in Indigenous communities.

One example relates to the use of distinction-based housing strategies, which are housing plans developed specifically for First Nations, Inuit, and Métis peoples, acknowledging their unique cultures, rights, and needs. While the Canada Mortgage and Housing Corporation (CMHC) acknowledges that the Urban, Rural and Northern Indigenous Housing Strategy complements existing distinction-based housing strategies (Canada Mortgage and Housing Corporation 2025b), several interview participants emphasized that, in their experience, CMHC's housing programs lack a distinctions-based approach. One participant described the CMHC as "a large ship trying to turn on a dime," referring to how slowly the organization pivots or changes their approach.

Several interview participants and attendees at the Healthy Energy Homes Virtual Gathering emphasized the importance of Indigenous-led approaches to policy development and funding. They encouraged funds being more directly provided to First Nations, Inuit, and Métis governments, organizations, and communities as they are best positioned to identify and serve the needs of their own community members. The Inuit-Crown Partnership Committee's 2019 *Inuit Nunangat Housing Strategy* also reasoned that investments should be provided to Inuit directly (Crown-Indigenous Relations and Northern Affairs Canada 2019). Such an approach could allow First Nations, Inuit, and Métis groups to develop solutions that are appropriate for their unique needs and context.

> ***"On spayr in pchi brin kan kon aten li mon Otokton obindon Aborijin…j'a di zinketchud di program di lojmen ki sa iti anonsi ayn kowp d'ani pawsi ki senb d'eyt rvenu a la manyayr pan-Otokton di fayr li safayr."*** *—Will Goodon, Minist di Lojmen ipi di la Propryiti Minajmen, Federasyon Di Michif Dju Manitoba (Michif language, French dialect)*

> ***"We kind of get lost when the word Indigenous or Aboriginal gets used… I have some concerns about a housing program that was announced a couple years ago that seems to have reverted back to the pan-Indigenous way of doing things."*** *—Will Goodon, Minister of Housing and Property Management, Manitoba Métis Federation*

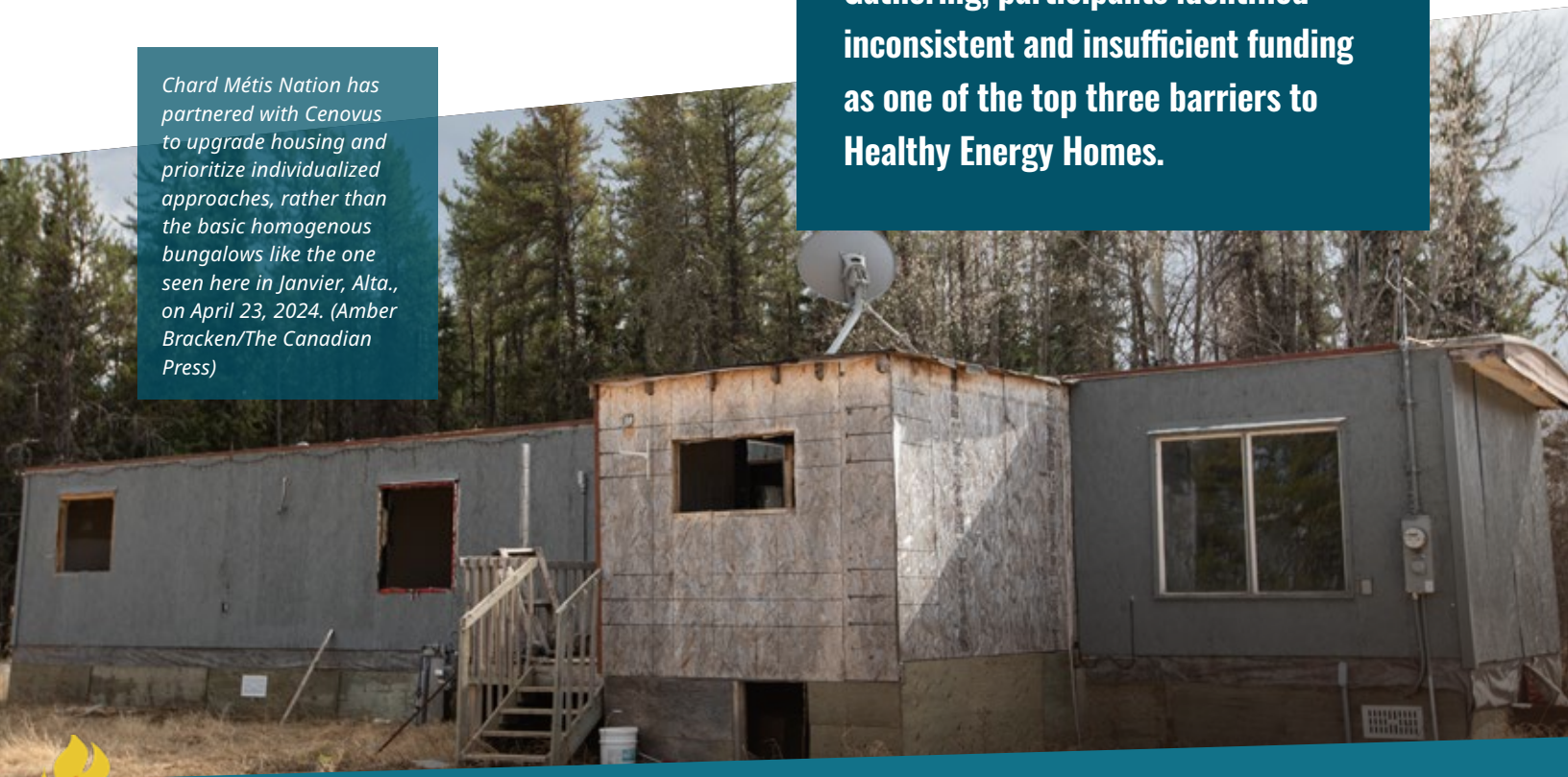
Homes built in First Nations, Inuit, and Métis communities are often not culturally appropriate and do not promote healthy housing. Interview participants shared examples, including how houses on reserves are often packed tightly together due to requirements around access to infrastructure, power and sewage. In the North, where the preparation of country foods requires frequent boiling, housing often does not have adequate kitchen

ventilation, resulting in an increased risk of mould. Lack of autonomy over housing and imposed Western-centric housing design contributes to psychological stress (Stout 2018).

Despite dependence on government-funded housing, existing funding programs are inconsistent and insufficient. This was identified by attendees of the Health Energy Homes Virtual Gathering as one of the top three barriers to achieving better housing outcomes. It has also been chronicled by a number of government reports. For example, the *Inuit Nunangat Housing Strategy* identified that the improvement and maintenance of housing in Inuit Nunangat required long-term, multi-year, stable investments. In their joint report, the AFN and ISC referred to the current funding system as using a "firefighter" approach, granting funding on a project-by-project, year-by-year basis in a patchwork format, analogous to putting out fires reactively (Assembly of First Nations and Indigenous Services Canada 2023). The Standing Committee on Indigenous and Northern Affairs 2022 report, *The Effects of the Housing Shortage on Indigenous Peoples in Canada* also echoed these recommendations that funding needs to be long-term, stable, predictable, and flexible (Standing Committee on Indigenous and Northern Affairs 2022). The "firefighter" approach does not align with community needs for operations and maintenance funding, nor with the need for reliable capital to support sustainable developments, long-term home affordability, and energy efficiency (LeBlanc et al 2023).

> ***"We need an approach to funding Indigenous housing that is equity driven and not crisis driven."*** *—Dr. Julia Christensen, Associate Professor, Department of Geography and Planning, Queen's University*

At the Healthy Energy Homes Virtual Gathering, participants identified inconsistent and insufficient funding as one of the top three barriers to Healthy Energy Homes.



Chard Métis Nation has partnered with Cenovus to upgrade housing and prioritize individualized approaches, rather than the basic homogenous bungalows like the one seen here in Janvier, Alta., on April 23, 2024. (Amber Bracken/The Canadian Press)

Despite Indigenous governments receiving insufficient funding, they must still use it and report on it. According to one interview participant working in northern communities, it wastes Indigenous governments' time, capacity, and labour hours on Band-Aid funding solutions that cannot address underlying existing issues. Infrastructure projects like housing construction require significant capital investments with rolling budgets over multiple years to ensure planning, design, and construction tasks are carried out effectively (Assembly of First Nations 2024).

By contrast, the Office of the Auditor General of Canada reported that most ISC and CMHC funding was allocated to projects that were "shovel-ready" or could be completed quickly (Office of the Auditor General of Canada 2024). An interview participant explained that there is no such thing as "shovel-ready" projects, as a community could be ready to start the work and still need to wait five years for funding to arrive. Additionally, becoming "shovel-ready" requires significant capital and staff capacity before funding is even awarded.

The nature of funding also poses an issue for Indigenous communities because it forces many Nations and organizations to compete with one another for funding that ultimately still falls short of what is needed to address housing needs. Between 2018 and 2023, ISC and the CMHC spent $3.86 billion on housing for First Nations. Of that amount, only $905.47 million (23 per cent) was guaranteed, with the rest requiring First Nations to apply and compete to receive funding (Office of the Auditor General of Canada 2024). The AFN and ISC determined in their collaborative study of First Nation infrastructure needs that the federal government would have to invest $135.1 billion between 2023 and 2030 to address First Nations housing needs and close the infrastructure gap by 2030 (Assembly of First Nations and Indigenous Services Canada 2023).

Similarly, $370 million was allocated in the 2024 federal budget for housing and infrastructure in Inuit Nunangat, which falls short of Inuit Tapiriit Kanatami's pre-budget submission of $75 billion over 35 years for infrastructure (Inuit Tapiriit Kanatami 2024). The amount of existing federal funding has been insufficient for decades. In 2024, the Office of the Auditor General of Canada reported that ISC and the CMHC's annual funding has been relatively stagnant since the 1990s (Office of the Auditor General of Canada 2024), meaning funds are not stretching as far as communities grapple with the rising cost of residential building construction, inflation, and increasing housing demand—pressures that have intensified in the wake of the COVID-19 pandemic and recent tariff disputes. Due to these challenges, one participant said that houses often remain unfinished, shortcuts are taken, and homes are not up to building code.

Inflexible funding undermines real outcomes

Federal funding programs present persistent challenges for Indigenous communities, particularly due to the rigidity of program requirements. These constraints often limit both access to funding and the flexibility with which it can be used once secured. Specific issues include non-stackable funding (i.e., funds that cannot be combined with other sources), eligibility restrictions that disqualify recipients from future funding, and programs tied to prescriptive activities rather than wholistic, community-defined outcomes. Collectively, these limitations constrain what communities can accomplish and how they approach solutions.

Louis Okimaw looks at the damage in his son's bedroom. Their house, pictured on April 20, 2016 in Attawapiskat First Nation, Ont. was deemed not fit for human habitation. (Nathan Denette/The Canadian Press)

Participants consistently highlighted how non-stackable funding creates financial barriers. In many cases, the amount provided is insufficient to cover the full cost of necessary work, particularly in housing. Without access to additional capital to close funding gaps, essential repairs may be delayed or foregone entirely. As one participant noted, in such circumstances, investments in climate resilient housing are often deprioritized in favour of more immediate community needs. Another participant shared that once a home receives funding from ISC, it becomes ineligible for further ISC housing funding for a ten-year period. This restriction can be especially problematic when the initial funds are insufficient to address all the required work, or when new issues emerge during the intervening years.

Another barrier noted was that under ISC's mould-remediation funding program in British Columbia, the First Nations Health Authority must first inspect and report on the home before funding can be approved (Tseshaht First Nation 2018). While intended to verify health risks, this requirement places additional demands on an already strained Indigenous health system and can delay access to urgently needed housing repairs.

Several participants also described how restrictive eligibility criteria and use conditions undermine the development of wholistic, culturally relevant housing solutions. Current funding structures can limit applicants' ability to implement thoughtful, innovative, and durable housing options. In the context of substandard housing conditions, innovation is not a luxury but a necessity. Participants emphasized the need for greater flexibility in program design to effectively meet local needs. One participant shared that ideally there would be more "golden egg" funding—unrestricted, multi-year funding that includes budget lines for research and design, thereby enabling innovation.

Concerns were also raised regarding program requirements imposed by institutions such as the CMHC. For example, participants shared that CMHC would not approve the use of more durable building materials suited to local climate conditions due to higher upfront costs. As a result, communities were compelled to use materials like vinyl siding, which are ill-suited to the environment and have resulted in homes requiring premature repair. Others noted that CMHC's requirement to select the lowest bidder on work often results in reduced construction quality and infrastructure longevity.

One participant recounted how their father's house was built out of fir and cedar by their grandfather. When mould developed in the house, despite it being fixable, CMHC policies necessitated the construction of a new home rather than allowing for remediation—forcing a difficult choice between living in an unsafe home with mould, accepting a new one with lower-quality materials, or relocating entirely.

When government agencies focus on the procurement requirements of the funding (e.g. using specific materials to reduce costs, procuring work through contracting the lowest bidders) instead of the outcomes for Indigenous communities, it limits the ability of funding recipients to innovate or tailor projects to their unique needs and context. One participant described their view that such funding relationships are centered on control and compliance instead of achieving positive outcomes for families and communities, perpetuating colonial dynamics and undermining self-determined, community-led approaches.

