



City of
Kelowna

Local Government Climate Action Program (LGCAP)

Kelowna Survey Responses for 2022

July, 2022

1435 Water Street
Kelowna, BC V1Y 1J4
TEL 250-469-8610
FAX 250-862-3349
email@kelowna.ca

kelowna.ca

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The Local Government Climate Action Program

The provincial Local Government Climate Action Program (LGCAP) provides local governments and Modern Treaty Nations with predictable and stable funding for the next three years to support the implementation of local climate action that reduces emissions and prepares communities for the impacts of a changing climate.

The LGCAP supports local climate action to help BC reach the Province's [legislated climate targets](#) and achieve provincial climate goals outlined in the [CleanBC Roadmap to 2030](#) and the [Climate Preparedness and Adaptation Strategy](#).

The City of Kelowna is eligible for \$419,082 annually until 2024 provided the following eligibility requirements are met each year:

1. Be a signatory of the [BC Climate Action Charter](#);
2. Measure and report on corporate GHG emissions;
3. Demonstrate climate investment equivalent to 20 per cent (\$83,816) of provincial funding;
4. By the July 15 deadline, submit and publicly post a completed program survey and a signed attestation form to confirm that the LGCAP funds will be used towards climate action projects; and
5. Demonstrate that all LGCAP funds received over the three-year period are spent by March 31, 2025.

Kelowna’s LGCAP Survey Responses

PART A: Climate Action Planning

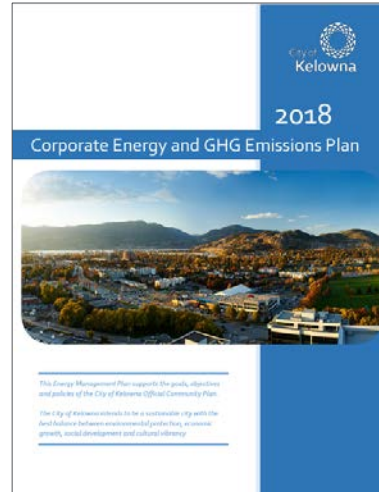
Climate Action Plans are strategic roadmaps that identify how an organization or community will reduce their greenhouse gas (GHG) emissions (mitigation), increase their resilience to the impacts of climate change (adaptation), or a combination of both.

1. Does your local government or Modern Treaty Nation have a climate action plan or strategy?

- Yes



Community Strategy:
[Kelowna's Community Climate Action Plan](#) (2018)



Corporate Strategy:
[Corporate Energy and GHG Emissions Plan](#) (2018)

PART B: Corporate GHG Emissions

GHG emissions produced from a local government or Modern Treaty Nation delivering “traditional services”, including fire protection, solid waste management, recreational / cultural services, road and traffic operations, water and wastewater management, and local government administration.

2. For the calendar year 2021, did your local government or Modern Treaty Nation measure and publicly disclose corporate greenhouse gas (GHG) emissions?

- **OTHER** due to data management issues, we have not been able to report since 2018. The City recently procured new energy management software and corporate GHG emissions to 2021 should be available for reporting in quarter 3 of 2022. When new data is available it is included in the annual Council’s 2019-2022 Priority Progress Reports under the Environmental Protection: GHG emissions are decreasing <https://opendata.kelowna.ca/pages/environmental-protection>.

PART C: Community Wide Emissions

B.C. Climate Action Charter signatories have committed to act and develop strategies to measure and report on their community GHG emissions generated from all GHG sources, sinks and reservoirs within their community boundary.

3. For the calendar year 2021, did your local government or Modern Treaty Nation measure and publicly disclose a community-wide emissions inventory?

