



Local Government Climate Action Program (LGCAP) Year 3

Kelowna Survey Responses for 2024

July 2024

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Introduction

The Local Government Climate Action Program – Year 2

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 2026 provided the following eligibility requirements are met each year:

- Be a signatory of the [BC Climate Action Charter](#);
- Measure and report on traditional service GHG emissions;
- Report on projects linked to one or more objectives from the province's [CleanBC Roadmap to 2030](#) and/or [Climate Preparedness and Adaptation Strategy](#);
- By the July 31 deadline, submit the completed program survey and signed attestation form to confirm that the first two years of LGCAP funds were or will be used towards climate action by the March 31, 2025 deadline; and
- By the September 30 deadline, publicly post the survey and attestation form.

Part A: Climate Action Planning

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

To answer the following questions, consider staff that contribute to activities that reduce greenhouse gas (GHG) emissions and/or strengthen resilience and the ability to adapt to climate-induced impacts. This includes (but is not limited to): climate-related hazards; integrating climate change measures into policies, strategies and planning; improving education, raising awareness of climate change causes and solutions, increasing human and institutional capacity with respect to climate change mitigation and adaptation, and impact reduction and early warning systems.

Question 1 a): How many staff in full time equivalents (FTEs) are dedicated to working specifically on climate action? If a staff member is a climate action coordinator and works 100% on climate-related issues, add 1.0.

4.0

Question 1 b): How many staff in full-time equivalents (FTEs) are dedicated to working on climate action in other departments such as transportation or engineering? For example: Can include staff in engineering, emergency management, transportation, waste management, etc. related to climate work but whose primary role is not working on climate action. If a staff member works approximately 25% (please estimate) on climate-related issues, add 0.25. Working on climate-related issues does not need to be written into the staff member's job description to be counted here.

10.5

Question 2 a): Does your local government or Nation have a community-wide climate action plan or other guiding document(s)?

Yes, a standalone mitigation plan was adopted in June 2018.

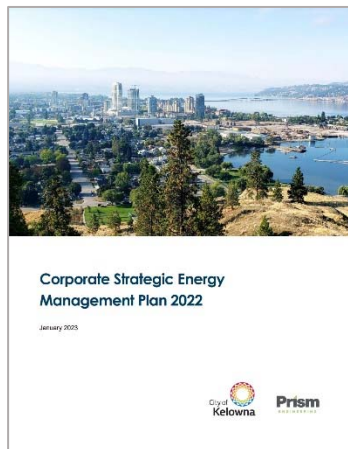


[Kelowna's Community Climate Action Plan](#) (2018).

It should be noted that a new community climate action plan (the Climate Resilient Kelowna Strategy) that addresses both mitigation and adaptation is currently in development. A draft can be found at: <https://getinvolved.kelowna.ca/climatestrategy>.

Question 2 b): Does your local government or Nation have a corporate climate action plan or other guiding document(s)?

Yes, an integrated climate action plan (addressing mitigation and energy) (adopted in January 2023)



[Corporate Strategic Energy Management Plan](#) (2022)

Question 3: Has your local government or Nation declared a climate emergency?

Yes

Question 4: Please select up to three challenges impeding the advancement of climate action in your community.

- ✓ Lack of staff capacity or expertise
- ✓ Lack of financial resources
 - Lack of data or information
 - Lack of provincial or federal government support or collaboration
- ✓ Competing priorities
 - Other

Part B: Traditional Services Greenhouse Gas Emissions

Measuring traditional services emissions (defined in previous years as corporate emissions) is a Program requirement for all communities with a 2020 population of 10,000 and above (see population statistics here). Traditional services GHG emissions are those produced by the delivery of local government or Modern Treaty Nation “traditional services” including:

- Fire protection,
- Solid waste management,
- Recreational / cultural services,
- Road and traffic operations,
- Water and wastewater management, and
- Local government administration.

Question 5: For the 2023 calendar year, has your local government or Nation measured and reported associated traditional services GHG emissions?

Yes

If your local government or Nation measured 2023 traditional services GHG emissions, please report the GHG emissions from services delivered directly by your local government (in tonnes of carbon dioxide equivalent) from scope 1 and 2 sources.

7,381

- **OPTIONAL:** Please indicate how many tonnes of CO₂e are associated with facilities.
 - 4,345
- **OPTIONAL:** Please indicate how many tonnes of CO₂e are associated with mobile sources.
 - 3,036

If your local government or Nation measured 2023 traditional services GHG emissions, please report the GHG emissions from contracted services (in tonnes of carbon dioxide equivalent) from scope 1 and scope 2 sources.

4,601

If your local government or Nation measured 2023 traditional services GHG emissions, please report the total GHG emissions from both directly delivered and contracted services (in tonnes of carbon dioxide equivalent) from scope 1 and scope 2 sources. This would be the sum of the two questions above.