Capacity gaps

> ***"How do we help support communities to better develop [skilled trades capacity among] their people and develop a program? Government doesn't give enough resources to allow that to happen."*** *—Gary Wilson, President and Chair of AHMA, Board Member of NICHI, Chief Executive and Economic Development Officer of Tiičma Enterprises*

Many Indigenous communities in Canada face persistent capacity constraints when navigating federal, provincial, and territorial funding programs, policies, and accountability frameworks related to health, energy, and housing. Capacity, in this context, refers to the resources and supports—such as administrative infrastructure, financial tools, training, knowledge systems, and skilled personnel—that enable communities to pursue self-determined goals and exercise their inherent rights. Where these supports are limited or absent, communities encounter significant barriers to accessing and implementing opportunities intended to support their well-being. This challenge is well-documented: the Office of the Auditor General of Canada (2024) recommended that ISC and the CMHC identify First Nations communities with the highest capacity needs and ensure they receive sustained funding to manage housing. Despite such findings, federal initiatives often continue to require a high level of community capacity without providing the necessary support—creating a structural mismatch that undermines policy outcomes and perpetuates inequity.

Capacity limits are a constraint throughout the project lifecycle

Interview participants highlighted that communities facing the greatest capacity barriers often have the greatest needs and miss out on accessing necessary support as a result. One interview participant explained that their Nation has not been successful with CMHC funding applications as they do not have a housing department that would have the capacity to

apply for funding. The CMHC alone has 13 separate funding programs for building houses, repairing existing units, and increasing housing capacity. Virtual Gathering attendees shared that many Indigenous communities already experience issues with staff capacity, and navigating several different application and reporting requirements adds to their excessive administrative burdens.

Lack of awareness of programs, time-consuming funding applications, and difficulty building relationships with trusted partners and contractors were also identified as significant barriers in the context of energy-efficiency projects (Indigenous Clean Energy Social Enterprise 2023).

Compounding this issue, many funding opportunities also have short application windows, which can further strain capacity that is already stretched between competing priorities. Where Indigenous communities are able to access funds, funding requirements can also make administrative and project management processes more complicated and time-consuming, increasing capacity demands. For example, one participant shared that if repairs need to be done, funders expect the band council to put out a request for proposals for the contracting work rather than simply calling a contractor to have the repair done.

The prevalence of these challenges was supported by discussions at the Healthy Energy Homes Virtual Gathering, where the majority of attendees identified community capacity as one of the top barriers to Healthy Energy Homes. Attendees explained that increasing community capacity must focus on leadership, skill-building, training, and collaboration. Interview participants echoed these needs, with one providing an example of how there is a shortage of local tradespeople and technicians qualified to install energy-efficient technologies in northern communities, creating additional reliance on external contractors. Another pointed out that community members need training on maintaining and repairing their homes to prevent deterioration, as a lot of people missed out on learning these skills due to the intergenerational impacts of residential schools and the Sixties Scoop. In this sense, delivering Healthy Energy Homes is not only about building a house, but also about providing additional supports to build capacity and empower Indigenous communities and homeowners where needed to achieve their self-determined interests.

Financial capacity is limited

> ***"Ta'n tujiw wesuwa'qa'tmk elt teliknaq ewle'jimk, ta'n msit taqoey ta'n ki'l tl-lukwetsk nisapita'tun ki'l telpitekeweyem ta'n poqnitpa'q kulaman na kisi-tepawtukwetsk na mijisin."*** *— Drew Plna'l, Teliknaqewey Nikanus, L'nui Mnikuk L'nue'kati (Mi'kmaq language)*

> ***"When you're dealing with energy poverty, the first thing that you're going to do is turn down your thermostat at night so that you can afford a meal."*** *— Drew Bernard, Energy Lead, Lennox Island First Nation*

Limited financial capacity also poses challenges for Indigenous communities. Many communities and individuals do not have funds available to cover the costs of housing repairs, retrofits, or construction, and there are often gaps between the funding they receive and the actual cost of the project. Some projects also require pre-planning activities in advance of applying for funding, such as geotechnical surveys, which can cost between $5,000 and $10,000. Such costs must be paid for with no guarantee that a funding application will be successful, placing an enormous burden on homeowners and communities. These capacity barriers are well documented and echoed across many different contexts, including Indigenous Clean Energy's (2023) report *Enabling Efficiency* which identified high up-front costs as the largest barrier to energy-efficiency projects.

Gaps in financial capacity can prevent communities and homeowners from making the initial investments necessary to benefit from housing and energy projects in the future. An interview participant provided the example that if a household were to spend a one time fee of $2,500 on energy retrofits, they could save $700 per year. While these savings provide long-term benefits, they require homeowners to front the initial capital. Gaps in financial capacity can also lead to communities and homeowners delaying necessary repairs until they qualify for financial support. The *Indian Act* doesn't enable homeowners on their reserve lands to leverage the equity they've earned on their homes to make the necessary repairs, creating further dependence on limited government funds. In one example of what they referred to as energy poverty, a community member delayed repairing their furnace until they became eligible for one of these programs, which meant they did not have a working furnace for two years and their home deteriorated further as a result.

In the Northwest Territories, it can be more cost-effective to take a lower paying job and qualify for public housing than to own a home and pay for a mortgage and heating.

Limited financial capacity can also mean that communities and homeowners have to make trade-offs in determining what gets funded or how they access housing. One participant shared that the funding received from territorial governments is mainly used for operating and maintaining housing, including heating them and keeping people in their current homes, but is insufficient to add housing stock. Additionally, the extremely high cost of heating homes can pose a major barrier to homeownership. In the Northwest Territories, for example, it can be more cost-effective for individuals to take a lower paying job and qualify for public housing than to own a home and pay for a mortgage and heating.

Participants with ICE's Bringing It Home initiative tour in Tyendinaga, Ont. Flat Street Tiny Home Subdivision in the summer of 2025. (Cara Garneau/ICE)

5

Solutions that translate policy into homes

In addition to barriers and challenges highlighted during interviews and literature reviews, examples of success have also come to light, including international and Canadian examples of government action, community action, and innovative finance models. These solutions demonstrate that meaningful progress is possible when housing, health, energy and climate are treated as interconnected priorities rather than separate policy silos, and when driven by Indigenous leadership.

Indigenous communities and organizations are already leading the delivery of healthier, more energy-efficient and climate-resilient homes; what's needed is co-ordinated policy action that's grounded in accountability and builds on these successes. Innovative financing models that focus on outcomes and long-term partnerships can help translate policy commitments into Healthy Energy Homes—while creating co-benefits for health, climate and self-determination.

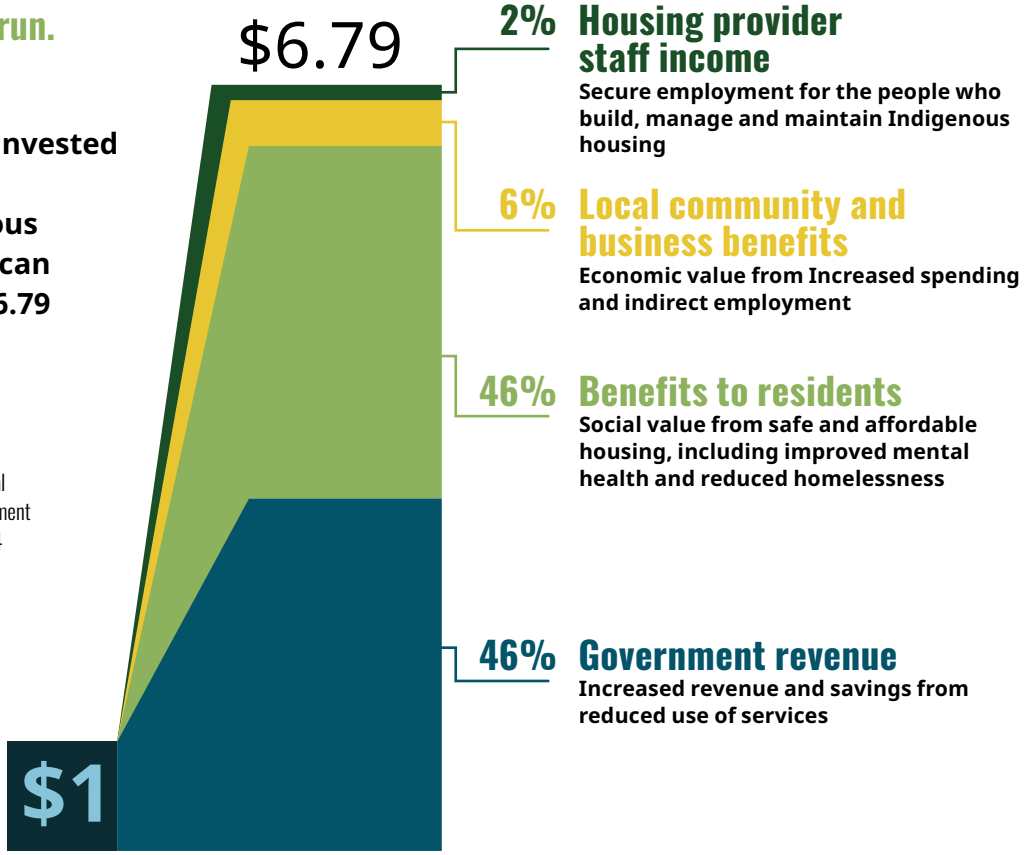
Advancing government responsibility in Indigenous housing

Effective and co-ordinated support from governments can enable current and new homes that are healthy, climate resilient, and energy efficient for Indigenous Peoples across Canada. The co-benefits of such projects—for communities but also for governments' bottom lines—are clear.

Investing in Indigenous housing supports the Canadian economy, benefits local communities through economic development opportunities, and—due to decreased use of government services—saves money, according to the report *The Effects of the Housing Shortage on Indigenous Peoples in Canada* (Standing Committee on Indigenous and Northern Affairs 2022). The Aboriginal Housing Management Association estimates that for every dollar invested in Indigenous housing each year, the social return on investment is around $6.79, which includes an estimated $3.12 in government savings from decreased government service use (Aboriginal Housing Management Association 2024).

FIGURE 5:

Investing in Indigenous housing pays off in the long run.



A dollar invested today in Indigenous housing can return $6.79 in social benefits

Source: Aboriginal Housing Management Association 2024

ICE's Bringing It Home Project Stewards on the Yale High Performance Tour in Harrison Hot Springs, B.C. in the winter of 2023. (ICE)

International success stories demonstrate the power of policy and illustrate the kinds of policy tools that could be applied in Canada. In 2016, Ireland established the Warmth and Wellbeing Scheme, a multi-departmental social and health policy initiative with the overall goal of improving the living conditions of vulnerable people, including those at risk of energy poverty and living with chronic respiratory conditions (Government of Ireland 2024). Essentially, the initiative provided free energy upgrades to eligible homes to create warmer and healthier conditions. The positive effects of the program included improvements in respiratory symptoms, physical functioning, emotional well-being, and reduced anxiety and depression.

Similarly, New Zealand created the Warm Up New Zealand: Heat Smart program in 2009, administered by the Energy Efficiency and Conservation Authority, which provided funding for insulation retrofits and clean, efficient heating. A cost-benefit analysis of the program found that there were yearly savings associated with reduced hospitalization costs related to circulatory and respiratory illness. When these health results were combined with estimated energy savings and an analysis of industry impacts, the net benefit of the program was estimated at NZ $951 million dollars (He Kāinga Oranga Housing and Health Research Programme 2025).

Research in the Australian context on climate, housing, energy, and Indigenous health has also demonstrated the importance of Healthy Energy Homes, especially in the context of excessive heat and energy poverty (Quilty 2022). Where remote Indigenous communities are experiencing low quality housing and energy instability, researchers are calling for a multi-sectoral response including thermal safety, reliable electricity supply, retrofits, the involvement of health care professionals, and ensuring that remote Indigenous communities benefit from renewable energy technology (Quilty 2022).

ICE's 20/20 Catalysts participants are pictured at Bear's Inn, a homestead with solar power and battery storage by Reserve Power in Six Nations of the Grand River, Ont. in the fall of 2024. (Cara Garneau/ICE)

Local voices and community action in Indigenous housing

> ***"...Ni'n ketloqo ketlamsitm na teliknaq westawiasik lukwaqn na mawi-mtuwe'k lukwaqn, ta'n pasik wen kisi-tl-lukwetew ta'n teliknaq, katu elt na ma'wt mawi-apanketask aqq ta'n mawi-we'tuwe'k taqoey ta'n kisi-tl-lukwutitesnu ta'n teliknaq ta'n pasik teken L'nue'kati asoqmtaqtek Kana'ta."*** *— Drew Plna'l, Teliknaqewey Nikanus, L'nui Mnikuk L'nue'kati (Mi'kmaq language)*

> ***"I truly believe that energy efficiency work is the hardest work that anybody can do in energy, but it's also the most rewarding and the most impactful thing that we can be doing in energy in any Indigenous community across Canada."*** *—Drew Bernard, Energy Lead, Lennox Island First Nation*

In Canada, many Indigenous communities and organizations are already at the forefront of Healthy Energy Homes, designing and implementing a range of initiatives related to housing development, improving health outcomes, energy efficiency, climate resiliency, and more. While there are numerous projects and initiatives demonstrating the success of Healthy Energy Homes for First Nations, Inuit, and Métis in Canada, a few examples are showcased here.

