

Local Government Climate Action Program Survey Submission Report

Nelson

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Question	Answer
1. Does your local government or Modern Treaty Nation have a climate action plan or strategy?	Yes
1.a. Indicate the date the plan was adopted.	The plan was approved in December 2020
1.b. Include a link to the document (URL) or webpage.	https://www.nelson.ca/DocumentCenter/View/4920/Nelson-Next
2. For the calendar year 2021, did your local government or Modern Treaty Nation measure and publicly disclose corporate greenhouse gas (GHG) emissions?	No, corporate GHG emissions are not currently being measured, but we are currently undertaking one and it will be completed in the next two years
3. For calendar year 2021, did your local government or Modern Treaty Nation measure and publicly disclose a communitywide emissions inventory?	No, but we are intending to undertake a community GHG inventory in the next two years
4. Is your local government or Modern Treaty Nation tracking progress on its community-wide GHG reduction target?	Yes

4.a. Please provide your reduction target(s).	75% reduction in community ghg emissions by 2030 and net zero by 2040
4.b. Please provide the target year.	2030
4.c. Please provide the baseline year.	2007
4.d. Please provide the link(s) to the document(s) or website if available.	https://www.nelson.ca/DocumentCenter/View/4920/Nelson-Next
5. Describe up to four climate intiatives, and their outcomes, your local government or Modern Treaty Nation is currently undertaking for Buildings	Demand-side Management - Regional Energy Efficiency Program In 2012, Nelson developed the EcoSave Energy Retrofits Program to assist residents to undertake energy retrofits in their homes with the option to use their electric bill to finance the upgrades (On-bill Financing through Nelson's municipal electric utility, Nelson Hydro). In 2019, through a partnership between Nelson and the Regional District Central Kootenay (RDCK), the program expanded to all residents within the RDCK, becoming the Regional Energy Efficiency Program (REEP). The program increased its capacity from one employee responsible for the delivery and management, to a team of four, varying from part-time to full-time. REEP is managed and delivered through Nelson's Climate & Energy team, in partnership with the RDCK. Nearly 1,000 residents have registered for the program since the expansion in 2019. The program and the assistance that is available
	('concierge in nature') are vital to residents who face barriers in equity, accessing information and understanding the complicated layers of rebates and financing. Currently, staff are working on an application to the (Federal) Community Efficiency Financing Program to scale up participation to meet local and regional climate goals. Embodied Carbon In the fall of 2020, the City of Nelson commissioned research to investigate the relationship between energy efficiency and embodied carbon in newly constructed Part 9 homes. This study was conducted on 3 new homes in Nelson and established the need to conduct a more thorough analysis with the help of embodied carbon experts.

This led to a more robust 34-house study in Nelson and Castlegar, led by Canada's leading embodied carbon researchers on Part 9 buildings, Builders for Climate Action, assisted by a local energy advisor, and funded by FortisBC. This research, the first of its kind in Canada, allowed the City of Nelson to identify the amount of embodied carbon associated with new Part 9 homes in Nelson and Castlegar and the building materials in the study homes that contributed the most embodied carbon emissions. After a year of research and engagement, the project published two documents (Material Carbon Emissions Guide and Benchmarking Report) that are relevant to municipalities and building communities across the province and country.

Approximately 20 months after the City of Nelson first started talking about the importance of addressing embodied carbon, the initiative is now a key component of the City's emissions reduction strategy and is led by the Climate & Energy team. This initiative is now focused on translating the research findings into action (e.g., establishing an embodied carbon advisory group to build capacity in our local building community, integrating embodied carbon considerations into the City's existing energy efficiency support systems, and assessing appropriate policies and programs that could contribute to meaningful emissions reductions).

Step Code

The City of Nelson first adopted the BC Energy Step Code in October 9th, 2018. These changes came into effect August 1, 2019. In December 2020, the City of Nelson took further action to accelerate the adoption of Step Code when the Building Bylaw was amended to require a higher Step Code standard (Step 3) in new residential buildings (i.e., Part 9) and introduce a Step Code standard (Step 2) for new developments of complex buildings (i.e., Part 3). The building community has been largely supportive of this work to increase the energy efficiency of homes in Nelson.