11,982

If your local government or Nation measured 2023 traditional services GHG emissions, please report what protocol you used to measure emissions.

2023 B.C. Best Practices Methodology for Quantifying Greenhouse Gas Emissions

Part C: Community-Wide Greenhouse Gas Emissions

B.C. Climate Action Charter signatories have committed to measuring and reporting their community-wide GHG emissions generated from all GHG sources (anthropogenic) within their community boundary.

The Community Energy and Emissions Inventory (CEEI) initiative provides a provincial framework for tracking and reporting energy and GHG emissions at a community-wide scale. It is published with a two-year lag; however, raw data can be requested by local governments that wish to measure and report their community-wide emissions for the buildings and solid waste sectors ahead of publication.

The Climate Action Secretariat (CAS) is aware that some local governments are developing their own community-wide GHG emissions inventories (separate from the provincial CEEI). A better understanding of community-wide emissions measurement across B.C. will help CAS as we upgrade CEEI.

Question 6: For the 2023 calendar year, have community-wide GHG emissions been measured for your local government or Nation?

No, community GHG emissions were not reported because the 2023 Provincial CEEI data has not been released.

If not, has your community or Nation measured and reported community-wide emissions in the past?

Yes

When was the last year your community or Nation reported its community-wide emissions and what is the interval for reporting (ex. 2022, every 5 years)?

2021. Emissions inventories are updated when the Province releases CEEI inventory updates, annually. However, these updates usually result in inventories that are 2 + years out of date.

Please report your community-wide transportation sector emissions in tonnes of CO₂e for the most recent year available.

410,425

Please report your community-wide buildings sector emissions in tonnes of CO₂e for the most recent year available.

292,066

Please report your community-wide solid waste sector emissions in tonnes of CO₂e for the most recent year available.

64,641

If your local government or Nation measured your community-wide emissions, please report the protocol(s) you used to measure emissions.

- Global Protocol for Community-Scale Greenhouse Gas Emissions Inventories (GPC).

- GCoM Common Reporting Framework (CRF).
- 2006 IPCC Guidelines for National Greenhouse Gas Inventories.
- U.S. Community Protocol for Accounting and Reporting of Greenhouse Gas Emissions (ICLEI USA).
- ✓ Regional specific methodology (CEEI).
- Jurisdiction specific methodology.
- Other.

Question 7: Currently, the Province's legislated GHG emission reduction targets are 40% by 2030, 60% by 2040 and 80% by 2050, relative to 2007. Please state your local government or Nation's target(s). Please enter "o" if no targets or baseline are established for the years given in the table.

	Reduction Percentage (format: e.g., 40)	Baseline Year (format: e.g., 2007)
2030	-	-
2040	-	-
2050	80	2007

If your local government or Nation's targets do not conform to the target years noted above, please enter them here. Format e.g.: target 2035 50% baseline 2010, target 2060 70% baseline 2010, ...

The City's Official Community Plan has GHG emission reduction targets of 25% by 2033 and 80% by 2050. However, in June 2022, Council directed staff to use targets of 40% below 2007 levels by 2030 and net zero by 2050 in the development of a new Climate Resilient Kelowna Strategy anticipated to be complete in 2024, at which time the OCP targets will be revised to reflect this.

Question 8: Does your local government or Nation have net-zero or carbon-neutral emissions target(s)? Please select all that apply.

- Yes: Community-wide net-zero target (Net-zero refers to a jurisdiction or organization achieving a balance between greenhouse gas emissions produced and removed from the atmosphere (e.g. planting trees or using carbon capture technologies))
- Yes: Corporate carbon neutrality (Carbon neutral refers to an organization reducing emissions as much as practicable and then offsetting the remainder by purchasing offsets or other similar mechanisms)
- ✓ Yes: Corporate net-zero target (Net-zero refers to a jurisdiction or organization achieving a balance between greenhouse gas emissions produced and removed from the atmosphere (e.g. planting trees or using carbon capture technologies))
- No

Note: Once the Climate Resilient Kelowna Strategy is completed, the OCP targets for community GHG emissions will be updated to reflect net-zero by 2050 GHG emission reduction target.

Question 9: Please select up to three supporting indicators that would be most valuable to your local government or Nation to advance climate action (these indicators were previously reported through the Community Energy and Emissions Inventory initiative).

- Housing type: Private dwellings by structural type
- Floor area: Average floor area by building category and era
- Residential density: Population and dwelling units per "net" land area
- Commute by mode: Employed labour force by mode of commute
- Greenspace: Land area that is parks and protected greenspace
- Walk score: Proximity to services
- Proximity to transit: Persons, dwelling units and employment within walking distance of a "quality" transit stop/line

✓ Other:

- Vehicle kilometres travelled (ICBC data) at the forward sortation area (FSA) or neighbourhood level and/or vehicle ownership at the FSA or neighbourhood level
- Building energy (natural gas, electricity) use at the FSA or neighbourhood level
- Tree canopy coverage

Part D: Provincial Policy Alignment - Mitigation

The [CleanBC Roadmap to 2030](#) is B.C.'s plan to meet provincial emissions reduction targets to be 40% below 2007 levels for 2030 and set us on course to reach net-zero emissions by 2050.