Over six years, Efficiency Nova Scotia has worked in partnership with 13 Mi'kmaw communities across Nova Scotia on the Mi'kmaw Home Energy Efficiency project (Efficiency Nova Scotia 2023). The program has focused on energy efficiency upgrades, including insulation, heat pumps, and draft-proofing in more than 1,000 band-owned homes. Together, these upgrades have saved over 68,500 gigajoules of energy and reduced greenhouse gas emissions by more than 6,200 tonnes, producing an average of $1,500 in annual energy bill savings per home (Efficiency Nova Scotia 2023). The project is funded by the Government of Canada, the Province of Nova Scotia's Department of Natural Resources and Renewables, and Demand Side Management Funding regulated by the Nova Scotia Utility and Review Board. The majority of the funds are spent on heat pumps, with funds also being used for basement upgrades, attic upgrades, bathroom ventilation, and heat recovery ventilators.

Kylea Smart, who lives and works in Tyendinaga, Ont., and ICE Project Steward Ay'Den Abraham are pictured during a tour of tiny homes in the summer of 2025. (Cara Garneau/ICE)

In 2024, after completing a review and revitalization of their housing stock, Cawathil First Nation in British Columbia completed essential housing repairs on 22 homes in the community, addressing housing needs and enhancing the quality of life for community members (Indigenous Services Canada 2024). This project was completed in partnership with the Government of Canada, providing $3.1 million through ISC and $150,000 through Canada Mortgage and Housing Corporation since 2018.

Keepers of the Circle, an urban Indigenous hub operated by the Temiskaming Native Women's Support Group and non-profit organization, has also undertaken significant projects related to Healthy Energy Homes with a focus on women, girls, and gender-diverse peoples. In recent years, the group trained six Indigenous women with no previous experience on modular construction to build a 600-square-foot passive home in partnership with Tooketree using Phase 1 funding from Canada Mortgage and Housing Corporation (Keepers of the Circle 2025). This capacity-building approach also supported the women in practicing their culture and accessing support from an Elder throughout the process.

Building on this success and using Phase 2 funding from Canada Mortgage and Housing Corporation, Keepers of the Circle is currently in the process of building a modular construction factory and social enterprise in Kirkland Lake, Ontario, led by Indigenous women. This facility will also serve as a year-round training centre for local community members (Keepers of the Circle 2025). The factory will construct single, multiplex, and community buildings designed to include solar, wind, and geothermal technology. The ultimate goal of the factory is to address the housing challenges faced by communities and provide affordable housing, energy efficiency, and opportunities for Indigenous people in the housing sector.

> ***"You can't have one without the other [health and housing]."***
> *—Interview participant working in Indigenous housing*

In British Columbia, Lu'ma Native Housing Society provides safe affordable housing for urban Indigenous Peoples and a wide range of services and programs that create the conditions needed to determine their health and wellness (Lu'ma Group of Companies n.d.). The Lu'ma Group of Companies includes Lu'ma Medical Centre, offering safe integrated primary care and Indigicare Medicines Ltd., an Indigenous pharmacy.

Lu'ma has over 21 housing properties comprising 1,760 housing units. The society has expanded its offering in the housing continuum to include unique programs for children in foster care, youth transitioning from care to adulthood, supportive transitional housing, shelter for homelessness, and short-term housing for patients and their families who must visit Vancouver for vital medical services.

> ***On aseyl a…a enkowraji li kontraktewr/metchyi, on vu awayr…li zavantaj ikonomik a ali a no prop Sitwayin."*** *— Will Goodon, Minist di Lojmen ipi di la Propryiti Minajmen, Federasyon Di Michif Dju Manitoba (Michif language, French dialect)*

> ***"We try to … encourage Métis contractors/trades, we want … the economic benefits to go to our own citizens."*** *—Will Goodon, Minister of Housing and Property Management, Manitoba Métis Federation*

To serve Red River Métis citizens, the Manitoba Métis Federation has developed numerous programs and initiatives under their Housing and Property Management Department (Manitoba Métis Federation 2025c). These include a rapid services team to support families experiencing or at risk of homelessness, a first-time home purchase program to assist with down payments and closing costs, and one-time forgivable loans through their Home Enhancement Loan Program that can be used for emergency repairs, accessibility upgrades, senior's upgrades, electrical, sewer, and water infrastructure and testing (Manitoba Métis Federation 2025e; Manitoba Métis Federation 2025a; Manitoba Métis Federation 2025b). Under the Government of Canada's Indigenous Homes Innovation Initiative, the Manitoba Métis Federation has developed Michif Manor, a housing concept to provide culturally appropriate and affordable housing to Red River Métis families with loved ones receiving treatment in Winnipeg, supporting cultural ways of healing (Manitoba Métis Federation 2025d).

The Manitoba Métis Federation has also created Mazoun, a transitional housing project for Red River Métis youth who age out of care to provide them with wraparound and culturally appropriate services, and the first Métis-specific housing and support program of its kind in Canada (Manitoba Métis Federation 2025d). The Manitoba Métis Federation also manages numerous residential properties across Manitoba, including housing for seniors. To combat issues related to mould in homes, the Manitoba Métis Federation is also working to build houses with steel framing and spun rock insulation.

ICE's Bringing It Home Project Stewards on the Yale High Performance Tour in Harrison Hot Springs, B.C. in the winter of 2023. (ICE)

In Prince Edward Island, Lennox Island First Nation is working on several renewable energy projects, increasing energy efficiency community-wide, and electrifying the community's heating system. The First Nation installed 65 heat pumps with much community commendation. Before the heat pumps were installed, community members were experiencing heat stroke and knew that temperatures would only continue to rise over the years to come. After the pumps were installed, community members were thrilled to have air conditioning in their homes, knowing they could live comfortably throughout the summer. Members' pride in community has increased as retrofits have improved their homes and alleviated financial burdens. A Lennox Island First Nation staff person shared that members have reached out expressing their gratitude as they would have needed to replace their furnaces at great personal expense. The heating system electrification has had a highly positive impact on members.

Indigenous Clean Energy's Bringing It Home Project Accelerator is an Indigenous-led initiative to enable and implement healthy, energy-efficient, and sustainable homes in First Nations, Métis, and Inuit communities across Canada. The initiative focuses on capacity building to empower communities to lead on community-scale retrofit projects and high performance new-build housing projects while respecting their unique cultural and climatic differences. A core pillar is the recognition that housing is a critical determinant of health. This includes participatory research with communities to track indoor air quality and energy use; studies on the benefits of retrofits for asthma, mental health, and household well-being; gathering data to support broader policy and funding reform; and elevating community voices and stories. The initiative clearly demonstrates that Indigenous communities are moving forward and taking action on healthier housing, despite systemic barriers. Today, it is helping dozens of communities launch or scale their projects, and its long-term goal is to support hundreds more. In this sense it's not just about fixing houses, but reclaiming control over housing systems, improving health outcomes, empowering local economies, and creating climate-ready communities rooted in Indigenous values and vision.

Financing Indigenous housing

> ***"If we're wanting to address the housing crisis and the climate crisis, it's not going to be done using only funding."*** *—Shaun Loney, Author and Entrepreneur, AKI Solutions Group*

Canada's National Housing Strategy (NHS) is a 10+ year, $115+ billion plan launched in 2017 to improve housing outcomes for those in greatest need (Government of Canada 2025a) and represents an important opportunity to better support Indigenous Healthy Energy Homes initiatives. Furthermore, the launch of Build Canada Homes, a new $13 billion federal agency with a mandate to accelerate affordable housing construction, also creates a critical opportunity to get Indigenous housing right (Prime Minister of Canada 2025).

The National Indigenous Collaborative Housing Inc (NICHI), in collaboration with ISC, has successfully distributed $275.2 million in federal funding to support 74 Indigenous-led housing projects in Canada (National Indigenous Collaborative Housing Inc. 2025). This collaboration shows that when funding decisions can be made by Indigenous Peoples and Indigenous communities, safe and affordable homes can be delivered more effectively and efficiently.

Project Coach Ian Scholten and Project Steward Desiree Maurice, both with ICE's Project Accelerator program, tour the Tyendinaga, Ont. Flat Street TIny Home Subdivision in the summer of 2025. (Cara Garneau/ICE)

Interview participants shared their experiences successfully creating alternative financing arrangements to better support Healthy Energy Homes. One such example is the First Nations Market Housing Fund, a self-sufficient fund that operates on the earnings of the trust. Chief Executive Officer Travis Seymour said that the fund's mandate is to support First Nations access to financing to build homes on reserve. This goal is focused on facilitating homeownership, rather than on-reserve social or subsidized housing that is often the norm.

The First Nations Market Housing Fund (FNMHF) currently provides two programs geared to First Nations who are interested in expanding market-based housing. The first program is the capacity development program. This program is designed to help First Nations qualify for the FNMHF's Credit Enhancement Program (First Nations Market Housing Fund n.d.-b).

The second program offered by FNMHF is the Credit Enhancement program. This program is used to support First Nations who are able to safely guarantee on-reserve home loans for their members. Loans can be used for new home builds, renovations, refinancing and/or purchasing existing housing (First Nations Market Housing Fund n.d.-a). For those First Nations approved for this program, the FNMHF acts as a backup guarantor of the market housing loans. Should both the homeowner and the First Nation be unable to repay a housing loan, the FNMHF will provide a pooled guarantee of up to 10 per cent of the total value of the housing loans. One additional benefit of using this program is that the Fund provides a suite of legal document templates that can be used to facilitate the loan between the First Nation, the lender, and the homeowner. Once a loan program is set up, the FNHMF can provide follow-up "homeownership" support to community members, through workshops, presentations and one-on-one meetings.

First Nations individuals living on reserve typically have limited access to financing from private lenders due to land management regimes laid out in the *Indian Act* and the communal nature of reserve lands (First Nations Market Housing Fund n.d.-a). The programs and services offered by the FNMHF are designed to help these individuals overcome the obstacles to on-reserve homeownership.

Another emerging initiative is Yänonhchia' Housing Finance, a First Nation designed and led institutional solution to the housing crisis, promoting access to private homeownership through an established network of Indigenous financial institutions (Collin et al 2023; Yänonhchia' Housing Finance 2025). It provides affordable capital, lending policies, best practices, and a capital fund to support housing loans for First Nations individuals on reserve. Anchored in respect and partnership, Yänonhchia' acts in complement to other actors in the housing funding ecosystem, fostering mutually beneficial relationships to maximize benefits to First Nation communities.

In addition to these arrangements, there are several other types of loans that could support on-reserve homeownership. A revolving loan fund involves the First Nation lending money to members and using the interest from the loan to pay for the cost of administering loans. Another loan option is called Access to Assets (A2A) lending, where a First Nations individual that holds land can lease the land to themselves. The individual can then acquire a mortgage for the leasehold property through a financial institution (CMHC 2019). According to an interview participant, A2A leasing has become popular in Western Canada and Cree communities in northern Quebec were early adopters.

> ***"There's lots of money for housing, but it's called public safety; it's called reduction in the number of people going to emergency wards, reduction in the number of people in mental health beds, reduction in the number of people on social assistance, reduction in the number of people involved with the criminal justice system. Tons of money that should be earmarked for housing, it's just called something else right now."***
> *—Shaun Loney, Author and Entrepreneur, AKI Solutions Group*

Shaun Loney proposes an alternative to typical funding approaches in his paper *The Winnipeg Model* (Encompass Co-Op 2022). He proposes switching from funding to procurement models, where government agencies pay non-profits for the community services they provide that reduce pressure on government services. The core difference in this model is that governments purchase outcomes instead of funding initiatives. Under this model, governments could procure Indigenous communities, or organizations supporting Indigenous communities, to build Healthy Energy Homes by purchasing outcomes like reductions in utility bills, reductions in medical visits for mould-related issues, reductions in interactions with emergency services and other related benefits.

The Winnipeg Model suggests that Manitoba Justice could buy a reduction in the number of court appearances and jail time, while Manitoba Health could buy a reduction in visits to the emergency room. This approach would reduce costs to these overburdened systems; government workloads have been steadily increasing and the resources required to maintain services have been increasing accordingly. In this model, government agencies pay a non-profit providing services once the government agency has seen a benefit, in this case, in workload reduction.

This approach also calls on foundations to provide the initial investments, as foundations in Canada have $136 billion in assets and distribute only four per cent through grants. Using

this model, foundations would provide the initial capital for non-profits to provide services, and then invoice the government agencies for payment, once the reduction in services is complete. This approach would not involve reducing government service budgets but rather reducing the need for future budget increases (Encompass Co-Op 2022).

Loney explained that current funding models reinforce Indigenous communities' dependency on the government, rather than achieving self-sufficiency. From this perspective, funding is about control (i.e. how the money was spent, if there is any money left over, when the money was spent) rather than outcomes. Shifting to a procurement approach could change this relationship by prioritizing wholistic outcomes, for example those related to health, housing, and energy.

