

Climate Action Revenue Incentive Program (CARIP)

Public Report for 2019

May, 2020

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

kelowna.ca

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Local Government Information

Name of Local Government:	City of Kelowna
Name of Regional District:	Regional District of Central Okanagan
Does your region have a Regional Growth Strategy?	Yes
Population category:	100,000 +
Submitted by:	Tracy Guidi Sustainability Coordinator 250 469-8983 tguidi@kelowna.ca

Narrative Focus

Local government signatories to the B.C. Climate Action Charter have committed to taking climate action by:

- Working towards achieving corporate carbon neutrality;
- Measuring and reporting on their community wide greenhouse gas (GHG) emissions; and
- Creating complete, compact, energy-efficient communities.

A key part of the 2019 CARIP survey is to highlight and celebrate successful climate actions undertaken by local governments in British Columbia.

1. In 2019, what actions has your local government taken to support the creation of compact, complete, and energy efficient communities?

Last April (2019) Kelowna City Council endorsed a growth scenario for the community that identifies generally where future residential growth, estimated at 25,000 units, will be targeted between 2020 and 2040. The key directions for the growth scenario include:

- More infill and redevelopment in the Core Area (target of 67% of new units in the Urban Core area and 33% of new units in the suburbs)
- Greater focus on “missing middle housing” throughout the Urban Core Area (target of 75% of new housing as multi-unit and 25% as single/two-unit housing)
- No new suburban areas identified for new development

This growth scenario sets key directions for the updates to the Official Community Plan (OCP), Transportation Master Plan (TMP) and 20 Year Servicing Plan that are all in progress. Further, the development of these three plans is being done concurrently to ensure these critical planning documents work together to move towards the vision outlined in Imagine Kelowna (a vision for the community developed with input from the community) that includes growing vibrant urban centers, limiting sprawl and connecting people through diverse transportation options transitioning from our car-centric culture.

At a more localized level, Council adopted the Capri-Landmark Urban Centre Plan which will significantly enhance the City of Kelowna’s (the City) long-term growth strategy and focus on more urban revitalization in the form of complete communities.

Further, the eligibility requirements for the Rental Tax Exemption Program were changed, introducing location requirements, focusing on areas with transit and amenities.

To improve energy efficiency in the community, Council endorsed the Energy Step Code Implementation Strategy for Part 9 residential buildings in May 2019, and Step 1 commenced December 1, 2019. Stakeholders were engaged in the fall of 2019 to develop a Step Code implementation for Part 3 buildings. Initiatives were also taken to improve energy efficiency for existing homes through the introduction of a *See the Heat* Thermal Imaging Program and Community Energy Retrofit Strategy development.

2019 Corporate Climate Action

Corporate climate actions refer to actions that reduce the GHG emissions produced as a result of a local government's delivery of "traditional services", including fire protection, solid waste management, recreational/cultural services, road and traffic operations, water and wastewater management, and local government administration.

2. In 2019, when it comes to corporate climate action, did your local government undertake any of the following actions?

- | | |
|---|--|
| <input checked="" type="checkbox"/> Building and Lighting Actions | <input checked="" type="checkbox"/> Transportation Actions |
| <input checked="" type="checkbox"/> Energy Generation Actions | <input checked="" type="checkbox"/> Water and Wastewater Actions |
| <input checked="" type="checkbox"/> Greenspace Actions | <input type="checkbox"/> Other Climate Actions (please specify) |
| <input checked="" type="checkbox"/> Planning Actions | <input type="checkbox"/> Don't Know |
| <input checked="" type="checkbox"/> Solid Waste Actions | |

3. When it comes to corporate Building and Lighting Actions, did your local government undertake any of the following in 2019?