One requirement of this Program is that you must report on a minimum of one project linked to objectives from the [CleanBC Roadmap to 2030](#) and/or [Climate Preparedness and Adaptation Strategy](#) (CPAS). Funding does not need to come from this program. For questions 10-13, if your community reports one initiative related to one sector (e.g. buildings) you have satisfied this requirement. That said, please select all that apply.

Question 10: Please indicate all climate initiatives your local government or Nation had in-progress, ongoing or completed in the 2023 calendar year related to the buildings sector. This should not be limited to what your LGCAP funding supported.

Corporate buildings policies, programs and actions.

- Highest efficiency standards for new space and water heating equipment.
- BC Energy Step Code adoption (Step 3 or higher).
- Zero Carbon Step Code adoption.
- ✓ Efficiency upgrades/retrofits.
- Requirement to use mass timber in buildings construction.
- Requirement to measure embodied carbon.
- Other.
 - Developing policy for all new corporate buildings (city-owned and operated) to meet LEED Gold and CAGBC Zero Carbon Building standards.

Community-wide buildings policies, programs and actions.

- ✓ Topping up Provincial energy efficiency incentive programs.
- Highest efficiency standards for new space and water heating equipment.
- ✓ BC Energy Step Code adoption (Step 3 or higher).
- Zero Carbon Step Code adoption.
- Requirement to use mass timber in buildings construction.
- Requirement to measure embodied carbon.
- ✓ Other.
 - Participated in a working group led by Renewable Cities comprising architects, developers, building officials and other industry professionals to examine local government solutions to mass timber.

Please highlight a community project(s) that was in-progress, ongoing or completed in the 2023 calendar year related to buildings.

- Continued to offer an additional \$2,000 rebate for heat pumps as part of the Clean BC Municipal Top-Up program and expanded top-up options to include electrical service upgrades and heat pump water heaters.

- Offered mid-construction blower door test rebates (\$325) for new Part 9 building permits.
- Ongoing collaboration with NRCAN on Canadian Energy End Use (CEE) map project to develop mapping dashboard (GIS) for building energy use and GHG metrics based on current and projected policy scenarios.
- Ongoing collaboration with Carleton University on randomized control trial field study to: administer heat pump survey, test efficacy of information distributions, and recruit participants to a home energy coordinator program.
- Analysis of aggregated Part 9 NRCAN data since Step Code implementation, to develop understanding of current performance and prospects for higher steps of Step Code and Zero-Carbon Step Code.
- Continued implementation of Energy Step Code Step 3 for Part 9 residential buildings and mid-steps for Part 3 buildings.
- Continued participating in the Building Benchmark BC program.
- Continued the *See the Heat* (in partnership with the Okanagan Regional Library) program. where residents can borrow a thermal imaging camera that connects to a smartphone to learn more about the energy efficiency of their home.
- Initiated a contract for a home energy concierge program, Home Energy Navigator. The program launched in early-2024.

Question 11: Please indicate all climate initiatives your local government or Nation had in-progress, ongoing or completed in the 2023 calendar year related to the transportation sector. This should not be limited to what your LGCAP funding supported.

Corporate transportation policies, programs and actions.

- Programs to increase high-occupancy (2 or more people) vehicle trips (i.e. carpooling).
- ✓ Established personal (passenger) transportation target goals, and measures to reach them, in annual reports – may include target goals for vehicle kilometre reduction, mode share for active transportation and zero-emission vehicles.
- Established commercial transportation target goals, and measures to reach them, in annual reports – may include target goals for vehicle kilometre reduction, mode share for energy efficient commercial transportation and zero-emission vehicles.
- Implemented zero-emission vehicle first procurement policy for all local government on and off-road vehicles purchases.
- Implemented a zero-emission vehicle preference or requirement for contracted work from a service provider.
- ✓ Active transportation infrastructure investments.
- ✓ Active transportation education and encouragement programs.
- ✓ Expanded micromobility access, bylaws and/or infrastructure (e.g. introduced or expanded bike/e-bike/e-scooter sharing programs, built new bike/scooter lanes, updated bylaws for use of bikes/scooters).
- ✓ Installation of secure bike parking (i.e. bike valet).
- ✓ Electric vehicle charging studies/planning.

- ✓ Electric vehicle charging infrastructure investments.
- Required new and/or existing gasoline and card lock fuel stations to include zero-emission vehicle infrastructure development.
- Not applicable.
- Other.

Community-wide transportation policies, programs and actions.