A similar outcomes-based approach has been launched in the United Kingdom through the Better Futures Fund, a £500 million, 10-year initiative that invests in preventative, locally-tailored programs to support vulnerable children and families and improve social outcomes (UK Government 2025). By funding measurable results rather than activities, the program enables local authorities, charities, and social investors to design flexible, wholistic solutions tailored to local needs (Bridges Outcome Partnership 2025). This model could serve as inspiration for a National Indigenous Outcomes Fund in Canada to support integrated housing, health, and energy initiatives led by Indigenous communities.

Participants suggested additional finance models such as the use of community bonds. Organizations like Toronto's Tapestry Capital issue bonds to non-profits. Individuals can invest in community bonds and receive a small rate of return while supporting social and environmental causes, like affordable housing. An interview participant suggested investing funds received from the federal government in a trust and using the interest on the trust to build homes and purchase off-reserve lands. They explained that on-reserve housing is based on welfare payments, while off-reserve land is wealth-building. Another participant recommended that more private capital needs to be involved, leveraging private capital, government funding, and philanthropy together.

Additionally, a potential Indigenous Sustainable Bond framework—a principle-based approach currently being explored by Indigenous and financial leaders—has the potential to not only generate new funding streams for Indigenous communities for initiatives like housing, but also generate positive environmental and social outcomes (Hungerford and Freyman 2024). The concept aims to standardize how Indigenous bonds are issued in capital markets, ensuring that funds are used transparently and in alignment with Indigenous rights, self-determination, and community benefit (Hungerford and Freyman 2024).

There are many financial pathways to support Indigenous housing and the road to Healthy Energy Homes will look different in every community, reflecting local values, priorities and governance systems. What is essential is that these financial pathways are led by Indigenous rights holders, ensuring they reflect distinct community needs and advance self-determination.

Factors for success

> ***"The First Nations who are trying to solve these problems are probably better equipped to solve them than the policy people who live and work in Ottawa."*** *—Travis Seymour, Chief Executive Officer, First Nations Market Housing Fund*

Across examples of government action supporting the delivery of Healthy Energy Homes, the synergies between health, energy, climate, and housing are critical in developing effective solutions. Further, measuring the impact of initiatives like the Warmth and Wellbeing Scheme or Warm Up New Zealand: Heat Smart program requires looking at metrics more broadly than those only associated with one piece of the puzzle. Rather, to capture the true success of these initiatives, considering health, energy, climate, and housing outcomes simultaneously can accurately recognize the co-benefits.

The examples of community action provided in this report, though a small sampling of the successes Indigenous communities and organizations across Canada have achieved, illustrate the importance of programs that are Indigenous-led and responsive to the self-determined needs of communities.

Furthermore, many of these communities have forged strong partnerships to support their initiatives and programs over the long-term in ways that address specific gaps, whether it be in available housing, wrap-around supports, capacity building, or other areas. Indigenous leadership in developing and implementing these programs, ensures that the outcomes are aligned with the community's unique geography, culture, history, and needs. First Nations, Inuit, and Métis governments and organizations are best positioned to understand the issues facing their community members and identify appropriate solutions.

Many organizations, including the Taskforce for Housing and Climate, NICHI, and the Assembly of First Nations, recommend Indigenous-led housing development projects to support culturally appropriate housing solutions that ensure access to safe and adequate housing and help advance self-determination and reconciliation (British Columbia Assembly of First Nations 2023; Task Force for Housing and Climate 2024; National Indigenous Collaborative Housing Inc. 2024). The self-sufficiency and pride fostered by building homes that meet members' needs, and that can be maintained in community without dependence on outside materials or labour, has positive benefits for members' health and the community's overall well-being. The NICHI "For Indigenous, By Indigenous" model exemplifies the success of Indigenous-led approaches in action. Through collaborative partnerships with Indigenous leaders, housing providers, and local organizations, NICHI has demonstrated how quickly and effectively funding can move from government announcement to shovels in the ground, ensuring homes are designed, built, and delivered according to community priorities (National Indigenous Collaborative Housing Inc. 2025).

Alternative finance models also provide examples of arrangements that deviate from traditional funding structures to support Indigenous communities in achieving their desired outcomes. The First Nations Market Housing Fund, for example, includes a focus on capacity

building and provides an Indigenous-led model for supporting First Nations and community members in accessing capital. The Winnipeg Model also contrasts these traditional funding arrangements by focusing primarily on procuring outcomes, which in this context would be improved wholistic health, reductions in hospital visits, reductions in healthcare costs, and other measures of well-being.

These examples of solutions are underpinned by several factors of success that can inform the development of policy options to support these outcomes. These include:

- Intentional collaboration and partnership across government agencies, and between government bodies, and Indigenous Nations, communities, and organizations.
- Long-term commitments and agreements with Indigenous Nations, communities, and organizations.
- Funding programs that offer some degree of flexibility in achieving outcomes, or focus on prioritizing outcomes.
- Recognizing and measuring the co-benefits of Healthy Energy Homes to inform policy development, especially health outcomes, and emissions reductions.
- Capacity building and knowledge-sharing initiatives related to health, energy, and housing.
- Policy and program co-development with Indigenous leadership.

ICE's 20/20 Catalysts tour the Raónraon Hummingbird Healing Lodge, built by No More Silence and powered by solar from Sacred Earth Solar in Six Nations of the Grand River, Ont. during the fall of 2024. (ICE)

6

Conclusions

The research presented in this report demonstrates that investing in Healthy Energy Homes can deliver health, energy, housing, and climate co-benefits. A more integrated approach to policy—both within governments and between different orders of government—can help realize those benefits.

Participants with ICE's Bringing it Home program attend a British Columbia Institute of Technology workshop with Instructor Cody Brentzen in Penticton in Osoyoos, B.C. in the summer of 2025. (ICE/Cara Garneau)

The overall findings from our analysis can be summarized as follows:

1. Healthy homes are fundamental to Indigenous health, well-being, and self-determination.

Evidence from the literature review, interviews with knowledge holders, and testimony shared during the Healthy Energy Homes Virtual Gathering reaffirms that long-term, flexible, co-development investments in climate resilient, energy efficient, culturally-appropriate housing that supports the well-being of occupants will yield long-term returns by improving health outcomes, lowering healthcare and energy costs, advancing reconciliation and creating more resilient communities.

2. Current government approaches remain fragmented and often fail to empower Indigenous leadership, costing lives and resources.

Despite some recognition of the links between Indigenous health, energy, climate, and housing, siloed policies, short-term funding cycles, and rigid administrative frameworks limit community-driven innovation and hinder progress toward integrated, distinction-based solutions. Building capacity is also essential to empower and support Indigenous Nations, communities, and organizations to advance Healthy Energy Home solutions. Each government holds a piece of the solution; only by working together with Indigenous leadership can we close the housing gap and secure a healthier, more resilient future for the next seven generations.

3. Wholistic approaches to housing that integrate health, energy and climate deliver the most sustainable and equitable outcomes.

Across Canada and internationally, success stories are built on wholistic models of housing rooted in shared accountability, flexible funding, capacity development, and recognition of the co-benefits across health, housing, energy and climate policy domains.

ICE's Project Accelerator Project Stewards conduct an energy audit in Penticton, B.C. during their first on-site session in the summer of 2025. (ICE)

Indigenous Clean Energy's Bringing It Home Project Stewards participate in a hands-on retrofit skills workshop led by mentors in Wakefield, Que. in the winter of 2023. (ICE)

7

Policy recommendations

Addressing housing inequities in Indigenous communities cannot and should not be solved by investment alone. Smart, co-ordinated policy that reorients existing approaches is required to successfully implement Healthy Energy Home solutions and generate co-benefits for health, climate, and community well-being.

Changes to existing policies and mechanisms must: support Indigenous sovereignty and self-determination, incorporate flexibility to adapt to community needs, prioritize building long-term relationships, and be undertaken in the spirit of genuine co-creation. Smart policy also requires respecting and creating space for Indigenous knowledge and ways of knowing, governance systems, cultural practices and protocols. Although these policy recommendations are primarily targeted at federal, provincial, and territorial governments, as well as associated agencies in Canada, it is also critical that they are interpreted in a way that is grounded in a distinctions-based approach to working with First Nations, Inuit, and Métis and that supports Nation-to-Nation relationships.

As outlined at the outset of this report, this project's findings led us to the following recommendations:

RECOMMENDATION 1:

Co-ordinate and integrate government action

Federal, provincial and territorial governments and their agencies should improve co-ordination by creating a working group that streamlines access to resources for Indigenous Nations, communities, and organizations, improving their policy integration.

This collaboration would develop a single-window approach—one point of contact that would reduce bureaucratic barriers and administrative burdens on Indigenous communities, improve access to funding, and support for Healthy Energy Homes, while also better allocating the resources available to support the development of Indigenous-led solutions.

Such an approach also aligns with Indigenous worldviews, which see health, energy, climate and housing as wholistic and interconnected. Improved co-ordination should also strengthen accountability for how Indigenous housing funds are allocated and administered, prioritizing direct, Nation-to-Nation relationships with First Nations, Inuit, and Métis governments rather than pan-Indigenous models that may not reflect distinctions-based governance.

In order to address the lack of policy integration and better streamline processes, governments should:

- Reduce the burden on Indigenous communities by developing a single-window approach to funding and support for delivery programs and services related to Indigenous housing, energy efficiency, and climate resilient housing. Indigenous communities in need of support or trying to access funds should be able to clearly identify where they can access resources through one primary point of contact.
- Strike an interdepartmental working group between the main government agencies involved at the federal level (e.g. Indigenous Services Canada, Crown-Indigenous Relations and Northern Affairs Canada, the Canada Mortgage and Housing Corporation, Housing, Infrastructure and Communities Canada, Environment and Climate Change Canada, Health Canada, and the Public Health Agency of Canada) and Indigenous organizational representation. The working group should:
    - Identify opportunities to re-allocate or otherwise co-ordinate existing funds to maximize and more effectively distribute the resources available, ensuring accountability and prioritizing Nation-to-Nation and distinctions-based approaches.
    - Take a collaborative approach to addressing Indigenous housing challenges.
    - Develop and implement a distinctions-based strategy, to inform policy and program development related to delivering Healthy Energy Homes.
    - Streamline processes and combine existing programs to build more momentum and maximize impact.

- Develop and work with an Indigenous advisory council that includes representation from First Nations, Inuit, Métis rights holders and Indigenous communities without reserve lands, and urban Indigenous populations.

RECOMMENDATION 2:

Co-develop policies and programs with Indigenous leadership

Federal, provincial, and territorial governments and their agencies should co-develop policies and programs to support Healthy Energy Homes with Indigenous leadership, in pursuit of Indigenous self-determination. This co-development will ensure cultural and regional relevance, supporting more tailored solutions and improved outcomes.

A one-size-fits-all funding approach fails to recognize the unique culture, history, and geographic context of Indigenous Peoples across Canada and serve their specific needs. To ensure cultural and regional relevance, governments should:

- Develop an approach to ensure all government agencies and programs are accountable for taking a distinctions-based approach to working with First Nations, Inuit, and Métis. This approach would ensure the unique rights, histories, and circumstances of Indigenous Peoples are meaningfully considered and integrated in funding and other initiatives.
- Provincial and territorial governments should work to update building code standards to reflect energy efficiency, health, climate resilience, and Indigenous values. This process should include collaboration with First Nations, Inuit, and Métis governments, communities, and organizations to ensure that code standards reflect the unique cultural and geographic realities of Indigenous housing, including on reserve, in urban settings, and in northern and remote regions.
- Co-develop a guiding document on best practices for federal, provincial, and territorial departments and agencies working on Healthy Energy Homes with First Nations, Inuit, and Métis, building on existing examples such as *Decision-making guidance for Federal Programs to implement best practices in support of Indigenous self-determined climate leadership* (Government of Canada 2024) and the *Joint Committee on Climate Action: Best Practices for Federal Departments Working with First Nations on Climate Change* (Joint Committee on Climate Action 2020). The document should outline overarching principles, accountability, and best practices for engagement, program design and implementation.
- Support training in Ethical Space (Assembly of First Nations n.d.), Indigenous cultural safety and anti-racism for all non-Indigenous professionals working on Healthy Energy Homes in Indigenous communities, including government employees, healthcare providers, housing practitioners, and external contractor associations to improve trauma-informed practice.

- Work to co-create funding programs and initiatives to support the delivery of Healthy Energy Homes with Indigenous Nations, communities, and organizations including eligibility criteria, process, and reporting requirements. These efforts should include:
    - Partnering between Build Canada Homes and First Nations, Inuit, and Métis leadership and Indigenous organizations to help deliver affordable, healthy, energy-efficient housing for Indigenous Peoples across Canada.
    - Partnering with provincial and regional Indigenous governance bodies to develop funding programs and supports that recognize and account for the specific geographies of communities across Canada and how they translate into different needs and solutions related to Healthy Energy Homes. For example, coastal, Arctic, and Prairie communities all exist within different environments, posing different challenges related to housing and climate change.
    - Partnering with Indigenous communities without reserve lands to identify gaps related to available funding and support in this context as it relates to the delivery of Healthy Energy Homes. Once gaps are identified, co-create tailored funding and procurement programs and supports to address these areas.
    - Partnering with Indigenous organizations to identify gaps related to accountabilities and available support for urban Indigenous populations as it relates to the delivery of Healthy Energy Homes, applying a distinctions-based approach. Once gaps are identified, co-create tailored funding and procurement programs and supports to address these areas.

