Survey Template For the 2017 CARIP Climate Action/Carbon Neutral Progress Survey

Local governments are required to submit the 2017 CARIP Climate Action/Carbon Neutral Progress Survey on or before June 1, 2018.

Use Template to Collect Information

In response to local government input, this Survey Template has been created to assist with collecting information for the 2017 CARIP Climate Action/Carbon Neutral Progress Survey, and follows the same structure as the survey.

Responses entered into this Template can be cut and pasted into the online survey. The survey asks for up to five actions in each category, and there is a place in the survey to report additional actions if desired. In this Template, simply add more lines to the tables to report more than five actions.

Use Template to Assist with Reporting

Local governments are also required to publicly report the information submitted in the 2017 CARIP Climate Action/Carbon Neutral Progress Survey. There is no ability for survey respondents to generate a report of survey responses, in turn:

- A PDF copy of your survey responses will be sent to you once your completed survey has been submitted.
- Given that it is challenging to edit the PDF document, you are encouraged to use your populated version of this Template, or your own, to report your CARIP results publicly.
- You may also choose to create a report in another format that contains the information submitted in the 2017 CARIP Climate Action/Carbon Neutral Progress Survey.

Further information on CARIP can be found on the Ministry of Municipal Affairs and Housing website.

The Government of BC will not collect, use, or disclose personal information using SurveyMonkey[®]. Please be aware however that IP addresses are collected by SurveyMonkey[®] itself, and these IP addresses and other information collected will be stored on SurveyMonkey[®]'s servers located outside of Canada. Please do not provide any third-party information (i.e. refer to others) in your responses to the survey.

Climate Action Revenue Incentive (CARIP) Public Report for 2017

Local Government: Corporation of the City of Cranbrook

Report Submitted by: Name: Donovan Brekke Role: Energy Conservationist Email: Donovan.brekke@cranbrook.ca Phone: (250) 421-4211



Date: April 30, 2018

The Corporation of the City of Cranbrook 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.

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.

Cor	Community-Wide Actions Taken in 2017		
Cor	mmunity-Wide Actions Proposed for 2018		

Cor	prporate Actions Taken in 2017	
	Energy Management Steering Group including presentations to staff and quarterly energy awareness information to staff	
	Continuation with funding to Carbon Offset reserve to be used for sustainability initiatives (BC	
	Hydro Energy Manager Partnership)	
	Update the Strategic Energy Management Plan through BC Hydro's Energy Management Program	
	Asset Management Planning	
Cor	porate Actions Proposed for 2018	
	Energy Management Steering Group including presentations to staff and quarterly energy	
	awareness information to staff	
	Continuation with funding to Carbon Offset reserve to be used for sustainability initiatives (BC	
	Hydro Energy Manager Partnership)	
	Update the Strategic Energy Management Plan through BC Hydro's Energy Management Program	
	Asset Management Planning	

Broad Planning		
What is (are) your current GHG reduction target(s)?The City is currently developing GHG reduction targets through FCM's PCP Program		rough
Are you familiar with your community's community energy and emissions inventory (e.g. CEEI or another inventory)?		Yes
What plans, policies or guidelines govern the implementation of climate mitigation in your community?		
 Community Energy and E 	Emissions (CEE) Plan	No
Community- Wide Clima	te Action Plan	No
 Integrated Community S 	ustainability Plan	Yes
Official Community Plan	(OCP)	Yes
Regional Growth Strateg	y (RGS)	No
• Do not have a plan		
• Other: Energy Policy No.	60-101	Yes
Does your local government have	e a corporate GHG reduction plan?	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 street lights and lights in parks or other public spaces.

Cor	Community-Wide Actions Taken in 2017		
Cor	mmunity-Wide Actions Proposed for 2018		

Corporate Actions Taken in 2017 Western Financial Place: Completed Pool Dehumidification Project. Completed the Arena and Squash Court Lighting to LED lights.