- Programs to increase high-occupancy (2 or more people) vehicle trips (i.e. carpooling).
- ✓ Improving or expanding public transportation.
- ✓ Mode shift targets for passenger and/or commercial transportation (shifting from private vehicles to sustainable modes like walking, cycling and public transit) in Official Community Plan, Regional Growth Strategy or other guiding documents.
- ✓ Established personal (passenger) transportation target goals, and measures to reach them, in annual reports – may include target goals for vehicle kilometre reduction, mode share for active transportation and zero-emission vehicles.
- Established commercial transportation target goals, and measures to reach them, in annual reports – may include target goals for vehicle kilometre reduction, mode share for energy efficient commercial transportation and zero-emission vehicles.
- Bylaws updated to prioritize energy efficient transportation hierarchy (i.e. pedestrians first).
- Revising existing bylaws or implementing new ones to support active transportation.
- ✓ Active transportation planning.
- ✓ Active transportation infrastructure investments.
- ✓ Active transportation education and encouragement programs.
- ✓ Expanded micromobility access, bylaws and/or infrastructure (e.g. introduced or expanded bike/e-bike/e-scooter sharing programs, built new bike/scooter lanes, updated bylaws for use of bikes/scooters).
- Bylaws that reduce or eliminate off-street parking requirements.
- ✓ Implement pedestrian plazas, car-free streets (temporary or permanent) or limited-access automobile streets.
- ✓ Installation of public secure bike parking (i.e. bike valet).
- Neighbourhood or community-wide speed limit reductions.
- ✓ Electric vehicle charging studies/planning.
- ✓ Mandatory EV infrastructure in new construction.
- ✓ Established electric vehicle charging ready bylaws.
- ✓ Electric vehicle charging infrastructure investments.
- Streamlined hydrogen fueling station permitting process.
- ✓ Required new and/or existing gasoline and card lock fuel stations to include zero-emission vehicle infrastructure development.
- Required green roads certification for any new or significantly modified existing roads.

- Not applicable.
- Other.

Please highlight a community project(s) that was in-progress or completed in the 2023 calendar year related to transportation.

- To support the shift to electric vehicles, we updated the Zoning Bylaw to require most parking stalls in new residential buildings (e.g., single-family dwellings, duplexes, fourplexes, townhomes, multi-unit residential buildings) to include an energized electrical outlet capable of minimum Level 2 charging.
- Invested in 13 bus stops and completed new network plans to improve transit in Rutland and the Mission.
- Completed two major bike corridors: the Houghton active transportation corridors (ATCs) from Hollywood Road to Rutland Road, and the Ethel/Casorso ATC from Okanagan College to Rotary Beach.
- Updated the City's Bike Map.
- Completed a plan for the Neighbourhood Bikeways Program.
- Continued to deliver the City's Micromobility Program for shared e-bikes and e-scooters.
- Continued implementation of the anti-idling bylaw on July 25, 2022.
- Continued expansion of the public EV charging network, with new level two chargers at four different locations across the community.
- Offered additional rebates for MURB EV charging (individual charger rebate and EV ready infrastructure rebate) as part of the Clean BC Municipal Top Up program.
- Organized GoByBike Week. Participation in 2023 increased by roughly 20 per cent, with a 40 per cent increase in the number of schools participating.
- Continued improvements to winter active transportation corridor maintenance, focusing on corridors that are used most and connect to key destinations. New equipment also made snow clearing quicker and more efficient.
- Continued the Central Okanagan Regional Goods Movement Study in partnership with the BC Ministry of Transportation and Infrastructure, which identifies strategies to ensure the sustainable and efficient movement of goods as our region grows, including decarbonization of commercial goods movement in alignment with the Clean BC Roadmap to 2030.

Question 12: Please indicate all climate initiatives your local government or Nation had in-progress, ongoing or completed in the 2023 calendar year related to community-wide and corporate action. This should not be limited to what your LGCAP funding supported.

Corporate climate policies, programs and actions

- Circular economy or zero waste strategy.
- Sustainable procurement policy.
- ✓ Renewable energy investments (e.g. district energy, waste heat recovery, biomass, solar studies).
- Green/blue carbon sequestration.
- Compliance carbon offset projects.

- Voluntary carbon offset projects.
- Not applicable.
- Other.

Community-wide climate policies, programs and actions.

- ✓ Complete, compact communities.
 - ✓ Rezoning
 - Smaller lots
 - ✓ Density bonuses
 - ✓ Secondary suites and laneway homes
 - ✓ Infill development
 - ✓ Urban containment boundaries
 - ✓ Official Community Plans
 - Regional Growth Strategies
 - ✓ Community Development Plans
- ✓ Organics diversion
 - Circular economy or zero waste strategy
- ✓ Renewable energy investments (e.g. district energy, waste heat recovery, biomass)
 - Green/blue carbon sequestration
 - Not applicable
- ✓ Other
 - Participated in the Canadian Circular Cities and Regions initiative and develop a Circular Economy Roadmap through the process.

