

Climate Action Revenue Incentive (CARIP) Public Report for 2016



Local Government: Town of Comox

Report Submitted by:

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The [insert Local Government here] 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	
	Primary area of reduction in community GHG production through our Official Community Plan is projected to be through transit oriented development policies of the OCP. The resulting more compact development pattern in association with pedestrian and cycling infrastructure improvements also reduces GHG production.
	The Town continues to require energy efficient construction standards through the rezoning process.
	The Town has also enacted a Downtown Revitalization incentive program that requires energy efficient construction to qualify for full incentives.
Community-Wide Actions Proposed for 2017	
	As in prior years, our targets for community wide reductions from the OCP remain, along with requirements for rezoning and Downtown Revitalization incentives – at least until Dec 31 st .

Corporate Actions Taken in 2016	
Corporate Actions Proposed for 2017	

Broad Planning	
What is (are) your current GHG reduction target(s)?	2011 OCP Bylaw (section 2.3.11) identifies a 28% reduction (from 4.99 to 3.60 tCO ₂ e per person) over a 20 year time frame in comparison to the previous OCP.
Has your local government used the Community Energy and Emissions Inventory (CEEI) to measure progress?	No
What plans, policies or guidelines govern the implementation of climate mitigation in your community?	
• Community Energy and Emissions (CEE) Plan	No
• Climate Action Plan	No
• Integrated Community Sustainability Plan	No
• Official Community Plan (OCP)	Yes
• Regional Growth Strategy (RGS)	Yes
• Other:	No
Does your local government have a corporate GHG reduction plan?	No
Does your local government have a climate reserve fund or something similar?	No

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.

Community-Wide Actions Taken in 2016	
Community-Wide Actions Proposed for 2017	

Corporate Actions Taken in 2016	
	New Marina buildings built in 2016 are heated by electricity instead of natural gas, reducing GHG impact of buildings. They were also built to current energy efficiency standards to minimize utility consumption.
	We also installed our first LED streetlight in 2016.
Corporate Actions Proposed for 2017	
	The Town will consider the BC Hydro program for updating streetlights with energy efficient LED fixtures and evaluate the performance of the streetlight installed in 2016.

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.

Community-Wide Actions Taken in 2016	
Community-Wide Actions Proposed for 2017	

Corporate Actions Taken in 2016	
Corporate Actions Proposed for 2017	

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 	No 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

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.

Community-Wide Actions Taken in 2016	
	Two instances of bylaw protection undertaken in response to unauthorized tree cutting.
Community-Wide Actions Proposed for 2017	
	Review of Tree Protection bylaw on Planning department 2017 work plan.

Corporate Actions Taken in 2016	
Corporate Actions Proposed for 2017	

Greenspace	
Does your local government have urban forest policies, plans or programs?	Yes

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	
	We continue to participate in a pilot project to collect & compost (gore cover aerated) organics, and continue to encourage the Regional District to expand that program here in the Comox Valley.
Community-Wide Actions Proposed for 2017	
	We will continue with the organics pilot and with our lobbying of the Regional District.

Corporate Actions Taken in 2016	
	We have repeatedly requested that MMBC assume its legal responsibility for residential recycling collection in Comox.
Corporate Actions Proposed for 2017	
	We will continue to request that MMBC assume responsibility for residential recycling collection in the Town.

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?	Yes

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	
	We continue to work with the Regional District to implement its Transit Future Plan with the goal of increasing ridership in public transit.
	We widened a section of Robb Avenue (for bicycles) and added a sidewalk.
	We built a multi-use pathway on a portion of Lazo Road.
Community-Wide Actions Proposed for 2017	
	We will continue to work with the Regional District to implement its Transit Future Plan.
	We will widen another section of Robb Avenue (for bicycles).

