

# Climate Action Revenue Incentive Program (CARIP)

Public Report for 2018

May, 2019

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# Table of Contents

- Table of Contents..... 2
- Broad Planning Actions..... 3
- Building and Lighting Actions ..... 5
- Energy Generation Actions ..... 6
- Greenspace / Natural Resource Protection Actions ..... 7
- Solid Waste Actions ..... 8
- Transportation Actions ..... 9
- Water and Wastewater Actions..... 12
- Climate Change Adaptation Actions ..... 13
- Other Climate Actions ..... 16
- Innovation and Peer-to-Peer Learning ..... 17
- 2018 Carbon Neutral Reporting ..... 18
- GCC Climate Action Recognition Program..... 20

## Broad Planning Actions

Broad Planning refers to high level planning that sets the stage for GHG emissions reductions, including plans such as Official Community Plans, Integrated Community Sustainability Plans, Climate Action Plans or Community Energy Emissions Plans. Land use planning that focuses on Smart Growth principles (compact, complete, connected, and centered) plays an especially important role in energy and GHG reduction.

<b>Community-Wide Broad Planning Actions Taken in 2018</b>	
	Completed an updated Community Climate Action Plan.
	Continued work on the Official Community Plan (OCP) Update including the creation of four high level growth scenarios which were analyzed (including for GHG emissions reductions) and formed part of the 2018 public engagement.
	Completed Phase 1 and Phase 2 of the Transportation Master Plan. This included vision, goals, and land use-scenarios in conjunction with the Official Community Plan Update.
	Completed Phase 1 of the Regional Transportation Plan: vision, goals and the regional network. Began work on Phase 2: existing conditions.
	Continued work on Capri-Landmark Urban Centre Planning which began in 2017. This supports the City's goal towards developing complete communities through focusing growth on urban centre revitalization, sustainable transportation, improving access to urban parks and public spaces.
	Coordinated planning for the Okanagan Rail Trail from Vernon to Kelowna. This included a project to examine land use and transportation options along the Okanagan Rail Trail in conjunction with UBC's School of Community and Regional Planning.
	Collaborated with the BC Council for International Cooperation to align Kelowna's indicators and targets to the UN's Sustainable Development Goals.
	Adopted Healthy Housing Strategy which includes recommendations to improve energy efficiency in buildings.
<b>Community-Wide Broad Planning Actions Proposed for 2019</b>	
	Continue work on the OCP Update. Land use planning and policy development is underway, using guidance from a growth scenario endorsed by Council in March, 2019. The OCP will focus on infill and redevelopment while slowing sprawl. Plan completion is expected spring 2021.
	Continue development of the Kelowna Transportation Master Plan including development and evaluation of draft options. Plan completion is expected spring 2020.
	Continue development of the Regional Transportation Plan, including development and evaluation of draft options and coordination with Kelowna's Community Climate Action Plan. Completion of the Plan expected spring 2020.
	Capri-Landmark Plan completed and endorsed by Council.
	Continue to plan for the Okanagan Rail Trail.
<b>Corporate Broad Planning Actions Taken in 2018</b>	
	Completed an updated Corporate Energy and GHG Emissions Plan to reduce GHG emissions by 12% below 2007 levels by 2022. The Plan also requires energy modelling and airtightness testing for the construction of all new civic facilities.

<b>Broad Planning</b>	
<b>What is (are) your current GHG reduction target(s)?</b>	<p><b>OCP Policy 6.2.1 GHG Reduction Target and Actions.</b> The City of Kelowna will, in partnership with: senior governments; local residents and businesses; NGOs; external agencies; and utility providers, work towards reducing absolute community greenhouse gas emissions by:</p> <ul style="list-style-type: none"> <li>• 4% below 2007 levels by 2023;</li> <li>• 25% below 2007 levels by 2033; and</li> <li>• 80% below 2007 levels by 2050.</li> </ul>
<b>Are you familiar with your local government's community energy and emissions inventory (e.g. <a href="#">CEEI</a> or another inventory)?</b>	<b>Yes</b>
<p><b>What plans, policies or guidelines govern the implementation of climate mitigation in your community?</b></p> <ul style="list-style-type: none"> <li>• Community Energy and Emissions Plan</li> <li>• Integrated Community Sustainability Plan</li> <li>• Community- Wide Climate Action Plan</li> <li>• Official Community Plan</li> <li>• Regional Growth Strategy</li> <li>• Do not have a plan</li> </ul>	<p><b>No</b> <b>No</b> <b>Yes</b> <b>Yes</b> <b>Yes</b></p>
<b>Does your local government have a corporate GHG reduction plan?</b>	<b>Yes</b>

## Building and Lighting Actions

Low-carbon buildings use the minimum amount of energy needed to provide comfort and safety for their inhabitants and tap into renewable energy sources for heating, cooling and power. These buildings can save money, especially when calculated over the long term. This category also includes reductions realized from energy efficient street lights and lights in parks or other public spaces.