Please highlight a community project(s) that was in-progress, ongoing or completed in the 2023 calendar year related to community-wide or corporate action.

- Continued to implement the 2040 Official Community Plan
- Continued development of the North End Plan
- Participated in the Canadian Circular Cities and Regions Initiative
- In late 2023, the City launched a project to create a new Fast Track approval process to help make it easier and faster to develop infill housing. The Fast Track builds upon the success of the City's new infill pre-zoning, and includes two key components:
 - An initial set of 4-6 pre-reviewed infill designs (aka: pre-approved, standardized), and
 - An accelerated (Fast Track) approval process that reduces approval timelines by 80 per cent
 - (The project will be completed in 2024. Following completion, the City will be looking to expand the options available for pre-approved designs.

Part E: Provincial Policy Alignment - Resilience and Adaptation

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

One requirement of this Program is that you must report on at least one or more project(s) linked to one or more objectives from the [CleanBC Roadmap to 2030](#) and/or the [Climate Preparedness and Adaptation Strategy \(CPAS\)](#) in Questions 10-13. If your community reports one initiative related to one sector you have satisfied this requirement, but please select all that apply for Questions 10-13.

Question 13: Please indicate all initiatives your local government or Nation had completed, ongoing or in-progress in the 2023 calendar year to adapt to and build resilience to climate impacts. This should not be limited to what your LGCAP funding supported.

Corporate resilience and adaptation policies, programs and actions.

- Undertaking or completing a risk assessment at the asset or project level.
- Undertaking or completing a Hazard Risk Vulnerability Analysis (HRVA) at the asset or project level.
- ✓ Addressing current and future climate risks through plans, adaptation measure implementation, programs, service delivery, asset management and/or other functions.
- ✓ Collaboration with other communities on resilience planning/initiatives.
- ✓ Monitoring climate risks or impacts (floods, wildfire, etc.).
- Providing training (adaptation and mitigation skills).
- ✓ Creation of policy/procedures to affect change (climate considerations into decision-making processes).
- ✓ Creating data systems to support climate action.
- ✓ Utilizing natural assets/nature-based solutions.
- ✓ Developing emergency/hazard response plans.
- Not applicable.
- Other.

Community-wide resilience and adaptation policies, programs and actions.

- ✓ Undertaking or completing a risk assessment at the community level.
- ✓ Undertaking or completing a Hazard Risk Vulnerability Analysis (HRVA) at the community level.
- ✓ Addressing current and future climate risks through plans, adaptation measure implementation, programs, service delivery, asset management and/or other functions.
- ✓ Collaboration with other communities on resilience planning/initiatives.
- ✓ Hydroclimatological data collection.
- ✓ Monitoring climate risks or impacts (floods, wildfire, etc.).

- ✓ Public engagement on climate risks and actions.
 - Providing training (adaptation and mitigation skills).
- ✓ Creation of policy/procedures to affect change (climate considerations into decision-making processes).
- ✓ Creating data systems to support climate action.
- ✓ Utilizing natural assets/nature-based solutions.
- ✓ Developing emergency/hazard response plans.
 - Not applicable.
 - Other.

Please highlight one or more climate adaptation project(s) that were completed, ongoing or in-progress in the 2023 calendar year to reduce risk and increase resilience.

Please enter NA if your community reported no community-wide or corporate initiatives ongoing, completed or in-progress for 2023.

- Won a Climate and Energy Action Award at the 2023 UBCM Conference for the FireSmart Community Chipping Program that offers free curbside removal and chipping of highly flammable plant and shrub materials to reduce wildfire fuel levels on private properties.
- Completed a quantitative Climate Vulnerability and Risk Assessment.
- Implemented the Community Wildfire Resilience Plan, which was endorsed in August 2022.
- Continued an update to the Sustainable Urban Forest Strategy (strategy development and engagement).
- Continued the development of the new community climate action plan, the Climate Resilient Kelowna Strategy, which addresses both mitigation and adaptation (strategy development and engagement).
- Continued work on the Mill Creek Flood Protection Project (City is in the fifth year of an eight-year project to improve flood passage and public safety on Mill Creek).
- Continued work on the City of Kelowna Water Security Plan, a holistic view of future water needs and community resiliency in the face of a changing climate and social pressures.
- Administer and promote Qualified Water Efficient Landscaper (QWEL) certification for contractors.
- Offered rebates for planting climate appropriate landscapes for the public.

Question 14 a): Has a climate risk and vulnerability or similar assessment been undertaken for your local government or Nation?

Please select all that apply. In the textbox, please provide the link to the public assessment if available.