- Yes, we do our own community-wide emissions inventory
 - **What year is the data from?**
2018
 - **How frequently is data collected?**
As data becomes available through CEEI and/or when capacity permits.
 - **What methodology is used?**
The most recent inventory was calculated by a consultant using CityInSight, a community energy, emissions, and finances model that assesses all city sectors (buildings, transportation, waste, etc.). The model uses input from the provincial Community Energy and Emissions inventory and third-party fuel sales data to calculate the inventory.
 - **Include a link to the document (URL) or webpage where it is disclosed.**
The most recent inventory was published in a Council report on [PM Council Meeting - June 20, 2022 \(escribemeetings.com\)](#) (item 3.7) and when new data is available it is included in the annual Council's 2019-2022 Priority Progress Reports under the Environmental Protection: GHG emissions are decreasing <https://opendata.kelowna.ca/pages/environmental-protection>.
 - **What are your total community-wide emissions (in tCO₂e):**
874,156 tCO₂e
 - **What are the sectoral emissions from energy use in buildings (in tCO₂e)?**
331,922 tCO₂e
 - **What are the sectoral emissions from energy use in transportation (in tCO₂e)?**
482,490 tCO₂e
 - **What are the sectoral emissions from methane at landfills (in tCO₂e)?**
38,273 tCO₂e
 - **What are the indirect emissions from electricity used in the community (in tCO₂e)?**
36,381 tCO₂e
 - **What is the energy use from electricity (in kWh)?**
1,378,000,000 kWh

PART D: Community GHG Emissions Reduction Targets

A local government or Modern Treaty Nation goal to reduce community GHG emissions by a specific amount and by a pre-determined date.

4. Is your local government or Modern Treaty Nation tracking its progress on its GHG reduction target?

- Yes
 - **Please provide your reduction target(s), target year and baseline year:**

Reduction targets in the 2040 OCP are:

- Reduce emissions below 2007 levels by 4, 25 and 80 per cent by 2023, 2033 and 2050.

It should be noted that Council recently directed staff to use new GHG emission reduction targets of 40 per cent below 2007 levels by 2030 and net zero GHG emissions by 2050 in the development of the Climate Resilient Kelowna Strategy. Public consultation on these targets will happen this fall.

- **Please provide the link(s) to the document(s) or website if available.**

See [2040 Official Community Plan | City of Kelowna](#), Chapter 12, policy 12.1.1 for current targets. Also see [PM Council Meeting - June 20, 2022 \(escribemeetings.com\)](#) (item 3.7) for recommended updates to the target.

PART E: Alignment with Clean BC Roadmap to 2030 and Climate Preparedness and Adaption Strategy

The [Clean BC Roadmap to 2030](#) is B.C.'s plan to meet provincial Paris emissions reduction targets for 2030 and reach net zero by 2050. One requirement of this program is to report on projects linked to **one or more** objectives from the [CleanBC](#) and/or draft [Climate Preparedness and Adaptation Strategy](#) (CPAS). For the following 4 questions in this section, for 2021 and 2022, describe **up to four** climate initiatives¹ your local government or Modern Treaty Nation is currently undertaking along with the outcomes (e.g., GHG reductions, increased energy efficiency, enhanced public awareness and support etc.).

5. Describe climate initiatives and their outcomes, your local government or Modern Treaty Nation is currently undertaking for BUILDINGS.

- *Key buildings actions in the CleanBC Roadmap to 2030 include zero-carbon new construction by 2030, highest efficiency standards for new space and water heating equipment and enhancing energy efficiency programs.*
- *Examples of buildings initiatives – Step code adoption, carbon pollution standard, energy efficient / demand side management programs, zero carbon heating requirement and net zero buildings commitments.*
 - Energy Step Code early adoption: Since June 1, 2021 Kelowna has been an early adopter of Step 3 for Part 9 buildings and Step 2/3/4 for Part 3 buildings.
 - Energy Step Code Compliance Pilot Program: A third-party contractor was hired to ensure that building permit submissions accurately reflect the expected energy performance of new homes. The purpose of this initiative is to improve and enhance Step Code compliance in the building sector.
 - Canadian End-use Mapping (CEE Map) Project: In collaboration with Canmet Energy-Ottawa and Natural Resources Canada, this project creates an open online map-based decision tool for assessing building stock energy efficiency.

