

Climate Action Revenue Incentive (CARIP) Public Report for 2017

Local Government: City of Rossland

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Date: May 22, 2018



The City of Rossland has completed the 2017 Climate Action Revenue Incentive Program (CARIP) Public Report as required by the Province of BC. The CARIP report summarizes actions taken in 2017 and proposed for 2018 to reduce corporate and community-wide energy consumption and greenhouse gas emissions (GHG) and reports on progress towards achieving carbon neutrality.

2017 BROAD PLANNING ACTIONS

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, centred) plays an especially important role in energy and GHG reduction.

Community-Wide Actions Taken in 2017	
	Continue to support the redevelopment and infill existing neighbourhoods
	Sustainability Commission organises many community engagement events throughout the year promoting various climate related actions (movie nights, GREEN drinks discussions, expert talks)
	Held Climate Action Meeting hosted by CBT to discuss options for furthering climate action in Rossland
	Approval of a Food Charter for Rossland.
	Adopted Lower Columbia Healthy Communities Plan which promotes Smart Growth Principles
	Took part in pilot project to test and refine the SoCARB (State of Climate Adaptation and Resilience in the Basin) indicator suite in communities across the Columbia Basin-Boundary region. The 2017 baseline report measures community progress on climate adaptation across five climate impact pathways: extreme weather and emergency preparedness, wildfire, water supply, flooding and agriculture. SoCARB indicators were designed to provide data and insights relating to climate change, including local environmental impacts and community impacts (e.g., economic impacts), as well as information to help build adaptive capacity and track local actions.
Community-Wide Actions Proposed for 2018	
	Update the State of Rossland-indicator monitoring project to measure Rossland's progress toward its sustainability goals.
	Sustainability Commission climate action related events.

Corporate Actions Taken in 2017	
	Adopted a new street light policy with the aim of reducing the number of streetlights and replacing all street lights with LED lights
	Ongoing support for the Sustainability Commission
	Climate Action Reserve fund bylaw. Bylaw places CARIP funds and an additional 25\$ per tonne of measurable greenhouse gas emissions annually into a Climate Action reserve fund to be used for GHG reduction initiatives.
	Adopted City owned land strategy to promote infill and other City objectives.
Corporate Actions Proposed for 2018	
	Consider Employee Electric Bike Purchase Program.
	Adopt policies to support Rossland SCEEP.

Broad Planning	
What is (are) your current GHG reduction target(s)?	33% below Rossland's 2007 GHG emissions' levels by 2020.
Are you familiar with your community's community energy and emissions inventory (e.g. CEEI or another inventory)?	Yes
What plans, policies or guidelines govern the implementation of climate mitigation in your community?	
<ul style="list-style-type: none"> • Community Energy and Emissions (CEE) Plan • Community- Wide Climate Action Plan • Integrated Community Sustainability Plan • Official Community Plan (OCP) • Regional Growth Strategy (RGS) • Do not have a plan • Other: 	Yes Yes Yes Yes No
Does your local government have a corporate GHG reduction plan?	Yes

2017 BUILDING AND LIGHTING ACTIONS

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.

Community-Wide Actions Taken in 2017	
	Sustainability Commission donated LED bulbs to Food Bank for distribution to lower income households.
	Replacement of the EV Charging station (not currently working) in partnership with the Accelerate Kootenays program.
	Builders Workshops - Community Energy Association with support from SC. Focuses on energuide rating and educating builders and realtors, new home builders
	(Solar) Energy Information evening organised by Sustainability Commission
	Solar monitoring project – installed solar monitoring station on Works Yard roof to provide more information on solar viability in Rossland.
	Energy Crawl of energy efficient homes and 2 electric vehicles organised by Sustainability Commission
Community-Wide Actions Proposed for 2018	

Corporate Actions Taken in 2017	
	LED Streetlight replacements in Lower Rossland and Red Mtn and the walking tunnels
	Completed LED lighting in Arena
	Completed upgrades to the historical Miners Hall. Efficiency measures include reuse of pre-existing doors, installation of energy efficient lighting, improved insulation, low flow fixtures; Heating and cooling provided by a ductless HVAC system with heat recovery units;
	Completed upgrades to the Rossland Museum. Efficiency measures include, improved insulation, new windows, low flow fixtures, energy efficient lighting.
Corporate Actions Proposed for 2018	
	Consider Energy Step Code implementation and incentives in Rossland.
	Complete LED street light replacements for remainder of Rossland.

Building and Lighting	
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	
Is your local government aware of the BC Energy Step Code?	Yes
Is your local government implementing the BC Energy Step Code?	No

2017 ENERGY GENERATION ACTIONS

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 Actions Taken in 2017	
Community-Wide Actions Proposed for 2018	

Corporate Actions Taken in 2017	
	Sustainability Commission installed a solar monitoring station on Public Works Building to gather data for making decisions on solar installation in Rossland.
Corporate Actions Proposed for 2018	

Energy Generation	
Is your local government developing, or constructing:	
• A district energy system	No
• A renewable energy system	No
Is your local government operating:	
• A district energy system	No
• A renewable energy system	No
Is your local government connected to a district energy system that is operated by another energy provider?	No
Are you aware of the Integrated Resource Recovery guidance page on the BC Climate Action Toolkit ?	Yes
Are you familiar with the 2017 “List of Funding Opportunities for Clean Energy Projects Led by First Nations and Local Governments?”	Yes

2017 GREENSPACE/NATURAL RESOURCE PROTECTION ACTIONS

Greenspace 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.

Community-Wide Actions Taken in 2017	
	Adopted Invasive Species Bylaw to address the impacts of knotweed on the community.
	Completed restoration work on Centennial Wetland.
	Support development of a Forest Park to preserve some of the forest surrounding Rossland
Community-Wide Actions Proposed for 2018	
	Adopt bylaw preserving City Lands and some private land as a Forest Park

Corporate Actions Taken in 2017	
Corporate Actions Proposed for 2018	

Greenspace	
Does your local government have urban forest policies, plans or programs?	No
Does your local government have policies, plans or programs to support local food production?	Yes

2017 SOLID WASTE ACTIONS

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.

Community-Wide Actions Taken in 2017	
	The Food Task Force (Sustainability Commission) did some education on backyard composting and growing food in Rossland.
Community-Wide Actions Proposed for 2018	

Corporate Actions Taken in 2017	
	Continued support for Regional Zero Waste program.
	Continue recycling program and discourage the overuse of paper. Council continue to use laptops instead of printing Agendas
Corporate Actions Proposed for 2018	
	Continued support for Regional Zero Waste program.

Solid Waste	
Does your local government have construction and demolition waste reduction policies, plans or programs?	No
Does your local government have organics reduction/diversion policies, plans or programs?	No

2017 TRANSPORTATION ACTIONS

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, ridesharing, and public transit, can contribute to reductions in greenhouse gas emissions and more livable communities.

Community -Wide Actions Taken in 2017	
	Council helped fund 'free' bus to ski hill in the winter. Heavily used by locals and tourists and greatly reduces vehicle trips.
	New multi purpose pathway installed on Leroi Ave, Spokane St and Davis St as part of a major infrastructure upgrade.
Community-Wide Actions Proposed for 2018	
	Investigate options for a connector trail between Red Mountain and Blackjack as an extension to the Centennial Trail
	Investigate options for an improved off road link between Rossland and Trail.
	Continue to implement Active Transportation Plan by constructing off road neighbourhood links to reduce vehicle trips.

Corporate Actions Taken in 2017	
	Continue to support Rossland carshare
	Purchased 4 new fuel efficient fleet vehicles to replace older models
Corporate Actions Proposed for 2018	

Transportation	
Does your local government have policies, plans or programs to support:	
• Walking	Yes
• Cycling	Yes
• Transit Use	Yes
• Electric Vehicle Use	Yes
• Other (please specify)	
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 behavior)?	No
Does your local government integrate its transportation and land use planning?	Yes

2017 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 greenhouse gas emissions.

Community-Wide Actions Taken in 2017	
	Continue to participate in Regional Liquid Waste Management Plan
Community-Wide Actions Proposed for 2018	

Corporate Actions Taken in 2017	
	Community is fully water metered with a volumetric rate structure.
	Continual lowering of water service lines to reduce the need for winter “bleeding” of pipes.
	Replacement of aging infrastructure on Spokane St, First Ave, Leroy Ave and Davis St – 1025m of water line.
	Ongoing leak detection.

Corporate Actions Proposed for 2018	
	Will complete an inflow and infiltration study in City's sewer system to reduce additional flows into the system.

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

2017 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.

Please identify the THREE climate impacts that are most relevant to your Local Government.	
<ul style="list-style-type: none"> • Warmer winter temperatures reducing snowpack • Changes to temperature and precipitation causing seasonal drought • Heatwaves impacting population health • Increased temperatures increasing wildfire activity • Increased temperatures affecting air quality • Changing temperatures influencing species migration and ecosystem shifts • Extreme weather events contributing to urban and overland flooding • Sea level rise and storms causing coastal flooding and/or erosion 	 ✓ ✓ ✓
Other:	

In 2017 has your local government addressed the impacts of a changing climate using any of the following?	
Risk and Vulnerability Assessments	No
Risk Reduction Strategies	No
Emergency response planning	Yes
Asset management	Yes
Natural/Eco asset management strategies	No
Infrastructure upgrades (e.g. storm water system upgrades)	Yes
Beach Nourishment projects	No
Economic diversification initiatives	Yes

Strategic and financial planning	Yes
Cross-department working groups	No
OCP policy changes	Yes
Changes to zoning and other bylaws and regulations	Yes
Incentives for property owner (e.g. reducing storm water run-off)	No
Public education and awareness	Yes
Research	Yes
Mapping	No
Partnerships	Yes
Other:	

Climate Change Adaptation Actions Taken in 2017	
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.	
	Rossland is participated in a pilot project to evaluate, refine, and support uptake of the State of Climate Adaptation and Resilience in the Basin (SoCARB) indicator suite. SoCARB was developed in 2014 as a result of a research partnership between Columbia Basin Trust's Communities Adapting to Climate Change Initiative.
	Implementation of the City's Community Wildfire Protection Plan with assistance from UBCM Strategic Wildfire Prevention Initiative.
	Focussed landscaping plant selection on drought resistant native species
	Joined the Regional Emergency Preparedness program to have better support in the event of an emergency.
Climate Change Adaptation Actions Proposed for 2018	
	Adopt new Subdivision and Servicing Bylaw
For more information please contact:	

Corporate Actions Taken in 2017	
Corporate Actions Proposed for 2017	

Other	
Are you familiar with the Community Lifecycle Infrastructure Costing Tool (CLIC) ?	Yes
Have you used CLIC?	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 repeat 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 raising their profile through applications to [CEA’s Climate and Energy Action Awards](#), [UBCM Climate and Energy Action Award](#), [FCM Sustainable Communities Awards](#) or through submissions to [FCM’s National Measures Report](#).

Community-Wide Action
For more information contact:
Corporate Action
For more information contact:

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.

Mitigation

Programs and Funding
<ul style="list-style-type: none"> Federal Gas Tax Program Columbia Basin Trust Clean Water and Waste Water Fund Bike BC Community Energy Association BC Hydro Columbia Fish and Wildlife Compensation Program

Adaptation

Programs and Funding
<ul style="list-style-type: none"> UBCM Strategic Wildfire Protection Program

2017 CARBON NEUTRAL REPORTING

Local governments are required to report on their progress in achieving their carbon neutral goal under the 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 [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 greenhouse gas (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 you measure your local government's corporate GHG emissions in 2017?	Yes
If your local government measured 2017 corporate GHG emissions, please report the number of corporate GHG emissions (in tonnes of carbon dioxide equivalent) from services delivered <u>directly</u> by your local government:	401.61
If your local government measured 2017 corporate GHG emissions, please report the number of corporate GHG emissions (in tonnes of carbon dioxide equivalent) from <u>contracted</u> services:	14.78
TOTAL A: CORPORATE GHG EMISSIONS FOR 2017	416.39 tCO₂e

Reporting Reductions and Offsets

To be carbon neutral, a local government must balance their TOTAL corporate GHG emissions generated in 2017 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

If applicable, please report the 2017 GHG emissions reductions (in tonnes of carbon dioxide equivalent (tCO₂e)) being claimed from Option 1 GHG Reduction Projects:

OPTION 1 PROJECTS	REDUCTIONS
Energy Efficient Retrofits	

Solar Thermal	
Household Organic Waste Composting	
Low Emission Vehicles	
Avoided Forest Conversion	
TOTAL B: REDUCTIONS FROM OPTION 1 PROJECTS FOR 2017	tCO2e

If applicable, please report the names and 2017 GHG emissions reductions (in tonnes of carbon dioxide equivalent (tCO2e)) being claimed from Option 2 GHG Reduction Projects:

OPTION 2 PROJECT NAME	REDUCTIONS
TOTAL C: REDUCTIONS FROM OPTION 2 PROJECTS FOR 2017	tCO2e

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 2017 reporting year:

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

OFFSET PROVIDER NAME	OFFSETS
TOTAL D: OFFSETS PURCHASED FOR 2017	tCO2e

TOTAL REDUCTIONS AND OFFSETS FOR 2017 (Total B+C+D) = tCO2e

Corporate GHG Emissions Balance for 2017

Your local government's Corporate GHG Emissions Balance is the difference between total corporate 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 2017 = (A – (B+C+D)) = 416.39 tCO2e

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

If applicable, please record any emissions reductions you will be carrying over for future years and the source of the emissions reductions, including the year they were earned (E.g., Organics diversion, 2016 100 tCO2e).

SOURCE OF CARRY OVER EMISSION REDUCTIONS (and year earned)	REDUCTIONS
BALANCE OF REDUCTIONS ELIGIBLE FOR CARRY OVER TO NEXT YEAR	tCO2e

Carbon Neutral Reporting	
Does your local government have a climate reserve fund or something similar?	Yes

GCC CLIMATE ACTION RECOGNITION PROGRAM

Green Communities Committee (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 (i.e: 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.

For purposes of 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 or financial resources and is intended to result in significant GHG reductions:

PROJECT NAME:
Climate Action Reserve Fund Bylaw places CARIP funds and an additional 25\$ per tonne of measurable greenhouse gas emissions annually into a Climate Action reserve fund to be used for GHG reduction initiatives.

Based on your local government's 2017 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 checked="" type="checkbox"/>	Level 3 – Accelerating Progress on Charter Commitments	✓
<input type="checkbox"/>	Level 4 - Achievement of Carbon Neutrality	
<input type="checkbox"/>	Not Sure	