It should be noted that in 2020, there was interest from staff and council to further accelerate our adoption of the BC Energy Step Code. Before moving forward however, it was established to be important to make sure that pursuing higher levels of the BC Energy Step Code wouldn't inadvertently contribute to more embodied carbon emissions. Staff are currently accessing when to require higher levels of Step Code.

6. Describe up to four climate intiatives, and their outcomes, your local government or Modern Treaty Nation is currently undertaking for Transportation

E-Bike Financing Program

In the summer of 2020, the City launched an E-bike Financing Program and has since distributed over 130 loans to Nelson Homeowners. The program is designed to promote a healthy alternative to driving and decrease the climate impact of transportation in Nelson. The City was the first municipality to launch a commuter bicycle incentive program in the Province. Since then, similar programs have begun launching across BC.

To better understand the impact of the E-Bike Financing Program on

travel behaviour and greenhouse gas emissions, the City has recently partnered with UBC's REACT (Research on Active Transportation) Lab. The study will take two years to complete and will provide rigorous information on the effectiveness of the E-Bike Financing Program in helping achieve the City's ambitious climate targets.

Active Transportation Plan

In 2020, the City of Nelson staff produced a review and implementation plan for City's Active Transportation Plan. This included several immediate, short, and ongoing actions between 2020 and 2025. This has resulted in successful grants for the conceptual design, engineering, and construction of Phase 1 of the City's PrCity'sBike Route – a neighbourhood bikeway to equally prioritize cyclists and pedestrians occupying a primary corridor between a key residential neighbourhood and downtown – and the solution and design of many other crucial pedestrian and cycling links within the City. The Plan has also led to the completed conceptual design of Phase 2 of the Primary Bike Route and submission for funding for the construction of this section.

This Plan also provides a mechanism for viewing other City capital projects through a more adaptable transportation lens and outlines key methods of monitoring and review of the City's transportation systems moving forward.

Secure Bike Storage

Part of the Active Transportation Implementation Plan includes the fabrication and installation of several bike racks downtown. A large secure bike locker has been installed in the downtown parkade to provide safe, protected short-term bike storage for commuters and visitors of the downtown. This free-to-use locker can store around 25 bicycles at any one time. City staff have also recently distributed a Request For Quote to fabricate new large bike racks at one of the City's most popular amenities — Lakeside Park. This will continue for other community spaces. Finally, City staff are currently taking bylaw amendments to Council to double long-term bicycle parking requirements for new multi-unit developments in the City. This will ensure adequate volumes of bicycle parking for residents.

Parking Requirement Flexibility

Given that the use of passenger vehicles accounts for such a large percentage of total ghg emission, we want to provide flexibility for developments in the required amount of parking per dwelling unit. City staff have implemented and are proposing further bylaw amendments to permit different types of developments to reduce the amount of parking required where appropriate. This includes an option to reduce parking requirements by up to 50% for mixed-use developments, reduce the number of required stalls when providing car-share stalls, and providing a cash in-lieu option per parking space.

All of these relaxations have been implemented as steps towards the removal of parking requirements – a key priority tactic in the City's

climate plan Nelson Next. This flexibility comes with a variety of benefits including reducing the requirements for surface and underground parking, maintaining unit affordability by not having to build parking structures, catering unit occupancy to those not requiring personal motor vehicle parking, maintaining natural landscaping of lots that would otherwise be used for parking, and reduces local street traffic congestion and emissions.

7. Describe up to four climate intiatives, and their outcomes, your local government or Modern Treaty Nation is currently undertaking for Community

Nelson Next Climate Plan

Mayor and Council have recently approved a comprehensive climate action plan entitled Nelson Next. This Plan builds on Nelson's strong foundation of leadership, offering a range of evidence-based and community-grounded strategies and that will reduce our greenhouse gas emissions (mitigation) and our vulnerability to climate change impacts (adaptation). Taken together, Nelson Next provides a framework for ensuring an accelerated transition to low-carbon resilience.