- New or upgraded energy-efficient lighting systems
- New or upgraded energy efficient heating systems
- New or upgraded building envelope initiatives
- Upgrades to amenities in recreation facilities
- Studies related to building and/or lighting energy efficiency
- Other (Please specify)
- Don't Know

2019 Highlights

- Upgraded to LED lighting for the ice sheets at Rutland Arena, Memorial Arena and Prospera.
- Continued LED lighting upgrades in all facilities as part of end of life replacement program.
- Replaced and optimized pump systems at Wastewater Treatment Facility.
- Upgraded City Hall boilers from low efficiency to high efficiency.
- Studied the energy efficiency at H₂O.

4. When it comes to corporate Energy Generation Actions, did your local government undertake any of the following in 2019?

- Solar power projects
- Heat recovery or heat reclamation projects
- Biomass or bio-gas projects
- Geo-exchange or geothermal projects
- Studies related to energy generation
- Other (please specify)
- Don't know

2019 Highlights

- No new projects completed in 2019. Past ongoing projects include heat recovery from Rutland Arena and Wastewater Treatment Facility, solar hot water and earth tubes at the landfill, etc.

5. When it comes to corporate Greenspace Actions, did your local government undertake any of the following in 2019?

- Tree planting
- Greenspace acquisition
- New or upgraded amenities in parks
- Invasive species management
- Plans or strategies related to greenspace
- Other (please specify)
- Don't know

2019 Highlights

- Developed linear park along Bellevue Creek (Phase 1).
- Developing a Shoreline Protection Plan to enhance and protect riparian areas along the shoreline.
- Removed structures to create 1.4 acres of additional park space at Sarsons Beach and Hobsons Beach Parks.
- Planted 250 trees in boulevards and parks; 900 trees along Mill Creek, and 720 seedlings at Mission Ridge and Mission Creek Mountain Bike Skills Park

6. When it comes to corporate Planning Actions, did your local government undertake any of the following in 2019?

- Energy / Emissions Management Plan (new or updated)
- Asset Management Plan (new or updated)
- Corporate Climate Action Plan (new or updated)
- Strategic Plan (new or updated)
- Other (please specify)
 - Capital Planning
- Don't know

2019 Highlights

- Updated the 10-Year Capital Plan which sets the direction for infrastructure investment and includes infrastructure to renew existing assets and to accommodate growth.

7. When it comes to corporate Solid Waste Actions, did your local government undertake any of the following in 2019?

- Introduction, expansion, or improvement of recycling initiatives at corporate facilities
- Introduction, expansion, or improvement of composting initiatives at corporate facilities
- Communication or education for staff related to corporate solid waste initiatives
- Studies or research related to corporate solid waste initiatives
- Plans or strategies related to corporate solid waste initiatives
- Other (please specify)
 - Increased efficiencies for equipment operations at landfill
- Don't know

2019 Highlights

- Procurement initiatives to have electric/diesel hybrid heavy equipment for the landfill.

8. When it comes to corporate Transportation Actions, did your local government undertake any of the following in 2019?

- Fleet replacement or upgrades
- New or improved electric vehicle initiatives
- New or improved active transportation infrastructure for staff
- Communication or outreach for staff related to corporate transportation initiatives
- New or improved public transportation for staff
- Other (please specify)
 - Electric vehicle policy
 - Renewable diesel to reduce emissions
 - Car share participation
- Don't know

2019 Highlights

- Created an internal staff Electric Vehicle Committee (representing five different departments) that will update Council and Senior Leadership on EV policy and initiatives (both corporate and community).
- Purchased 3 electric fleet vehicles.
- Introduced drive score cards that are generated by GPS systems that provides drivers of fleet vehicles their driver safety and fuel-efficient performance.

9. When it comes to corporate Water and Wastewater Actions, did your local government undertake any of the following in 2019?

- New or improved water or wastewater infrastructure
- Studies or research related to water conservation
- Plans or strategies related to water or wastewater
- Water reduction initiatives
- Other (please specify)
- Don't know

2019 Highlights

- Researched water saving capabilities that could be achieved for the domestic water utility by moving to a remote, cellular based water meter transition endpoint that will allow staff to access water use (and waste) information in real time.
- Reduced irrigation water use in city parks by approximately 38 million liters annually through a combination of initiatives including: technical adjustments, new installation guidelines, new operational recommendations, and upgrades to the water flow sensing cables and systems to better detect leaks for irrigation.

