

Community Success Story

Energy Efficiency Policy Adoption in Three BC First Nations

Context

Non-treaty First Nations in British Columbia are not required to meet BC Building Code standards but must adhere to National Building Code standards. First Nations with signed treaties may or may not be subject to provincial building codes.

Some First Nations are using the BC Energy Step Code (“Step Code”), an optional compliance path for meeting the energy efficiency requirements in the BC Building Code, to guide their energy efficiency work.

The Step Code sets performance targets for new construction and groups them into “steps” from 1 to 5 that apply across various building types and regions of the province. The lower steps are relatively straightforward to meet, while the upper steps are more ambitious.

This case study explores the experiences of three BC First Nations communities with developing and implementing an Energy Efficient Buildings Policy.

xʷməθkʷəy̓ə m (Musqueam) Indian Band



The Musqueam Indian Band’s unceded traditional territories include what is now called Vancouver and its neighbouring areas. Many of Musqueam’s 1,300 members live on a small portion of their traditional territory known as the Musqueam Indian Reserve, located south of Marine Drive in Vancouver near the mouth of the Fraser River. There are approximately 250 homes and several community buildings on the reserve.

Energy efficiency is a high priority for the Musqueam Indian Band. They have been progressive in adopting new technologies, retrofitting homes to save energy, and working to reduce their carbon emissions. Musqueam’s main drivers for adopting energy-efficient building practices are lowering utility costs and improving the comfort, health, and safety of residents’ homes. Musqueam’s approach to energy efficiency has been to learn from issues in existing homes and to address them in new construction.



New construction on Musqueam Indian Reserve #2
Credit: Musqueam Indian Band



New construction on Musqueam Indian Reserve #2
Photo Credit: Musqueam Indian Band

Community Contacts

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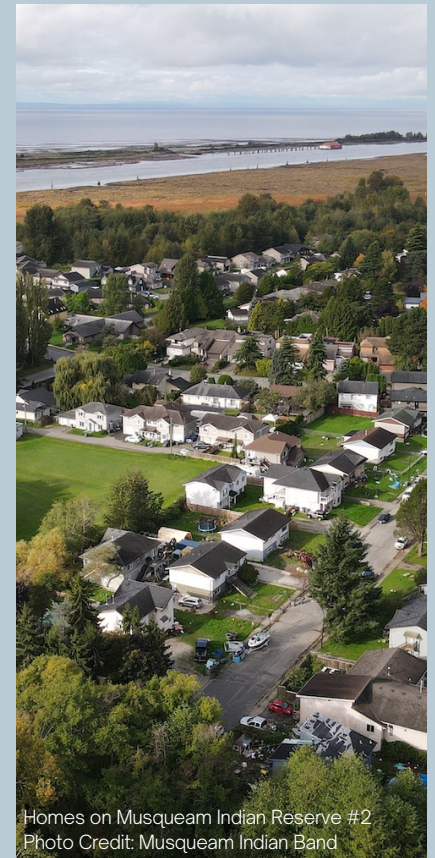
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Homes on Musqueam Indian Reserve #2
Photo Credit: Musqueam Indian Band



Laxgalts'ap Village Government Office
Credit: Frank Clark

“Step Code is just one aspect of a high-performance building. Cost-effectiveness, resilience and ease of maintenance are also important considerations for the community...”

Step Code and the features installed in the new homes have also been an important educational tool for members, helping to explain all the different features. This aligns with a move in the community to make residents more responsible for maintenance.”

- Drae Azak,
Capital Housing and
Infrastructure Manager,
Laxgalts'ap Village
Government

The Musqueam Indian Band uses the Step Code as a tool to communicate the target performance standard for new construction. When it is cost-effective, Musqueam aims to build new homes to Step 2 or 3. However, the community has not adopted a formal energy efficiency policy for new construction. Formal policy adoption would require a directive from Chief and Council, and the community currently has other priorities. It's unlikely Musqueam would adopt the Step Code or other policy unless it became a requirement of its funding partners or if there was substantial evidence from other Nations of the advantages of adopting such a policy.