RECOMMENDATION 3:

Commit to long-term investment agreements

Federal, provincial, and territorial governments should cement multi-year housing agreements with Indigenous Nations, communities, and organizations to support sustainable, long-term planning and the development of new Healthy Energy Homes.

The need to address both pressing housing and health issues in Indigenous communities remains constant year over year, yet support continually fluctuates in the context of changing government mandates each election cycle. In addition, these challenges are compounded by climate change.

Governments should replace “firefighting” and piecemeal approaches with secure and reliable funding for integrated solutions addressing issues related to Indigenous health, energy, and housing.

While such long-term commitments and agreements do exist to some extent, they should be implemented on a larger scale. Several examples could be drawn on to inform this approach, including Indigenous Clean Energy’s Project Accelerator and Air Quality Project. Several resources are available for further guidance, such as the *Home Energy Justice*

*Forum Proceeding Report (*EcoTrust Canada 2025)—which identifies key actions to advance Indigenous energy justice, energy efficiency, and climate resilience as well as Pembina Institute's *Restoring the Flow* report (2025)—which outlines policies to support Indigenous-led clean energy in remote communities.

To support the delivery of Healthy Energy Homes and more effectively realize the benefits, governments should:

- Invest in and prioritize long-term commitments and agreements co-created with Indigenous Nations, communities, and organizations to address housing needs using trauma-informed practices. Appropriate timelines for initiatives should be determined in partnership with those receiving the funds.
- Collaborate with Indigenous Nations, communities, and organizations to map out phased approaches to long-term funding agreements to allow for more consistent and tailored support through each phase of an initiative, rather than funding each phase of a project in piecemeal through different programs.

RECOMMENDATION 4:

Provide flexible funding options

Federal, provincial, and territorial governments and their agencies should provide a range of funding model options to allow Indigenous communities to choose the program and level of flexibility that will support them in achieving their desired outcomes.

These options should range from open-ended funds to those that maintain specific requirements but allow for smaller variabilities (e.g. flexibility on timeline and reporting requirements). Funding mechanisms with different levels of flexibility can be used to service the distinct, culturally appropriate needs of Indigenous Nations, communities and organizations, guided by a "For Indigenous by Indigenous model". For example, some groups require open-ended funds to begin exploring potential projects, where others are looking to fund much more specific or "shovel-ready" initiatives.

Allowing recipients the flexibility to achieve their desired outcomes through funding programs is more efficient in developing solutions than imposing requirements that are not aligned with the challenges being experienced on the ground. This approach is also one step in more comprehensive support of Indigenous self-determination.

To more effectively allow for flexibility that balances the priorities of government agencies and supports Indigenous self-determination, governments should create a range of funding program options, including:

- Open-ended funding programs that support Indigenous Nations, communities, and organizations in identifying needs, exploring project options, and determining desired outcomes. Such programs should also be used to support recipients in exploring innovations and new ideas.

- Create funding programs with increased flexibility in how funds can be spent on housing and energy-related projects (e.g., the materials used, criteria for how goods and services can be procured and contracted, etc.).
- Create funding programs specific to pre-planning activities to support recipients in preparing to apply for more "shovel-ready" funds for projects. Such programs should cover the costs of initial studies and research that may be needed to develop more fulsome project plans and proposals.
- Explore and pilot an outcomes-based procurement program. Following an evaluation of results, tweak and improve the program and build organizational experience in alternative approaches to solving housing challenges. For example, through the creation of a National Indigenous Outcomes Fund, drawing inspiration from initiatives such as the United Kingdom's Better Futures Fund.

RECOMMENDATION 5:

Measure the wholistic benefits and impacts of housing

Federal, provincial, and territorial governments and their agencies should measure the wholistic benefits and impacts of Healthy Energy Homes to ensure that the data collected is Indigenous-informed, while upholding Indigenous data sovereignty. Evaluation frameworks should be co-developed early, supporting future policy decisions and funding allocations that are led by Indigenous rights holders.

The benefits of Healthy Energy Homes extend beyond the provision of housing to support physical, mental and spiritual health, and community well-being, while also presenting opportunities to create energy-efficient and climate-resilient homes. Yet, in cases where Indigenous communities have spearheaded the development of Healthy Energy Homes, their benefits are not always adequately acknowledged or recognized, which can impact funding decisions.

To better inform such decisions, governments should:

- Enable Indigenous Nations, communities, and organizations to identify their own metrics of success and report on them in ways that are aligned with their own protocols and ways of knowing. This could include metrics like the reduction in hospital visits, improvements in well-being, and energy savings.
- Co-develop evaluation frameworks with Indigenous rights holders from the outset to track metrics, impacts, and progress. For example, federal, provincial, and territorial governments should empower Indigenous communities to use storytelling and other ways of sharing knowledge that are rooted in community and culture to document the benefits in their own communities.
- Draw on global examples including those from New Zealand and Ireland (page 44) to measure the impact of Healthy Energy Homes. The intention of this is to recognize the role of housing as a social determinant of health and the benefits to health and well-being stemming from Healthy Energy Homes.

RECOMMENDATION 6:

Ensure funding programs are accessible and capacity-responsive

Federal, provincial, and territorial governments and their agencies should adapt funding program formats to address issues and barriers related to community capacity, as a means of improving access to funding, training, skill-building, and job creation in communities.

Capacity building efforts should prioritize both reducing barriers to accessing funding, and improving the ability of communities to deliver Healthy Energy Homes. Many Indigenous Nations, communities, and organizations face barriers and challenges related to capacity, including staff availability, access to resources, high workloads, and more. Often, those lacking the capacity to acquire funding to support their priorities and initiatives have the greatest needs. Capacity building is also necessary not only to acquire funds, but to train and hire community members and build skills throughout the lifecycle of a project.

To more effectively support Indigenous communities experiencing capacity barriers, governments should:

- Work to flip the standard format where Indigenous communities are expected to seek out and identify appropriate funding to meet their needs and instead approach Indigenous communities to identify their needs and connect them with the appropriate agencies or resources. How this looks in practice (e.g., providing funding liaisons, creating networks) should be explored in further detail with Indigenous organizations to ensure alignment with their protocols and needs.
- Build on accessible program models, such as library lending programs for home radon detectors that make testing affordable and widely available. Where library programs are not accessible in remote communities, governments could provide several radon monitors and related health information directly to communities. Similar models could be adapted to improve access to other Healthy Energy Homes supports.
- Integrate funding for capacity building initiatives in all funding allocations. Delivering Healthy Energy Homes should move beyond construction of homes to include training programs for community members seeking employment, skill-building programs for new homeowners looking to learn about maintenance, and more, as aligned with community priorities.

By implementing these policy recommendations, Canadian governments have an opportunity to support Indigenous communities in creating Healthy Energy Homes that are energy efficient, climate resilient, and support the well-being of inhabitants. Success requires a shift toward meaningful partnerships: long-term, flexible, and co-developed approaches that recognize Indigenous leadership as central to achieving housing, health, and climate outcomes.

Glossary

Distinctions-based approach: A framework that recognizes First Nations, Inuit, and Métis as the distinct, rights-bearing Indigenous Peoples of Canada. It emphasizes that First Nations, Inuit, and Métis are not a homogeneous group, but rather consist of unique communities with their own histories, cultures, and relationships with the Crown. This approach ensures that the unique rights, priorities, and circumstances of each group are acknowledged and respected.

Energy poverty: A condition in which households cannot afford or reliably access the energy services needed to maintain a healthy, safe, and comfortable standard of living. It can force difficult trade-offs, such as turning down the heat in order to afford groceries. In Indigenous communities, energy poverty is shaped not only by income but also by inadequate housing quality, reliance on expensive or polluting fuels, and limited access to energy infrastructure.

Healthy Energy Homes: We call homes that are energy efficient, climate resilient, and support the well-being of inhabitants, Healthy Energy Homes. The term Healthy Energy Home is not intended to be a housing certification like Net-Zero Energy Home or Passive House, rather it describes housing that is built in a way that supports community and cultural well-being, including physical and mental health aspects while reducing energy consumption and improving comfort.

Indigenous Peoples: A collective term for the original peoples of North America and their descendants. In Canada, this includes three distinct groups: First Nations, Inuit and Métis.

Indigenous communities: This term is used in this report to reflect the communal connection of Indigenous Peoples. For the purposes of this report, it reflects 1) A formal First Nation, Métis, or Inuit community; 2) Indigenous people living in housing provided by an urban Indigenous housing provider; 3) Urban Indigenous people who are connected through local groups or Friendship Centres; 4) Métis people living across a region as members of a Métis Nation or a Métis Local (Indigenous Clean Energy 2023).

Indigenous housing: In this report, Indigenous housing refers to housing that is inhabited by Indigenous people. This includes, but is not limited to, on- and off-reserve housing, urban Indigenous housing, and housing in chartered communities or Inuit settlements.

Pan-Indigenous approach: An approach that treats Indigenous Peoples in Canada as a single, collective group rather than recognizing the distinct rights, histories, and circumstances of First Nations, Inuit, and Métis.

Unhealthy housing: Housing that contributes to negative health outcomes, including chronic disease, injury and/or mental or spiritual distress. This includes, but is not limited to, housing that is structurally unsound, has lead, mould, asbestos, poor air quality, or is overcrowded.

Well-being: This report uses the term well-being in a wholistic sense, encompassing physical, mental, spiritual, social, cultural, and economic dimensions that are interconnected

and grounded in relationships with land and all of Creation (Tsuji et al 2023; Alliance for Healthier Communities n.d.; First Nation Health Authority n.d.). However, there is no single pan-Indigenous definition of well-being, as each individual and community holds distinct relationships, teachings and histories (Tsuji et al 2023; First Nation Health Authority n.d.).

Wholistic: Indigenous communities often use holistic/wholistic interchangeably across the country. The term *wholistic* is used throughout the report in place of holistic. It reflects language that is generally considered more inclusive of Indigenous ways of understanding, knowing, doing and being, and is culturally relevant, respectful, and consistent with Indigenous tenets of wholeness and wholism (Absolon 2010; Miles et al 2023).

An energy-efficient model house built during ICE's 20/20 Catalysts Program in 2024 in Wendake, Que. (ICE/Alexandra Jurecko)

References

Aboriginal Housing Management Association. 2024. *British Columbia Urban, Rural, and Northern Indigenous Housing Strategy*. https://ahma-bc.org/wp-content/uploads/2024/12/AHMA_BCURNI_Housing_Strategy_Report_December2024.pdf

Aboriginal Housing Management Association. 2023. *Lived Experience & Stories of Extreme Heat Among Indigenous Households in British Columbia: Assessing the Response from Indigenous Housing Providers and the Aboriginal Housing Management Association*. West Vancouver, BC. https://ahma-bc.org/wp-content/uploads/2024/04/CNA-Report-Final.pdf

Absolon, Kathy. 2010. "Indigenous Wholistic Theory: A Knowledge Set for Practice." *First Peoples Child & Family Review*, *5*(2), 74–87. https://www.erudit.org/en/journals/fpcfr/2010-v5-n2-fpcfr05254/1068933ar/

Alliance for Healthier Communities. n.d. "Model of Wholistic Health and Wellbeing." https://www.allianceon.org/Model-Wholistic-Health-and-Wellbeing

American Lung Association. 2019. *State of the Air 2019.* https://www.lung.org/getmedia/a7050746-8c29-4bf5-9580-90cf82e5dcd0/sota-2019-full.pdf

Assembly of First Nations. n.d. "Working Together: Bridging gaps to form long-term, equitable, consent-based relationships in the face of climate change." https://afn.ca/environment/environmental-protection-climate-action/joint-committee-on-climate-action/working-together/#:~:text=Ethical%20Space%20is%20an%20equity,and%20work%20together%20in%20harmony

Assembly of First Nations. 2021. *Sector Update: First Nations Control of Housing.* Ottawa, ON. https://www.afn.ca/wp-content/uploads/2021/07/Sector-Update-Housing-June-2021-EN.pdf

Assembly of First Nations and Indigenous Services Canada. 2023. *Closing the Infrastructure Gap by 2030: A Collaborative and Comprehensive Cost Estimate Identifying the Infrastructure Investment Needs of First Nations in Canada*. Ottawa, ON. https://afn.bynder.com/m/367574a3a5cb5abe/original/1-AFN-Closing-the-Infrastructure-Gap-by-2030-National-Cost-Estimate-English-report-1.pdf

Assembly of First Nations. 2025. *The Housing Gap*. https://afn.ca/economy-infrastructure/infrastructure/closing-the-infrastructure-gap/housing/

Bahadori, Katayoun, Mary M Doyle-Waters, Carlo Marra, Larry Lynd, Kadria Alasaly, John Swiston, Js Mark FitzGerald. 2009. "Economic burden of asthma: a systematic review." *BMC Pulmonary Medicine 9, 24.* https://bmcpulmmed.biomedcentral.com/articles/10.1186/1471-2466-9-24