2019 Community-Wide Climate Action

Community-wide actions refer to actions that reduce GHG emissions across the community (i.e. actions not related to “traditional services” in corporate operations).

10. In 2019, when it comes to community-wide climate action, did your local government undertake any of the following actions?

- | | |
|---|--|
| <input checked="" type="checkbox"/> Building and Lighting Actions | <input checked="" type="checkbox"/> Water and Wastewater Actions |
| <input checked="" type="checkbox"/> Energy Generation Actions | <input checked="" type="checkbox"/> Other Climate Actions (please specify) |
| <input checked="" type="checkbox"/> Greenspace Actions | <ul style="list-style-type: none"> • Woodstove Exchange Program • Agricultural Chipping Program • Mow-Chip-Rent It Rebate Program |
| <input checked="" type="checkbox"/> Planning Actions | |
| <input checked="" type="checkbox"/> Solid Waste Actions | |
| <input checked="" type="checkbox"/> Transportation Actions | <input type="checkbox"/> Don't Know |

11. When it comes to community-wide Building and Lighting Actions, did your local government undertake any of the following in 2019?

- New or upgraded energy-efficient lighting systems
- New or upgraded energy efficient heating systems
- BC Energy Step Code related projects
- Incentives/rebate programs related to energy-efficient building or lighting
- Outreach, education or communication related to energy-efficient building or lighting
- Other (Please specify)
 - Community Energy Retrofit Strategy development
- Don't Know

2019 Highlights

- Kelowna City Council endorsed the implementation of the Energy Step Code for Part 9 residential buildings in the Spring of 2019 with the following key dates:
 - December 1, 2019: Step 1 implementation
 - June 1, 2021: Step 3 implementation
- Partnered with FortisBC and Okanagan Regional Library to offer the *See the Heat* thermal imaging camera program. Residents can borrow a thermal imaging to learn more about the energy efficiency of their home.
- Collaborated with FortisBC to promote the Small Business Program, which offers free energy evaluations and energy saving products. In Kelowna there were 135 evaluations completed that resulted in 30 retrofit projects saving more than 137,000 kWh of energy.

12. When it comes to community-wide Energy Generation Actions, did your local government undertake any of the following in 2019?

- Solar power projects
- Heat recovery or heat reclamation projects
- Landfill gas capture / utilization projects
- Geo-exchange or geothermal projects
- Studies related to energy generation
- Other (please specify)
 - Renewable energy policy development
- Don't know

2019 Highlights

- Expanded the landfill gas collection system through the installation of ten new horizontal collector runs consisting of 1660m of new pipe.
- Drafted renewable energy target policy for the 2040 OCP.

13. When it comes to community-wide Greenspace Actions, did your local government undertake any of the following in 2019?

- Tree planting
- Greenspace restoration or maintenance
- Greenspace acquisition
- Invasive species management
- Plans or strategies related to greenspace
- Other (please specify)
- Don't know

2019 Highlights

- Acquired 10.8 acres of natural space at Twinflower Court.
- Secured wetland and riparian area property along K.L.O. Road as part of the Mission Creek Restoration Initiative.
- Negotiated 6,762 m² of riparian restoration through the development process.
- Completed LiDAR analysis to show that community wide Kelowna's tree canopy coverage was 23%, surpassing the 20% target established in the 2030 OCP. More work needs to be done; however, as the study showed downtown and urban areas were only at 12.4%.

14. When it comes to community-wide Planning Actions, did your local government undertake any of the following in 2019?

- Official Community Plan (new or updated)
- Climate Action Plan (new or updated)
- Regional Growth Strategy (new or updated)
- New or updated bylaw(s) or zoning addressing climate issues
- Other (please specify)
 - Urban Centre Planning
 - Tax Exemption Program
- Don't know

2019 Highlights

- Council endorsed the Growth Strategy for the 2040 OCP Update.
- Council adopted the Capri-Landmark Urban Centre Plan.
- Updated Rental Tax Exemption Program to introduce location requirements with a focus on areas with transit and amenities.
- Amended the Zoning Bylaw to lower parking requirements and include incentives for carshare and secure bicycle storage for purpose-built rental housing projects and projects in urban centres and the urban core.