Laxgalts'ap Village Government

Laxgalts'ap



Village Government

Laxgalts'ap Village is part of the Nisga'a First Nation, a self-governing modern treaty nation on BC's North Coast. Laxgalts'ap, one of four communities within the Nation, comprises approximately 600 members.

Housing in the Village includes privately owned homes and a rental stock of 42 units managed by the Village Government. The Village Government is also responsible for community amenities such as the

administration building, community centre and daycare. The community is growing significantly. Six new homes were completed in 2022, and 14 new units are planned for development in 2023.

Energy efficiency is also a high priority for Laxgalts'ap Village Government. For new construction, they are working with a contractor capable of reaching Step 4 or 5 for residential buildings. All new buildings in the community will reach Step 4. The main driver for this practice is the community's experience with existing homes that lacked a well-sealed envelope, which led to very high heating costs for residents. Cost-effectiveness, resilience and ease of maintenance are also important considerations for the community.

Laxgalts'ap Village Government is currently developing a Housing and Infrastructure Action Plan. This plan focuses on energy efficiency and high-performance buildings, and possibly the Step Code, although there is no plan to formally adopt the Step Code at this time. After the Action Plan is completed, they intend to focus on a universal building regulation. Staff capacity and time to work collaboratively is a limitation, as staff need to coordinate across all four Nisga'a communities. Staff believe a greater understanding of the benefits of high performance buildings will help support a future formal adoption of the Step Code.



Welcome sign at Laxgalts'ap Village
Credit: Laxgalts'ap Village Government

Tsawwassen First Nation



scəwəθən məsteyəx^w

TSAWWASSEN FIRST NATION

The traditional territories of the Tsawwassen First Nation (TFN) include areas now called Richmond, Surrey, Langley, Delta, and the Gulf Islands. They are a modern treaty nation governing 724 hectares of land. Roughly half of the TFN's 491 members live on

Tsawwassen lands, located south of Ladner on BC's South Coast.

Residential areas of the TFN fall into two categories: the TFN Community Area, which includes member housing and TFN facilities, and the Leasehold Area, which includes non-member housing and other uses. The Leasehold Area has seen major development, with 2,949 units planned for completion in the next three years. In the Community Area, 36 units of member rental housing and an Elder Centre were built in 2022.

For the Tsawwassen First Nation, energy efficiency is a high priority for member-owned homes and a moderate-to-high priority for leaseholds. While some community members are interested in setting a higher minimum Step Code, the cost to leasehold purchasers is a concern. Member housing is subsidized by the First Nation and is not subject to the same market pressures, though housing affordability is still a concern. Many in the community recognize other benefits of energy-efficient homes, such as comfort and reduced utility bills.

Tsawwassen First Nation is in the process of adopting Step 3 for residential buildings and Step 2 for commercial buildings. The Chief and Executive Council are responsible for setting policy, and each department is then responsible for updates to building regulations. Tsawwassen First Nation is interested in adding to the code, but this isn't permitted under the current Provincial code requirements. However, they were allowed to include previous requirements.

Advice for other communities interested in energy-efficient buildings

1. Find a knowledgeable and collaborative contractor who is willing to work with others.
2. Take advantage of outside support to build your network and help point you in the right direction.
3. Energy efficiency is just one pillar of a high-performance building. It's also important to consider cost, moisture management and ease of maintenance.
4. Provide energy efficiency training to your building inspectors, or if you use external building inspectors, ensure they have received adequate training.



Beach at Tsawwassen First Nation
Credit: Tsawwassen First Nation



Homes in Tsawwassen First Nation
Credit: Tsawwassen First Nation

“With so many other municipalities in the region already leading on the BC Energy Step Code, we anticipate fewer barriers than some other regions.”

**- Robert (Bob) Schantz,
Chief Building Official,
Tsawwassen First Nation**

For more information about First Nations Home EnergySave visit:
www.fnenergy.ca

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