- Municipal Heat Pump “Top Ups”: Since August, 2021, the City of Kelowna has offered a \$2,000 top up to [Better Homes BC](#) rebates to support residents to adopt more efficient, lower carbon home heating technologies.
- Corporate energy studies: Over the past year three energy studies, three energy audits and four recommissioning studies have been completed at various corporate buildings to identify projects to improve energy efficiency and reduce GHG emissions.

6. Describe climate initiatives and their outcomes, your local government or Modern Treaty Nation is currently undertaking for TRANSPORTATION.

- *Key transportation actions in the CleanBC Roadmap to 2030 include reducing distance travelled, encouraging “mode shifting” to more energy efficient forms of transport and accelerating the switch to Zero Emission Vehicles.*
- *Examples of Transportation initiatives – Active transportation plan or investments, secure bike parking, commute reduction programs, transit/pedestrian-oriented development regulation, Electric Vehicle charging infrastructure plans or number of public installations, trip reduction programs, mode shift targets in OCP or RGS’s.*
 - [2040 Transportation Master Plan](#) (TMP): The TMP was endorsed in January, 2022 and its implementation will help cut carbon emissions and accommodate more trips while reducing car-dependence. The Plan targets doubling transit ridership, quadrupling the number of trips made by bicycle and reducing the average distance driver per person by 20 per cent.
 - [Micromobility Permit Program](#): In 2021 Kelowna became a participant in the [provincial electric kick scooter pilot program](#) and updated our traffic bylaw to allow electric scooters to be ridden under the same rules as bikes and e-bikes. Under the City’s Micromobility Permit Program, the City issued permits to several shared e-scooter companies to provide shared micromobility services within Kelowna. Analysis of the program found that between April – October, 2021 approx. 33% of e-scooter trips replaced car trips (personal car, taxi, or ride-hail), resulting in 148,500 kilometers of vehicle travel that was prevented from being driven on our roadways.
 - Active Transportation Network Build Out: In 2021, Kelowna added 2.5 km of All Ages and Abilities (AAA) protected bicycle lanes to our network. Projects completed included Phase 6 of the Ethel Street active transportation corridor, the first phase of the Casorso active transportation corridor, the extension of the Lakeshore shared-use pathway across the Bellevue Creek bridge, and a segment connecting the Okanagan Rail Trail to the Waterfront. Additionally, a segment of the Rail Trail to Greenway active transportation corridor along Leckie Road was completed as part of development.
 - GoByBike Week: This year Kelowna was able to reinvigorate a return to GoByBike Week with in-person events and celebration stations to encourage people to try riding. The event saw 2,729 riders register, a 73% increase from 2021 and more than a 30% increase from 2019 – an increase from pre-pandemic levels. Approximately 14% of registered riders were new, first-time riders. All together, participants from the Central Okanagan region rode 89,190 km.
 - Public EV Charging Infrastructure Gap Analysis: This analysis, currently in process, will aid in strategizing on locations for additional public chargers in the community.
 - EV Readiness Bylaw Amendments: Council has directed staff to develop Zoning Bylaw amendments to require all new residential development to be EV ready.
 - Vehicle Idling Control: Early this year, Council directed staff to bring an anti-idling bylaw and accompanying education program for their consideration.
 - Corporate transportation initiatives: A Green Fleet Strategy was recently completed to identify opportunities to reduce GHG emissions from the City’s corporate fleet. Further an Infrastructure Assessment was completed to assess the requirements needed to achieve the goals laid out in the Green Fleet Strategy.

7. Describe climate initiatives and their outcomes, your local government or Modern Treaty Nation is currently undertaking for COMMUNITY.