15. When it comes to community-wide Solid Waste Actions, did your local government undertake any of the following in 2019?

- Introduction, expansion, or improvement of recycling initiatives
- Introduction, expansion, or improvement of composting initiatives
- Community clean-up initiatives
- General Waste reduction initiatives (including landfill diversion strategies)
- Outreach, education or communication related to solid waste
- Other (please specify)
- Don't know

2019 Highlights

- Hosted several reuse and reduce events including two trunk sales, two repair café's and a backyard composter subsidy program.
- Hired two student ambassadors as part of the regional waste reduction program to educate the public on recycling.
- Hired a new contractor for the curbside waste collection with vehicles that use compressed natural gas instead of diesel to reduce emissions.

16. When it comes to community-wide Transportation Actions, did your local government undertake any of the following in 2019?

- New or improved active transportation infrastructure
- New or improved public transportation initiatives
- New or improved electric vehicle initiatives
- Outreach, education or communication related to transportation
- Plans or strategies related to transportation
- Other (please specify)
 - Traffic signal optimization
 - Electric Vehicle Strategy development
- Don't know

2019 Highlights

- Expanded the active transportation network by 2.7 km through protected bike lane projects on Sutherland and Ethel Avenues.
- Implemented Bikeshare Permit Program which allows private shared mobility operators to deploy a variety of small vehicles as a shared service (e.g. e-scooters, e-bikes). Five e-scooter operators received permits in 2019.
- Developed Transit Service Guidelines to ensure resources are used effectively; that acceptable level of service quality is provided to the customer; and to provide a consistent and fair approach for guiding investments in existing and new transit services.
- Developed Transit Travel Training Action Plan to guide the delivery of training sessions targeting middle and high school aged youth and adults over 50 years of age. This program helps to address people's barriers to transit by educating them on how to effectively interact with transit systems, providing them with the confidence and resources they need to do so successfully.
- Installed four Level 3 DC fast chargers (two at Kelowna International Airport, one at the Okanagan Heritage Museum and one at Rutland Centennial Park) in partnership with FortisBC and Natural Resources Canada (NRCan). In late 2019, an NRCan Zero Emission Vehicle Infrastructure Program grant was approved for two more Level 3 DC Fast chargers to be installed in 2020.
- Paved the final section of the Okanagan Rail Trail from Gordon Drive to Manhattan Point and worked collaboratively with other jurisdictions to draft a Management Plan and Design Guidelines for the Rail Trail.

17. When it comes to community-wide Water and Wastewater Actions, did your local government undertake any of the following in 2019?

- Water restrictions
- Incentives / rebate programs related to water or wastewater
- Outreach, education or communication related to water or wastewater
- Studies or research related to water or wastewater
- Plans or strategies related to water or wastewater
- Other (please specify)
- Don't know

2019 Highlights

- Educated the public and enforced water restrictions which resulted in an estimated five per cent reduction in water usage.
- Implemented an irrigation controller and rain sensor rebate program to encourage water conservation.
- Offered irrigation contractor training to become a water efficient certified service provider which will help reduce water usage through proper landscape material, irrigation design and use of water budget calculators.

Climate Preparedness and Adaptation Action

This section of the 2019 CARIP survey is designed to collect information related to the types of climate impacts local governments are experiencing and how they are being addressed.

18. Please identify the climate impacts that are most relevant to your local government:

- Increased temperatures increasing wildfire activity
- Extreme weather events contributing to urban and overland flooding
- Changes to temperature and precipitation causing seasonal drought
- Warmer winter temperatures reducing snowpack
- Sea level rise and storms causing coastal flooding and/or erosion
- Other (please specify)
- Don't know

19. In 2019, did your local government take any of the following actions in an effort to consider or address the impacts of climate change?