Nelson Next is a climate plan for the community. It draws from a rigorous set of baseline data, extensive research, and an intensive engagement process, to consolidate and coordinate existing policies and actions on climate change, while also introducing new actions to address emerging risks and opportunities.

Organics Diversion Program

The City of Nelson will be the first municipality in Canada to implement a city-wide organics diversion program following a pretreatment model. Through this innovative program, residents will be equipped with an in-home appliance that will mash and dehydrate food waste. This process is referred to as 'pre-treatment' and substantially reduces the weight and volume of food scraps and therefore requires only 8 collection services per year (compared to 52 trips with a traditional weekly-curbside model).

This program will significantly reduce community GHG emissions, enhance local resilience to climate change, divert more waste away from landfill than a traditional weekly-curbside model, and support our local economy by creating green jobs in service, repair, and program delivery

This project is among the 'Priority Tactics' to be implemented from the City's Nelson Next Climate Plan.

The Nest Lab for Collaborative Climate Solutions

Nest Lab was created to bring together diverse Nelson stakeholders to collaborate on community climate action. The idea to develop a social innovation lab emerged from a series of cross-sectorial Climate Crisis Round Tables hosted by Nelson at its Best and the West Kootenay EcoSociety in 2019.

A first phase of the Nest Lab was convened by the City of Nelson, Nelson at its Best and Interior Health in the spring of 2020 with seed funding from the Vancouver Foundation. One of the lab's goals in Phase I was to assist in the development of the City's forthcoming

Climate Action Plan by helping unearth a wide and diverse range of community perspectives and ideas for local climate action. The lab was a success both in terms of participant experience and helping create the City's Climate Action Plan, Nelson Next.

In Phase II, we wanted to further support participants in the implementation of community-led actions that align with Nelson Next. Funding from the Trottier Family Foundation allowed us to deepen the lab experience and provide seed funding to all the priority initiatives.

Nest Lab participants were recently recognized for their contribution with a Sustainability Leadership Award presented by Council in December. Because of the success of the Nest Lab in advancing the goals outlined in Nelson Next, the City's Climate & Energy team is looking to secure further funding to support the Lab to continue. The Nest Lab is led by key staff from the following convening partners; City of Nelson, Interior Health, Nelson at its Best, and Selkirk College with support from some expert facilitators.

8. Describe up to four climate intiatives, and their outcomes, your local government or Modern Treaty Nation is currently undertaking for Climate Resilience

State of Climate Adaptation Report (SoCARB)

The State of Climate Adaptation Report (SoCARB) for the city of Nelson was designed by a team of climate change professionals to provide data and insights relating to climate change, including local environmental impacts and community impacts (e.g., economic impacts), as well as information to help build adaptive capacity and track local actions. Originally developed in 2015, the SoCARB indicator suite measures community progress on climate adaptation across five climate impact pathways: extreme weather and emergency preparedness, water supply, flooding, agriculture, and wildfire.

The information in the report is a reference document for the City of Nelson, intended to highlight trends and impacts related to the local climate and surrounding environment, and to inform local planning and decision-making. While focused on Nelson, this report includes changes in indicators outside of the City of Nelson jurisdiction, such as wildfire starts, recognizing that a better understanding of trends associated with these indicators can help the community prepare for current and future changes.

The preparation of the SoCARB report was carried out with assistance from the Government of Canada and the Federation of Canadian Municipalities, with additional funding from Columbia Basin Trust and participating local governments. The project was led by the Columbia Basin Rural Development Institute with contributions from external experts and local governments.

Nelson Next, Climate Adaptation Working Group
The City of Nelson is currently developing an implementation plan to
accompany the Nelson Next Climate Plan. This implementation plan
will likely include the development of a cross-departmental working
group on Climate Adaptation and Resilience. The details of this
workgroup are still to be defined but key functions would include
ensuring a climate lens is applied within municipal decision-making
and the application of climate data and modelling for capital projects.

9. Which elements of your community's current official community plan (OCP) (or other relevant strategies, policies and/or plans) support the creation of more complete, compact communities?