- *Key community actions in the CleanBC Roadmap to 2030 include supporting better land use planning, supporting local climate action, and supporting natural asset infrastructure.*
- *Example of Community initiatives – Organics diversion, completed climate or energy emission plans, renewable energy investments, (e.g. waste heat recovery, biomass), or use of land use planning tools such as zoning bylaws and official community plans.*
- [2040 Official Community Plan](#) (OCP): Council endorsed a new OCP to 2040 which sets a strategic course for the next 20 years as to how our city should grow, prioritizing areas, decisions and policies that our citizens have told us they want to focus on through Imagine Kelowna and OCP engagement. See survey question 9 for details on how the OCP contributes to a compact, complete community.
- Climate Resilient Kelowna Strategy: The City is in process of developing a Climate Resilient Kelowna Strategy to put the community on the path to a low carbon future while preparing to be resilient to the forecasted changes in climate. Phase 1 of the project, GHG emissions reduction modelling, recently completed. Phase 2, a climate vulnerability and risk assessment, recently began, with the full strategy anticipated to be completed mid 2023.
- Sustainable Urban Forest Strategy. This is an update to the 2011 Strategy and is anticipated to be complete in quarter 1 of 2023. The Strategy will provide an update on recommendations towards achieving the City's strategic objectives and increase the climate resilience of the urban forest resource.
- [Zoning Bylaw Update](#): The new city-wide zoning bylaw update takes direction from the OCP to confirm with its policy direction. The zoning bylaw update recently received third reading and is awaiting provincial ministerial sign-off before being adopted later this summer.
- Expanded Organics Diversion Study: A regional organics diversion study is currently in progress and is investigating opportunities for food waste diversion.
- Construction and Demolition Diversion Pilot: A pilot program is currently in progress which is deconstructing select City owned buildings to understand what can be recovered and diverted from the landfill, as demolition waste constitutes a significant portion of the landfill waste stream.
- Organic management improvements: Beginning in 2021, and over a five-year period, the City will invest over nine million dollars into improvements on how organic waste is managed. This will include improvements to reduce the need for fossil fuel-based equipment.

8. Describe climate initiatives and their outcomes, your local government or Modern Treaty Nation is currently undertaking for CLIMATE RESILIENCE.

- *Key climate resilience actions in the CleanBC Roadmap to 2030 include working to develop regionally specific adaptation and resilience strategies as part of B.C.'s Climate Preparedness and Adaptation Strategy; this includes supporting access to data needed for hazard and land-use risk reduction.*
- *Examples of Climate resilience initiatives - Assessment of current and future climate hazards or risks to the local government and plans to address those risks through local government planning, programming, service delivery, asset management and other functions.*
- Mill Creek Flood Protection: The Mill Creek Flood Protection Project is a multi-year, multi-million-dollar initiative to improve the creek corridor and reduce flooding potential throughout the City, from the Kelowna Airport to Okanagan Lake. As part of that project, improvements have been made to the diversion structure located next to the Okanagan Rail Trail east of Dilworth Drive. This project is funded in part by the Government of Canada.
- FireSmart Community Chipping Program: To reduce risk related to wildfire, Kelowna offers residents the opportunity to have hazardous vegetation removed from curbside. From April 19- June 16, approximately 70 metric tonnes were collected to be converted to organic compost.

- Community Wildfire Resiliency Plan: The City is nearing completion of a five-year strategic plan that identifies comprehensive actions aimed at wildfire risk reduction for the community.
- Community Water Conservation Initiatives: To better manage water use and prevent unintentional water waste, the City implemented new cellular advanced metering infrastructure (AMI) which allows residents to access their water use information through a free application. The City also offers free irrigation audits to customers to recommend practical changes to promote efficient irrigation practices that comply with water restrictions. Further the City sponsors free landscape and irrigation contractor training to ensure that water efficient irrigation designs and systems are implemented.

PART F: Community Land Use Planning

Complete, compact communities are characterized as those which avoid sprawling and car-dependent development; integrate a mix of housing, key services and amenities within a 20-minute walk and that enable viable low carbon transportation options.