- Emergency response planning
- Asset management
- Infrastructure upgrades
- Public education and awareness
- Strategic and financial planning
- Risk and vulnerability assessments
- Risk reduction strategies
- Official Community Plan policy changes
- Other (please specify)
 - Amendments to Subdivision, Development and Servicing Bylaw 7900
 - Okanagan Climate Change Projections stakeholder contributor

2019 Highlights

- Implemented fuel modification and wildfire management at Knox Mountain Park (this is an ongoing multi-year project).
- Removed 600 trees to increase Mill Creek channel capacity between Lake Avenue and Sexsmith Road. 900 replacement trees, that were more appropriate species for the area, were planted in better locations to contribute to the riparian function and GHG emissions reduction.
- Educated existing wildfire interface neighbourhoods on Firesmart (a program that educates homeowners how to reduce their risk when living in a wildfire interface area).
- Amended Subdivision, Development and Servicing Bylaw 7900 to incorporate climate change into the standard. Stormwater qualities now include a rainfall intensity increase of 15% in the calculations.
- Initiated Area Based Water Management Plan in conjunction with local, regional, and provincial agencies to take a holistic view of water supply and connectivity in the Okanagan Valley. The Plan addresses water, source water protection, wastewater, stormwater, natural asset management, and environmental flow needs.
- Developed modelling tools that incorporate new hydrology estimates based on climate change for Mill Creek.

20. In 2019, did your local government partnered with any of the following organizations to prepare for, and adapt to, a changing climate?

- Adaptation to Climate Change Team (SFU)
- Columbia Basin Trust
- Community Emergency Preparedness Fund (UBCM)
- Federation of Canadian Municipalities
- Fraser Basin Council
- Pacific Institute for Climate Solutions (UVic)
- Other (please specify)
 - Community Resiliency Investment Fund (UBCM)
 - Tree Canada for tree planting
 - SHAW partnership for tree planting
 - Disaster Mitigation and Adaptation Fund (Infrastructure Canada)
- Don't know

2019 Carbon Neutral Reporting

Local governments are required to report on their progress in achieving their corporate carbon neutral goal under the B.C. Climate Action Charter. Working with B.C. local governments, the joint Provincial-UBCM Green Communities Committee has established a common approach to determining corporate carbon neutrality for the purposes of the Charter, including a Carbon Neutral Framework and supporting guidance for local governments on how to become carbon neutral.

Prior to completing this portion of the survey, please ensure that you are familiar with guidance available on the B.C. Climate Action Toolkit website, specifically the Workbook and Becoming Carbon Neutral: A Guide for Local Governments in British Columbia.

Please note: As a result of the BC Recycling Regulation, local governments are no longer required to account for GHG emissions from vehicles, equipment and machinery required for the collection, transportation and diversion of packaging and printed paper, in their annual CARIP reports.

2019 Carbon Emissions

21. Did your local government measure corporate GHG emissions for 2019?

- Yes
- No
- Don't Know

22. If your local government measured 2019 corporate GHG emissions, please report the number of corporate GHG emissions (in tonnes of carbon dioxide equivalent (tCO₂e) from:

Service Delivery Type	2019 GHG Emissions Reductions
Services delivered directly by your local Government	7,931 tonnes CO ₂ e
Contracted Services	-
TOTAL	7,931 tonnes CO₂e

2019 Carbon Reductions

To be carbon neutral, a local government must balance their TOTAL corporate GHG emissions generated in 2019 by one or a combination of the following actions:

- Undertake Green Communities Committee-supported Option 1 Project(s)
- Undertake Green Communities Committee-supported Option 2 Project(s)
- Purchase carbon offsets from a credible offset provider

For more information about options to balance or offset corporate GHG emissions please refer to *Becoming Carbon Neutral: A Guidebook for Local Governments in British Columbia*.

