

Climate Action Revenue Incentive (CARIP) Public Report for 2018

Local Government: City of Chilliwack

Report Submitted by: City of Chilliwack

Name: Marc Sole

Role: Senior Environmental Services Specialist

Email: sole@chilliwack.com Phone: 604-793-2967

Date: May 31, 2019

CHILLIWACK

The City of Chilliwack has completed the 2018 Climate Action Revenue Incentive Program (CARIP) Public Report as required by the Province of BC. The CARIP report summarizes actions taken in 2018 and proposed for 2019 to reduce corporate and community-wide energy consumption and greenhouse gas emissions (GHG) and reports on progress towards achieving carbon neutrality.



2018 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, and centred) plays an especially important role in energy and GHG reduction.

0.6	Q 6 + Q 7 Community-Wide Broad Planning Actions Taken in 2018 + Additional Actions	
	Densification supported through Zoning Bylaw Amendments to permit secondary rental suites in	
	single family homes, permit coach houses in R1A zone, removing the owner occupant	
	requirement.	
	Adoption and Implementation of the Chilliwack Proper and Fairfield Island Neighbourhoods Plan	
	as a schedule to the OCP.	
	Continued to support the densification process through the Official Community Plan (OCP) 2040	
	and applications within the urban corridor.	
	Continued engagement with First Nations regarding long term community planning.	
	Initiated Industrial Land Review to explore greater land use efficiency of existing industrial areas.	
Q8	Community-Wide Broad Planning Actions Proposed for 2019	
	Pedestrian Network Plan – City wide plan to expand the sidewalk and walkway systems and	
	improve their standards, designs and connectivity to encourage active regular short-distance	
	trips.	
	Transit Plan – developing a plan with BC Transit for community transit expansion and investment	
	for the next five years.	
	Develop a Neighbourhood Plan for Sardis.	
	Continue densification through redevelopment of existing neighbourhoods.	
	Continue engagement with First Nations, the public regarding densification, urban growth	
	boundary.	
	Update the Community Integrated Air Quality, Energy and Greenhouse Gas Action Plan.	

QS	Q 9 + Q 10 Corporate Broad Planning Actions Taken in 2018 + Additional Actions	
Q 1	L1 Corporate Broad Planning Actions Proposed for 2019	
	Update the Corporate Integrated Air Quality, Energy and Greenhouse Gas Action Plan.	



Broad Planning		
Q 12 What is (are) your current GHG reduction target(s)? Reduce GHG Emissions by 20% per capita from 2007 levels by 2020.		ls by
Q 13 Are you familiar with your local government's community energy and emissions inventory (e.g. <u>CEEI</u> or another inventory)?		Yes
Q 14 What plans, policies or guid in your community?	lelines govern the implementation of climate mitigation	
Community Energy and E	missions Plan	Yes
 Integrated Community St 	ustainability Plan	No
Community- Wide Climate	e Action Plan	Yes
Official Community Plan		Yes
 Regional Growth Strateg 	/	Yes
Do not have a plan		
Other:		No
Q 15 Does your local government have a corporate GHG reduction plan?		Yes

2018 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 street lights and lights in parks or other public spaces.

Q 16 + Q 17 Community-Wide Building and Lighting Actions Taken in 2018 + Additional Actions		
	Changed approximately 100 high-pressure sodium street lights to LED.	
	Required LED street lights for new developments and City capital projects.	
	Retrofitted 51 HPS light fixtures with new LED fixtures in order to reduce energy consumption by	
	approximately 50%.	
Q 1	8 Community-Wide Building and Lighting Actions Proposed for 2019	
	Continue converting street lights to LED as they require replacement.	
	Continue requiring LED street lights for new developments.	



Q 1	Q 19 + Q 20 Corporate Building and Lighting Actions Taken in 2018 + Additional Actions	
	Replaced HID lighting with LED on floor 3 at Heritage Park.	
	Installed LED lighting in Evergreen Hall Cheam room to replace T8 fluorescent bulbs.	
	Installed LED lighting at the Landing Sport Centre to replace T8 fluorescent bulbs.	
	Installed LED lighting in the natatorium at Chilliwack Landing Leisure Centre to replace HID.	
	Continued LED lighting conversions at City Hall from various types of lighting.	
Q 2	1 Corporate Building and Lighting Actions Proposed for 2019	
	Continue LED lighting conversions at City Hall.	
	Install LED lighting at Salish (Chilliwack) Library.	
	Install LED lighting in the gym of the Cheam Leisure Centre.	
	Install LED lighting in the natatorium of the Cheam Leisure Centre.	
	Install LED lighting on floor 4 at Heritage Park.	

Building and Lighting	
The Province has committed to taking incremental steps to increase energy-efficience	y requirements in
the BC Building Code to make buildings net-zero energy ready by 2032. The BC Energ	gy Step Codea
part of the BC Building Codesupports that effort	
Q 22 Is your local government aware of the BC Energy Step Code? Yes	
Q 23 Is your local government implementing the BC Energy Step Code?	

P5 2018 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.

Q	Q 24 + Q 25 Community-Wide Energy Generation Actions Taken in 2018 + Additional Actions	
Q 2	26 Community-Wide Energy Generation Actions Proposed for 2019	



Q 2	27 + Q 28 Corporate Energy Generation Actions Taken in 2018 + Additional Actions
	Continued to use biogas generated at the Wastewater Treatment Plant (WWTP) to run biogas boilers to heat the WWTP digesters.
	Continued to explore the possibility of converting excess biogas into biomethane and conveying that into the FortisBC pipeline.
	Completed a Biogas Feasibility Study at the Wastewater Treatment Plant though the \$80,000 grant funding received from the Federation of Canadian Municipalities (FCM). The Study completed by Associated Engineering on behalf of the City evaluate options to upgrade biogas to biomethane and ultimately sell it to FortisBC.
	Completed the installation of a stand-alone biogas heating system to run the industrial high strength wastewater pre-treatment facility at the WWTP. Biogas generation will be commenced once the pre-treatment facility received brewery wastewater in the middle of 2019.
Q 2	29 Corporate Energy Generation Actions Proposed for 2019
	Submitted grant funding application under the CleanBC Communities Fund to Design & Construct Organic Food Waste Receiving and Pre-Processing Station & Digester # 4 at the Wastewater Treatment Plant. If funding is received, project is planned to be completed by end of 2021.
	Continue to explore converting excess biogas into biomethane and convey it into the FortisBC pipeline by selecting a process equipment company and procurement methodology. To meet this objective, it is planned to complete a Business Case Analysis to determine the most suitable option to deal with excess biogas at the Wastewater Treatment Plant.
	Monitor Biogas generation through stand-alone biogas heating system installed under industrial high strength wastewater pre-treatment facility at the WWTP once brewery wastewater received at the plant by middle of 2019.

Energy Generation	
Q 30 Is your local government developing, or constructing a	
district energy system	No
 renewable energy system 	Yes
 none of the above 	
Q 31 Is your local government operating a	
district energy system	No
 renewable energy system 	Yes
 none of the above 	



Q 32 Is your local government connected to a district energy system that is operated by another energy provider?	
Q 33 Are you familiar with the 2018 <u>List of Funding Opportunities for Clean Energy Projects</u>	
Led by First Nations and Local Governments?	

2018 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.

Q 34 + Q 36 Community-Wide Greenspace Actions Taken in 2018 + Additional Actions (Q 35 below Q 41)		
	Tree planting and riparian restoration projects with school groups.	
	303 trees were planted throughout the City.	
Q	37 Community-Wide Greenspace Actions Proposed for 2019	
	Continue tree planting and riparian restoration projects with school groups and other interested	
	organizations.	
	Enhance salmon habitat at Wilson Park in partnership with the Fraser Valley Watersheds	
	Coalition in the fall of 2019.	
	Approximately 41 trees have been planted thus far in 2019.	

Q 38 + Q 39 Corporate Greenspace Actions Taken in 2018 + Additional Actions	
Q 4	10 Corporate Greenspace Actions Proposed for 2019



Greenspace	
Q 41 Does your local government have urban forest policies, plans or programs?	
Q 35. Does your local government have policies, plans or programs to support local food	Yes
production?	

2018 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.

Q 4	Q 42 + Q 43 Community-Wide Solid Waste Actions Taken in 2018 + Additional Actions		
	Coordinated "April is Earth Month" events with volunteer groups, with an emphasis on waste		
	management and community clean ups. Staged "Waste Reduction Month" (October) with		
	Household Hazardous Waste Day and school presentations.		
	Promoted two City-Wide Garage Sales to encourage reuse.		
	Phased out single-use recycling bags and provided residents with reusable containers for the		
	curbside collection of recycling in August and September, 2018.		
	Continued reducing greenhouse gas emissions from the Bailey Landfill through the Landfill Gas		
	Management System.		
Q 4	14 Community-Wide Solid Waste Actions Proposed for 2019		
	Continue waste reduction programs with the community.		
	Continue working with the Fraser Valley Regional District (FVRD) to implement an overall regional		
	waste diversion strategy, including compostable waste diversion for all sectors.		
	Investigate the potential for community wide bans on single-use items.		
	Implement separate curbside glass recycling collection to increase recycling rates and diversion		
	opportunities for residents.		
	Expand the Landfill Gas Management System at the Bailey Landfill to further reduce greenhouse		
	gas emissions and prepare for gas capture from future infilling.		
	Replace existing street-side waste containers with new receptacles better designed to encourage		
	recycling through proper waste sorting.		

Q 4	Q 45 + Q 46 Corporate Solid Waste Actions Taken in 2018 + Additional Actions	
	Continued with the compostables diversion programs at City Hall and the Chilliwack Library.	



Q 4	Q 47 Corporate Solid Waste Actions Proposed for 2019		
	Continue to expand compostables diversion at other municipal facilities.		
	Revamp the signage and waste diversion stations at municipal sites.		

Solid Waste	
Q 48 Does your local government have construction and demolition waste reduction policies, plans or programs?	Yes
Q 49 Does your local government have organics reduction/diversion policies, plans or programs?	Yes

2018 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 and public transit, can contribute to reductions in GHG emissions and more livable communities.

Q 5	Q 50 + Q 51 Community-Wide Transportation Actions Taken in 2018 + Additional Actions	
	Constructed a roundabout at Cultus Lake Road and Vedder Mountain Road to improve mobility	
	and reduce vehicle idling due to traffic queues.	
	Added a total of 2,800 additional Conventional bus transit service hours by increasing frequency	
	on the #7 and #8 routes and adding earlier runs on the #1, #2, #3, #4, #7 and #8 routes to provide	
	connection to the FVX regional bus service in order to facilitate commuting via transit.	
	City owned electric vehicle charging stations were used 1254 times.	
	Supported active transportation by constructing 220m of new bike lane and 2810m of new	
	sidewalk and multi-use pathway.	
Q 5	2 Community-Wide Transportation Actions Proposed for 2019	
	Construct a roundabout at Lickman Road and Luckakuck Way to improve mobility and reduce	
	vehicle idling due to traffic queues.	
	Construct cycling facilities on the Airport/Broadway corridor and the Spruce/Britton corridor.	

	Q 53 + Q 54 Corporate Transportation Actions Taken in 2018 + Additional Actions	
I		Staged a two-week sustainable commuting challenge.
Ī		Continued with vehicle right-sizing.



Q 5	5 Corporate Transportation - Actions Proposed for 2019
	Continue with staging the sustainable commuting challenge.
	Continue with vehicle right sizing.

Transportation	
Q 56 Does your local government have policies, plans or programs to support:	
Walking	Yes
Cycling	Yes
Transit Use	Yes
Electric Vehicle Use	Yes
Other (please specify)	No
Q 57 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 behaviour)?	
Q 58 Does your local government integrate its transportation and land use planning?	Yes

2018 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 GHG emissions.

Q 5	Q 59 + Q 60 Community-Wide Water and Wastewater Actions Taken in 2018 + Additional Actions		
	Conducted an annual water loss study for the water system to determine water losses and take		
	further actions to reduce losses as per the study findings.		
	Enforced summer water sprinkler restrictions. Prepared and implemented the Water Efficient		
	Community Plan.		
Issued rebates on low flush toilets, sold discounted home water conservation kits and rain			
	harvesting barrels. Educated the general public through radio and newspaper advertisements,		
	City of Chilliwack website, etc.		
QE	Q 61 Community-Wide Water and Wastewater Actions Proposed for 2019		
	Conduct the annual water loss study for the water system to determine water losses and take		
	further actions to reduce losses as per the study findings.		



Enforce summer water sprinkler restrictions, prepare and implement the Water Efficient
Community Plan.

Maintain rebate programs for low flush toilets, discounted home (outdoor/indoor) water conservation kits and rain harvesting barrels. Educate the general public through radio and newspaper advertisements, City of Chilliwack website, etc.

Q 62 + Q 63 Corporate Water and Wastewater Actions Taken in 2018 + Additional Actions

Took measures to reduce inflow and infiltration issues in the wastewater system to reduce flows during rainfall events.

Completed the pre-design study for the WWTP inlet works upgrade which will ultimately be equipped with more energy efficient processing equipment and increase the hydraulic grade line to facilitate future flows to run by gravity throughout the treatment plant without the need for a pumping system.

Completed construction of a new industrial high strength wastewater pre-treatment facility at the WWTP which will be equipped with more energy efficient processing equipment and a gravity flow system to reduce pumping requirements.

Continued to install so-called 'smart' water meters that utilize Automated Meter Intelligence (AMI) to enhance the City's Water Loss Management program. The system became operational in 2017, and situations such as backflow events, water leaks, and low/no flow conditions are now flagged as the data is transmitted, rather than as follow-up to quarterly readings.

Continued working with FLNRO to obtain groundwater licenses for the two groundwater drinking water wells installed in 2016 in the Marble Hill area in the Eastern Hillside to reduce energy consumption for pumping water from the valley floor to the higher elevations. Continuous pumping was not possible due to non-approval of groundwater licenses from the Province.

Commenced groundwater exploration program to find high quality groundwater in the Eastern Hillside Area so that energy consumption for pumping water from the valley floor to the higher elevations can be reduced.

Q 64 Corporate Water and Wastewater Actions Proposed for 2019

Continue to take measures to reduce inflow and infiltration issues in the wastewater system to reduce higher flows during rainfall events.

Complete the Design Build procurement process for the design and construction of the WWTP inlet works upgrade, which will ultimately be equipped with more energy efficient processing equipment and increase the hydraulic grade line to facilitate future flows to run by gravity throughout the treatment plant without the need for a pumping system and commence construction.

Continue to work with FLNRO to obtain groundwater licenses for the two groundwater drinking water wells installed in 2016 in the Marble Hill area in the Eastern Hillside to reduce energy consumption for pumping water from the valley floor to the higher elevations. Plan to commence construction of a water pump station including BC Hydro power once obtaining the GW licenses from the Province. Continue to upgrade the water system in the Marble Hill area to service additional hillside areas through Marble Hill groundwater wells to reduce energy consumption on pumping.



Commission and operate the industrial high strength pre-treatment facility at the WWTP which will be equipped with more energy efficient processing equipment and a gravity flow system to reduce pumping cost.

Continue with groundwater exploration program to find high quality groundwater in the Eastern Hillside Area so that energy consumption for pumping water from the valley floor to the higher elevations can be reduced.

Water Conservation	
Q 65 Does your local government have water conservation policies, plans or programs?	Yes

2018 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.

Q 66 Please identify the THREE climate impacts that are most relevant to your Local Government.

- Warmer winter temperatures reducing snowpack
- Changes to temperature and precipitation causing seasonal drought
- Heatwaves impacting population health
- Increased temperatures increasing wildfire activity
- Increased temperatures affecting air quality
- Changing temperatures influencing species migration and ecosystem shifts
- Changing temperatures influencing ecosystem shifts
- Extreme weather events contributing to urban and overland flooding
- Sea level rise and storms causing coastal flooding and/or erosion

Other (please specify):

Q 67 In 2018 has your local government addressed the impacts of a changing climate using any of the following?

Risk and Vulnerability Assessments	Yes
Risk Reduction Strategies	Yes
Emergency Response Planning	Yes
Asset Management	No
Natural/Eco Asset Management Strategies	No
Infrastructure Upgrades (e.g. stormwater system upgrades)	Yes
Beach Nourishment Projects	No
Economic Diversification Initiatives	No
Strategic and Financial Planning	No
Cross-Department Working Groups	No
Official Community Plan Policy Changes	No



Changes to Zoning and other Bylaws and Regulations	No
Incentives for Property Owners (e.g. reducing storm water run-off)	No
Public Education and Awareness	No
Research	Yes
Mapping	Yes
Partnerships	Yes
Other (please specify):	

Q	68 Climate Change Adaptation Actions Taken in 2018		
Ple	ease 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.		
	Updated IDF curves.		
	Continued to participate in Fraser Valley Agricultural Adaptation Strategies project with respect		
	to flood protection and drainage aspects.		
	Completed Sardis-Vedder Aquifer Groundwater Model Update Study.		
Q	Q 69 Climate Change Adaptation Actions Proposed for 2019		
	Continue stormwater system and dike infrastructure upgrades.		
	Continue to participate in Fraser Valley Agricultural Adaptation Strategies project.		
Q	Q 70 For more information please contact		
	Tara Friesen, Manager of Environmental Services, 604-793-2701, tfriesen@chilliwack.com		



Q 71. 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 y	ou have used, please indicate
whether they were useful in advancing your work in climate change adaptation?	
Indicators of Climate Change for British Columbia	Useful
<u>Plan2Adapt</u>	Useful
<u>Climate Projections for Metro Vancouver</u>	Haven't Used
Climate Projections for the Capital Region	Haven't Used
Climate Projections for the Cowichan Valley Regional District	Haven't Used
Province of BC's BC Adapts Video Series	Haven't Used
Preparing for Climate Change: Implementation Guide for Local Governments	Useful
Public Infrastructure and Engineering Vulnerability Committee's (PIEVC)	Haven't Used
Sea Level Rise Adaptation Primer	Haven't Used
BC Regional Adaptation Collaborative Webinars	Haven't Used
Retooling for Climate Change	Useful
Water Balance Model	Haven't Used
Water Conservation Calculator	Haven't Used
Funding:	
National Disaster Mitigation Program (NDMP)	Useful
Community Emergency Preparedness Fund (CEPF)	Useful
Municipalities for Climate Innovation Program (MCIP)	Useful
Climate Adaptation Partner Grants (FCM)	Haven't Used
Infrastructure Planning Grants (MAH)	Useful
Federal Gas Tax Fund	Useful
Other (please specify) CleanBC Communities Fund	Useful

2018 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.

Q7	Q 72 Community-Wide Other Actions Taken in 2018	
Q7	73 Corporate Other Actions Taken in 2018	



Other	
Q 74 Are you familiar with the Community Lifecycle Infrastructure Costing Tool (CLIC)?	Yes
Q 75 Is your local government using the <u>CLIC</u> tool?	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 highlight an action that has already been listed.

Projects included here may be featured as success stories on the <u>B.C. Climate Action Toolkit</u> 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 making applications to CEA's Climate and Energy Action Awards, FCM Sustainable Communities Awards or to FCM's National Measures Report.

Q 76 Community-Wide Innovation Action

Q 77 Corporate Innovation Action

Completed Biogas Feasibility Study at the Wastewater Treatment Plant though the \$80,000 grant funding received from the Federation of Canadian Municipalities (FCM). The Study completed by Associated Engineering on behalf of the City evaluate options to upgrade biogas to biomethane and ultimately sell it to FortisBC.

Q 78 For more information on actions described above contact

Chandra Naiduwa, Utilities Engineer, 604-793-2745, naiduwa@chilliwack.com

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 separated by a forward slash (e.g. program1/program2).

Mitigation

Q 79 Mitigation Programs, Partnerships and Funding	
Federation of Canadian Municipalities (FCM)	

Adaptation

Q 80 Adaptation Programs, Partnerships and Funding	

2018 CARBON NEUTRAL REPORTING

Local governments are required to report on their progress in achieving their carbon neutral goal under the <u>B.C. Climate Action Charter</u>. 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 <u>B.C. Climate Action Toolkit website</u>, especially the <u>Workbook</u> and <u>Becoming Carbon</u> <u>Neutral:</u> A <u>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 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

Q 81 Did your local government measure corporate GHG emissions for 2018?	Yes
Q 82 If your local government measured 2018 corporate GHG emissions, please	3,810
report the number of corporate GHG emissions from services delivered directly	
by your local government (in tonnes of carbon dioxide equivalent)	



Q 83 If your local government measured 2018 corporate GHG emissions, please	451
report the number of corporate GHG emissions from contracted services (in	
tonnes of carbon dioxide equivalent)	
Q 84 TOTAL A: CORPORATE GHG EMISSIONS FOR 2018 (Direct GHGs +	4,261 tCO2e
Contracted GHGs)	

Reporting Reductions and Offsets

To be carbon neutral, a local government must balance their TOTAL corporate GHG emissions generated in 2018 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

For more information about options to balance or offset corporate GHG emissions please refer to Becoming Carbon Neutral: A Guidebook for Local Governments in British Columbia.

If applicable, please report the 2018 GHG emissions reductions (in tonnes of carbon dioxide equivalent (tCO2e)) being claimed from any of the following Option 1 GHG Reduction Projects:

OPTION 1 PROJECTS	REDUCTIONS
Q 85 Energy Efficient Retrofits (in tonnes of carbon dioxide equivalent (tCO2e))	0.2
Q 86 Solar Thermal (in tonnes of carbon dioxide equivalent (tCO2e))	0
Q 87 Household Organic Waste Composting (in tonnes of carbon dioxide equivalent (tCO2e))	3,328
Q 88 Low Emission Vehicles (in tonnes of carbon dioxide equivalent (tCO2e))	7
Q 89 Avoided Forest Conversion (in tonnes of carbon dioxide equivalent (tCO2e))	0
Q 90 TOTAL B: REDUCTIONS FROM ALL OPTION 1 PROJECTS FOR 2018	3,335.2 tCO2e

Q 91 If applicable, please report the names and 2018 GHG emissions reductions (in tonnes of carbon dioxide equivalent (tCO2e)) being claimed from Option 2 GHG Reduction Projects:



Option 2 Project Name	REDUCTIONS
Option 2 GHGs Reduced (tCO2e)	
Option 2 Project Name	
Option 2 GHGs Reduced (tCO2e)	
Option 2 Project Name	
Option 2 GHGs Reduced (tCO2e)	
Q 92 TOTAL C: REDUCTIONS FROM ALL OPTION 2 PROJECTS FOR 2018	0 tCO2e

Offsets

Q 93 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 2018 reporting year:

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

Offset Provider Name	OFFSETS
Offsets (tCO2e)	
Offset Provider Name	
Offsets (tCO2e)	
Q 94 TOTAL D: OFFSETS PURCHASED FOR 2018	0 tCO2e

Q 95 TOTAL REDUCTIONS AND OFFSETS FOR 2018 (Total B+C+D) = 3,335.2 tCO2e

Corporate GHG Emissions Balance for 2018



Your local government's Corporate GHG Emissions Balance is the difference between total corporate offsetable GHG emissions (direct + contracted emissions) and the GHG emissions reduced through GCC Option 1 and Option 2 projects and/or the purchase of offsets.

Q 96 CORPORATE GHG EMISSIONS BALANCE FOR 2018 = (A – (B+C+D)) = _____925.8 tCO2e

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

Q 97 If your local government was carbon neutral in 2018, please record any emissions reductions you will be carrying over for future years and the source of the reductions, including the year they were earned (e.g. organics diversion, 2018 100 tCO2e)

SOURCE OF CARRY OVER EMISSION REDUCTIONS (and year earned)	REDUCTIONS
Q 98 BALANCE OF REDUCTIONS ELIGIBLE FOR CARRY OVER TO NEXT YEAR	0 tCO2e

Carbon Neutral Reporting	
Q 99 Does your local government set aside funds in a climate reserve fund or	No
similar?	

GCC CLIMATE ACTION RECOGNITION PROGRAM

Green Communities Committee 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 (e.g. 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.

Q 100 Based on your local government's 2018 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	Yes
Level 4 - Achievement of Carbon Neutrality	
Not Sure	

Q 101 Related to 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 and/or financial resources and is intended to result in significant GHG reductions:

PROJECT NAME:		