The most impactful element that contributes to making Nelson a complete and compact community is the fact that our land use documents encourage ground floor density throughout the City. Our Zoning Bylaw permits a variety of options for density which depends on the zone. Even our lowest density residential zones permits for up to 3 units on a property (depends on lot size). The density can take shape in a variety of form. For example, provided the lot is of 555sq. m. or more, the property could accommodate 1 main dwelling + 1 suite + one laneway house.

Other zones, such as in our downtown, don't have maximum density. Density is regulated through the built form to ensure compatibility with the neighborhood.

Another important element that helps achieve complete and compact communities is the relaxation of parking standards. For example, a new mix-used building downtown can benefit from a 50% parking count discount. This is to encourage new buildings to include commercial uses at grade. It also alleviates the need to create expansive parking structures which leads to more affordable units for those not requiring a vehicle parking space.

10. What actions has your local government or Modern Treaty Nation taken to increase community completeness and compactness since 2020 (e.g. urban containment boundary, increasing density by allowing secondary suites and laneway or carriage housing options)?

As mentioned above, the City of Nelson has been allowing for increased density in low-density zones for many years. More recently, the City has looked at ways to encourage/facilitate the development of more laneway houses. Most notably, the City has commissioned (through a design competition) 3 pre-approved laneway designs/construction plans. These plans are sold for \$1000 which greatly reduces the upfront costs/approval time.

Other policies/regulatory changes revolve around flexible parking requirements. The City has increased the number of "small" car vehicle parking allowed in larger development. As well, it is offering a cash contribution to the Active Transportation fund in-lieu of parking. Again these strategies will help use urban space more efficiently, increase affordability and offer transportation equity.

11. What data would be most valuable to your local government or Modern Treaty Nation in decision-making related to the creation of complete, compact communities?

The City of Nelson is quite unique in the sense that it cannot sprawl (due to local geography) and that our zoning is relatively permissive compared to many municipalities. We will continue to push in that direction because it is good practice in planning. What might be useful is to have metrics on the likelihood of people using active transportation in "complete/compact" neighbourhood vs. a sprawling neighborhood. Another metric could be quantifying the benefit of density vis-a-vis GHG reduction.

12. From 2021 to now, has your local government or Modern Treaty Nation taken any action(s) to address climate impacts?	REEP - Income Qualified Program Support The Regional Energy Efficiency Program (REEP) is described in section #5. This program is designed to assist residents through the process of making their homes more energy efficient and includes an equity approach by having the option to register for the income qualified programs that are delivered external to REEP. When a resident chooses this option they are assisted with the process of choosing and accessing the appropriate program, including navigational support.
	Cooling Centers During the unprecedented and extreme heat in June and July of 2021, the City of Nelson responded by opening Cooling Centers to support the community. Two facilities were opened; one at the Seniors Centre which was intended to be used by an older, more vulnerable population and another at the Nelson Curling Club available to all. Both facilities were open from 11:00 AM to 7:00 PM over 5-days to provide a safe location for people to visit, and cool down during the heat of the day while learning how to reduce the temperatures in their homes. While operational, these facilities served approximately 50 people over the 5-days. This extreme heat event has prompted the planning and development of a Heat Response Plan to adapt to the possible increasing frequency and severity of similar events.
	E-Bike Program The City of Nelson E-Bike Program is offers up to \$8,000 of low-interest financing for Nelson homeowners toward the purchase of a commuter bicycle. In recognition that this program would be strengthened by enhancing equity of access to financing, the City is currently exploring ways to work with the community to provide access to low-interest financing for all residents. This may include creating resources for employee financing programs, working with the local credit union, seeking grants and / or partnering with another local organization to administer the loans.
13. Has a climate risk and vulnerability assessment (or similar assessment) been undertaken for your local government or Modern Treaty Nation?	Yes
13.a. Please provide a link to the document (URL).	https://www.nelson.ca/DocumentCenter/View/4920/Nelson-Next