23. If applicable, please report the 2019 GHG emissions reductions (in tonnes of carbon dioxide equivalent (tCO_{2e})) being claimed from any of the following Option 1 GHG Reduction Projects:

Option 1 GHG Reduction Projects	2019 GHG Emissions Reductions
1A Energy Efficiency Retrofits	N/A
1B Solar Thermal	N/A
1C Household Organic Waste	N/A
1D Low Emission Vehicles	N/A
1E Avoided Forest Conversion	N/A
1F Trenchless Technology	N/A
TOTAL	0

24. If applicable, please report the names and 2019 GHG emissions reductions (in tonnes of carbon dioxide equivalent (tCO_{2e})) being claimed from Option 2 GHG Reduction Projects:

Name of Option 2 GHG Reduction Projects	2019 GHG Emissions Reductions
N/A	
TOTAL	0

2019 Carbon Offsets

25. If applicable, please report the name of the offset provider, type of project and number of offsets purchased (in tonnes of carbon dioxide equivalent (tCO₂e)) from an offset provider for the 2019 reporting year.

Name of Offset Provider	Name of Project	2019 GHG Emission Reductions
N/A		
TOTAL		0

Corporate GHG Emissions Balance for 2019

Your local government's corporate GHG emissions balance is the difference between total corporate offsetable GHG emissions (direct + contracted emissions) and the GHG emissions reduced through Green Communities Committee Option 1 and Option 2 projects and/or the purchase of offsets.

26. Corporate GHG Emissions Balance for 2019 = (Total Emissions – (Reductions + Offsets))

Total Corporate Emissions = 7,931 tonnes CO₂e

If your corporate GHG emissions balance is negative or zero,
your local government is carbon neutral.

CONGRATULATIONS!

Green Communities Committee (GCC) Climate Action Recognition Program

The joint Provincial-UBCM Green Communities Committee is pleased to be continuing the Climate Action Recognition Program again this year. This multi-level program provides the GCC with an opportunity to review and publicly recognize the progress and achievements of each Climate Action Charter signatory.

Recognition is provided on an annual basis to local governments who demonstrate progress on their Charter commitments, according to the following:

- Level 1 – Demonstrating Progress on Charter Commitments: For local governments who demonstrate progress on fulfilling one or more of their Charter commitments.
- Level 2 – Measuring GHG Emissions: For local governments that achieve Level 1, who measure their corporate GHG emissions for the reporting year and demonstrate that they are familiar with their community's energy and emissions inventory (i.e. CEEI).
- Level 3 – Accelerating Progress on Charter Commitments: For those local governments who have achieved Level 1 and 2 and demonstrate significant action (corporately or community-wide) in reducing GHG emissions in the reporting year (e.g. through undertaking a GHG reduction project, purchasing offsets, establishing a reserve fund).
- Level 4 - Achievement of Carbon Neutrality: For local governments who achieve corporate carbon neutrality in the reporting year.

27. Based on your local government's 2018 CARIP Climate Action/Carbon Neutral Progress Survey, please check the Green Communities Committee Climate Action Recognition Program level that best applies:

- Level 1 – Demonstrating Progress on Charter Commitments
- Level 2 – Measuring GHG Emissions
- Level 3 – Accelerating Progress on Charter Commitments
- Level 4 – Achievement of Carbon Neutrality
- Don't know

28. Related to Level 3 recognition, if applicable, please identify any new or ongoing corporate or community-wide GHG reduction projects (other than an Option 1 or Option 2 project) undertaken by your local government that reflects a significant investment of time and/or financial resources and is intended to result in significant GHG reductions.

Significant resources (both time and financial) have been invested to date for the Official Community Plan Update and the Transportation Master Plan. While these plans are not yet complete (Transportation Master Plan is expected by the end of 2020 and the OCP is expected mid 2021), when they are they will result in significant reductions in GHG emissions over the long term as the community becomes more compact and connected through transit and active transportation options.

29. Does your local government set aside funds in a climate reserve fund or similar?

- Yes
- No
- Don't know