Corporate Actions Taken in 2016	
Corporate Actions Proposed for 2017	

Transportation	
Does your local government have policies, plans or programs to support:	
• Walking	No
• Cycling	No
• Transit Use	No
• Electric Vehicle Use	No
• Other (please specify)	No
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 have policies, plans or programs to support local food production (thus reducing transportation emissions)?	No

2016 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 2016	
	In 2016 we installed 180 new residential water meters (3% of our customers) many in response to suspected leaks.
	We continued our program of reading meters monthly and contacting high use customers who may have leaks.
Community-Wide Actions Proposed for 2017	
	We will continue to install residential meters and follow up with high use customers to find and fix leaks.

Corporate Actions Taken in 2016	
	In 2016 the Fire Dept installed a water recapture and reuse system to recycle the water used during fire training. This is expected to save up to 100,000 gallons of water annually.
Corporate Actions Proposed for 2017	
	New leak detection equipment will be purchased by Public Works.
	Billing threshold for high residential use will be reduced from 600 m3 to 500 m3 per customer.
Water Conservation	
Does your local government have water conservation policies, plans or programs?	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.

Climate Change Adaptation Actions Taken in 2016	
	In 2016 we constructed foreshore improvements (to current best standards) for the protection of a portion of Lazo Road from erosion.
Climate Change Adaptation Actions Proposed for 2017	
	In 2017 we plan to replant native vegetation along the Lazo foreshore works.

Resources you have used to support climate change adaptation (e.g. Plan2Adapt , Preparing for Climate Change: Implementation Guide)	

In 2016 did you consider climate change impacts in any of the following areas? (check if yes)	
Risk reduction strategies	
Risk and Vulnerability assessment	
Asset management	Yes
Infrastructure upgrades (e.g. stormwater system upgrades)	Yes
Cross-department working groups	
Emergency response planning	Yes
Land-use policy changes (eg. OCP, DPA)	
Economic diversification initiatives	
Ecosystem-based approaches (incl. shorelines)	Yes
Incentives (e.g. property owner reducing stormwater run-off)	Yes
Public education and awareness	
Research (e.g. mapping, participation in studies)	
Other (Please Identify):	

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.

Community-Wide Actions Taken in 2016	
Community-Wide Actions Proposed for 2017	

Corporate Actions Taken in 2016	
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 or climate change adaptation activity that your local government has undertaken and that has had or has the potential to have a significant impact. 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.

Community-Wide Innovative Action
Corporate Innovative 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.

Programs and Funding
Emergency Management BC Flood Protection Program – for Lazo Rd foreshore protection project Ministry of Transportation & Infrastructure BikeBC Program – for Lazo multi-use pathway construction Community Works Funds (Federal Gas Tax transfers through UBCM) for bike lanes, paths & sidewalks

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:	312.76
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:	250.70
TOTAL A: CORPORATE GHG EMISSIONS FOR 2016	563.46 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	
175 t of kitchen scraps & 1,544 t of yard waste composted (calculation net of 75% landfill gas recapture standard)	53.7
Low Emission Vehicles	
1,350 km on electric vehicle	0.46
Avoided Forest Conversion	
TOTAL B: REDUCTIONS FROM OPTION 1 PROJECTS FOR 2016	54.16 tCO₂e

If applicable, please report the names and 2016 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 2016	0 tCO₂e

If applicable, please report the number of offsets purchased (in tonnes of carbon dioxide equivalent (tCO₂e)) from an offset provider for the 2016 reporting year:

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

OFFSET PROVIDER NAME	OFFSETS
3Degrees Group Inc	509.3 tCO ₂ e
TOTAL D: OFFSETS PURCHASED FOR 2016	509.3 tCO₂e

TOTAL REDUCTIONS AND OFFSETS FOR 2016 (Total B+C+D) = 563.46 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)) = 0 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:

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 type="checkbox"/>	Level 3 – Accelerating Progress on Charter Commitments	
<input type="checkbox"/>	Level 4 - Achievement of Carbon Neutrality	YES
<input type="checkbox"/>	Not Sure	

