

Climate Action Revenue Incentive (CARIP) Public Report for 2016

Local Government: City of Colwood

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The City of Colwood has completed the 2016 Climate Action Revenue Incentive Program (CARIP) Public Report as required by the Province of BC. The CARIP report summarizes actions taken in 2016 and proposed for 2017 to reduce corporate and community-wide energy consumption and greenhouse gas emissions (GHG) and reports on progress towards achieving carbon neutrality.

2016 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 2016	
	Started to work on an update to the Official Community Plan.
Community-Wide Actions Proposed for 2017	
	Complete the update of the Official Community Plan.

Corporate Actions Proposed for 2017	
	Update the subdivision and development of land bylaw.
	Update the roads development cost charge bylaw.

Broad Planning		
What is (are) your current GHG reduction target(s)?	Per Capita GHG emissions reduction from 2007 levels – 50% by 2020, 75% by 2030 and 93% by 2050. Total GHG emissions reduction from 2007 levels – 33% by 2020, 49% by 2030 and 80% by 2050.	
Has your local government used the Community Energy and Emissions Inventory (CEEI) to measure progress?		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 • Official Community Plan (OCP) 	Yes Yes
Does your local government have a corporate GHG reduction plan?		Yes
Does your local government have a climate reserve fund or something similar?		Yes

2016 BUILDINGS 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.

Corporate Actions Taken in 2016	
	Replaced 157 high pressure sodium street lights with LED street lights on city streets and along a park trail.
	Refurbished two pergolas from the provincial government for use in a park.
Corporate Actions Proposed for 2017	
	Continue with program to replace high pressure sodium street lights with LED street lights on city streets.
	Start to replace compact fluorescent tube lights with LED's in City Hall.

2016 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.

Energy Generation	
Is your local government operating: <ul style="list-style-type: none"> A renewable energy system 	Yes
Are you aware of the Integrated Resource Recovery guidance page on the BC Climate Action Toolkit ?	Yes

2016 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.

Corporate Actions Taken in 2016	
	Planted trees and shrubs in the riparian area of Colwood Creek Park.
Corporate Actions Proposed for 2017	
	Landscape a storm water depression in Colwood Creek Park.

2016 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 2016	
	Held twice monthly branch drop off service for residents at the Public Works yard.
	Allowed tree service companies to dispose of chipped branches in our Public Works yard for use as mulch by our Parks group and the public.
	Held a spring cleanup for residents to dispose of large waste loads in Colwood closer to their homes than the landfill. Sorted the waste to divert as much of it as possible from the landfill.
Community-Wide Actions Proposed for 2017	
	Continue with branch drop off services.
	Hold a spring cleanup for residents.

Corporate Actions Taken in 2016	
	Continued using three digesters located beside City Hall for staff food wastes.
Corporate Actions Proposed for 2017	
	Continue using three digesters located beside City Hall for staff food wastes.

2016 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 2016	
	Worked with BC Transit to improve bus service with new bus shelters and stops.
Community-Wide Actions Proposed for 2017	
	Replace two electric vehicle charging stations that are not working.
	Continue working with BC Transit on bus servicing improvements.

Corporate Actions Taken in 2016	
	Constructed a multi-use path through an undeveloped area between a new residential area with a secondary school and an older residential area with an elementary and middle school.
Corporate Actions Proposed for 2017	
	Replace three older vehicles with electric vehicles and add a new electric vehicle to our fleet.
	On Metchosin Road, add approximately 1,200m of buffered bicycles lanes, a 400m sidewalk and a pedestrian activated crosswalk.
	Add a pedestrian activated crosswalk on Veterans Memorial Parkway at Havenwood Park and install a pedestrian bridge on a trail in Havenwood Park.
	Improve the traffic signals at Metchosin Road and Wishart Road for safer pedestrian and cyclist crossings.

Transportation	
Does your local government have policies, plans or programs to support:	
• Walking	Yes
• Cycling	Yes
• Transit Use	Yes
• Electric Vehicle Use	Yes

2016 CLIMATE CHANGE ADAPTATION ACTIONS

Climate Change Adaptation Actions

For local governments, adaptation to a changing climate can take the form of changes in policy, management, technology and behaviour that minimize negative impacts or exploit opportunities. It can involve both “hard” and “soft” solutions, including: changes in infrastructure engineering, planning, zoning, bylaws, and public education.

In 2016 did you consider climate change impacts in any of the following areas? (check if yes)	
Risk reduction strategies	Yes
Risk and Vulnerability assessment	Yes
Asset management	Yes
Infrastructure upgrades (e.g. stormwater system upgrades)	Yes
Ecosystem-based approaches (incl. shorelines)	Yes
Research (e.g. mapping, participation in studies)	Yes

2016 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.

Corporate Actions Taken in 2016	
	Prepared a protection plan for the Ocean Boulevard wastewater pump station which is close to the coast. Raised a protective lock block wall with rip rap beside it and made water proofing improvements to the pump station to protect it from storms and sea level rise.
Corporate Actions Proposed for 2017	
	Complete a study on options to relocate the Ocean Boulevard wastewater pump station to locations where it would not be affected by sea level rise before the year 2200.

INNOVATION AND PEER-TO-PEER LEARNING

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.

Programs and Funding
Gas Tax BC Transit

2016 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 survey, please ensure that you are familiar with guidance available on the B.C. Climate Action Toolkit website, especially *Becoming Carbon Neutral: A Guide for Local Governments in British Columbia*.

Reporting Emissions

Did you measure your local government's corporate GHG emissions in 2016?	Yes
If your local government measured 2016 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:	280
If your local government measured 2016 corporate GHG emissions, please report the number of corporate GHG emissions (in tonnes of carbon dioxide equivalent) from <u>contracted</u> services:	185
TOTAL A: CORPORATE GHG EMISSIONS FOR 2016	465 tCO₂e

Reporting Reductions and Offsets

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

- undertake GCC-supported Option 1 Projects
- undertake GCC-supported Option 2 Projects (community GHG emissions reduction projects that meet project eligibility requirements)
- purchase carbon offsets from a credible offset provider

If applicable, please report the 2016 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	149
Low Emission Vehicles	
Avoided Forest Conversion	
TOTAL B: REDUCTIONS FROM OPTION 1 PROJECTS FOR 2016	149 tCO₂e

TOTAL REDUCTIONS AND OFFSETS FOR 2016 (Total B+C+D) = 149 tCO₂e

Corporate GHG Emissions Balance for 2016

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 2016 = (A – (B+C+D)) = 316 tCO₂e

If your Corporate GHG Emissions Balance is negative or zero,

**your local government is carbon neutral.
CONGRATULATIONS!**

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.

This year a new recognition level has been added – **Level 3: Accelerating Progress on Charter Commitments**–. 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 the Community Energy and Emissions Inventory (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 (ie: 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: LED Street Light Retrofits
In 2016, Colwood retrofitted 157 street lights, approximately 25%, of our ornamental high pressure sodium (HPS) street lights, with LED's.

Based on your local government's 2016 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	X
<input type="checkbox"/>	Level 4 - Achievement of Carbon Neutrality	
<input type="checkbox"/>	Not Sure	