- ✓ Yes at the community level (Council Report and Executive Summary:

<https://kelownapublishing.escribemeetings.com/Meeting.aspx?Id=de070d94-f005-463e-a1aa-d2d737864d28&Agenda=Agenda&lang=English&Item=38&Tab=attachments>.
- Yes at the asset or project level
- No

Question 14 b): Are you integrating climate risk into asset management, budgeting and climate action plans?

- ☒ Yes, in asset management
- ☒ Yes, in budgeting
- ☒ Yes, in climate action plans
- ☐ No

Question 15: What are the most significant climate hazards and impacts faced by your jurisdiction and what is the timeframe of their expected impact on your community?

For each selection, please indicate if the timeframe of their expected impact is short, medium, long or not sure. (short [current/by 2025]; medium [2026-2050]; long [beyond 2050])

Climate hazard	Expected impact timeframe
Extreme heat and heat stress	Short
Extreme cold, snow and ice	Short
Water shortages	Short
Wildfire	Short
Wildfire smoke	Short
Overland flooding	Short
Coastal flooding, storm surge events and/or other coastal hazards	N/A
Wind, rain, and other storm events	Short – medium
Ecological impacts (examples of ecological impacts include biodiversity loss and erosion)	Short
Cultural impacts (examples of cultural impacts include threats to identities, languages, and livelihoods)	Short
Human health impacts	Short
Power outages	Short
Not applicable / no hazards	N/A
Not sure	N/A
Other: <ul style="list-style-type: none"> Water quality degradation Landslides Invasive species 	Medium Medium – long Short

Question 16: What information do you need to know to be able to plan effectively for the future of your community, with respect to the hazards and impacts identified in Question 15? Please select one or more of what you consider the most valuable types of information for planning.

- ☒ Local knowledge
 - Localized climate modelling and projected scenarios
 - Assessment of potential community impacts
 - Assessment of community vulnerabilities
 - Risk assessment of hazards

- ✓ Mapping of climate change impacts and hazards
 - Demographic information
 - Projected development
- ✓ Adaptation planning information
- ✓ Technical expertise to implement solutions
- ✓ Community/stakeholder engagement and support
 - Information on partnership opportunities
- ✓ Examples of actions taken by other communities
 - Not sure
- ✓ Other
 - Indigenous knowledge: culturally significant sites, historical ecological ranges/ecosystem patterns.

Optional: What resilience indicators are of most value to your local government or Nation?

In developing the Climate Resilient Kelowna Strategy, we found that identifying adaptation/resilience indicators was challenging. Therefore, the City of Kelowna would welcome best practices for adaptation/resilience indicators.

Tree canopy coverage and localized temperature data would be valuable.

Question 17: Based on the hazards and impacts you indicated as most significant in Question 15, which groups are most vulnerable to the impacts of those climate hazards and impacts?

- ✓ Low-income households
- ✓ Indigenous Peoples
 - Racialized communities
- ✓ Newcomers to Canada (immigrants and refugees)
- ✓ People experiencing homelessness
- ✓ Seniors
 - Women and girls
- ✓ Persons with disabilities
 - LGBTQIA2S+: Lesbian, Gay, Bisexual, Transgender, Queer or Questioning, Intersex, Asexual, Two-Spirit, and additional sexual orientations and gender identities
- ✓ People living alone/isolated
 - Not sure
- ✓ Other
 - Through the Climate Vulnerability and Risk Assessment, we identified which areas of Kelowna would be most at risk for the major local climate hazards (i.e., wildfires, extreme heat, flooding). Therefore, the groups above living in the highest risk areas (depending on the hazard) will be most vulnerable

Question 18: Of the hazards and impacts identified in Question 15, please specify the associated adaptation measures completed or in-progress in the 2023 calendar year, if any. If entering a hazard under "Other", please also write the hazard in the "Adaption measure" textbox.

Hazard	Adaptation measure
Extreme heat and heat stress	<ul style="list-style-type: none"> Continued implementation of the Heat Alert and Response System Drafted the Sustainable Urban Forest Strategy (in-progress) Mapped urban heat islands through the Climate Vulnerability and Risk Assessment
Extreme cold, snow and ice	<ul style="list-style-type: none"> Continued upgrading the capacity of snow clearing equipment.
Water shortages	<ul style="list-style-type: none"> 2023 was an extreme drought year and the City effectively managed through Level 5 drought conditions for almost four months (both potable and non-potable water systems were resilient) All creeks exhibited high temperatures due to critical flow conditions. The City ensured that environmental flow need releases were achieved for Mission Creek from Hydraulic Lake storage. Additional attention was given to reservoir levels in the Hydraulic Creek Watershed to ensure supply met demand throughout the year in the Southeast Kelowna water system. Administer and promote Qualified Water Efficient Landscaper (QWEL) certification for contractors Offered rebates for planting climate appropriate landscapes for the public Participated in provincial drought response team Continued development of Water Security and Responsibility Plan
Wildfire	<ul style="list-style-type: none"> Continued implementation of the Community Wildfire Resilience Plan Continued the Community FireSmart Chipping Program for wildfire fuel reduction Continued implementation of the FireSmart program Worked with Glenmore-Ellison Improvement District during Grouse Complex Fire for emergency water planning
Wildfire smoke	<ul style="list-style-type: none"> Continued communications program to raise awareness of smoke impacts, options for accessing clean air spaces
Overland flooding	<ul style="list-style-type: none"> Continued implementation of the Mill Creek Flood Mitigation Project (the upgraded diversion trimmed peak flows effectively on Mill Creek)

