

Climate Action Revenue Incentive (CARIP) Public Report for 2017





Climate Action Revenue Incentive (CARIP) Public Report for 2017

Local Government: District of Squamish

Report Submitted by: Name: Katherine Brandon Role: Sustainability Coordinator Email: kbrandon@squamish.ca

Phone: 604.815.5004

Date: May 29, 2018



The District of Squamish 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.

Climate Action Revenue incentive (CARIP) Report for 2017

Table of Contents

Broad Action Planning	3
Building and Lighting Actions	5
Energy Generation Action	6
Greenspace and Natural Resource Protection Actions	7
Solid Waste Actions	8
Transportation Actions	9
Water and Wastewater Actions	11
Climate Change Adaptions	12
Innovation and Peer-to-Peer Learning	14
Carbon Neutral Reporting	15
Climate Action Recognition Program	18

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

Squamish 2040 Official Community Plan update (bylaw received third reading) – the District's highest level community plan reaffirmed GHG emissions reduction targets, refined Smart Growth as well as alternative transportation policies for climate change mitigation. Specific directives focus on encouraging compact land use patterns that support complete neighbourhoods, infill development, providing a diversity of transportation options, and a greater mix of land uses. Emphasis is placed on active transportation and public transit as an essential part of the District transportation and land use network.

The OCP update was also supported by background analyses involving local, regional and subject matter experts and led to the creation of the Adapting to Climate Change in Squamish: backgrounder report, which identified the top near-term and long-term impact priorities for the District to address through proactive planning.

Creation of new Development Permit Area 3 (Universal Guidelines) as part of updated OCP, including designation to establish objectives to promote reduction of GHG emissions (building design guidelines for greater energy efficiency).

Completion of phase 1 for the Community Carbon Marketplace. Projects within the community were identified as prospects for the marketplace.

The Community Carbon Market Place progressed into its second phase where suitable projects were identified as candidates for the community Carbon Marketplace. The District of Squamish will become carbon neutral and foster carbon reduction within the local economy but also allow opportunity for external buyers to purchase offsets within the marketplace.

Community-Wide Actions Proposed for 2018

Integrated planning for higher-density neighbourhood sub-areas and employment areas to ensure they are easily accessed by active transportation and transit networks.

Continued expansion of the Community Carbon Marketplace and working with the Economic Development department to foster the opportunity to new and old businesses in town.

Coi	Corporate Actions Taken in 2017		
	Squamish 2040 Official Community Plan update embedded new policies and directives for corporate		
	carbon neutrality. The plan sets out objectives to demonstrate municipal leadership and minimize		
	GHGe from District operations, and to achieve and maintain corporate carbon neutrality.		
	The District continued work on creation of its locally planned and managed carbon credit/trading		
	marketplace within the District that enables the purchase of offsets that support tangible local		
	projects.		
	The Community Carbon Market Place progressed into its second phase where suitable projects		
	were identified as candidate for the community Carbon Marketplace. The District of Squamish will		
	become carbon neutral and foster carbon reduction within the local economy but also allow		
	opportunity for external buyers to purchase offsets within the market place.		
Coi	rporate Actions Proposed for 2018		
	Continue to identify policies and practices to reduce GHG emissions and work towards carbon		
	neutrality.		
	Ongoing planning for improved energy efficiency of existing and new municipal facilities, as well as		
	reducing emissions associated with the municipal fleet.		
	Work with the District's updated purchasing policy to understand and evaluate the life cycle costs		
	and carbon implications of both large capital expenditures and ongoing purchases.		

Broad Planning		
The District of Squamish plans to achieve and maintain corporate carbon neutrality. As a signatory to the BC Climate Action Charter, the District of Squamish is working to reduce energy use and greenhouse gas emissions within its municipal operations.		arter, the
Are you familiar with your commor another inventory)?	Are you familiar with your community's community energy and emissions inventory (e.g. CEEI or another inventory)?	
What plans, policies or guidelines	govern the implementation of climate mitigation in your	
community?		
• Commu	nity Energy and Emissions (CEEP) Plan	Yes/ No
• Commu	nity- Wide Climate Action Plan	Yes/ No
 Integrate 	ed Community Sustainability Plan	Yes/ No
Official (Community Plan (OCP)	Yes/No
 Regiona 	Growth Strategy (RGS)	Yes/ <u>No</u>
	ave a plan	Yes/ <u>No</u>
• Other:	•	Yes/ <u>No</u>
Does your local government have	a corporate GHG reduction plan?	Yes/No

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 streetlights and lights in parks or other public spaces.

Community-Wide Actions Taken in 2017

The Squamish building community is already preparing for new Step Code by taking courses and many builders already using new practices.

Community-Wide Actions Proposed for 2018

Continued effort from the building community to prepare for new Step Code by taking courses and implementing new practices.

Corporate Actions Taken in 2017

Preparation for adoption of new step code, education and learning opportunities for employees.

The District has created a priority projects policy this year that prioritizes faster processing of projects (One of the criteria is projects that are meeting a Step 4 or higher in the building code.

Installed a UV light system on all 3 pools at the Brennan Park Aquatic Centre as a secondary disinfection system. Here are some exciting facts for that project:

- The installation allowed us to change previous procedures which saved the District approx. 450,000 L of water a year.
- This water savings will in turn save approx. 7 metric tons of GHG emissions per year by not having to heat that water.
- We also save on the purchase and delivery of 1,500 litres of chlorine as less will be needed.

The new laser levelling system on our new electric ice resurface allows automatic adjustment of the shaving blade to keep the ice at a uniform thickness of 3.8cm. This allows:

- The ice to freeze quicker which reduces demand on the compressors this could save as much as .3 tonnes of GHG per year.
- Replaced the worn and torn insulation on the piping for the steam room at the pool. This will undoubtedly reduce the heat lost through the pipes.

Corporate Actions Proposed for 2018

At the Waste Water Treatment Plant approximately 20 exterior HID wall packs will be replaced with LED fixtures.

Staff will hire a consultant to put together a plan to upgrade the gas fired boilers at the RCMP station as well as upgrade the heating and ventilation system. The boilers are currently oversized and inefficient so there will be future savings in GHG emissions.

Green building actions to encourage, incentivize and mandate energy efficiency practices in the design, construction, retrofitting and renovation of building (amending the Zoning Bylaw to encourage energy efficient building construction for multi-family and commercial development through density bonuses for energy efficient construction; also progressing through the BC Energy

_			
		Step Code to reach net zero energy ready buildings by 2032).	
		Continue to seek opportunities within existing infrastructure to reduce energy use and create	
		efficiencies when possible.	
		Continue to look for lighting upgrade and control opportunities.	

Building and Lighting	
The Province has committed to taking incremental steps to increase energy-efficiency re	equirements in
the BC Building Code to make buildings net-zero energy ready by 2032. The BC Energy S	Step Codea part
of the BC Building Codesupports that effort	
Is your local government aware of the BC Energy Step Cost?	<u>Yes</u> /No
Is your local government implementing the BC Energy Step Code?	Yes/No

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.

Со	ommunity-Wide Actions Proposed for 2018
	Continually seeking opportunity for new generating projects.

Energy Generation	
Is your local government developing, or constructing:	
A district energy system	Yes/ <u>No</u>
A renewable energy system	Yes/ <u>No</u>
Is your local government operating:	
A district energy system	Yes/ <u>No</u>
A renewable energy system	Yes/ <u>No</u>
Is your local government connected to a district energy system that is operated by another energy provider?	Yes/ <u>No</u>
Are you aware of the Integrated Resource Recovery guidance page on the BC Climate Action Toolkit?	<u>Yes</u> /No
Are you familiar with the 2017 "List of Funding Opportunities for Clean Energy Projects Led by First Nations and Local Governments?"	<u>Yes</u> /No

2017 GREENSPACE/NATURAL RESOURCE PROTECTION

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.

Co	Community-Wide Actions Taken in 2017		
	The "River Estuary Education Program" was delivered by the Squamish River Watershed Society and continued into another successful season which included attendance by local students throughout Squamish.		
	Squamish Climate Action Network (CAN) has continued success with community participation and operates three community gardens, two in the heart of downtown (corner of Cleveland Ave. & Main St., and corner of 2nd Ave & Main St.), and one in the Garibaldi Highlands (corner of Hwy 99 and Mamquam Rd.)		
	SHIM (Sensitive Habitat Inventory and Mapping) was completed.		
Co	mmunity-Wide Actions Proposed for 2018		
	Completed SHIM mapping to be unrolled and potentially integrated into GIS.		
	The real-estate strategy will support and seek grant opportunities to support the protection of greenspaces.		
	The updated Official Community Plan has designated increased District Green Space and allocated sensitive areas to reduce development of sensitive habitats and to maintain green spaces within the community.		
	The District has updated it's real-estate strategy The District anticipates a significant amount of land acquisitions (purchases and rights-of-way) to support important community needs including: • Environmental – greenspaces, environmentally sensitive areas, stormwater retention.		

Cor	Corporate Actions Taken in 2017	
	Continued development of a trees and soils bylaw.	
	Continued development of an invasive species bylaw.	
Cor	Corporate Actions Proposed for 2018	
	Redefining of ditch mapping, which will be used for operational protocols.	
	A trees and soils bylaw will be completed.	
	An invasive species bylaw to be completed.	

Greenspace	
Does your local government have urban forest policies, plans or programs?	Yes/No
Does your local government have policies, plans or programs to support local food production?	Yes/No

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

Other Climate Action Network include:

- Reuse it fair: annual event to off load or gain items instead of throwing items away and other buying new items.
- Repair café: Opportunity for public to have items required to prevent disposal of items.

Community-Wide Actions Proposed for 2018

Continued commitment to community events from the Climate Action Network:

- Reuse it fair: annual event to off load or gain items instead of throwing items away and other buying new items.
- Repair café: Opportunity for public to have items required to prevent disposal of items.

Rebuild it Center seeking new location to expand their operation.

Corporate Actions Taken in 2017 Continued construction of vertical Expansion of Landfill, efficient use of land, preserve natural areas, limit footprint of landfill. Purchased and installed source separation waste bins (garbage, recycling and compost) for the 3 public works lunchrooms and provided education to staff.

Solid Waste Bylaw passed by council for business, institutions, commercial and multifamily homes to increase waste diversion within the community.

Corporate Actions Proposed for 2018

Landfill Gas Capture and Flare budget approved to work towards development of system.

Transition to Recycle BC, by joining and working with this organization District of Squamish can utilize Recycle BC's marketing, communication tools and materials to increase public outreach and diversion of waste.

Diversion audits will be conducted and marked on a smart device through the ESRI collector application by District Staff. The audit information will be uploaded into GIS to identify areas where increased education and awareness could be implemented.

Solid Waste	
Does your local government have construction and demolition waste reduction policies, plans	Yes/No
or programs?	
Does your local government have organics reduction/diversion policies, plans or programs?	Yes/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 infrastructure projects to improve active transportation infrastructure (annual budget of	
	\$700K) – e.g. bike lane additions, 2 new Neighbourhood Ways (bike boulevards), some new sections	
	of sidewalk/curb.	
	Public transit expansion in Sept 2017 has increased frequency on core network from 27 mins to 23	
	mins. This Aiming to increase ridership.	
	Began working with Modo to bring car sharing to Squamish.	
	Completed School Travel Planning project for 3 elementary schools in Squamish (the other 3 were	
	completed in 2016). Includes best routes maps, promotion of active transportation at the schools	
	and with the PACs, and recommended infrastructure improvements.	
Cor	mmunity-Wide Actions Proposed for 2018	
	More infrastructure improvements planned e.g. LED lighting on an important segment of our major	
	separated bike path, ped/bike highway underpass improvements, new connector trail linking a	
	neighbourhood to a school, new sections of sidewalk adjacent to 2 elementary schools.	
	Transit expansions in summer and fall – summer South Parks Pilot route to provide an alternative to	
	SOV to the recreational areas in southern Squamish, fall - route re-alignments, and a new route to	
	again increase frequency on the core network from 23 mins to 20 mins, and provide better access	
	to Quest University.	
	Anticipate 2 Modo vehicles to be available in Squamish in summer 2018.	
	Separated bike lane preliminary design for key downtown connector route (Pemberton Ave).	
	A conceptual study will be conducted for new N-S separated bike route (Government Rd Corridor).	
	Continued work with SLRD, member municipalities in the corridor and the Province to support and	
	advocate for the implementation of effective regional transit services (OCP Policy 19.4e).	

Corporate Actions Taken in 2017

Three e-bikes were purchased to provide District staff a transportation method with reduced carbon foot print.

Corporate Actions Proposed for 2018

Operations will be implementing a fleet GPS system, this system will allow for route optimization. This will allow for efficient use of vehicles and equipment as well as reduced fuel consumption within the District of Squamish operations.

Three purchased e-bikes will be available to provide District staff a transportation method with reduced carbon foot print. The usage of the bikes will be monitored to determine if the bikes fleet should expand.

Transportation		
Does your local governme	ent have policies, plans or programs to support:	
• \	Walking	Yes/No
• (Cycling	Yes/No
• 1	Transit Use	Yes/No
• E	Electric Vehicle Use	Yes/No
• (Other (please specify)	Yes/No
Does your local governme	ent have a transportation demand management (TDM) strategy (e.g.	Yes/No
to reduce single-vehicle o	ccupancy trips, increase travel options, provide incentives to	
encourage individuals to r	modify travel behavior)?	
Does your local governme	ent integrate its transportation and land use planning?	Yes/No

2017 WATER AND WASTEWATER ACTIONS

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.

Cor	Community-Wide Actions Taken in 2017		
	Ongoing educational water conservation program. Public outreach by door to door campaigning		
	and an educational booth at farmer's market and community events.		
	Sewer Rehabilitation – reduce stormwater inflow and infiltration. Results in less pumping and		
	treatment and defers capacity upgrades.		
	Water main replacement – reduces leakage/water loss, results in less pumping and treatment of		
	water.		
	New automation system at the wastewater treatment plant.		
Cor	Community-Wide Actions Proposed for 2018		
	Water Meter installations – reduce water consumption.		

Co	rporate Actions Taken in 2017		
	Initiated a BC Hydro funded Energy Audit for the Districts Wastewater Treatment Plant Aeration		
	System to create a business case to replace the existing 45 year old blowers with newer, more		
	energy efficient technology.		
	Installed low flow toilets in DOS facilities along with the facilities department and water conservation educator.		
	Integrated non-potable water use for construction operations through Site Alteration Permits. Non-		
	potable water will be utilized primarily for dust suppression and geotechnical testing.		
Co	Corporate Actions Proposed for 2018		
	Complete the BC Hydro funded Energy Audit for the Districts Wastewater Treatment Plant Aeration		
	System to create a business case to replace the existing 45 year old blowers with newer, more		
	energy efficient technology.		
	Put forward a budget request to council to replace the existing 45 year old blowers with newer, more energy efficient technology.		
	Apply for grant funding to help replace the existing 45 year old blowers with newer, more energy efficient technology.		

Water Conservation	
Does your local government have water conservation policies, plans or programs?	Yes/No

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.

- Increased temperatures increasing wildfire activity
- Extreme weather events contributing to urban and overland flooding
- Sea level rise and storms causing coastal flooding and/or erosion

In 2017 has your local government addressed the impacts of a changing climate using any of the	
following?	
Risk and Vulnerability Assessments	Yes/No
Risk Reduction Strategies	Yes /No
Emergency response planning	Yes /No
Asset management	Yes /No
Natural/Eco asset management strategies	Yes / <u>No</u>
Infrastructure upgrades (e.g. storm water system upgrades)	Yes /No
Beach Nourishment projects	Yes / <u>No</u>
Economic diversification initiatives	Yes /No
Strategic and financial planning	Yes /No
Cross-department working groups	Yes /No
OCP policy changes	Yes /No
Changes to zoning and other bylaws and regulations	Yes /No
Incentives for property owner (e.g. reducing storm water run-off)	Yes / <u>No</u>
Public education and awareness	Yes / <u>No</u>
Research	Yes /No
Mapping	<u>Yes</u> /No
Partnerships	Yes/No

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.

Adoption of Integrates Flood Hazard Management Plan and Flood Plain bylaw.

Climate Change Adaptation Actions Proposed for 2018

Community Wildfire Protection Plan.116

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

Other	
Are you familiar with the Community Lifecycle Infrastructure Costing Tool (CLIC)?	Yes/No
Have you used CLIC?	Yes/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 <u>CEA's Climate and Energy Action Awards</u>, <u>UBCM Climate and Energy Action Awards</u>, <u>FCM Sustainable Communities Awards</u> or through submissions to <u>FCM's National Measures</u> Report.

Community-Wide Action

- The Community Carbon Market Place will work to reduce Green House Gases through
 partnership with the community and business to reduce emissions and sell offsets as an
 incentive or have the ability to buy offsets locally.
- The District of Squamish has applied for the Smart Cities Challenge. As a fast-growing community, the District of Squamish faces the challenge of how to accommodate a rising population while still achieving our ambitious environmental and sustainability targets.
 By 2036, the population is projected to nearly double from 20,000 to 36,000. This rapid growth will increase waste, and, based on current employment data, require a significant and growing number of community members to commute to jobs outside of Squamish, increasing both their cost of living and their greenhouse gas emissions.

As current District programs like recycling and energy reduction will not be sufficient to meet our community's ambitious Zero-waste action plan, Squamish has chosen to pursue a path of sustainable growth using the principles of the circular economy.

Working with our partners — UBC CERC, BCIT SMART, Powertech Labs, Philips Canada, Ecube Labs, Squamish & District Forestry Association, Carbon Engineering and Stuart Olson — and in collaboration with Squamish Nation and our local community, Squamish will transform our environmental footprint by using innovation, data and connected technology to eliminate waste leakage, extend the lifecycles of what we make, and use and convert waste, in particular, biomass, into renewable, clean energy, creating a living laboratory for communities across Canada and the world to benefit from.

www.squamish.ca/smart-cities-challenge

Corporate Action

The Community Carbon Market Place is supported though the District and offsets will be purchased from local sources to continuously achieve carbon neutrality.

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 <u>Becoming Carbon Neutral: A Guide for Local Governments in British Columbia</u>.

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/No
If your local government measured 2017 corporate GHG emissions, please report	1169tCO2e
the number of corporate GHG emissions (in tonnes of carbon dioxide equivalent)	
from services delivered <u>directly</u> by your local government:	
If your local government measured 2017 corporate GHG emissions, please report	174tCO2e
the number of corporate GHG emissions (in tonnes of carbon dioxide equivalent)	
from <u>contracted</u> services:	
TOTAL A: CORPORATE GHG EMISSIONS FOR 2017	
	1343tCO2e

Reporting Reductions and Offsets

To be carbon neutral, a local government must balance their TOTAL corporate GHG emissions generated in 2017 by one or a combination of the following actions:

- undertake GCC-supported Option 1 Project(s)
- undertake GCC-supported Option 2 Project(s)
- purchase carbon offsets from a credible offset provider

If applicable, please report the 2017 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	758 tCO2e
Low Emission Vehicles	
Avoided Forest Conversion	
TOTAL B: REDUCTIONS FROM OPTION 1 PROJECTS FOR 2017	758tCO2e

If applicable, please report the names and 2017 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 2017	tCO2e

If applicable, please report the name of the offset provider, type of project and number of offsets purchased (in tonnes of carbon dioxide equivalent (tCO2e)) from an offset provider for the 2017 reporting year:

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

OFFSET PROVIDER NAME	OFFSETS
Community Carbon Marketplace, West Coast Railway Museum: ground	293tCO2e
based heat exchange project (offsetting natural gas)	
Community Carbon Marketplace, Sea to Sky Soils: organic waste diversion project.	292tCO2e
TOTAL D: OFFSETS PURCHASED FOR 2017	585tCO2e

TOTAL REDUCTIONS AND OFFSETS FOR 2017 (Total B+C+D) = 1343 tCO2e

Corporate GHG Emissions Balance for 2017

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 2017 = (A – (B+C+D)) = 0 tCO2e

If your Corporate GHG Emissions Balance is negative or zero, your local government is carbon neutral. CONGRATULATIONS!

Carbon Neutral Reporting	
Does your local government have a climate reserve fund or something similar?	<u>Yes</u> /No

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 – 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:	
The Community Carbon Marketplace	

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:

Level 1 – Demonstrating Progress on Charter Commitments	
Level 2 – Measuring GHG Emissions	
Level 3 – Accelerating Progress on Charter Commitments	
Level 4 - Achievement of Carbon Neutrality	Level 4
Not Sure	