14. What are the three most significant climate hazards faced by your jurisdiction	"Wildfire", "Extreme heat and heat stress", "Wind, rain, and other storm events", "Ecological, cultural and/or human health impacts (examples of cultural impacts include threats to identities, languages, and livelihoods; examples of ecological impacts include biodiversity loss, erosion, invasive species, ecosystem changes)", "Water shortage", "Extreme cold, snow and ice", "Overland flooding", "Coastal flooding, storm surge events and/or other coastal hazards"
15. Are you responding to this survey on behalf of a Modern Treaty Nation?	No
16. Based on the hazard you indicated as most significant in question 14, as a local government, which groups are most exposed/vulnerable to the impacts of that climate hazard?	"Low-income households", "Indigenous peoples", "Racialized communities", "Newcomers to Canada (immigrants and refugees)", "People experiencing homelessness", "Seniors", "Women and girls"
17. Based on the hazard you indicated as second most significant in question 14, as a local government, which groups are most exposed/vulnerable to the impacts of that climate hazard?	"Low-income households","Indigenous peoples","Racialized communities","Newcomers to Canada (immigrants and refugees)","People experiencing homelessness","Seniors","Women and girls"
18. Based on the hazard you indicated as third most significant in question 14, as a local government, which groups are most exposed/vulnerable to the impacts of that climate hazard?	"Low-income households", "Indigenous peoples", "Racialized communities", "Newcomers to Canada (immigrants and refugees)", "People experiencing homelessness", "Seniors", "Women and girls"
19. Select the top three factors your local government or Modern Treaty Nation needs most to increase the capacity to adapt to climate impacts and build community resilience.	"Increased funding", "Increased staff knowledge, expertise and data specific to climate adaptation", "Increased staff capacity"
20. How does your local government or Modern Treaty Nation ensure equitable access to, and distribution of, climate action opportunities and benefits?	"By designing and implementing climate actions that target the barriers to access and resilience faced by the equity seeking groups/frontline communities most impacted by climate change"
21. Do the climate action plan(s) and priorities of your local government or Modern Treaty Nation align with the climate action plans and priorities of senior levels of government?	"Yes, we align climate action plan(s) and priorities with the federal 2030 Emissions Reduction Plan", "Yes, we align climate action plan(s) and priorities with the provincial CleanBC Roadmap to 2030", "Yes, we collaborate with other communities to align with climate action plans and priorities of senior levels of government"

22. Is your local government a signatory to the B.C. Climate Action Charter or a Modern Treaty Nation?	Yes
23. To demonstrate commitment to climate action, climate investments (i.e., matching funding or in-kind contributions) equivalent to 20% of the provincial funding received are required of local governments and Modern Treaty Nations. The intent is to show past, current, and future investments in climate action and create awareness and education.	"Staff time","Climate or energy studies and/or assessments","Climate or energy plans, policies and/or strategy development","Climate resilient infrastructure and/or capital project(s)"
24. Please provide your (or survey primary contact's) first and last name.	Cecilia Jaques
25. Please indicate your (or survey primary contact's) position with your local government or Modern Treaty Nation.	Climate & Energy Advisor
26. Please provide your (or survey primary contact's) business email address.	cjaques@nelson.ca
27. Please provide your (or survey primary contact's) business phone number.	2503528274



Local Government Climate Action Program Attestation Form

Instructions for the Attestor:
1. Complete and sign this form by filling in the fields below.
2. Email the completed and signed form to LGCAP@gov.bc.ca.
I, the Chief Financial Officer, or equivalent position, of City of Nelson (name of local government) confirm the following:
1. That Local Government Climate Action Program funding has been, or will be, allocated to climate action.
2. That if funds are held in reserve, they will be spent by March 31, 2025.
 3. That a completed and signed version of this form will be submitted by email to the Climate Action Secretariat, Ministry of Environment and Climate Change Strategy by July 29, 2022. a. If council approval is required, it will be submitted no later than September 30, 2022. 4. That a completed and signed version of this form will be publicly posted by September 30, 2022.
5. That a completed and exported version of the program survey (submitted online) will be publicly
posted by September 30, 2022.
Attested to by me at (name of local government) City of Nelson
on (date)
Signature of Attestor:
Printed Name of Attestor: Chris Jury
Title or Profession of Attestor (i.e. Chief Financial Officer or equivalent position):
Telephone Number of Attestor: 250 - 352 -8242
Email Address of Attestor: