

Climate Action Revenue Incentive Program (CARIP)

Public Reporting for 2013



City of Revelstoke

Reported by
Penny Page-Brittin

Environmental Sustainability Coordinator
pbrittin@telus.net

Table of Contents

Introduction..... 3

Community Wide Actions 4

 Measure 4

 Plan 4

 Reduce 4

 Supportive Community Wide Actions 4

 Direct Community Wide Actions 5

 Community-Wide Innovation 5

Corporate Actions 6

 Measure 6

 Plan 6

 Reduce 6

 Supportive Corporate Actions 6

 Direct Corporate Actions 7

 Corporate Innovation 8

Introduction

The Climate Action Revenue Incentive Program (CARIP) is a conditional grant program that provides funding to Climate Action Charter signatories equivalent to one-hundred percent of the carbon tax that they pay directly. The City of Revelstoke signed the Climate Action Charter in the fall of 2008.

To be eligible for the conditional grant, local governments must:

- Sign on to the BC Climate Action Charter, and by doing so commit to take actions and develop strategies to achieve the following three goals:
 1. Being carbon neutral in their corporate operations by 2012.
 2. Measure and report on their community GHG emissions profile.
 3. Create complete, compact, energy efficient rural and urban communities.
- Report publicly on their plan and progress toward meeting their climate action goals.

This report is written to satisfy the last requirement. The report indicates where the City of Revelstoke is with regards to measuring emissions at the corporate and community levels as well as actions taken in 2013 and planned for 2014 to reduce emissions. Actions are divided into supportive and direct actions. Supportive actions refer to activities that provide a framework or foundation for direct actions to be implemented. Direct actions refer to activities that can be directly implemented by the City.

Community Wide Actions

Measure

In 2010 the Community Energy and Emissions Inventory (CEEI), developed by the Province using 2007 data, was refined with the addition of district energy to develop the City of Revelstoke Community Energy and Emissions Plan (CEEP). The City provided input toward the development of the 2010 CEEI and plans to work further with the Province to ensure district energy is included in subsequent CEEIs, creating a valuable tool to measure progress.

Plan

In May 2010 the City adopted a greenhouse gas emissions reduction target, including policies and actions towards meeting this target. Following completion of the Community Energy and Emission Plan (CEEP) and the District Energy Expansion Pre-feasibility Plan (DEEP) in 2011, an amended greenhouse gas emissions reduction target of 8% by 2020 and 15% by 2030 from 2007 baseline emission was adopted into the OCP.

Reduce

Supportive Community Wide Actions	Actions Taken in 2013	Proposed Actions for 2014
Broad Planning	<p><i>A Sustainability Celebration and public open house was held</i></p> <p><i>The Integrated Community Sustainability Plan (ICSP) was completed</i></p> <p><i>Environmental mapping, including habitat types, environmentally sensitive habitat mapping and buildable lands analysis was completed</i></p> <p><i>The adopted Community Energy and Emission Plan (CEEP) was submitted to FCM Partners for Climate Protection and the City received recognition for milestones 1-3 for the community</i></p>	<p><i>Adopt revised environmental mapping into the OCP, including habitat types, environmentally sensitive habitat mapping and buildable lands analysis.</i></p> <p><i>Review the ICSP and move forward with implementation</i></p>
Energy Generation		<p><i>Explore options for expansion of Revelstoke Community Energy Corporation (RCEC)</i></p>
Green Space		<p><i>Explore options through the DCC Bylaw to increase parkland contribution</i></p> <p><i>Develop a Food Security Strategy that Identifies sites within the City that could be suitable and available for community gardens and urban farming</i></p>

Transportation	<i>Bike to Work Week Revelstoke in sponsorship with the City, promoted biking to work</i>	<i>Continue to develop and work on the Master Transportation Plan, including an active transportation section</i> <i>Promote bike to work week activities in June 2014</i> <i>Utilize the anti-idling brochure as an "educational" ticket</i>
Waste	<i>A waste characterization study for the Revelstoke landfill was completed</i> <i>A study to understand the feasibility of implementing household organic composting was completed</i>	<i>Provide input for the development of the next phase of implementation of the Columbia Shuswap Regional District Solid Waste Management Plan</i> <i>Work with Multi Material British Columbia (MMBC) to ensure a smooth transfer of responsibility of recycling collection services for the community</i>
Water/Sewer	<i>A Water Smart Action Plan was developed which builds on the 2007 Water Conservation Strategy</i>	
Other Actions		<i>Update and expand the Environmental Sustainability page on the City website</i>

Direct Community Wide Actions	Actions Taken in 2013	Proposed Actions for 2014
Transportation	<i>An additional resort shuttle bus was added, and improvements were made to the route and schedule to increase ridership and safety</i>	<i>Explore improving pedestrian mobility to Arrow Heights Elementary School.</i> <i>Review transit service to improve ridership and efficiency</i>
Water/Sewer	<i>Water conservation products were distributed at farmers markets including education on how to use them</i> <i>A new large banner promoting Water Conservation was purchased</i>	<i>Improve water conservation education and continue to provide "free" water conservation products at the farmers markets and to utilize the Water Conservation banner</i>

Community-Wide Innovation

The City's resort shuttle bus has been a big success. The resort shuttle was added for the 2008/09 ski season to aid in transporting people to and from Revelstoke Mountain Resort and reduce vehicle travel. In the first year the service saw approximately 15,000 trips with ridership being approximately 85% local residents. Ridership has been steadily increasing and for the 2012/13 ski season reached just over 47,000 trips, with 40% of riders being visitors to the City.

Corporate Actions

Measure

The City has completed and maintains a corporate energy and emissions inventory which meets both the Provincial Climate Action Charter "traditional services" model, including contracted out services, and the Federation of Canadian Municipalities Partners for Climate Protection model. An excel spreadsheet is being used to track energy, emissions and cost related to corporate operations.

Plan

In 2011 a Corporate Energy and Greenhouse Gas Emissions Reduction Strategy was completed including a business-as-usual analysis and a reduction target of 20% below 2007 emissions levels by 2017.

Reduce

Supportive Corporate Actions	Actions Taken in 2013	Proposed Actions for 2014
Broad Planning		<i>Evaluate the recommendation in the 2011 Corporate Energy and Greenhouse Gas Emission Reduction Strategy.</i>
Building and Lighting	<p><i>An energy audit was completed on the Arena and Curling Rink.</i></p> <p><i>An optimization and recommissioning report completed for the pool natorium HVAC system</i></p>	<i>In conjunction with Wood Waste to Rural Heat review the feasibility of using biomass heating at the water treatment plant</i>
Energy Generation		<i>Continue to investigate options for District Energy expansion</i>
Waste		<i>Complete a study evaluating options and feasibility of organic household waste collection</i>
Water/Sewer	<p><i>Completed a Water Metering Feasibility Study</i></p> <p><i>Completed a Water Loss Management Plan</i></p> <p><i>Completed a Source Protection Plan for Greeley Watershed, including a public open house to raise awareness of the watershed as well as potential climate change impacts in the area</i></p>	

Other Actions	<p><i>The Environmental Sustainability Coordinator's contract was renewed for another year</i></p> <p><i>The Director of Engineering received certification to rate infrastructure projects using the Institute for Sustainable Infrastructure Envision rating system</i></p>	<p><i>Update the "Carbon Report", a breakdown of energy and GHG emission by city department, to raise awareness and foster a culture of conservation</i></p>
----------------------	---	--

Direct Corporate Actions	Actions Taken in 2013	Proposed Actions for 2014
Building and Lighting	<p><i>The new Visitor/Information Center was built district energy ready</i></p> <p><i>At the Arena, gas domestic hot water tanks were replaced with district energy supplied holding tanks and a gas furnace was replaced with a high efficient hydronic district energy supplied furnace</i></p> <p><i>A high efficient roof unit was installed at the Fire Hall</i></p> <p><i>T8 florescent fixtures were replaced with LED track lighting at the Museum</i></p> <p><i>At the community centre, heat pumps were replaced with Hi-efficient units, commercial refrigerators were replaced with energy efficient units and a set of doors was installed in the breezeway to prevent heat loss while loading and unloading equipment into the building</i></p> <p><i>Direct digital controls were installed at the Water Treatment Plant reducing propane consumption</i></p>	<p><i>Install digital direct controls for the HVAC systems at City Hall, g Fire Hall, Aquatic Centre, Arena and Court House.</i></p> <p><i>Upgrade lighting to more energy efficient fixtures at the Court House and City Hall</i></p>
Fleet	<p><i>Since 2007 the average age of the vehicle fleet has been reduced from 14.2 year to 8 years</i></p>	
Waste	<p><i>Development of a windrow compost/septage facility in conjunction with the Columbia Shuswap Regional District has initiated</i></p>	<p><i>Complete windrow compost/septage facility</i></p>
Water/Sewer		<p><i>Upgrades to irrigation system at playing fields to increase efficiency</i></p>

		<i>Verify distribution meters to determine more accurate water loss levels as indicated in the Water Loss Management Plan</i>
Greenspace		<i>Continue active management of the urban forest using best practices.</i>

Corporate Innovation

The community/aquatic center, arena and city hall are all connected to biomass district energy resulting in a saving of approximately 550 tCO2 annually. The heat reclamation system installed at the pool in 2011 has resulted in significant energy savings and a reduction of approximately 100 tCO2 annually.

Carbon Neutral Progress Reporting

	TonnesCO2e
Corporate Emissions for 2013	1024 tCO2(e)
Emissions from services delivered directly by the City of Revelstoke	982 tCO2(e)
Emissions from contracted services	42 tCO2(e)

The City of Revelstoke is continuing to work toward being carbon neutral by completing the direct and supportive actions listed in the Corporate and Community sections of this report.