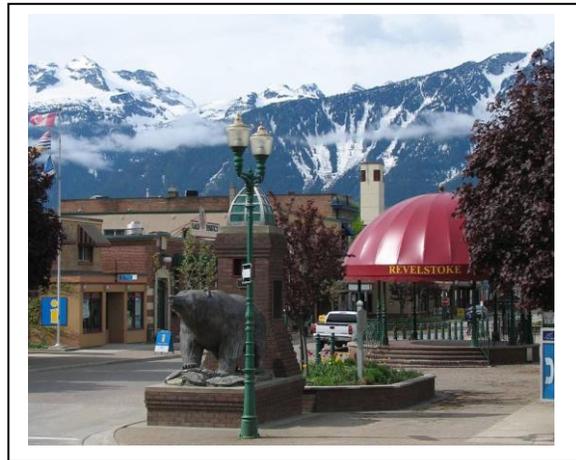


Climate Action Revenue Incentive (CARIP) Public Report for 2017

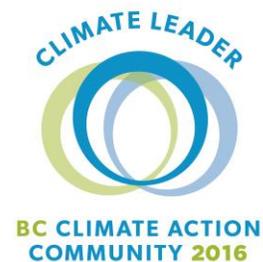
Local Government: City of Revelstoke

Report Submitted by: City of Revelstoke
Name: Penny Page-Brittin
Role: Environmental Sustainability Coordinator
Email: pbrittin@teus.net
Phone: 250 837-3497

Date: April 27, 2018



The City of Revelstoke 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	
	The City received Strategic Priorities Gas Tax funding to update the Official Community Plan and integrate the ICSP
Community-Wide Actions Proposed for 2018	
	Complete a population and housing study
	Begin community engagement through the Official Community Plan (OCP) review process
	Begin updating the OCP including the sustainability and environmental sections
	Integrate the ICSP into the OCP
	Revise the Development Cost Charge Bylaw

Corporate Actions Taken in 2017	
	Developed a 15-year Financial Plan
	Revised the Asset Management Policy and completed a Strategic Asset Management Plan
Corporate Actions Proposed for 2018	
	Explore funding options to support a Sustainability staff position

Broad Planning		
What is (are) your current GHG reduction target(s)?	8% reduction below 2007 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?	
• Community Energy and Emissions (CEE) Plan	Yes
• Community- Wide Climate Action Plan	No
• Integrated Community Sustainability Plan	Yes
• Official Community Plan (OCP)	Yes
• Regional Growth Strategy (RGS)	No
• Do not have a plan	Yes/No
• Other:	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	
<input type="checkbox"/>	Provided a wood stove exchange rebate program
<input type="checkbox"/>	
<input type="checkbox"/>	
Community-Wide Actions Proposed for 2018	
<input type="checkbox"/>	Continue to provide the wood stove exchange rebate program
<input type="checkbox"/>	Review information regarding the BC Energy Step Code
<input type="checkbox"/>	
<input type="checkbox"/>	

Corporate Actions Taken in 2017	
<input type="checkbox"/>	Recommissioned and upgraded the controls at the RCMP building
<input type="checkbox"/>	Upgraded the domestic hot water tank at the fire hall to include an air source heat pump
<input type="checkbox"/>	LED lighting upgrades at the museum
<input type="checkbox"/>	
<input type="checkbox"/>	
Corporate Actions Proposed for 2018	
<input type="checkbox"/>	Increase the number of LED streetlights
<input type="checkbox"/>	Complete energy audits on remaining municipal buildings
<input type="checkbox"/>	
<input type="checkbox"/>	

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 Cost?	Yes
Is your local government implementing the BC Energy Step Code?	Not at this time

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	
	Completed a Biofuels Technology Scan
Community-Wide Actions Proposed for 2018	
	Revelstoke Community Energy Corporation (RCEC) continues to provide biomass district heating to ten buildings in the community

Corporate Actions Taken in 2017	
Corporate Actions Proposed for 2018	
	Research options for heating the water treatment plant using geoexchange

Energy Generation	
Is your local government developing, or constructing:	
<ul style="list-style-type: none"> • A district energy system • A renewable energy system 	No No
Is your local government operating:	
<ul style="list-style-type: none"> • A district energy system • A renewable energy system 	Yes Yes
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	
	Food Security Coordinator implemented actions in the Food Security Strategy
	Community greenhouse feasibility study was completed
Community-Wide Actions Proposed for 2018	
	Continue to support community gardens and the farmers market

Corporate Actions Taken in 2017	
	Manager of Operations sits on the Board of Columbia Shuswap Invasive Species Society (CSISS)

Corporate Actions Proposed for 2018	
	Pilot the use of clover species for playing fields to reduce water needs and help decrease weeds
	Parks Supervisor continues to be a resource to staff regarding invasive species
	Continue to sit on the Board of Columbia Shuswap Invasive Species Society (CSISS)
	Update the Pesticide Use Bylaw to include provisions for invasive species

Greenspace	
Does your local government have urban forest policies, plans or programs?	Yes
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	
	Regional District hosted a “trunk sale”, or community garage sale
	Regional District established year-round free drop off of yard and garden, and metal waste in Revelstoke
	Regional District established a permanent hazardous waste depot in Revelstoke
	Successful food recovery program in place
Community-Wide Actions Proposed for 2018	
	Regional District is establishing an organic food waste processing facility at the Revelstoke landfill
	Regional District plans to implement a commercial organic food waste collection pilot project

Corporate Actions Taken in 2017	
	Completed a Wildlife Attractant Bylaw
	Implemented bear proof garbage containers in the downtown core
	Implemented Recycle Coach solid waste garbage app
	Added and replaced bear proof garbage containers in City Parks
Corporate Actions Proposed for 2018	
	Review options for residential organic waste collection, including options for centralized bins and curbside collection

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	
	Completed a Revelstoke Trails Strategy
	City received Strategic Priorities Gas Tax funding to complete a round about at 4 th /Victoria/Townley intersection
Community-Wide Actions Proposed for 2018	
	Install a public EV charging station as part of the Accelerate Kootenays Project
	Continue to support bike to work week
	Continue to support the resort shuttle bus service
	Implement actions in the Revelstoke Trails Strategy
	Begin developing a roundabout at 4 th /Victoria/Townley intersection

Corporate Actions Taken in 2017	
	Implemented vehicle fleet maintenance software to better track vehicle use and life cycle costing
Corporate Actions Proposed for 2018	
	Research the feasibility and business case to include electric vehicles in the City's fleet

Transportation	
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?	No

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	
	Water conservation education and items were provided to residents at the farmers market and other public events
Community-Wide Actions Proposed for 2018	
	Continue to provide water conservation education and items to residents at the farmers market and other public events

Corporate Actions Taken in 2017	
	Completed a Storm Water Management Plan
	Completed upgrades to Big Eddy water mains
Corporate Actions Proposed for 2018	
	Complete a Water Supply and Transmission Risk Analysis
	Revise the City's Water Conservation Plan
	Complete a Water Conservation plan for the Big Eddy water system
	Complete a hydraulic water model for the City
	Begin a long-term planning study for the sewage treatment facility
	Revise the City's Water Balance

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 	XX XX XX
Other:	

In 2017 has your local government addressed the impacts of a changing climate using any of the following?	
Risk and Vulnerability Assessments	Yes
Risk Reduction Strategies	Yes
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	No
Strategic and financial planning	No
Cross-department working groups	No
OCP policy changes	No
Changes to zoning and other bylaws and regulations	No
Incentives for property owner (e.g. reducing storm water run-off)	No
Public education and awareness	No
Research	No
Mapping	No
Partnerships	No
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.	
	Climate change adaptation has been considered in the Strategic Asset Management Plan, Hazard Risk Vulnerability Assessment and Storm Water Management Plan
Climate Change Adaptation Actions Proposed for 2018	
	Interface wildfire mitigation projects and education

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?	
Indicators of Climate Change for British Columbia, 2016 Plan2Adapt Climate Projections for Metro Vancouver Climate Projections for the Capital Region Climate Projections for the Cowichan Valley Regional District Province of BC's BC Adapts Video Series Preparing for Climate Change: An Implementation Guide for Local Governments The Public Infrastructure and Engineering Vulnerability Committee's (PIEVC) protocol Sea Level Rise Primer BC Regional Adaptation Collaborative Webinars www.ReTooling.ca Water Balance Model The Water Conservation Calculator Funding: National Disaster Mitigation Program (NDMP) Community Emergency Preparedness Fund (CEPF) Municipalities for Climate Innovation Program (MCIP) Climate Adaptation Partner Grants (FCM) Infrastructure Planning Grants (MAH) Federal Gas Tax Fund	Haven't Used Haven't Used Haven't Used Haven't Used Haven't Used Haven't Used Useful Haven't Used Haven't Used Haven't Used Haven't Used Useful Useful Haven't Used Useful Useful Haven't Used Useful Useful
Other:	

2017 OTHER CLIMATE ACTIONS

Other Climate Actions

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

Community-Wide Actions Taken in 2017	
	The City contracted an Environmental Sustainability Coordinator
Community-Wide Actions Proposed for 2018	

Corporate Actions Taken in 2017	
	The City contracted an Environmental Sustainability Coordinator
Corporate Actions Proposed for 2018	
	Continue to contract an Environmental Sustainability Coordinator
	Submit a grant application to FCM Climate Action staff grants program to create a municipal staff position

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
In March 2016, the Food Security Coordinator in conjunction with Revelstoke Community Connections Food Bank began a food recovery program. In two years time the program has redirected 190,000 lbs of food from ending up in the landfill. The food has been distributed to 15 different agencies in Revelstoke including the food bank, women's shelter, group homes and school programs. The food packaging which would have also gone to the landfill was recycled and food that was no longer edible went to local farmers for animal feed or compost.
Corporate Action

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
Columbia Basin Trust Climate Action Program BC Hydro

Adaptation

Programs and Funding
Columbia Basin Trust Climate Action 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:	1031.68
If your local government measured 2017 corporate GHG emissions, please report the number of corporate GHG emissions (in tonnes of carbon dioxide equivalent)	72.11

from <u>contracted</u> services:	
TOTAL A: CORPORATE GHG EMISSIONS FOR 2017	1103.79 tCO2e

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 Completing building energy audits on remaining municipal buildings Evaluating electric vehicles for the City’s vehicle fleet

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	XX
<input type="checkbox"/>	Level 4 - Achievement of Carbon Neutrality	
<input type="checkbox"/>	Not Sure	