	<ul style="list-style-type: none"> Continued enforcement of Riparian Management Area development limitations to move structures away from flood-prone areas at time of re-development (Natural Environment Development Permits-Official Community Plan) Finished Downtown Stormwater Master Plan Initiated work related to a potential stormwater utility
Coastal flooding, storm surge events and/or other coastal hazards	N/A
Wind, rain, and other storm events	-
Ecological impacts	<ul style="list-style-type: none"> Completed the sensitive ecosystem inventory update in collaboration with the Regional District of Central Okanagan Continued the update to Sustainable Urban Forest Strategy including analysis of new LiDAR to estimate tree canopy coverage Implementation of updated bylaws for tree protection to increase the number of replacement trees required Updated Zoning Bylaw to improve tree planting standards (e.g. requirements for soil volumes/soil cells appropriate to mature tree size, increased the number of trees planted in parking lots) Worked with regional partner (RDCO) to update invasive species bylaw and implemented invasive species management plans with several capital projects (e.g. Mill Creek Diversion)
Human health impacts	<ul style="list-style-type: none"> Continued work on extreme heat response planning (e.g., implementation of the two-tiered Heat Alert & Response System for heat warnings and extreme heat emergencies) Continued implementation of the Regional Air Quality Program in collaboration with the Regional District of Central Okanagan
Cultural impacts	-
Power outages	<ul style="list-style-type: none"> As part of the development of the Climate Resilient Kelowna Strategy, engaged with FortisBC Electricity on grid redundancy.
Other	-

Part F: Equity

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 planning and adaptation responses.

Question 19: How does your local government or Nation ensure equitable access to and distribution of climate action opportunities and benefits? Please select all that apply.

- ☒ By collecting and analyzing disaggregated and/or spatial data on the impacts of climate policy and change.
- ☒ By engaging with equity seeking groups/frontline communities most impacted by climate policy and change.
- ☒ By designing and implementing climate actions that remove barriers to participation in planning and programs faced by equity seeking groups/frontline communities most impacted by climate change.
- ☐ There are no specific measures in place to ensure equitable access to and distribution of opportunities and benefits.
- ☐ Not sure how to integrate equity into our climate action work.
- ☐ Not sure if equity is being integrated into our climate action work.

Optional: Please highlight a climate initiative completed or in-progress in the 2023 calendar year that promotes equity and inclusion.

Continued partnering on the delivery of the See the Heat thermal imaging camera loan program. The program is in partnership with the Okanagan Regional Library and provides thermal imaging cameras for loan at no cost to ORL members. The program removes the cost barrier to energy efficiency and allows residents to borrow a thermal imaging camera that connects to a smartphone to learn more about the energy efficiency of their home (e.g. how well your house is insulated, how well doors and windows seal, what plug ins and outlets are particularly leaky, etc.). The program was recently highlighted in the SDG Cities Canada Report for Inclusive Culture:

https://unhabitat.org/sites/default/files/2024/06/sdg_cities_canada_report_final_23.06.2024_web.pdf

Part G: LGCAP Year 2 Funding

The Program must be able to demonstrate the impact this funding has on greenhouse gas emissions reductions and resilience and adaptation in B.C. To substantiate the Program, we must develop a baseline understanding of where local governments and Nations are at with respect to climate action and track progress over time.

Please do your best to specify how much of your LGCAP funds was invested for each initiative undertaken without double counting.

Question 20: What did/will your local government or Nation spend its LGCAP funding on for year two of the Program (2023)? Please select all that apply and indicate the total dollar value associated with each initiative. Please ensure the amount(s) entered for Question 20 equals your local government or Nation's total LGCAP funding received in 2023 (\$419,082).