- 9. Which elements of your local government's current official community plan (OCP) (or other relevant strategies, policies and/or plans) support the creation of more complete, compact communities?**
- For the first time, Kelowna has developed its [Official Community Plan](#) and [Transportation Master Plan](#) in tandem to ensure a coordinated approach to land use and transportation planning. Both plans were adopted in early 2022 and boast a more focused growth strategy, in conjunction with active transportation and transit service to better connect our urban centres and core area.
 - The 2040 OCP supports the creation of more complete, compact communities by:
 - Utilizing a unique district-based approach, providing each of the five districts (Urban Centres, the Core Area, the Gateway, Suburban Neighbourhoods and Rural Lands) with their own distinct set of guiding policies that speak to the unique context and approach to accommodating growth.
 - Including a pillar to “stop planning new suburban neighbourhoods.” No new expansion beyond the Permanent Growth Boundary is signaled beyond what is already approved.
 - Directing 73 per cent of future residential growth to Urban Centres and the Core Area.
 - Signaling more opportunities for residential infill and redevelopment across the Core Area. This approach addresses the need for more housing variety, particularly missing middle forms, while still allowing the city to grow in a more compact form, protecting critically important agricultural lands and positioning the City to address its infrastructure deficit.
 - Providing flexibility in the Core Area for a variety of housing types and other key ingredients for great neighbourhoods such as small scale local commercial opportunities and neighbourhood scaled institutional uses, to create a significant amount of housing in livable, walkable neighbourhoods.
 - 76 per cent of new growth will reside in multi-unit buildings.
- 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)?**
- Adoption of the 2040 [Official Community Plan](#) and 2040 [Transportation Master Plan](#) in early 2022. See question 9 for details.

- [Infill Design Challenge 2.0](#): With winners announced earlier this year, the purpose of this open design competition for infill development was to generate innovative ideas for infill housing that enhance affordability, diversity, resiliency, inclusivity, and livability in Kelowna's housing system.
- **Infill Options**: This project, that is currently underway, will investigate pre-zoning options for infill housing, expanded infill housing boundary areas, for those parcels without lane access. The program will also investigate options to support infrastructure delivery and to streamline development approvals.
- [Zoning Bylaw Update](#): The new city-wide zoning bylaw update takes direction from the OCP to confirm with its policy direction. The Zoning Bylaw update recently received third reading and is awaiting provincial ministerial sign-off before being adopted later this summer.
- **20 Year Servicing Plan Update**: This update, currently in progress, will align infrastructure needs with the new OCP growth objectives.

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?

- More frequent updates to the CEEI data
- More accurate and refined temperature, rainfall, and other climate projections
- Vehicle ownership, by vehicle type and drivetrain type, at the neighbourhood level
- Vehicle kilometers travelled data
- Financial modelling on capital and operating costs of infrastructure investments
- GHG emissions at neighbourhood level for buildings in order to target retrofit areas
- Sensitive ecosystem information updated on a regular basis (e.g. 5 years) to understand loss in these areas
- Finer grained housing tenure statistics
- Information on how more funding for school busing can be identified to reduce student eligibility thresholds from 3 – 4.8 km to 1 km

PART G: Adaptation, Resilience and Equity

The goal of climate adaptation is to reduce risk and vulnerability associated with climate change. To manage climate impacts, local governments and Modern Treaty Nations are integrating adaptation principles into decisions and everyday activities, in addition to undertaking mitigation activities.

Taking an equity-informed approach to climate action is about enhancing climate resilience for everyone in B.C., regardless of where and how they live and requires a just approach that integrates equity considerations into climate adaptation responses.

12. From 2021 to now, has your local government or Modern Treaty Nation taken any action(s) to address climate impacts?

See response to question 8.

13. Has a climate risk and vulnerability assessment (or similar assessment) been undertaken for your local government or Modern Treaty Nation?