Balestrery, Jean E. 2025. "Health and Wellbeing among Arctic Indigenous Peoples: Leveraging Legal Determinants of Health." *The Arctic Institute — Center for Circumpolar Security Studies.* https://www.thearcticinstitute.org/health-wellbeing-among-arctic-indigenous-peoples-leveraging-legal-determinants-health/

Banerji, Anna, Alison Bell, Elaine L. Mills, Jane McDonald, Kanta Subbarao, Greg Stark, Nicola Eynon, and Vivian G. Loo. 2001. "Lower Respiratory Tract Infections in Inuit Infants on Baffin Island." *Canadian Medical Association Journal* 164 (13): 1847–1850. https://www.cmaj.ca/content/164/13/1847

Banerji, Anna, and Krista Lanctôt. 2009. "Risk Factors and Viruses Associated With Hospitalization Due to Lower Respiratory Tract Infections in Canadian Inuit Children." *The Pediatric Infectious Disease Journal.* https://doi.org/10.1097/INF.0B013E31819F1F89

Banerji, Anna, Val Panzov, Joan Robinson, Michael Young, Kaspar Ng and Muhammad Mamdani. 2013. "The cost of lower respiratory tract infections hospital admissions in the Canadian Arctic." *International Journal of Circumpolar Health*. 72:1, 21595. https://www.tandfonline.com/doi/pdf/10.3402/ijch.v72i0.21595%40zich20.2013.72.issue-S2

Banerji Anna, Val Panzov, Michael Young, Joan Robinson, Bonita Lee, Theo Moraes, Muhammad Mamdani, B Louise Giles, Depeng Jiang, Danny Bisson, Marguerite Dennis, Johanne Morel, Judith Hall, Charles Hui, Bosco Paes, James b Mahony. 2016. "Hospital admissions for lower respiratory tract infections among infants in the Canadian Arctic: a cohort study." *CMAJ Open*. https://pubmed.ncbi.nlm.nih.gov/28018874/

Barbo, Geneveave, Sharmin Alam. 2024. "Indigenous people's experience of primary health care in Canada: a qualitative systemic review." *HPCDP Journal*. https://www.canada.ca/content/dam/phac-aspc/documents/services/reports-publications/health-promotion-chronic-disease-prevention-canada-research-policy-practice/vol-44-no-4-2024/indigenous-people-experiences-primary-health-care-canada-qualitative-systematic-review.pdf

Barn, Prabjit. 2014. *Evidence review: Home and community clean air shelters to protect public health during wildfire smoke events.* BC Centre for Disease Control. https://www.bccdc.ca/resource-gallery/Documents/Guidelines%20and%20Forms/Guidelines%20and%20Manuals/Health-environment/WFSG_EvidenceReview_CleanAirShelters_FINAL_v3_edstrs.pdf

BC Housing. 2025. "Indigenous Housing Fund Program Overview." https://www.bchousing.org/projects-partners/Building-BC/IHF

BC Hydro. 2025. "Programs for Indigenous Communities." https://www.bchydro.com/powersmart/local_government_district/indigenous-community-offers.html

Beugin, Dale, Dylan Clark, Sarah Miller, Ryan Ness, Ricardo Pelai, Janna Wale. 2023. *The Case for Adapting To Extreme Heat: Costs of the 2021 B.C. heat wave.* Canadian Climate Institute. Ottawa, ON. https://climateinstitute.ca/wp-content/uploads/2023/06/The-case-for-adapting-to-extreme-heat-costs-of-the-BC-heat-wave.pdf

Bledsoe, Arthur, Emily He, Rosa Brown. 2025. *Restoring the Flow - Policies to support Indigenous-led clean energy in remote communities.* Pembina Institute. https://www.pembina.org/pub/restoring-flow

Blue, Raidin, Jessica McIlroy, and Betsy Agar. 2024. *Beyond Energy Efficiency: Deep Retrofits Save More than Just Money.* Pembina Institute. https://www.pembina.org/pub/beyond-energy-efficiency

Breton, Cleo. 2020. *Urban Indigenous Housing in BC: Municipal Response through Housing Policies and Plans.* University of British Columbia, Aboriginal Housing Management Association, Housing Research Collaborative. Vancouver, BC. https://housingresearchcollaborative.scarp.ubc.ca/files/2020/11/Urban-Indigenous-Housing-in-BC.pdf

Bridges Outcomes Partnerships. 2025. "UK Government launches £500m outcomes-focused Better Futures Fund." July 14. https://bridgesoutcomespartnerships.org/uk-government-launches-500m-outcomes-focused-better-futures-fund/

British Columbia Assembly of First Nations. 2023. *What We Heard from the 2023 Housing Forum.* Prince George, BC. https://www.bcafn.ca/sites/default/files/docs/reports-presentations/BCAFN%20Housing%20Forum%20What%20We%20Heard%20Report%203.7.2024.pdf

British Columbia Coroners Service. 2022. *Extreme Heat and Human Mortality: A Review of Heat-Related Deaths in B.C. in Summer 2021.* June 7. https://www2.gov.bc.ca/assets/gov/birth-adoption-death-marriage-and-divorce/deaths/coroners-service/death-review-panel/extreme_heat_death_review_panel_report.pdf

Campbell, Jonathan R., Placide Nsengiyumva, Leslie Y. Chiang, Frances Jamieson, Hadeel Khadawardi, Henry K.-H. Mah, Olivia Oxlade, Hayden Rasberry, Elizabeth Rea, Kamila Romanowski, Natasha F. Sabur, Beate Sander, Aashna Uppal, James C. Johnston, Kevin Schwartzman, Sarah K. Brode. 2022**.** "Costs of Tuberculosis at 3 Treatment Centers, Canada, 2010-2016." *Emerging Infectious Diseases*, *28*(9), 1814-1823. https://doi.org/10.3201/eid2809.220092

Canada Mortgage and Housing Corporation. 2024. *Mould in Housing: A Resource Guide for First Nation Housing Providers*. https://assets.cmhc-schl.gc.ca/sites/cmhc/professional/industry-innovation-and-leadership/industry-expertise/indigenous-housing/develop-manage-indigenous-housing/maintenance-solutions/mould-in-housing/pdfs/mould-resource-guide-en-acc.pdf?rev=da7bb2c4-7895-4063-9878-3c55de8ceb12

Canada Mortgage and Housing Corporation. 2025a. "Funding for Indigenous Housing." https://www.cmhc-schl.gc.ca/professionals/project-funding-and-mortgage-financing/funding-programs/indigenous

Canada Mortgage and Housing Corporation. 2025b. "Urban, Rural and Northern Indigenous Housing Strategy." https://www.cmhc-schl.gc.ca/professionals/project-funding-and-mortgage-financing/funding-programs/indigenous/urban-rural-northern-indigenous-housing-strategy

Canadian Partnership for Children's Health and Environment. 2024. A Collective Call for Action to Ensure Healthy Indoor Air Quality in Schools and Child Care Settings. April 25. https://healthyenvironmentforkids.ca/2024/04/25/a-collective-call-for-action-to-ensure-healthy-indoor-air-quality-in-schools-and-child-care-settings/

Canadian Partnership for Children's Health and Environment and Canadian Environmental Law Association. 2024. An Environmental Scan of Indoor Air Quality Support Programs for Schools and Child Care Settings in Canada. https://healthyenvironmentforkids.ca/wp-content/uploads/2024/04/CPCHE-CELA-HELD-2024-Policy-Scan_FINAL_EN.pdf

Carrière, Gilles, Evelyn Bougie, Dafna Kohen, Michelle Rotermann, and Claudia Sanmartin. 2016. "Acute Care Hospitalization by Aboriginal Identity in Canada, 2006 through 2008." *Health Reports* 27 (8): 3–11. https://www150.statcan.gc.ca/n1/en/pub/82-003-x/2016008/article/14647-eng.pdf

Chen, Hao, James M. Samet, Philip A. Bromberg, Haiyan Tong. 2021. "Cardiovascular health impacts of wildfire smoke exposure". *Part Fibre Toxicol* 18, 2. https://link.springer.com/article/10.1186/s12989-020-00394-8#citeas

CleanBC. 2025. "Programs and Resources for Indigenous Communities." https://www.betterhomesbc.ca/indigenous-support/

Climate Central. 2023. *After the Storm: Health risks from damp, moldy homes*. https://assets.ctfassets.net/cxgxgstp8r5d/6itwyGIDPgXSMlaQX53iuK/d7ee9672ce13ff8c688f9c67d7414966/FINAL_After_the_Storm_2023__EN_.pdf

CMHC. 2019. "Better Access to Home Financing for First Nations." https://www.cmhc-schl.gc.ca/media-newsroom/news-releases/2019/better-access-home-financing-first-nations

Collin, Dominque, Lawrence L. Schembri, Jean Vincent. 2023. "Homeownership critical to solving Indigenous housing crisis." Fraser Institute. August 10. https://www.fraserinstitute.org/commentary/homeownership-critical-solving-indigenous-housing-crisis

Corntassel, J, Chaw-win-is, T'lakwadzi. 2009. "Indigenous Storytelling, Truth-telling, and Community Approaches to Reconciliation: *ESC: English Studies in Canada*, 35(1). https://dspace.library.uvic.ca/server/api/core/bitstreams/c58aeadb-f233-4eea-a85f-ca3f7dd61335/content

Crown-Indigenous Relations and Northern Affairs Canada. 2019. *Inuit Nunangat Housing Strategy*. Ottawa, ON. https://www.rcaanc-cirnac.gc.ca/eng/1554820296529/1554820324561

Crown-Indigenous Relations and Northern Affairs Canada. 2021. "Métis Nation Housing Sub-Accord to Provide $500 Million over 10 Years." https://www.rcaanc-cirnac.gc.ca/eng/1548426109089/1636047297154

Crown-Indigenous Relations and Northern Affairs Canada. 2022. *Canada and Manitoba Métis Federation Announce Housing Investments from Budget 2022.* News Release. https://www.canada.ca/en/crown-indigenous-relations-northern-affairs/news/2022/08/canada-and-manitoba-metis-federation-announce-housing-investments-from-budget-2022.html

Dales, Robert E., Hans Zwanenburg, Rick Burnett. 1991. "Adverse Health Effects among Adults Exposed to Home Dampness and Molds." *American Review of Respiratory Disease* 143 (3): 505–509. https://pubmed.ncbi.nlm.nih.gov/2001058/

Davis-Alphonse, Chastity. 2023. "Empowering First Nations in BC With Clean, Sustainable Energy Sources." *BIV Magazine*, June 21. https://www.biv.com/news/biv-magazine/empowering-first-nations-bc-clean-sustainable-energy-sources-8272222

Department of Finance Canada. 2024. *Budget 2024: Chapter 6, A Fair Future for Indigenous Peoples.* Ottawa, ON. https://www.budget.canada.ca/2024/report-rapport/chap6-en.html

Ecotrust Canada. 2025. *Home Energy Justice Forum Proceedings Report*. Vancouver, BC. May 27. https://ecotrust.ca/wp-content/uploads/2025/08/EnergyProceedingsReport_EC_2025-web.pdf

Efficiency Manitoba. n.d. "About Us." https://efficiencymb.ca/about/

Efficiency Nova Scotia. 2023. *Mi'kmaw Home Energy Efficiency Project*. Dartmouth, NS. https://assets.ctfassets.net/hro74sf4x6k2/2YEeVixoz9xqFq8PCvj72S/2f4d14e8ae8d22d3a070c5e4999ff982/MHEEP-Impact-Report-2023_English.pdf

Encompass Co-op. 2022. *The Winnipeg Model: New Financial Tools to Address Homelessness.* https://static1.squarespace.com/static/64e448d362c4b05c9e46ad00/t/65afe9966f79d458de69ce33/1706027508188/The+Winnipeg+Model.pdf

Environment and Climate Change Canada. 2025. "The Government of Canada is supporting 13 Indigenous-led clean energy projects through the Low Carbon Economy Fund's Indigenous Leadership Fund." News release. July 8. https://www.canada.ca/en/environment-climate-change/news/2025/07/the-government-of-canada-is-supporting-13-indigenous-led-clean-energy-projects-through-the-low-carbon-economy-funds-indigenous-leadership-fund.html

First Nations Health Authority. n.d. "First Nations Perspective on Health and Wellness." https://www.fnha.ca/wellness/wellness-for-first-nations/first-nations-perspective-on-health-and-wellness

First Nations Health Authority. 2024. "Housing IS Health Care." https://www.fnha.ca/about/news-and-events/news/housing-is-health-care

First Nations Market Housing Fund. n.d.-a. "What We Offer – Credit Enhancement." https://www.fnmhf.ca/our-services/credit-enhancement/

First Nations Market Housing Fund. n.d-b. "What We Offer – Capacity Development." https://www.fnmhf.ca/our-services/capacity-development-support/

Florez Bossio, Camila and Ryan Ness. 2024. "High and dry: The rising tide of flood risks and the insurance dilemma." *Policy Options*. https://policyoptions.irpp.org/magazines/march-2024/high-and-dry-the-rising-tide-of-flood-risks-and-the-insurance-dilemma/

Foster, Camilla. 2025. "This is How Living in a Cold Home Can Impact Your Health." *The Independent.* https://www.independent.co.uk/life-style/health-and-families/uk-cold-front-heating-home-health-b2700169.html

Gilliland, Wyatt. 2025. "Groundbreaking First Nations Housing Class Action Suit Begins." *Investigative Journalism Bureau, University of Toronto.* May 9. https://ijb.utoronto.ca/news/decision-awaited-in-groundbreaking-first-nations-housing-class-action-suit/

Government of Canada. 2023. "The United Nations Declaration on the Rights of Indigenous Peoples." June 21. https://www.justice.gc.ca/eng/declaration/decl_doc.html

Government of Canada. 2024. "Decision-making guidance for federal programs to implement best practices in support of Indigenous self-determined climate leadership." April 8. https://www.canada.ca/en/environment-climate-change/services/climate-change/indigenous-partnership/decision-making-guidance.html

Government of Canada. 2025a. "Canada's National Housing Strategy." August 27. https://housing-infrastructure.canada.ca/housing-logement/ptch-csd/index-eng.html

Government of Canada. 2025b. "Delivering on Truth and Reconciliation Commission Calls to Action." September 17. https://www.rcaanc-cirnac.gc.ca/eng/1524494530110/1557511412801

Government of Ireland. 2024. "Warmth and Wellbeing Scheme." https://www.gov.ie/en/department-of-climate-energy-and-the-environment/publications/warmth-and-wellbeing-scheme/

Hannah, Alan. 2022. *Systemic Barriers for First Nations People: Security of Tenure in Canada*. The Office of the Federal Housing Advocate. https://www.homelesshub.ca/sites/default/files/attachments/Hanna-systemic_barriers_for_First_Nations_people-security_of_tenure.pdf

Health Canada. 2025. *Radon Gas: It's in Your Home.* Government of Canada. https://www.canada.ca/content/dam/hc-sc/migration/hc-sc/ewh-semt/alt_formats/hecs-sesc/pdf/pubs/radiation/radon_brochure/radon-brochure-eng.pdf

He Kāinga Oranga Housing and Health Research Programme. 2025. "Evaluation of Warm Up New Zealand: Heat Smart Programme." https://www.healthyhousing.org.nz/our-research/past-research/evaluation-warm-new-zealand-heat-smart-programme

Hostland, Craig Rodney. 2015. *Sustainable Home Environments: Proactively Addressing Sickness-Related Damp and Moldy Environments to Reduce the Impact on the BC Health Care System.* Doctor of Philosophy (PhD) thesis, University of British Columbia (Okanagan). https://dx.doi.org/10.14288/1.0220722

House of Commons. 2017. *Breaking Point: The Suicide Crisis in Indigenous Communities.* Report of the Standing Committee on Indigenous and Northern Affairs. House of Commons Canada. Ottawa, ON. https://www.ourcommons.ca/Content/Committee/421/INAN/Reports/RP8977643/inanrp09/inanrp09-e.pdf

Housing, Infrastructure and Communities Canada. 2024. "Departmental Response to Auditor General's Report on Housing in First Nations Communities." https://housing-infrastructure.canada.ca/pd-dp/parl/2024/06/inan/inan-a-eng.html

Hungerford, Geordie, Monika Freyman. 2024. *Shaping and Indigenous Sustainable Bond Framework: Summary of October 2024 Roundtable Meetings and Recommendations*. https://addendacapital.com/Portals/0/Thought%20leadership%20paper_Indigenous%20Sustainable%20Bond%20Framework_April24.pdf

Hurley, Mary C. 2000 (revised 2002). *The Crown's Fiduciary Relationship with Aboriginal Peoples.* PRB 00-09E. Parliamentary Research Branch, Library of Parliament, Government of Canada. August 10. https://publications.gc.ca/Collection-R/LoPBdP/BP/prb0009-e.htm

Indigenous Clean Energy. 2021. *Energy Foundations.* https://indigenouscleanenergy.com/wp-content/uploads/2022/06/Energy-Foundations-Report-FINAL.pdf

Indigenous Clean Energy. 2023. *Enabling Efficiency: Pathways and Recommendations Based on the Perceptions, Barriers, and Needs of Indigenous People, Communities, and Organizations.* Prepared for Natural Resources Canada. Ottawa, ON. https://indigenouscleanenergy.com/wp-content/uploads/2023/12/Enabling-Efficiency-Report-December-2023.pdf

Indigenous Clean Energy. 2025. "Enabling Energy Efficiency - Now and for Future Generations." https://indigenouscleanenergy.com/our-programs/bringing-it-home/

Indigenous Services Canada. 2023. "Apperance before the Standing Committee on Indigenous and Northern Affairs (INAN) on the 2023-24 Main Estimates, May 29, 2023." Ottawa, ON. https://www.sac-isc.gc.ca/eng/1692803257628/1692803297737#SecC-21

Indigenous Services Canada. 2023. "First Nations Housing Roles and Responsibilities." Government of Canada. January 1. https://www.sac-isc.gc.ca/eng/1476904944575/1535115608897

Indigenous Services Canada. 2024a. *Evaluation of the On-Reserve Housing Program*. Government of Canada. Gatineau, QC. https://www.sac-isc.gc.ca/eng/1720186594125/1720186628408

Indigenous Services Canada. 2024b. "About Indigenous Health Care." Government of Canada. https://www.sac-isc.gc.ca/eng/1626810177053/1626810219482

Indigenous Services Canada. 2024c. "Chawathil First Nation and Canada Collaborate to Successfully Complete Home Repairs." News release. Government of Canada. April 29. https://www.canada.ca/en/indigenous-services-canada/news/2024/04/chawathil-first-nation-and-canada-collaborate-to-

successfully-complete-home-repairs.html

Indigenous Services Canada. 2024d. "Indigenous Health Equity Fund." Government of Canada. August 9. https://www.sac-isc.gc.ca/eng/1721758041536/1721758068269

Indigenous Services Canada. 2025. "About the Non-Insured Health Benefits Program." Government of Canada. July 28. https://www.sac-isc.gc.ca/eng/1576790320164/1576790364553

Inuit Tapiriit Kanatami. 2024. "ITK Encouraged by Budget 2024 Investments in Inuit Housing, Infrastructure and Food Security." https://www.itk.ca/itk-encouraged-by-budget-2024-investments/

Ismaila, Afisi S., Amyn P. Sayani, Mihaela Marin, Zhen Su. 2013. "Clinical, economic, and humanistic burden of asthma in Canada: a systematic review." *BMC Pulmonary Medicine.* https://link.springer.com/content/pdf/10.1186/1471-2466-13-70.pdf

Ismaila, Afisi S., Lucie Blais, Tam Dang-Tan, Shiyuan Zhang, Amelie Forget, Fatima-Zohra Kettani, Diane Corriveau, Catherine Lemiere. 2019. "Direct and indirect costs associated with moderate and severe asthma in Quebec, Canada." *Canadian Journal of Respiratory, Critical Care and Sleep Medicine.* https://www.tandfonline.com/doi/citedby/10.1080/24745332.2018.1544839?scroll=top&needAccess=true

Jetty, Radha. 2020. "Tuberculosis among First Nations, Inuit and Metis children and youth in Canada: Beyond medical management." *Paediatr Child Health*, 26(2): e78-e81. https://pmc.ncbi.nlm.nih.gov/articles/PMC7962700/

Joint Committee on Climate Action. 2020. *Joint Committee on Climate Action: Best Practices for Federal Departments Working with First Nations on Climate Change*. https://afn.bynder.com/m/53c4261c38cf481e/original/JCCA-Best-Practices-for-Federal-Departments-working-with-First-Nations-on-Climate-Change.pdf

Kantamneni, Abhilash and Brendan Haley. 2024. *Archetypes of Experiences with Energy Poverty in Canada*. Efficiency Canada, Carleton University, Ottawa, ON. https://www.efficiencycanada.org/wp-content/uploads/2024/04/Archetypes-of-Experiences-with-Energy-Poverty-in-Canada-Report.pdf

Keepers of the Circle. 2025. "Indigenous Women-Led Modular Factory." https://keepersofthecircle.com/modular-factory

Kovesi, Thomas, Gary Mallach, Yoko Schreiber, Michael McKay, Gail Lawlor, Nick Barrowman, Anne Tsampalieros, Ryan Kulka, Ariel Root, Len Kelly, Michael Kirlew and J. David Miller. 2022. "Housing Conditions and Respiratory Morbidity in Indigenous Children in Remote Communities in Northwestern Ontario, Canada." *Canadian Medical Association Journal* 194 (3): E80–E88. https://www.cmaj.ca/content/194/3/E80

Larcombe, Linda A., Pam Warkentin, Matthew Singer, Simon Denechezhe, Joe Dantouze, Evan Yassie, Jason Bussidor, Casandra Dolovich, Pamela Orr. 2022. "Radon Gas Concentrations in On-Reserve Housing in Two Northern Manitoba First Nation Communities." *Wellbeing, Space and Society* 3 (5 Suppl 2): 100090. https://doi.org/10.1016/j.wss.2022.100090

Loppie, Charlotte and Fred Wien. 2022. *Understanding Indigenous Health Inequalities through a Social Determinants Model.* National Collaborating Centre for Indigenous Health. https://www.nccih.ca/Publications/Lists/Publications/Attachments/10373/Health_Inequalities_EN_Web_2022-04-26.pdf

Lovekin, Dave, Dylan Heerema. 2019. *The true cost of energy in remote communities.* Pembina Institute. https://www.pembina.org/pub/diesel-true-cost

Lu'ma Group of Companies. n.d. "Lu'ma Native Housing Society." https://www.lnhs.ca/luma-native-housing-society

Lysenko, Olga, Katarina Yaramenka, Érika Mata, Fernando Burgoa Francisco, Andrea Gabaldon Moreno, Matilda Lidfeldt, and Francisco Verdugo González. 2024. "Positive Climate and Health Impacts from Upscaled Use of Heat Pumps and Solar Panels in Technology Packages in EU-

27 by 2050." *Sustainable Production and Consumption* 44: 221–233. https://doi.org/10.1016/j.spc.2023.12.007

Manitoba Métis Federation. 2025a. "First Time Home Purchase Program." https://www.mmf.mb.ca/first-time-home-purchase-program

Manitoba Métis Federation. 2025b. "Home Enhancement Loan Program (HELP)." https://www.mmf.mb.ca/home-enhancement-loan-program-help

Manitoba Métis Federation. 2025c. "Housing & Property Management." https://www.mmf.mb.ca/housing-property-management

Manitoba Métis Federation. 2025d. "Indigenous Home Innovation Initiative." https://www.mmf.mb.ca/indigenous-home-innovation-initiative

Manitoba Métis Federation. 2025e. "Rapid Services." https://www.mmfrapidservices.com/

McCarthy Tétrault. 2025. "First Nations Housing Class Action." https://www.mccarthy.ca/en/first-nations-housing-class-action

Métis Nation British Columbia. 2024. "Métis Rent Supplement Program." https://www.mnbc.ca/work-programs/programs-services/Métis-housing-rent-supplement-program

Métis Nation British Columbia. 2024. "Ma Nîḳi Seniors Home Renovation Program." https://www.mnbc.ca/work-programs/programs-services/ma-niki#:~:text=The%20Ma%20N%C3%AE%C4%B7i%20Seniors%20Home,age%20in%20place%20with%20dignity

Miles, Rosalin M., Maddison I. Chow, Gemma Tomasky, Shannon S. D. Bredin, Kai L. Kaufman, Darren E. R. Warburton. 2023. "Wholistic versus Holistic: Words Matter for Indigenous Peoples." *The Health & Fitness Journal of Canada*, *16*(3), 3–7. https://hfjc.library.ubc.ca/index.php/HFJC/article/view/830

Naderifar, Mahin, Hamideh Goli, Fereshteh Ghaljaie. 2017. "Snowball Sampling: A Purposeful Method of Sampling in Qualitative Research." *Strides in Development of Medical Education* 14(3). https://www.researchgate.net/publication/324590206_Snowball_Sampling_A_Purposeful_Method_of_Sampling_in_Qualitative_Research

National Collaborating Center for Indigenous Health. 2017. "Housing as a Social Determinant of First Nations, Inuit, and Metis Health." https://www.nccih.ca/495/Housing_as_a_social_determinant_of_First_Nations,_Inuit,_and_M%C3%A9tis_health.nccih?id=20

National Indigenous Collaborative Housing Inc. 2025. "NICHI Celebrates Successful Distribution of $281.5 Million for Indigenous Housing in Urban, Rural and Northern Communites." https://nichi.ca/nichi-celebrates-successful-distribution-of-281-5-million-for-indigenous-housing-in-urban-rural-and-northern-communities/

National Indigenous Collaborative Housing Inc. 2024. "Funding Allocation." https://nichi.ca/allocation-funding/

Natural Resources Canada. 2024a. *The State of Canada's Forests: Annual Report 2024*. https://natural-resources.canada.ca/sites/admin/files/documents/2025-08/StateofForestReport-2024-EN.pdf

Natural Resources Canada. 2024b. "Wah-ila-toos: Funding Opportunities." https://www.canada.ca/en/services/environment/weather/climatechange/climate-plan/reduce-emissions/reducing-reliance-diesel/wah-ila-toos-funding-opportunities.html

Natural Resources Canada. 2025. *The Canada Green Buildings Strategy: Transforming Canada's Buildings Sector for a Net-Zero and Resilient Future*. Ottawa, ON. https://natural-resources.canada.ca/transparency/reporting-and-accountability/plans-and-performance-reports/departmental-strategies/the-canada-green-buildings-strategy-transforming-canadas-buildings-sector-for-net-zer/26065

Nunatsiavut Government. 2025. *Sungiutisannik Nunatsiavummi: An Inuit Approach to Climate Change Mitigation and Adaptation in Nunatsiavut*. https://nunatsiavut.com/wp-content/uploads/2025/03/ADAPT-NUNATSIAVUT.pdf

Nunavut Housing Corporation. 2024. "About NHC." https://www.nunavuthousing.ca/about

Office of the Parliamentary Budget Officer. 2021. *Federal Spending on First Nations and Inuit Health Care*. Ottawa, ON. https://distribution-a617274656661637473.pbo-dpb.ca/9bee4c701b89b6285aa9b66e68a21806ca91473fd4d74b86d817e56ef673a89a

Office of the Auditor General of Canada. 2024. *Housing in First Nations Communities.* Ottawa, ON. https://www.oag-bvg.gc.ca/internet/docs/parl_oag_2024_03_02_e.pdf

Orr, Pamela H., Martha Ainslie, and Linda A. Larcombe. 2024. "Housing and Respiratory Health among Indigenous Peoples in Canada." *Canadian Journal of Respiratory, Critical Care, and Sleep Medicine*, 8 (5): 229–34. https://doi.org/10.1080/24745332.2024.2377187

Priest, Naomi, Yin Paradies, Matthew Stevens, and Ross Bailie. 2012. "Exploring Relationships between Racism, Housing and Child Illness in Remote Indigenous Communities." *Journal of Epidemiol Community Health* 66(5): 440–47. https://pubmed.ncbi.nlm.nih.gov/21118951/

Prime Minister of Canada. 2025. "Prime Minister Carney launches Build Canada Homes to supercharge homebuilding across the country." Ottawa, ON. https://www.pm.gc.ca/en/news/news-releases/2025/09/14/prime-minister-carney-launches-build-canada-homes

Public Health Agency of Canada. 2024. *Tuberculosis in Canada: 2012-2021 expanded report*. https://www.canada.ca/content/dam/phac-aspc/documents/services/publications/diseases-conditions/tuberculosis-canada-expanded-report-2012-2021/tuberculosis-canada-expanded-report-2012-2021.pdf

Public Health Agency of Canada. 2025. "Funding Opportunities: Public Health Agency of Canada and Health Canada." https://www.canada.ca/en/public-health/services/funding-opportunities/grant-contribution-funding-opportunities.html

Quilty, Simon. 2022. "Climate, Housing, Energy and Indigenous Health: A Call to Action." *The Medical Journal of Australia*, 217(1), 9–12. https://onlinelibrary.wiley.com/doi/10.5694/mja2.51610

Rathebe Phoka C., Khathutshelo Vincent Mphaga, Daniel M. Masekameni. 2025. "Climate change and environmental radioactivity: a review of studies on climate conditions in variation on indoor radon concentrations." *Environ Monit Assess*, 197(4):446. https://pubmed.ncbi.nlm.nih.gov/40113619/

Reed, Graeme, Shari Fox, Danika Billie Littlechild, Deborah McGregor, Diana Lewis, Jeese N. Popp, Kristine Wray, Norma Kassi, Raymond Ruben, Sarah Morales, and Steven Lonsdale. 2024. *For Our Future: Indigenous Resilience Report.* Natural Resources Canada. Ottawa, ON. https://changingclimate.ca/site/assets/uploads/sites/7/2024/03/Indigenous-Resilience-Report_Final_EN.pdf

Rennie, Donna, Chandima Karunanayake, and Joshua Lawson. 2019. "Damp Housing Is a Risk Factor for Atopic Asthma in a First Nations Population of Adults." *European Respiratory Journal* 54 (suppl 63): PA2772. https://doi.org/10.1183/13993003.congress-2019.PA2772

Riva, Mylène, Pierrich Plusquellec, Robert-Paul Juster, Elhadji A. Laouan-Sidi, Belkacem Abdous, Michel Lucas, Serge Dery, and Éric Dewailly. 2014. "Household Crowding Is Associated with Higher Allostatic Load among the Inuit." *Journal of Epidemiology & Community Health* 68 (4): 363–369. https://doi.org/10.1136/jech-2013-203270

Riva, Mylène, Christopher Fletcher, Philippe Dufresne, Karine Perreault, Gina Muckle, Louise Potvin, and Ross S. Bailie. 2020. "Relocating to a New or Pre-Existing Social Housing Unit: Significant Health Improvements for Inuit Adults in Nunavik and Nunavut." *Canadian Journal of Public Health 111*, 21–30. https://doi.org/10.17269/s41997-019-00249-6

Shared Value Solutions. 2024. *Indigenous Housing and Climate Resilience Report.* Guelph, ON. Prepared for the Canadian Climate Institute. https://climateinstitute.ca/wp-content/uploads/2025/01/Indigenous-Housing-Climate-Resilience-Report.pdf

Standing Committee on Human Resources, Skills and Social Development and the Status of Persons with Disabilities. 2021. *Indigenous Housing: The Direction Home.* House of Commons Canada.

Ottawa, ON. https://www.ourcommons.ca/Content/Committee/432/HUMA/Reports/RP11348049/humarp05/humarp05-e.pdf

Standing Committee on Indigenous and Northern Affairs. 2022. *The Effects of the Housing Shortage on Indigenous Peoples in Canada*. House of Commons Canada. Ottawa, ON. https://www.ourcommons.ca/Content/Committee/441/INAN/Reports/RP11862143/inanrp03/inanrp03-e.pdf

Statistics Canada. 2022. "Indigenous population continues to grow and is much younger than the non-Indigenous population, although the pace of growth has slowed." https://www150.statcan.gc.ca/n1/daily-quotidien/220921/dq220921a-eng.htm?indid=32990-1&indgeo=0

Stout, Roberta. 2017. *The Built Environment: Understanding how physical environments influence the health and well-being of First Nations people living on-reserve.* National Collaborating Centre for Indigenous Health. https://www.nccih.ca/docs/emerging/RPT-Built-Environment-Stout-EN.pdf

Supreme Court of Canada. 2016. "Daniels v. Canada (Indian Affairs and Northern Development)." April 14. https://decisions.scc-csc.ca/scc-csc/scc-csc/en/item/15858/index.do

Surrey Urban Indigenous Leadership Committee. 2021. *Skookum Lab: An Indigenous Reflection of our Social Innovation Journey.* https://surreyindigenousleadership.ca/wp-content/uploads/2023/12/skookum-lab-reflections-2.pdf

Task Force for Housing and Climate. 2024. *Blueprint for More and Better Housing: How Federal, Provincial and Municipal Governments Can Ensure We Build 5.8 Million Homes That Are Affordable, Low-Carbon and Resilient.* https://housingandclimate.ca/wp-content/uploads/2024/03/Blueprint-for-More-and-Better-Housing-Mar-2024-EN.pdf

Thomson, Harriet, Stefan Bourzarovski, Carolyn Snell. 2017. "Rethinking the measurement of energy poverty in Europe: A critical analysis of indicators and data." *Indoor Built Environ* 7: 879-901. https://pubmed.ncbi.nlm.nih.gov/28919837/

Tseshaht First Nation. 2018. *Tseshaht First Nation Housing Funding Guide.* https://tseshaht.com/wp-content/uploads/2018/12/TFN-Housing-Funding-Programs-guide.pdf

Tsuji, Stephen R J., Aleksandra M Zuk, Andrew Solomon, Ruby Edwards-Wheesk, Fatima Ahmed, Leonard J S Tsuji. 2023. "What is Wellbeing, and What is Important for Wellbeing? Indigenous Voices from across Canada." *International Journal of Environmental Research and Public Health*, 20(17):6656. https://pmc.ncbi.nlm.nih.gov/articles/PMC10487260/#sec4-ijerph-20-06656

UK Government. 2025. "Largest fund of its kind to support vulnerable kids & families." July 14. https://www.gov.uk/government/news/largest-fund-of-its-kind-to-support-vulnerable-kids-families

United Nations. 1989. *Convention of the Rights of the Rights of the Child*. General Assembly resolution. November 20. https://www.ohchr.org/en/instruments-mechanisms/instruments/convention-rights-child

Vancouver City Savings Credit Union. 2025. "Put Your Money Where It Advances Reconciliation." https://rethink.vancity.com/community/reconciliation

Wale, Janna, Maria Shallard, Ian Scholten, and Chad Bonnetrouge. 2024. *Beyond Sustainability: The Power of Indigenous Healthy Energy Homes*. Canadian Climate Institute. Ottawa, ON. https://climateinstitute.ca/wp-content/uploads/2024/06/Beyond-sustainability-power-Indigenous-Healthy-Energy-Homes.pdf

World Health Organization. 2009. *WHO Guidelines for Indoor Air Quality: Dampness and Mould*. Geneva, Switzerland. https://www.ncbi.nlm.nih.gov/books/NBK143946/#:~:text=Healthy%20indoor%20air%20is%20recognized,their%20health%20and%20well%2Dbeing

Yänonhchia' Housing Finance. (2025). "About us." https://yahf.ca/about-us/

Acknowledgements

Peer Reviewers

Gary Wilson, President and Chair - Aboriginal Housing Management Association; Board Member - National Indigenous Collaborative Housing Inc.; Chief Executive and Economic Development Officer - Tiičma Enterprises

Dr. Julia Christensen, Associate Professor - Department of Geography and Planning, Queen's University

Mary Pupo, Energy and Sustainability Manager - Otipemisiwak Metis Government of the Metis Nation within Alberta

Will Goodon, Minister of Housing and Property Management - Manitoba Métis Federation

Canadian Climate Institute Contributors

Jaela Bernstien, Senior Communications Specialist

Dale Beugin, Executive Vice President

Claudine Brulé, Communications and External Relations Lead

Kirsten Cole, Director, Communications and External Relations

Dean Evangeliou, External Affairs Manager

Aiman Ghori, Production and Marketing Manager

Julia Kilpatrick, Vice President, External Affairs

Maëlle Martin-Richon, Senior Digital Specialist

Krystal Northey, Public Affairs Lead

Andrew Patrick, Deputy Director, Communications

Indigenous Clean Energy Contributors

Harmony Blackbird, Communications Manager

Lina Forero, Senior Communications Manager

Cara Garneau, Communications Coordinator

Chris Henderson, Founding Executive Director

James Jenkins, Executive Director

Corey Cote-Diabo, Director of Efficiency and Transportation

Phase 2 Interview Contributions

Abhi Kantamneni
Dylan Heerema
Gordon Hart
Jalili Saad
Jessica Nadjiwon
Keith Smith
Dr. Laura Tozer
Margaret Coady
Dr. Mylene Riva
Sara Fralin
Dr. Tom Kovesi
Leona Humchitt

Phase 6 Interview Contributions

Lenny Kishi
Andrea Foster
Bertha Cormier
Charles Pender
Cole Chretien
Gary Wilson
Michael Sadler
Michelle Bonner
Shaun Loney
Sheldon Pollett
Travis Seymour
Will Goodon
Dr. Julia Christensen
Dr. Linda Larcombe
Dr. Michael Schwandt
Drew Bernard
Jeffrey Beach
Samara Lewis
Darius Mali

Graphic Design

Cover Art: Indigenous Marketing Solutions

Design and Layout: Laurie Barnett, Graphic Designer

Indigenous Research logo and branding elements: Design de Plume

Recommended Citation

Shallard, Maria, Carlyn Allary, Kayla Fayant, Chad Bonnetrouge, Joanne Shantz, Olivia Shotyk, Jeremy Shute. 2025. *Building Strength Through Shelter: Policy prescriptions for Indigenous Healthy Energy Homes.* Canadian Climate Institute. Ottawa, ON.

Other Acknowledgements

We want to raise our hands and recognize the countless Indigenous and allied organizations and individuals working tirelessly to push forward change and improve housing and health for First Nations, Inuit and Métis people from coast to coast to coast.

A special thank you to Bruce Dudley, Janna Wale, Avery Velez, Ian Sholten, Kate Harland, Dr. Mylene Riva, Leona Humchitt, and Jason Dion for support on the early phases of this work and Jordyn Burnouf, Board member at the Canadian Climate Institute who co-facilitated our Healthy Energy Homes Virtual Gathering. An extended thank you to all of the organizations and individuals that we met with, that contributed to the scoping of research based off of the important lived experiences and expertise that they hold. This includes international organizations such as the Sustainable Energy Authority of Ireland and Wilya Janta in Australia whose work is inspirational.

Mígwech
Algonquin

Mikwetc
Atikamekw

Ması
Dene

Huy tseep q'u
Hul'qumi'num

Kuei
Innu-Aimun

ᖁᔭᓐᓇᒦᒃ
Inuktitut

Maarsii
Michif

Wela'lin
Mi'kmaq

Niá:wen
Mohawk

ᒥᑫᐧᐨ
Oji-Cree

Miigwech
Ojibwe

Miigwetch
Ojibwe West

Kinanâskomitzin
Plains Cree

Kúkwstumckacw
Ucwalmícwts

Thank you/merci

in various Indigenous languages