	Library: Exterior lighting to LED		
	Kinsmen Arena: Radiant crowd heaters upgraded		
	Curling Rink: Ice plant replacement and Lighting upgrade		
	Fire Hall #2: Exterior lighting upgraded to LED		
	Public Works: Shop lighting upgraded		
Cor	Corporate Actions Proposed for 2018		
	Pool underwater Lighting upgrade		
	Kinsmen Arena Lighting upgrade		
	Lagoon Aeration blowers add VFD'S		

Building and Lighting

The Province has committed to taking incremental steps to increase energy-efficiency requirements in the BC Building Code to make buildings net-zero energy ready by 2032. The BC Energy Step Code--a part of the BC Building Code--supports that effort

Is your local government aware of the BC Energy Step Cost?	Yes
Is your local government implementing the BC Energy Step Code?	Yes

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.

Cor	Community-Wide Actions Taken in 2017		
Cor	mmunity-Wide Actions Proposed for 2018		

Со	Corporate Actions Taken in 2017		
	Study for microgeneration project for city's PRV stations		
Со	rporate Actions Proposed for 2018		
	Study for microgeneration project for city's PRV stations		
	Study for Solar thermal and Solar photovoltaic at Western Financial Place		

Energy Generation	
Is your local government developing, or constructing:	
A district energy system	No
A renewable energy system	No
Is your local government operating:	
A district energy system	No
A renewable energy system	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 <u>BC Climate</u> <u>Action Toolkit</u> ?	
Are you familiar with the 2017 "List of Funding Opportunities for Clean Energy Projects Led by First Nations and Local Governments?"	No

2017 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.

Cor	Community-Wide Actions Taken in 2017		
	Idlewild Park Rehabilitation Project		
	Springtime spruce up campaign – community cleanup and beautification initiative		
	Continue to follow the City's Urban Forest Management Plan and Parks and Recreation Master		
	Plan		
Cor	mmunity-Wide Actions Proposed for 2018		
	Springtime spruce up campaign – community cleanup and beautification initiative ie: Skate Park		
	clean-up		
	Idlewild Park Rehabilitation Project		
	Continue to follow the City's Urban Forest Management Plan and Parks and Recreation Master		
	Plan		

Сог	Corporate Actions Taken in 2017		
	Upgrading sprinkler controls to refine amount of watering on parks		
	Rehabilitating eroding soils at the City's reservoir using soil amendments and native vegetation		
	Tree reforestation at Idlewild Park and Lions Park		
Сог	Corporate Actions Proposed for 2018		
	Continued Invasive Weed Program with East Kootenay Invasive Species Council		
	Bat houses and Osprey pole at Idlewild Park		
	Continuation of Tree planting		
	"TREES FOR LIFE" Program with Cranbrook in Bloom Committee		

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

Со	Community-Wide Actions Taken in 2017	
	Continue to support the Regional District of East Kootenay (RDEK) initiatives regarding solid waste	
	and recycling	
	RDEK owns/operates the transfer stations and landfill facility	
Со	mmunity-Wide Actions Proposed for 2018	
	Continue to support the Regional District of East Kootenay (RDEK) initiatives regarding solid waste	
	and recycling	
	RDEK owns/operates the transfer stations and landfill facility	

Cor	Corporate Actions Taken in 2017	
Cor	rporate Actions Proposed for 2018	

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

Со	Community -Wide Actions Taken in 2017		
	Annual sidewalk rehabilitation program and capital road programs; in the Annual Capital Roads		
	program we use a warm mix asphalt and 10% to 20% Recycle Asphalt Product		
	Continuation of promoting public awareness of the transit program and encouraging ridership		
	Free transit pass for low income residents through the Leisure Access Program		
Сог	Community-Wide Actions Proposed for 2018		
	Annual sidewalk rehabilitation program and capital road programs; in the Annual Capital Roads		
	program we use a warm mix asphalt and 10% to 20% Recycle Asphalt Product		
	Continuation of promoting public awareness of the transit program and encouraging ridership		
	Free transit pass for low income residents through the Leisure Access Program		
	Development of more cycling and walking trails		

Cor	Corporate Actions Taken in 2017	
	Continuation of Fleet GPS for fuel consumption and fuel tracking software	
	Idle reduction devices in fleet vehicles	
Cor	rporate Actions Proposed for 2018	
	Continuation of Fleet GPS for fuel consumption and fuel tracking software	
	Idle reduction devices in fleet vehicles	
	Multi-year strategy to fully link all corners of City through a Bicycling network of on and off road	
	pathways	

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

2017 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.

Сог	mmunity-Wide Actions Taken in 2017
	Continuation of the Water Smart Ambassador Program
Сог	mmunity-Wide Actions Proposed for 2018
	Continuation of the Water Smart Ambassador Program
	Free Lawn and Garden Water Assessments

Со	Corporate Actions Taken in 2017		
	Completing an energy study at the waste water lagoon blower building		
	Continuation of the water smart ambassador program		
	Continuation of low flow toilet program in city buildings and facilities		
	Continuation of night time pressure reduction of potable water		
	Waste water lagoon energy efficiency upgrade from energy study		
Сог	Corporate Actions Proposed for 2018		
	Continuation of the water smart ambassador program		
	Continuation of low flow toilet program in city buildings and facilities		
	Continuation of night time pressure reduction of potable water		

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

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

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

Other:

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.
Continuation of staff awareness on energy consumption and energy conservation initiatives
SMARTTool/CO2 emissions calculation training
Climate Change Adaptation Actions Proposed for 2018
Continuation of staff awareness on energy consumption and energy conservation initiatives
SMARTTool/CO2 emissions calculation training
For more information please contact:

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

2017 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.

Со	Community-Wide Actions Taken in 2017		
Со	mmunity-Wide Actions Proposed for 2017		

Сог	Corporate Actions Taken in 2017		
	City of Cranbrook Pool Dehumidification Retrofit- Heat recovery retrofit project at the aquatic		
	center that is expected to reduce GHG emissions by 231 tonnes.		
Со	rporate Actions Proposed for 2017		

Other	
Are you familiar with the <u>Community Lifecycle Infrastructure Costing Tool (CLIC</u>)?	No
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 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</u> <u>Award</u>, <u>FCM Sustainable Communities Awards</u> or through submissions to <u>FCM's National Measures</u> <u>Report</u>.

Community-Wide Action

For more information contact:

Corporate Action

City of Cranbrook Pool Dehumidification Retrofit- Heat recovery retrofit project at the aquatic center that is expected to reduce GHG emissions by 231 tonnes.

For more information contact: Stacey Paulsen (250)489-0254

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.

Mitigation

Programs and Funding

Adaptation

Programs and Funding

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</u> <u>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
If your local government measured 2017 corporate GHG emissions, please report	2038.14
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	32.86
the number of corporate GHG emissions (in tonnes of carbon dioxide equivalent)	
from <u>contracted</u> services:	
TOTAL A: CORPORATE GHG EMISSIONS FOR 2017	2071
	tCO2e

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	
Low Emission Vehicles	
Avoided Forest Conversion	
TOTAL B: REDUCTIONS FROM OPTION 1 PROJECTS FOR 2017	tCO2e

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
TOTAL D: OFFSETS PURCHASED FOR 2017	tCO2e

TOTAL REDUCTIONS AND OFFSETS FOR 2017 (Total B+C+D) = 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)) = 2071 tCO2e

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

If applicable, please record any emissions reductions you will be carrying over for future years and the source of the emissions reductions, including the year they were earned (E.g., Organics diversion, 2016 100 tCO2e).

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

Carbon Neutral Reporting	
Does your local government have a climate reserve fund or something similar?	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:	

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	
х	Level 3 – Accelerating Progress on Charter Commitments	
	Level 4 - Achievement of Carbon Neutrality	
	Not Sure	