- No, but we are currently undertaking one and it will be complete in the next year

14. What are the three most significant climate hazards faced by your jurisdiction? Note: the top 3 options will be used to answer the next 3 questions in this section.

While the Province survey asks to rank these in order of importance, it is recognized the top 6 all can have significant impacts in the Kelowna area. While these are ranked for the purposes of this survey, one hazard may not be more significant than the other.

1. Overland flooding
2. Wildfire
3. Extreme heat and heat stress
4. Water shortage
5. Ecological impacts (e.g. biodiversity loss, erosion, invasive species, ecosystem changes)
6. Wind, rain, and other storm events
 - Extreme cold, snow and ice
 - 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? Select all that apply:

For Overland Flooding

- ✓ Low-income households
- ✓ Indigenous peoples
- Racialized communities
- ✓ Newcomers to Canada
- ✓ People experiencing homelessness
- Seniors
- Women and girls
- Other: single person households, those with medical conditions

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? Select all that apply:

For Wildfire

- ✓ Low-income households
- ✓ Indigenous peoples
- Racialized communities
- ✓ Newcomers to Canada
- ✓ People experiencing homelessness
- ✓ Seniors
- Women and girls
- Other: single person households, those with medical conditions

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? Select all that apply:

For Extreme heat and stress

- ✓ Low-income households
- ✓ Indigenous peoples
- Racialized communities
- ✓ Newcomers to Canada

- ✓ People experiencing homelessness
- ✓ Seniors
- Women and girls
- Other: single person households, those with medical conditions

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?

More than three factors apply to this situation.

- ✓ Increased funding
- ✓ More community engagement and activation
- ✓ More partnerships and collaboration across levels of government
- Increased staff knowledge, expertise and data specific to climate adaptation
- ✓ Increased staff capacity
- Political support and direction
- ✓ Other: data for better planning and information
- Do not know

20. How does your local government or Modern Treaty Nation ensure equitable access to, and distribution of, climate action opportunities and benefits? Select all that apply:

- By collecting and analyzing disaggregated and/or spatial data on the impact of climate actions
- By engaging with equity seeking groups/frontline communities most impacted by climate change
- 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
- ✓ There are no specific measures in place at this time to ensure equitable access to, and distribution of, opportunities and benefits
- Do not know how or if equity is being integrated into our climate action work
- Other

PART H: Governance

Reducing GHG emissions and adapting to the impacts of climate change can be enhanced by collaboration across levels of governments.

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?

Select all that apply:

- ✓ 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 assess our plans and priorities for multilevel alignment
- ✓ Yes, we collaborate with other communities to align with climate action plans and priorities of senior levels of government
- No, there is no process currently for multilevel government alignment of climate plans and implementation
- No, we do not assess our climate plans and priorities to ensure they align with those of senior levels of government
- No, our resource capacity doesn't permit us to align more effectively with senior levels of government
- No, for reasons other than those mentioned above, please specify

PART I: Program Requirements

To be eligible for funding, applicants are required to be a signatory to the B.C. Climate Action Charter or a B.C. Modern Treaty Nation and demonstrate climate investment equivalent to 20% of the provincial funding received.

22. Is your local government a signatory to the [B.C. Climate Action Charter](#)?

Under the Charter, local government signatories commit to:

- *Becoming carbon neutral in their corporate operations*
- *Measuring and reporting their community's greenhouse gas emissions*
- *Creating complete, compact, more energy efficient communities*
- 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.

Our climate investments include (select all that apply):

- ✓ 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)
- Other: please specify

PART J: Survey Submitter Information

In this section, you will be asked to provide information as the survey's primary contact. If you are not the primary contact, please provide the contact information of the appropriate individual in the following questions. This information will be included in the survey submission to be posted publicly.

24. Please provide your (or survey primary contact's) first and last name.

Tracy Guidi

25. Please indicate your (or survey primary contact's) position with your local government or Modern Treaty Nation.

Sustainability Coordinator