<b>Community-Wide Building and Lighting Actions Taken in 2018</b>	
	Consulted on the Energy Step Code for Part 9 residential buildings. Developed an Energy Step Code Implementation Strategy for initial Council consideration.
	Hosted an Industry Workshop on Energy Step Code and Air Tightness with over 115 participants in attendance.
<b>Community-Wide Building and Lighting Actions Proposed for 2019</b>	
	Endorsed an Energy Step Code Implementation Strategy for Part 9 buildings. Step 1 begins December 2019.
	Update the Zoning Bylaw to reduce setbacks to accommodate thicker walls associated with those buildings Step 5 / Passive House.
	Consult on Energy Step Code Implementation for Part 3 buildings.
	Develop a Community Energy Retrofit Strategy.

<b>Corporate Building and Lighting Actions Taken in 2018</b>	
	Completed the LED street light replacement project which converted 10,600 street lights, resulting in 4,500 GWh/yr of reduced electricity use.
	Upgrade to LED fixtures in Library and Chapman Parkades when replacement is required.
	Completed energy audit of the Wastewater Treatment Facility in partnership with FortisBC which identified energy and GHG reduction measures for the next 3-5 years.
	Completed the Water Treatment Facility industrial feasibility audit, which identified energy and GHG reduction measures for the next 3-5 years.
	Applied to the Airport Carbon Accreditation Program and received Level 1 certification.
	Completed an equipment inventory and utility bill analysis of City facilities to allow for future energy conservation measures to be identified more quickly.
<b>Corporate Building and Lighting Actions Proposed for 2019</b>	
	Continue to upgrade LED fixtures in Library and Chapman Parkades until all fixtures have been replaced.
	Install energy efficiency upgrades at the Wastewater Treatment Facility as recommended in the energy audit completed in 2018. These include 2 pump upgrades and one variable frequency drive upgrade.
	Convert historical propane heating units in landfill operations building to natural gas

<b>Building and Lighting</b>	
The Province has committed to taking incremental steps to increase energy-efficiency requirements in the BC Building Code to make buildings net-zero energy ready by 2032. The BC Energy Step Code--a part of the BC Building Code--supports that effort	
<b>Is your local government aware of the <a href="#">BC Energy Step Code?</a></b>	Yes
<b>Is your local government implementing the <a href="#">BC Energy Step Code?</a></b>	Yes

## Energy Generation Actions

A transition to renewable or low-emission energy sources for heating, cooling and power supports large, long-term GHG emissions reductions. Renewable energy including waste heat recovery (e.g. from biogas and biomass), geo-exchange, micro hydroelectric, solar thermal and solar photovoltaic, heat pumps, tidal, wave, and wind energy can be implemented at different scales, e.g. in individual homes, or integrated across neighbourhoods through district energy or co-generation systems.

Community-Wide Energy Generation Actions Taken in 2018	
	Fully commissioned the FortisBC Biogas plant diverting 48 per cent of the landfill gas captured to beneficial re-use.

Corporate Energy Generation Actions Taken in 2018	
	Initiated staged approach to leachate recirculation to increase landfill gas production.
Corporate Energy Generation Actions Proposed for 2019	
	Hire a co-op student to increase leachate recirculation program.
	Investigate automation for leachate re-circulation.

Energy Generation	
<b>Is your local government developing, or constructing a</b> <ul style="list-style-type: none"> <li>• district energy system</li> <li>• renewable energy system</li> </ul>	No No
<b>Is your local government operating a</b> <ul style="list-style-type: none"> <li>• district energy system</li> <li>• renewable energy system (<i>Note: the City works in partnership with FortisBC to provide landfill gas while FortisBC operates the renewable energy system</i>).</li> </ul>	No No
<b>Is your local government connected to a district energy system that is operated by another energy provider?</b>	No
<b>Are you familiar with the 2018 <a href="#">List of Funding Opportunities for Clean Energy Projects Led by First Nations and Local Governments?</a></b>	No

## Greenspace / Natural Resource Protection Actions

Greenspace/Natural Resource Protection refers to the creation of parks and greenways, boulevards, community forests, urban agriculture, riparian areas, gardens, recreation/school sites, and other green spaces, such as remediated brownfield/contaminated sites as well as the protection of wetlands, waterways and other naturally occurring features.

<b>Community-Wide Greenspace Actions Taken in 2018</b>	
	Protected 64,128 m <sup>2</sup> of riparian areas through No Disturb Covenants or Parks dedications through the City's development process.
	Landscaped 10,946m <sup>2</sup> to restore/enhance riparian area through City's development process.
	Acquired or purchased 15.6 ha for park and natural greenspace protection
	Removed structures to create park space at Bluebird Beach and 1896 Marshall Street.
	Participated in the Mission Creek Restoration Initiative Strategy preplanning
	Enhanced and stabilized 100 linear meters along Okanagan Lake at Strathcona Waterfront Stabilization and Riparian Enhancement Project.
	Sold 500 trees through Neighbourwoods for planting on private property
<b>Community-Wide Greenspace Actions Proposed for 2019</b>	
	Acquire or purchase approximately 4.3 ha for park and natural greenspace protection (Mountainside Park, Mission Creek/Dewdney Creek Natural Area)
	Remove structures to create park space at Hobson Park.
	Sold 600 trees through NeighbourWoods for planting on private property. An additional 70 trees were provided free of charge to residents along Mill Creek who had been impacted by the Mill Creek Flood Mitigation Work in 2018.

<b>Corporate Greenspace Actions Taken in 2018 + Additional Actions</b>	
	Planted 300 street trees (4-5 cm caliper)
<b>Corporate Greenspace Actions Proposed for 2019</b>	
	Plant 400 street trees (4-5 cm caliper) and 5,000 tree seedlings
	Plant 100 trees along Mill Creek as part of Mill Creek Tree Planting Program
	Develop Wetland Management Plans for 4 wetlands (Chichester, Maude Roxby, Munson Pond and Thomson Wetland) in conjunction with Central Okanagan Land Trust and Okanagan Basin Water Board.
	Conduct a wetland / stormwater detention pond assessment, which will include water quality and sediment testing to make recommendations on design and structure improvements to enhance riparian and natural habitat.

<b>Greenspace</b>	
<b>Does your local government have urban forest policies, plans or programs?</b>	<b>Yes</b>
<b>Does your local government have policies, plans or programs to support local food production?</b>	<b>Yes</b>

## Solid Waste Actions

Reducing, reusing, recycling, recovering and managing the disposal of the residual solid waste minimizes environmental impacts and supports sustainable environmental management, greenhouse gas reductions, and improved air and water quality.

<b>Community-Wide Solid Waste Actions Taken in 2018</b>	
	Sold 300 composters to reduce organics ending up in the landfill.
	Hosted 2 repair cafes and 2 trunk sales to encourage reuse.
	Continued commercial and residential waste monitoring to ensure mandatory recyclables are not ending up in the landfill.
	Continued curbside recycling education through cart inspection program, illegal dump site monitoring, education and clean up.
<b>Community-Wide Solid Waste Actions Proposed for 2019</b>	
	Sold 350 composters.
	Host 4 reuse events.
	Increase recycling education to reduce contamination.
	Review options for reduction of single use plastic.

<b>Corporate Solid Waste Actions Taken in 2018</b>	
	Completed a Design, Operations and Closure Plan for the Landfill.
	Purchased 1 hybrid compost screening plant.
	Purchased new excavator that allows for increased efficiency in solid waste operations.

<b>Solid Waste</b>	
<b>Does your local government have construction and demolition waste reduction policies, plans or programs?</b>	<b>Yes</b>
<b>Does your local government have organics reduction/diversion policies, plans or programs?</b> <i>(Biweekly yard waste pick up and annual composter sales to divert organics from the waste stream).</i>	<b>Yes</b>



## Transportation Actions

Transportation actions that increase transportation system efficiency emphasize the movement of people and goods, and give priority to more efficient modes, e.g. walking, cycling and public transit, can contribute to reductions in GHG emissions and more livable communities.

<b>Community-Wide Transportation Actions Taken in 2018</b>	
	Expanded the active transportation network by: <ul style="list-style-type: none"> <li>• 5.7 km of buffered bike lanes (Lakeshore, Richter, Cooper)</li> <li>• 12.5 km of multi-use path (John Hindle Drive and Okanagan Rail Trail (Manhattan to Airport))</li> <li>• 0.8 km of sidewalk (portions of Pandosy, Banks, Gordon, Hollywood)</li> <li>• 3.0 km of bike lanes (Bernard (Ethel to Lakeview) and Ellis (Bernard to Gaston))</li> </ul>
	Expanded active transportation supportive infrastructure including: <ul style="list-style-type: none"> <li>• 6 pedestrian flashers</li> <li>• 3 half-signals</li> <li>• 1 new traffic signal</li> <li>• 1 smart right safety improvement</li> </ul>
	Piloted a dockless bikeshare in partnership with a private company which saw 33,000 trips in the first 3 months.
	Implemented 'NextRide' automatic vehicle locator (AVL) system for Transit system wide with a real-time mobile schedule app in partnership with BC Transit.
	Began outfitting 40 conventional transit buses with Transit Signal Priority radio equipment (to be completed in 2019)
	Restructured transit service to: <ul style="list-style-type: none"> <li>• add a new route linking downtown to UBCO campus via Glenmore</li> <li>• introduce bus service to University Heights student housing development</li> <li>• improve service reliability on major routes adding total of 5,000 service hours.</li> </ul>
	Upgraded 4 transit stops to improve accessibility, capacity, safety and comfort.
	Supported Clean Air and Safe Routes 4 School in 4 schools in Kelowna to increase active transportation (Pearson, Raymer, Belgo and South Kelowna Elementary).
	Hosted Bike to Work Week and Bike to School Week in conjunction with regional partners.
	Hosted Bike Rodeos at various schools throughout the region.
	Cost shared bike rack program that is delivered to businesses and residential properties to retrofit existing areas with higher bike storage pressure than when initially constructed.
	Increased network of automated bike and pedestrian counters by 10 per cent.
	Managed bike lockers in various locations around town.
	Constructed 12 new transit stops/platforms including one busy bay and one major transit station.
	Finalized Transit Future Action Plan identifying priority transit expansion projects region wide over the next 5 years.
<b>Community-Wide Transportation Actions Proposed for 2019</b>	
	Expand the active transportation network by: <ul style="list-style-type: none"> <li>• 1.6 km of new sidewalk (various locations)</li> <li>• 6.0 km of new bike lanes (Ellis, Bernard, Union, Banks, Doyle)</li> <li>• 11.7 km of buffered bike lanes (various locations)</li> <li>• 2.6 km of cycle tracks (Ethel and Sutherland)</li> </ul>
	Expand active transportation supportive infrastructure:

	<ul style="list-style-type: none"> <li>• 5 pedestrian crosswalk safety improvements</li> <li>• 1 new pedestrian flasher</li> </ul>
	Collect baseline data for South Kelowna Elementary School and analyze data to update School Travel Plans for Raymer and Pearson Elementary.
	Host Bike to Work Week and Bike to School week in conjunction with regional partners.
	Host Bike Rodeos will be held at various schools around the region.
	Continue cost shared bike rack program.
	Increase the network of automated bike and pedestrian counters by 20 per cent by tying into various ongoing infrastructure projects.
	Continue to manage bike lockers in various locations around town.
	Allow different vehicles and multiple operators as part of the bikeshare fleet to extend bikeshare options and expand the service area served by private firms.
	Complete Regional Transit Service Guidelines (including network design guidelines, service standards and performance guidelines) which facilitate service planning decisions and measure how well the transit system is progressing toward achieving its goals.
	Invest in 1,800 new transit service hours in the system, focused on Route 8 mid-day and Sunday service expansion to meet unprecedented service demand in these off-peak periods.
	Initiate study and design exercise for major transit capital projects in partnership with BC Transit including: transit operating centre, Orchard Park Exchange, Mission Recreation Exchange, Rutland Exchange and mobility hub, Park and Ride mobility hub, YLW transit infrastructure and service design review.
	Upgrade accessibility and amenity infrastructure at 6 transit stops.
	Develop a transit training program targeting seniors and high-school aged youth in partnership with BC Transit.
	Develop a strategy and materials to support a successful U-Pass campaign for Okanagan College in Kelowna and a strategy to support a successful UBCO U-Pass referendum for a pending 2020 fare increase.
	Complete Transit Signal Priority bus equipment expansion program. Complete transit signal review and transit signal priority optimization on two corridors support major frequent transit routes (Cadder/Springfield Rd and Gordon Drive).
	Develop bylaw and policy amendments as recommended in the Downtown Parking Plan to encourage expansion of car sharing.

<b>Corporate Transportation Actions Taken in 2018</b>	
	Continued use of bio-diesel in fleet.
	Continued use of GPS for route planning.
	Purchased 2 battery electric cars and one electric utility vehicle.
	Purchased 1 portable asphalt recycler.
	Revamped vehicle oil change schedules to reduce oil use.
<b>Corporate Transportation - Actions Proposed for 2019</b>	
	Utilize CNG vehicles for new curbside collection contract commencing October 2019.
	Continue to use bio-diesel in fleet.
	Continue to use GPS for route planning.
	Investigate the use of R100 renewable diesel fuel for fleet.
	Investigate the purchase of a hybrid landfill bull dozer.
	Purchase 1 utility battery electric vehicle.
	Recycle used shop oil rags.
	Replace end of life pick up used at Landfill with an electric pick up.

<b>Transportation</b>	
<b>Does your local government have policies, plans or programs to support:</b> <ul style="list-style-type: none"><li>• Walking</li><li>• Cycling</li><li>• Transit Use</li><li>• Electric Vehicle Use</li></ul>	<b>Yes</b> <b>Yes</b> <b>Yes</b> <b>Yes</b>
<b>Does your local government have a Transportation Demand Management (TDM) strategy (e.g. to reduce single-vehicle occupancy trips, increase travel options, provide incentives to encourage individuals to modify travel behaviour)?</b>	<b>Yes</b>
<b>Does your local government integrate its transportation and land use planning?</b>	<b>Yes</b>

## Water and Wastewater Actions

Managing and reducing water consumption and wastewater is an important aspect of developing a sustainable built environment that supports healthy communities, protects ecological integrity, and reduces GHG emissions.

<b>Community-Wide Water and Wastewater Actions Taken in 2018</b>	
	Regional Waste Reduction Office partnered with Okanagan Basin Water Board to sell 150 rain barrels during the annual composter sale.
	Introduced a new City endorsed Qualified Water Efficient Landscape (QWEL) certification program that educates and trains professionals on efficient irrigation practices and climate appropriate landscape material choices.
	Offered an irrigation system controller rebate for residents to switch to a water efficient, programmable option.
	Offered water conservation presentations to the public through the summer months.
<b>Community-Wide Water and Wastewater Actions Proposed for 2019</b>	
	Regional Waste Reduction Office partnered with Okanagan Basin Water Board to sell 200 rain barrels during the annual composter sale.
	Offer a landscape retro-fit rebate to replace high water consumptive landscape material for water efficient / xeriscape options that utilize QWEL certified landscapers.
	Develop an on-line water budget calculator for residents to help design water efficient landscapes.
	Develop a drought response plan.
	Initiate a Kelowna Area Based Water Management Plan in partnership with RDCO and OBWB.
	Introduced a biodegradable collection cup to help residents reduce oil and grease from being deposited into our sewer collection system and ultimately into our environment.

<b>Water Conservation</b>	
<b>Does your local government have water conservation policies, plans or programs?</b>	<b>Yes</b>

## Climate Change Adaptation Actions

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

<b>Please identify the THREE climate impacts that are most relevant to your Local Government.</b>	
<ul style="list-style-type: none"> <li>• Warmer winter temperatures reducing snowpack</li> <li>• Changes to temperature and precipitation causing seasonal drought</li> <li>• Heatwaves impacting population health</li> <li>• Increased temperatures increasing wildfire activity</li> <li>• Increased temperatures affecting air quality</li> <li>• Changing temperatures influencing species migration and ecosystem shifts</li> <li>• Changing temperatures influencing ecosystem shifts</li> <li>• Extreme weather events contributing to urban and overland flooding</li> <li>• Sea level rise and storms causing coastal flooding and/or erosion</li> </ul>	        ✓        ✓        ✓
Other (please specify): Most of the above has or could impact Kelowna.	
<b>In 2018 has your local government addressed the impacts of a changing climate using any of the following?</b>	
Risk and Vulnerability Assessments	Yes
Risk Reduction Strategies	Yes
Emergency Response Planning	Yes
Asset Management	Yes
Natural/Eco Asset Management Strategies	No
Infrastructure Upgrades	Yes
Beach Nourishment Projects	Yes
Economic Diversification Initiatives	No
Strategic and Financial Planning	Yes
Cross-Department Working Groups	Yes
Official Community Plan Policy Changes	No
Changes to Zoning and other Bylaws and Regulations	No
Incentives for Property Owners (e.g. reducing storm water run-off)	No
Public Education and Awareness	Yes
Research	Yes
Mapping	Yes
Partnerships	Yes

<b>Climate Change Adaptation Actions Taken in 2018</b>	
Please elaborate on key actions and/or partnerships your local government has engaged in to prepare for, and adapt to a changing climate. Add links to key documents and information where appropriate.	
	Committed to completing a Source Water Protection Plan (SWPP).
	Updated Community Wildfire Protection Plan
	Completed Mill Creek Flood Mitigation including tree removal and dredging to increase channel capacity for flood flows.
	Updated Landfill Surface Water Management Plan to include a review of climate change impacts to the site.
	Completed risk and vulnerability assessments of waterfront parks including Manhattan Beach, Manhattan Point, Sutherland Beach, Kinsmen Park, City Park, Kerry Park, Sarsons Beach, Paddle Centre, Maude Roxby Marsh.
	Completed 115m <sup>3</sup> beach nourishment project (placing additional sand on Rotary Beach from the Cook Road Boat Launch to mitigate beach erosion) and includes a monitoring program.
	Designed arch culvert to accommodate flood and debris at Spencer Road.
<b>Climate Change Adaptation Actions Proposed for 2019</b>	
	Research and provide recommendations for effective adaptation policies for the Official Community Plan Update.
	Initiate the Mill Creek Major Off-Stream Storage Projects and Channel Conveyance project to reduce storm peak flow during major storm events.
	Complete Source Water Protection Plan. Actions to be updated and re-evaluated on an ongoing basis.
	Propose water intake protection zone.
	Form a Technical Advisory Group with various agencies as part of the Source Water Protection Plan.
	Create a Southeast Landscape Level Wildfire Fuel Break. In conjunction with the City and Province, 1,000 hectares will be treated in this multi-year project valued at \$1.6 million and funded through Forest Enhancement Society BC.
	Study and initiate preliminary design for Surface Water Management Plan at the Landfill.
	Create a berm along Mill Creek at 1896 Marshall Street for flood protection.
	Assess City Park lake wall for resilience and protection design.
	Initiate an Okanagan Lake Foreshore flood impact assessment, pending funding from Community Emergency Preparedness Fund.
	Installed Spencer Road Arch Culvert to accommodate flood and debris.
<b>For more information please contact</b>	
	Rod MacLean, 250 469-8876

The following are key resources that may be helpful to your local government in identifying climate impacts, as well as, strategies, actions and funding to deal with them. For those resources that you have used, please indicate whether they were useful in advancing your work in climate change adaptation?	
<a href="#">Indicators of Climate Change for British Columbia</a> <a href="#">Plan2Adapt</a> <a href="#">Climate Projections for Metro Vancouver</a> <a href="#">Climate Projections for the Capital Region</a> <a href="#">Climate Projections for the Cowichan Valley Regional District</a> <a href="#">Province of BC's BC Adapts Video Series</a> <a href="#">Preparing for Climate Change: Implementation Guide for Local Governments</a> <a href="#">Public Infrastructure and Engineering Vulnerability Committee's (PIEVC)</a> <a href="#">Sea Level Rise Adaptation Primer</a> <a href="#">BC Regional Adaptation Collaborative Webinars</a> <a href="#">Retooling for Climate Change</a> <a href="#">Water Balance Model</a> <a href="#">Water Conservation Calculator</a>  Funding: <a href="#">National Disaster Mitigation Program (NDMP)</a> <a href="#">Community Emergency Preparedness Fund (CEPF)</a> <a href="#">Municipalities for Climate Innovation Program (MCIP)</a> <a href="#">Climate Adaptation Partner Grants (FCM)</a> <a href="#">Infrastructure Planning Grants (MAH)</a> <a href="#">Federal Gas Tax Fund</a>	Haven't Used Useful Haven't Used Haven't Used Haven't Used Haven't Used Haven't Used Haven't Used Haven't Used Haven't Used Haven't Used Haven't Used Haven't Used Haven't Used Useful Useful Haven't Used Haven't Used Useful Useful
Other (please specify)	N/A

## Other Climate Actions

This section provides local governments the opportunity to report other climate actions that are not captured in the categories above.

<b>Community-Wide Other Actions Taken in 2018</b>	
	Completed 13 exchanges and one wood heating workshop as part of the Woodstove Exchange Program
	Chipped 7,237 cubic meters of wood from 20 orchards through the Agricultural Chipping Program.
	Granted 17 Mow/Chip It Rebates for fuel reduction clearing 72.7 acres. Residents estimate they spent 1,516 hours cutting, dragging and making 103 piles of wood that ultimately were not burned.
	Reached more than 100,000 residents through social media to provide awareness on air quality programs, and the Air Quality Health Index during the wildfire season.
	Avoided approximately 200 tonnes of particulate matter (PM10 and PM2.5), 406 tonnes of carbon monoxide and 35 tonnes of volatile organic compounds that were not released into the air in 2018, through air quality and TDM programs
<b>Community-Wide Other Actions Proposed for 2019</b>	
	Offer up to 73 exchange rebates through the Woodstove Exchange Program.
	Registered 43 properties for the Free Agricultural Chipping Program.
	Continue to offer Mow/Chip it rebates.
	Continue outreach through social media for awareness on open burning, idling, dust, and rebates and programs available.
	Present a regional anti-idling control bylaw and updates to Smoke Control Bylaw No. 773 to the Regional District Central Okanagan board for consideration, followed by public engagement.

<b>Other</b>	
Are you familiar with the <a href="#">Community Lifecycle Infrastructure Costing Tool (CLIC)</a> ?	Yes
Is your local government using the <a href="#">CLIC</a> tool?	No



## Innovation and Peer-to-Peer Learning

### Innovation

This section provides the opportunity to showcase an innovative *Corporate and/or Community-Wide* GHG reduction and/or climate change adaptation activity that your local government has undertaken and that has had, or has the potential to have, a significant impact. You are welcome to highlight an action that has already been listed.

Projects included here may be featured as success stories on the [B.C. Climate Action Toolkit](#) and/or shared with other local governments to inspire further climate action. Please add links to additional information where possible.

Communities that have conducted innovative initiatives may want to consider making applications to [CEA's Climate and Energy Action Awards](#), [FCM Sustainable Communities Awards](#) or to [FCM's National Measures Report](#).

<b>Community-Wide Innovation Action</b>
N/A
<b>Corporate Innovation Action</b>
N/A
<b>For more information on actions described above contact</b>
N/A

### Programs, Partnerships and Funding Opportunities

Local governments often rely on programs, partnerships and funding opportunities to achieve their climate action goals. Please share the names of programs and organizations that have supported your local government's climate actions by listing each entry in the box below separated by a forward slash (e.g. program1/program2).

#### Mitigation

<b>Mitigation Programs, Partnerships and Funding</b>
<ul style="list-style-type: none"> <li>Partnered with Fortis BC, to apply for a grant from Natural Resources <i>Electric Vehicle Alternative Fuel Infrastructure Deployment Initiative</i>, for 4 DC Fast Charge Stations (one for Museum Parking Lot, one for Centennial Park and 2 at the airport). Grant was approved and installation of the DC fast chargers commences Spring 2019. Partnering with FortisBC to apply for 2 more DC Fast Charge Stations through the next round of grant funding.</li> <li>Partnering with Partnership for Sustainable Water in BC and Irrigation Association of BC to develop the water budget calculator.</li> </ul>

#### Adaptation

<b>Adaptation Programs, Partnerships and Funding</b>
<ul style="list-style-type: none"> <li>Received funding from Pacific Institute for Climate Solutions to hire a Climate Adaptation Intern to research and provide recommendations for effective adaptation policies for the Official Community Plan Update.</li> <li>Received funding from Disaster Mitigation Adaptation Funding for the Mill Creek Off-Stream Storage Projects and Channel Conveyance project.</li> <li>Received funding from FortisBC for a Community Energy Specialist position for 2 years.</li> </ul>

## 2018 Carbon Neutral Reporting

Local governments are required to report on their progress in achieving their carbon neutral goal under the [B.C. Climate Action Charter](#). Working with B.C. local governments, the joint Provincial-UBCM Green Communities Committee (GCC) has established a common approach to determining carbon neutrality for the purposes of the Climate Action 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](#), especially 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 Climate Action Revenue Incentive Program (CARIP) reports.*

### Reporting Emissions

Did your local government measure corporate GHG emissions for 2018?	Yes
If your local government measured 2018 corporate GHG emissions, please report the number of corporate GHG emissions from services delivered directly by your local government (in tonnes of carbon dioxide equivalent)	6,021
If your local government measured 2018 corporate GHG emissions, please report the number of corporate GHG emissions from contracted services (in tonnes of carbon dioxide equivalent)	--- (not measured)
<b>TOTAL A: CORPORATE GHG EMISSIONS FOR 2018 (Direct GHGs + Contracted GHGs)</b>	<b>6,021 tCO<sub>2e</sub></b>

### Reporting Reductions and Offsets

To be carbon neutral, a local government must balance their TOTAL corporate GHG emissions generated in 2018 by one or a combination of the following actions:

- undertake GCC-supported Option 1 Project(s)
- undertake GCC-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](#).

If applicable, please report the 2018 GHG emissions reductions (in tonnes of carbon dioxide equivalent (tCO<sub>2e</sub>)) being claimed from any of the following Option 1 GHG Reduction Projects:

<b>OPTION 1 PROJECTS</b>	<b>REDUCTIONS</b>
<b>TOTAL B: REDUCTIONS FROM ALL OPTION 1 PROJECTS FOR 2018</b>	<b>0 tCO<sub>2e</sub></b>

If applicable, please report the names and 2018 GHG emissions reductions (in tonnes of carbon dioxide equivalent (tCO<sub>2</sub>e)) being claimed from Option 2 GHG Reduction Projects:

<b>TOTAL C: REDUCTIONS FROM ALL OPTION 2 PROJECTS FOR 2018</b>	<b>0 tCO<sub>2</sub>e</b>
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**Offsets**

If applicable, please report the name of the offset provider, type of project and number of offsets purchased (in tonnes of carbon dioxide equivalent (tCO<sub>2</sub>e)) from an offset provider for the 2018 reporting year:

*NOTE: DO NOT INCLUDE ANY FUNDS THAT MAY BE SET ASIDE IN A CLIMATE ACTION RESERVE FUND.*

Offset Provider Name	OFFSETS
<b>Q 94 TOTAL D: OFFSETS PURCHASED FOR 2018</b>	<b>0 tCO<sub>2</sub>e</b>

**TOTAL REDUCTIONS AND OFFSETS FOR 2018 (Total B+C+D) = 0 tCO<sub>2</sub>e**

**Corporate GHG Emissions Balance for 2018**

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 GCC Option 1 and Option 2 projects and/or the purchase of offsets.

**CORPORATE GHG EMISSIONS BALANCE FOR 2018 = (A – (B+C+D)) = 6,021 tCO<sub>2</sub>e**

**If your Corporate GHG Emissions Balance is negative or zero,  
your local government is carbon neutral.  
CONGRATULATIONS!**

Carbon Neutral Reporting	
<b>Does your local government set aside funds in a climate reserve fund or similar?</b>	<b>Yes</b>

## GCC Climate Action Recognition Program

The joint Provincial-UBCM Green Communities Committee (GCC) 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 (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, and who have measured 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 have demonstrated undertaking significant action (corporately or community wide) to reduce 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 carbon neutrality in the reporting year.

**Based on your local government's 2018 CARIP Climate Action/Carbon Neutral Progress Survey, please check the GCC Climate Action Recognition Program level that best applies:**

<input type="checkbox"/>	Level 1 – Demonstrating Progress on Charter Commitments	
<input type="checkbox"/>	Level 2 – Measuring GHG Emissions	
<input type="checkbox"/>	Level 3 – Accelerating Progress on Charter Commitments	
<input type="checkbox"/>	Level 4 - Achievement of Carbon Neutrality	
<input checked="" type="checkbox"/>	Not Sure	X

**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:**

<b>PROJECT NAME:</b>
N/A