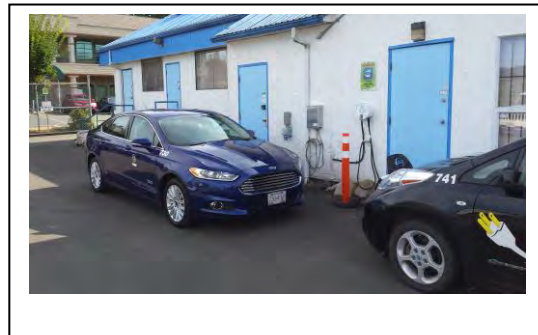


# Climate Action Revenue Incentive (CARIP) Public Report for 2015

**Local Government:**  
**Comox Valley Regional District**

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The Comox Valley Regional District has completed the 2015 Climate Action Revenue Incentive Program (CARIP) Public Report as required by the Province of BC. The CARIP report summarizes actions taken in 2015 and proposed for 2016 to reduce corporate and community-wide energy consumption and greenhouse gas emissions (GHG) and reports on progress towards achieving carbon neutrality. There is also an opportunity to report on climate adaptation actions.

## 2015 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 2015	
	Initiated local area planning process for Saratoga Beach settlement node
	Completed the CVRD Electoral Areas Community Climate Action Plan
Community-Wide Actions Proposed for 2016	
	Completion of Saratoga Beach settlement node local area plan
	Initiate local area plan for Union Bay settlement node
	Implementation of priority actions in community climate action plan

Corporate Actions Taken in 2015	
	Continued implementation of Corporate Energy Plan, including energy retrofit project development
	Corporate carbon neutral commitment – purchasing credits to offset emissions
Corporate Actions Proposed for 2016	
	Implement energy retrofit project at Comox Valley sports centre
	Adopt an updated GHG emissions reduction target

Snapshot Questions	
What GHG reduction targets are included in your local government's Official Community Plan or Regional Growth Strategy?	<b>50% by 2030</b>
Are you familiar with the Community Energy and Emission Inventory (CEEI)?	<b>Yes</b>

Does your local government use the Community Energy and Emissions Inventory (CEEI) to measure progress?	Yes
Which of the following does your local government use to guide climate action implementation?	
• Community Energy and Emissions (CEE) Plan	Yes
• Climate Action Plan	Yes
• Integrated Community Sustainability Plan	Yes
• Official Community Plan (OCP)	Yes
• Regional Growth Strategy (RGS)	Yes
• Other:	No
Does your local government have a climate action reserve fund?	No
Does your local government have a Corporate Climate Action Plan?	Yes

## 2015 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 2015	
	Implemented an oil to heat pump top-up incentive for rural CVRD residents
	Installed solar lighting in rural bus shelters
	Added wind turbine technology on a solar-powered streetlight
	Conversion of one streetlight service area to LED technology
Community-Wide Actions Proposed for 2016	
	Pilot incentive program for wood stove to heat pump conversions
	Monitor the development of a BC-wide “stretch” code and feasibility of local implementation
	Update building bylaw to address climate change adaptation

Corporate Actions Taken in 2015	
	Project development and funding agreements for ice plant heat recovery project at Comox Valley sports centre
	Updates to curling rink facility, including energy efficiency improvements
	Furthered design of new fire hall on Hornby Island to “Passive House” standard

<b>Corporate Actions Proposed for 2016</b>	
	Implement ice plant heat recovery project at Comox Valley sports centre
	Construction of new Hornby Island fire hall

## 2015 ENERGY GENERATION ACTIONS

### Energy Generation

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.

<b>Community-Wide Actions Taken in 2015</b>	
	Worked with Hornby Island group to initiate a solar PV demonstration project
	Completed a pre-feasibility study examining the potential for increased local biodiesel availability
<b>Community-Wide Actions Proposed for 2016</b>	
	Provide implementation support to Hornby Island solar PV demonstration project
	Continue biodiesel study work, including stakeholder workshop, site identification & preliminary facility design

<b>Corporate Actions Taken in 2015</b>	
	Continue tracking and reporting on energy generation data from four CVRD solar PV installations

<b>Corporate Actions Proposed for 2016</b>	
	Continue tracking and reporting on energy generation data from four CVRD solar PV installations
	Integrated office building design to include considerations for renewable energy generation
	Monitor upcoming opportunities for implementation of Integrated Resource Recovery study

<b>Snapshot Questions</b>	
Is your local government developing, or constructing a district energy project?	<b>No</b>
Is your local government operating a district energy system?	<b>No</b>
Is your local government developing or constructing a renewable energy project?	<b>No</b>
Is your local government operating a renewable energy project?	<b>Yes</b>
Are you aware of the Integrated Resource Recovery guidance page on the BC Climate Action Toolkit (insert link here)?	<b>Yes</b>

## 2015 GREENSPACE/ NATURAL RESOURCE PROTECTION 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.

<b>Community-Wide Actions Taken in 2015</b>	
	Upgrade Royston Marine Drive park
	One Spot Trail Extension
	Masters Park Bridge upgrades
<b>Community-Wide Actions Proposed for 2016</b>	
	Pinecrest Bike Facility
	Driftwood Marine Park development

<b>Corporate Actions Taken in 2015</b>	

<b>Corporate Actions Proposed for 2016</b>	

<b>Snapshot Question</b>	
Does your local government have urban forest policies, plans or programs?	<b>No</b>

**2015 SOLID WASTE ACTIONS**

**Solid Waste**

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.

<b>Community-Wide Actions Taken in 2015</b>	
	Commenced construction on phase 1 closure of existing landfill at Comox Valley waste management centre, including installation of a landfill gas collection system.
	Commenced design work for first phase of new landfill cell at Comox Valley waste management centre
	Enhancement of recycling options at various facilities through participation in Multi-Material BC packaging and printed paper recycling program
<b>Community-Wide Actions Proposed for 2016</b>	
	Commence construction on first phase of new landfill cell at Comox Valley waste management centre
	Submission of funding application for regional compost facility
	Illegal dumping program and bylaw development
	Re-instate a diversion program for drywall
	Award a contract for the design build of a leachate treatment facility at the Comox Valley waste management centre

<b>Corporate Actions Taken in 2015</b>	
	Staff participation in "Pitch-In Canada" clean-up day

<b>Corporate Actions Proposed for 2016</b>	
	Staff participation in "Pitch-In Canada" clean-up day
	Implementation of enhanced office recycling program

<b>Snapshot Questions</b>	
Does your local government have construction and demolition waste reduction policies, plans or programs?	<b>Yes</b>
Does your local government have organics reduction/diversion policies, plans or programs?	<b>Yes</b>

## 2015 TRANSPORTATION ACTIONS

### Transportation

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.

<b>Community -Wide Actions Taken in 2015</b>	
	Initiated bus stop installation along rural bus routes to phase out "flagging" system and improve accessibility of transit service to rural residents
	Implementation of "#In2Transit" marketing plan to promote public transit use
	Launched commuter-focused "C2C Express" bus route between Courtenay and Comox
	Completed independent service analysis of Comox Valley Transit system
	Improved transit schedule and routing on #2 Cumberland and #12 North Valley Connector routes
<b>Community-Wide Actions Proposed for 2016</b>	
	Complete preliminary design work for high priority cycling network connections and pursue grant funding opportunities for construction
	Stakeholder engagement for potential seaside path development along Comox Road
	Service planning for transit improvements
	Continue "#In2Transit" campaign to promote public transit use

<b>Corporate Actions Taken in 2015</b>	
	Participation in "Bike to Work" week.
	Promotion of car-pooling options

	Purchase of a plug-in hybrid vehicle for shared fleet
	Promotion of shared fleet electric bike for short trips
	Fleet tracking pilot project
<b>Corporate Actions Proposed for 2016</b>	
	Continued participation in "Bike to Work" week. Promotion of car-pooling options
	Analysis of fleet tracking pilot project & determination of next steps

<b>Snapshot Questions</b>	
Does your local government have policies, plans or programs to support:	
• Walking	<b>Yes</b>
• Cycling	<b>Yes</b>
• Transit Use	<b>Yes</b>
• Electric Vehicle Use	<b>Yes</b>
• Other	
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)?	<b>No</b>
Does your local government have policies, plans or programs to support local food production (thus reducing transportation emissions)?	<b>Yes</b>

## 2015 WATER AND WASTEWATER ACTIONS

### Water and Wastewater

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.

<b>Community-Wide Actions Taken in 2015</b>	
	Provided rebates for low flush toilets/smart irrigation control to reduce water consumption
	Development of a watershed protection plan
	Implement water restrictions and promotion of water efficiency practices
	Initiated a review of water treatment options
	Continued liquid waste planning process for south region
<b>Community-Wide Actions Proposed for 2016</b>	
	Will continue to provide rebates for low flush toilets/smart irrigation control to reduce water consumption
	Amend water consumption bylaw to include a Stage 4 for severe drought conditions



	Conduct referendum to initiate service areas for south sewer collection and treatment
	Expansion of existing biosolids compost facility

Corporate Actions Taken in 2015	
Corporate Actions Proposed for 2016	

Snapshot Questions	
Does your local government have water conservation policies, plans or programs?	Yes

## 2015 CLIMATE CHANGE ADAPTATION ACTIONS

### Climate Change Adaptation

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.

Community-Wide Actions Taken in 2015	
	In recognition of the World Oceans Day, hosted a movie night, “Shored Up,” a movie on sea level rise and climate change
	Implemented water restrictions and metering
	Salt marsh shoreline protection project led by Project Watershed with funding from the CVRD
Community-Wide Actions Proposed for 2016	
	Assess coastline to identify priority areas requiring further policy and development guidelines
	Complete a coastal flood risk assessment and adopt development permit area for coastal protection

	Encourage use of rain barrels, rain gardens, bioswales and maintaining trees and vegetation on properties

<b>Corporate Actions Taken in 2015</b>	
	Participation in multiple climate change adaptation focused webinars
<b>Corporate Actions Proposed for 2016</b>	
	An elected official forum and local government staff seminar with Associated Engineering on best practices
	Implement water balance model
	Review existing CVRD floodplain regulations in light of climate change projections and update floodplain mapping and construction requirements; amend flood proofing policies
	Work with CVRD municipalities under CAVI (Convening Action for Vancouver Island) umbrella to better manage our watersheds, including working towards region-wide watershed management strategy

<b>Snapshot Questions</b>	
Are you aware of the Plan2Adapt guidance page on the <a href="#">BC Climate Action Toolkit</a> ?	<b>Yes</b>
Are you aware of the <i>Preparing for Climate Change, An Implementation Guide for Local Governments in BC</i> on the <a href="#">BC Climate Action Toolkit</a> ?	<b>Yes</b>
Have you visited the climate change adaptation guidance page on the <a href="#">BC Climate Action Toolkit</a> ?	<b>Yes</b>

## 2015 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.

<b>Community-Wide Actions Taken in 2015</b>	



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 appropriate box below.

Programs and Funding

## 2015 CARBON NEUTRAL REPORTING

### Reporting Emissions

Did you measure your local government's corporate GHG emissions in 2015? (Yes/No)	Yes
If your local government measured 2015 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:	1671
If your local government measured 2015 corporate GHG emissions, please report the number of corporate GHG emissions (in tonnes of carbon dioxide equivalent) from <u>contracted</u> services:	121
<b>TOTAL A: CORPORATE GHG EMISSIONS FOR 2015</b>	<b>1792 tCO2e</b>

### 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 Option 1 Projects (GCC-supported)
- undertake Option 2 Projects (alternative) community GHG emissions reduction projects that meet project eligibility requirements

- purchase carbon offsets from a credible offset provider

If applicable, please report the 2015 GHG emissions reductions (in tonnes of carbon dioxide equivalent (tCO<sub>2</sub>e)) 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	
<b>TOTAL B: REDUCTIONS FROM OPTION 1 PROJECTS FOR 2015</b>	<b>tCO<sub>2</sub>e</b>

If applicable, please report the names and 2015 GHG emissions reductions (in tonnes of carbon dioxide equivalent (tCO<sub>2</sub>e)) being claimed from Option 2 GHG Reduction Projects:

OPTION 2 PROJECT NAME	REDUCTIONS
<b>TOTAL C: REDUCTIONS FROM OPTION 2 PROJECTS FOR 2015</b>	<b>tCO<sub>2</sub>e</b>

If applicable, please report the number of offsets purchased (in tonnes of carbon dioxide equivalent (tCO<sub>2</sub>e)) from an offset provider for the 2015 reporting year:

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

OFFSET PROVIDER	REDUCTIONS
3Degrees	1792
<b>TOTAL D: OFFSETS PURCHASED FOR 2015</b>	<b>1792 tCO<sub>2</sub>e</b>

**TOTAL REDUCTION AND OFFSETS FOR 2015 (Total B+C+D) = 1792 tCO<sub>2</sub>e**

### **Corporate GHG Emissions Balance for 2015**

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 2015 = (A – (B+C+D)) = 0 tCO<sub>2</sub>e**

**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. Recognition is provided on an annual basis to local governments who demonstrate progress on their Charter commitments, according to the following:

**Level 1 - Progress on Charter Commitments:** for local governments who demonstrate progress on fulfilling one or more of their Charter commitments

**Level 2 - Measurement:** for local governments 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 - Achievement of Carbon Neutrality:** for local governments who achieve carbon neutrality in the reporting year.

**Based on your local government's 2014 CARIP Public Report, please check the GCC Climate Action Recognition Program level that best applies:**

<input type="checkbox"/>	Level 1 - Progress on Charter Commitments	
<input type="checkbox"/>	Level 2 - Measurement	
<input checked="" type="checkbox"/>	Level 3 - Achievement of Carbon Neutrality	<b>X</b>
<input type="checkbox"/>	Not Sure	