- ☒ Corporate (*Options listed below, titled "Corporate initiatives"*)
- ☒ Community (*Options listed below, titled "Community initiatives"*)
- ☐ Funds on hold

Corporate Initiatives

- ☒ Staffing (\$355,082)
 - ☐ Energy study
 - ☐ Climate study
 - ☐ Traditional services emissions reporting
 - ☐ Asset management
 - ☐ Climate finance planning
 - ☐ Leveraging funds from other sources/ grant stacking
 - ☐ Buildings initiatives
 - ☐ Community-wide initiatives
 - ☐ Resilience and adaptation initiatives
 - ☐ Topping up programs/incentives
 - ☐ Other

Community Initiatives

- ☐ Climate engagement
- ☐ Climate study
- ☐ Energy study
- ☐ Asset management
- ☐ Buildings initiatives
- ☐ Transportation initiatives

- Community-wide initiatives
- Resilience and adaptation initiatives
 - Undertaking or completing a risk assessment at the community level.
 - Undertaking or completing a Hazard Risk Vulnerability Analysis (HRVA) at the community level.
 - ✓ Addressing current and future climate risks through plans, adaptation measure implementation, programs, service delivery, asset management and/or other functions. (\$24,000)
 - Collaboration with other communities on resilience planning/initiatives.
 - Hydroclimatological data collection.
 - ✓ Monitoring climate risks or impacts (floods, wildfire, etc.). (\$25,000)
 - Public engagement on climate risks and actions.
 - Creation of policy/procedures to affect change (climate considerations into decision-making processes).
 - Creating data systems to support climate action.
 - Utilizing natural assets/nature-based solutions.
 - Developing emergency/hazard response plans.
 - Other.
- Topping up programs/incentives
- ✓ Other
 - Rebates for low-carbon landscaping equipment (\$15,000)

Please highlight the initiative(s) your local government or Nation's LGCAP year two funding will support.

- **Lawn Swap Go Electric Rebate Program:** Provides rebates to eligible residents when trading out old gas-powered equipment for new electric equipment. The rebate covers up to \$150 (no more than 50% of the cost) for new electric lawnmowers, leaf blowers, trimmers or chainsaws.
- **Quail Ridge Park Wildfire Risk Reduction Prescription:** Develop a wildfire risk reduction prescription (known as a fuel management prescription) for the Quail Ridge Linear Park and adjacent natural area.
- **Fire Weather Monitoring Stations:** The City is partnering with UBCO to install a network of fire weather stations across Kelowna's natural areas. This would enable the Kelowna Fire Department to monitor wildfire weather and predicted fire behaviour in real time across the community.
- **Term Staff Position - Climate Action Specialist:** A three-year term staff position who can support the City's community climate action efforts by developing and implementing programs focused on mobilizing behaviour change in the community.

Question 21 a): How much additional funding for climate action were you able to invest by leveraging your LGCAP funds? This could include matching grants as well as private investment.
 2023 LGCAP funds were not used for additional funding.

Question 21 b): Please list the funding programs leveraged and associated funders (i.e. Investing in Canada Infrastructure Program, Canada/Province). Please enter "NA" if no funds were leveraged.
NA

Question 22: What is your internal decision criteria for spending LGCAP dollars?

Staff who have work that relates to climate action are sent an application form to apply for LGCAP funding on an annual basis. An internal committee reviews the applications and decides which projects/programs/initiatives are most in line with the City's corporate and community climate objectives (and the Province's CleanBC Roadmap to 2030 and Climate Preparedness and Adaptation Strategy). The recommended projects are presented to City Council in tandem with presentation of the LGCAP survey and attestation form.

Question 23: Does your local government or Nation use a formal framework to apply [a climate lens](#) on infrastructure planning and decision-making? This could include the Provincial preliminary GHG assessment guidance, the Federal climate lens guidance, or another climate lens framework.

• Yes



No

Question 24: What is the value in the Program's continuity for your community? Optional

LGCAP is very valuable to the City of Kelowna. It:

- Provides a predictable, reliable source of funding to invest in climate action – especially since local governments have many competing priorities (e.g., housing crisis, crime and safety) and limited available taxation dollars.
- In this era of inflation, climate funding is even more important as taxation dollars are not going as far, meaning there is even more competition for our limited financial resources.
- Provides a source of "matching funds" should the City of Kelowna apply for other climate action grants.
- Provides the resources and measures needed to assure that strategies and goals are effective, achievable and being implemented.
- Sends an important message that the province stands behind the CleanBC Roadmap to 2030 with funding to help communities implement actions that will help achieve the targets.

Part H: Local Government Climate Action Program Attestation Form

Instructions for the Attestor (CFO or equivalent staff person):

- Complete and sign this form by filling in the fields below.

I, the Chief Financial Officer, or equivalent position, attest to the following:

- That Local Government Climate Action Program funding has been, or will be, allocated to climate action.
- That Local Government Climate Action Program funds for years 1 and 2 received in 2022 and 2023 will be spent by March 31, 2025.
- That Local Government Climate Action Program funds for years 3-5 received in 2024 will be spent by March 31, 2028.
- That a completed and signed version of this form and survey contents will be publicly posted by September 30, 2024.

Attested by (first name, last name):

JOE SASS

Professional title:

GM CORPORATE SERVICES/CFO

Local Government or Modern Treaty Nation:

Kecouwag

Date:

JUL 15/24

Attestor Signature:

