

Survey Template

For the *2016 CARIP Climate Action/Carbon Neutral Progress Survey*

The 2016 CARIP Climate Action/Carbon Neutral Survey uses SurveyMonkey® software. SurveyMonkey® acquired FluidSurveys™, which is the software that was used for CARIP reporting for the past 2 years.

Local governments are required to submit the *2016 CARIP Climate Action/Carbon Neutral Progress Survey* on or before June 1, 2017.

Local governments are also required to publicly report the information submitted in the *2016 CARIP Climate Action/Carbon Neutral Progress Survey*. Local governments can generate a report by:

- creating a report based on the populated Survey Template; or,
- creating a report in another format that contains the information submitted in the 2016 CARIP Climate Action/Carbon Neutral Progress Survey.

In response to local government input, the Survey Template has been created to assist with collecting information for the *2016 CARIP Climate Action/Carbon Neutral Progress Survey*, and follows the same structure as the survey.

Responses entered into the Survey 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 the Survey Template, simply add more lines to the tables to report more than five actions.

Use of the Survey Template is recommended. Local governments are encouraged to edit the populated Survey Template and use it for their public report, **as the SurveyMonkey® survey will not enable survey respondents to generate a report of their responses.**

Further information on CARIP can be found on the [Ministry of Community Sport and Cultural Development's website](#).

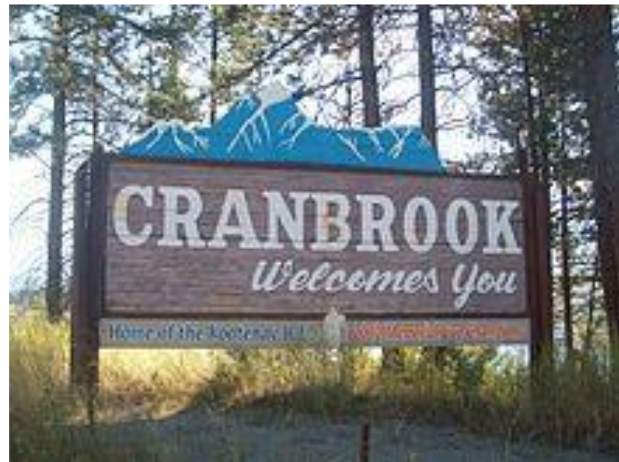
The Government of BC will not collect, use, or disclose personal information using SurveyMonkey®. Please be aware however that IP addresses are collected by SurveyMonkey® itself, and these IP addresses and other information collected will be stored on SurveyMonkey®'s servers located outside of Canada.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

Climate Action Revenue Incentive (CARIP) Public Report for 2016

Local Government:
Corporation of the City of Cranbrook

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Date: April 13, 2017



The Corporation of the City of Cranbrook has completed the 2016 Climate Action Revenue Incentive Program (CARIP) Public Report as required by the Province of BC. The CARIP report summarizes actions taken in 2016 and proposed for 2017 to reduce corporate and community-wide energy consumption and greenhouse gas emissions (GHG) and reports on progress towards achieving carbon neutrality.

2016 BROAD PLANNING ACTIONS

Broad Planning Actions

Broad Planning refers to high level planning that sets the stage for GHG emissions reductions, including plans such as Official Community Plans, Integrated Community Sustainability Plans, Climate Action Plans or Community Energy Emissions Plans. Land use planning that focuses on Smart Growth principles (compact, complete, connected, centred) plays an especially important role in energy and GHG reduction.

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

Corporate Actions Taken in 2016	
	Asset Management Planning
	Continuation with funding to Carbon Offset reserve to be used for sustainability initiatives (BC Hydro Energy Manager Partnership)
	Adoption of the City's updated corporate Energy Policy 60-101
	Energy Management Steering Group including presentations to staff and quarterly energy awareness information to staff
	Development of a Strategic Energy Management Plan through BC Hydro's Energy Management Program
Corporate Actions Proposed for 2017	
	Asset Management Planning
	Continuation with funding to Carbon Offset reserve to be used for sustainability initiatives (BC Hydro Energy Manager Partnership)
	Energy Management Steering Group including presentations to staff and quarterly energy awareness information to staff
	Update the Strategic Energy Management Plan through BC Hydro's Energy Management Program
	Joined the FCM's Partners for Climate Protection Program

Broad Planning	
What is (are) your current GHG reduction target(s)?	The City is currently developing GHG reduction targets through FCM's PCP Program
Has your local government used the Community Energy and Emissions Inventory (CEEI) to measure progress?	No

What plans, policies or guidelines govern the implementation of climate mitigation in your community?	
• Community Energy and Emissions (CEE) Plan	No
• Climate Action Plan	No
• Integrated Community Sustainability Plan	Yes
• Official Community Plan (OCP)	Yes
• Regional Growth Strategy (RGS)	No
• Do not have a plan	
• Other: Energy Policy No. 60-101	Yes
• Strategic Energy Management Plan	Yes
Does your local government have a corporate GHG reduction plan?	No
Does your local government have a climate reserve fund or something similar?	Yes

2016 BUILDINGS AND LIGHTING ACTIONS

Building and Lighting Actions

Low-carbon buildings use the minimum amount of energy needed to provide comfort and safety for their inhabitants and tap into renewable energy sources for heating, cooling and power. These buildings can save money, especially when calculated over the long term. This category also includes reductions realized from energy efficient street lights and lights in parks or other public spaces.

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

Corporate Actions Taken in 2016	
	Streetlights: Phase II of LED Streetlight Project completed & 10 th Avenue decorative streetlights upgraded to LED
	Western Financial Place: lighting upgrades in the aquatic center and parking lot, and an upgrade of the boiler stacks. Began pool dehumidification project.
	City Hall: Review & Redesign of HVAC System
	City Wide Motor Inventory
	Library: Hot water heating and VFD controls upgrade
	Curling Rink: Digital thermostat upgraded to a programmable thermostat for night setbacks
	RCMP: One rooftop unit upgraded
Corporate Actions Proposed for 2017	
	Western Financial Place: Completion of pool dehumidification project. Upgrade of the Arena and Squash Court lighting to LED lights
	Library: Exterior lighting upgraded to LED

	Kinsmen Arena: Radiant crowd heaters upgrade
	Curling Rink: Ice plant replacement & lighting upgrade
	Fire Hall #2: Exterior lighting upgraded to LED

2016 ENERGY GENERATION ACTIONS

Energy Generation Actions

A transition to renewable or low-emission energy sources for heating, cooling and power supports large, long-term GHG emissions reductions. Renewable energy including waste heat recovery (e.g. from biogas and biomass), geo-exchange, micro hydroelectric, solar thermal and solar photovoltaic, heat pumps, tidal, wave, and wind energy can be implemented at different scales, e.g. in individual homes, or integrated across neighbourhoods through district energy or co-generation systems.

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

Corporate Actions Taken in 2016	
	Feasibility study for microgeneration project at Idlewild Lake
Corporate Actions Proposed for 2017	
	Feasibility study for microgeneration project for City's PRV stations

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 BC Climate Action Toolkit ?	No

2016 GREENSPACE/ NATURAL RESOURCE PROTECTION ACTIONS

Greenspace Actions

Greenspace/Natural Resource Protection refers to the creation of parks and greenways, boulevards, community forests, urban agriculture, riparian areas, gardens, recreation/school sites, and other green spaces, such as remediated brownfield/contaminated sites as well as the protection of wetlands, waterways and other naturally occurring features.

Community-Wide Actions Taken in 2016	
	Idlewild Park Rehabilitation Project
	Planted 40 trees, primarily in the downtown area
	Replaced the existing garden bed at RBC/Credit Union with a native plant landscape
	Continued to follow the City's Urban Forest Management Plan and Parks and Recreation Master Plan
	Springtime spruce up campaign – community cleanup and beautification initiative
	Ongoing cycling and walking trail extension and upgrades
Community-Wide Actions Proposed for 2017	
	Idlewild Park Rehabilitation Project
	Continuation of tree planting
	Continue to follow the City's Urban Forest Management Plan and Parks and Recreation Master Plan
	Springtime spruce up campaign – community cleanup and beautification initiative
	Ongoing cycling and walking trail extension and upgrades

Corporate Actions Taken in 2016	
Corporate Actions Proposed for 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

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

2016 SOLID WASTE ACTIONS

Solid Waste Actions

Reducing, reusing, recycling, recovering and managing the disposal of the residual solid waste minimizes environmental impacts and supports sustainable environmental management, greenhouse gas reductions, and improved air and water quality.

Community-Wide Actions Taken in 2016	
	Continued to support the Regional District of East Kootenay (RDEK) initiatives regarding solid waste and recycling
	RDEK owns/operates the transfer stations and landfill facility
Community-Wide Actions Proposed for 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

Corporate Actions Taken in 2016	
Corporate Actions Proposed for 2017	

Solid Waste	
Does your local government have construction and demolition waste reduction policies, plans or programs?	Yes
Does your local government have organics reduction/diversion policies, plans or programs?	No

2016 TRANSPORTATION ACTIONS

Transportation Actions

Transportation actions that increase transportation system efficiency, emphasize the movement of people and goods, and give priority to more efficient modes, e.g. walking, cycling, ridesharing, and public transit, can contribute to reductions in greenhouse gas emissions and more livable communities.

Community -Wide Actions Taken in 2016	
	Annual sidewalk rehabilitation program and capital road programs; in the Annual Capital Roads program we require the use of 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
Community-Wide Actions Proposed for 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

Corporate Actions Taken in 2016	
	Continuation of Fleet GPS for fuel consumption and fuel tracking software
Corporate Actions Proposed for 2017	
	Continuation of Fleet GPS for fuel consumption and fuel tracking software
	Idle reduction devices in fleet vehicles

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 (e.g. to reduce single-vehicle occupancy trips, increase travel options, provide incentives to encourage individuals to modify travel behavior)?	No
Does your local government have policies, plans or programs to support local food production (thus reducing transportation emissions)?	No

2016 WATER AND WASTEWATER ACTIONS

Managing and reducing water consumption and wastewater is an important aspect of developing a sustainable built environment that supports healthy communities, protects ecological integrity, and reduces greenhouse gas emissions.

Community-Wide Actions Taken in 2016	
	Continued the Water Smart Ambassador Program. Included an elementary education program, residential water assessments, park assessments, and public education at various city events.

Community-Wide Actions Proposed for 2017	
	Continuation of the Water Smart Ambassador Program

Corporate Actions Taken in 2016	
	Completion of the MCC upgrades at the irrigation pump station
	Completed an energy study at the spray irrigation facility
	Continued the water smart ambassador program. Included an elementary education program, residential water assessments, park assessments, and public education at various city events.
	Continued night time pressure reduction of potable water
	Continued low flow toilet program in city buildings and facilities
Corporate Actions Proposed for 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
Water Conservation	
Does your local government have water conservation policies, plans or programs?	Yes

2016 CLIMATE CHANGE ADAPTATION ACTIONS

Climate Change Adaptation Actions

For local governments, adaptation to a changing climate can take the form of changes in policy, management, technology and behaviour that minimize negative impacts or exploit opportunities. It can involve both “hard” and “soft” solutions, including: changes in infrastructure engineering, planning, zoning, bylaws, and public education.

Climate Change Adaptation Actions Taken in 2016	
	Presentation to Council to increase awareness in the community regarding the City's corporate energy use and energy conservation initiatives
	Adoption of the City's updated Energy Policy 60-101
	Presentations to the Sunrise Rotary Club on energy use and energy conservation initiatives
	SMARTTool/CO2 emissions calculation training
	Presentations to staff to increase awareness to energy consumption and energy conservation initiatives
Climate Change Adaptation Actions Proposed for 2017	
	Continuation of staff awareness on energy consumption and energy conservation initiatives
	SMARTTool/CO2 emissions calculation training

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

In 2016 did you consider climate change impacts in any of the following areas? (check if yes)

Risk reduction strategies	
Risk and Vulnerability assessment	
Asset management	✓
Infrastructure upgrades (e.g. stormwater system upgrades)	✓
Cross-department working groups	✓
Emergency response planning	
Land-use policy changes (eg. OCP, DPA)	
Economic diversification initiatives	
Ecosystem-based approaches (incl. shorelines)	
Incentives (e.g. property owner reducing stormwater run-off)	
Public education and awareness	✓
Research (e.g. mapping, participation in studies)	✓
Other (Please Identify):	

2016 OTHER CLIMATE ACTIONS

Other Climate Actions

This section provides local governments the opportunity to report other climate actions that are not captured in the categories above.

Community-Wide Actions Taken in 2016

Community-Wide Actions Proposed for 2017

Corporate Actions Taken in 2016

Corporate Actions Proposed for 2017

Other	
Are you familiar with the Community Lifecycle Infrastructure Costing Tool (CLIC) ?	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 or climate change adaptation activity that your local government has undertaken and that has had or has the potential to have a significant impact. Projects included here may be featured as success stories on the B.C. Climate Action Toolkit and/or shared with other local governments to inspire further climate action. Please add links to additional information where possible.

Community-Wide Innovative Action
Corporate Innovative Action

Programs, Partnerships and Funding Opportunities

Local governments often rely on programs, partnerships and funding opportunities to achieve their climate action goals. Please share the names of programs and organizations that have supported your local government’s climate actions by listing each entry in the box below.

Programs and Funding
BC Hydro Energy Manager Funding FortisBC Custom Incentive Program Ministry of Energy and Mines Community Energy Leadership Program BC Hydro Regreening Fund Columbia Basin Trust Water Smart Ambassador Program

2016 CARBON NEUTRAL REPORTING

Local governments are required to report on their progress in achieving their carbon neutral goal under the Climate Action Charter. Working with B.C. local governments, the joint Provincial-UBCM Green Communities Committee (GCC) has established a common approach to determining carbon neutrality for the purposes of the Climate Action Charter, including a Carbon Neutral Framework and supporting guidance for local governments on how to become carbon neutral.

Prior to completing this survey, please ensure that you are familiar with guidance available on the B.C. Climate Action Toolkit website, especially *Becoming Carbon Neutral: A Guide for Local Governments in British Columbia*.

Reporting Emissions

Did you measure your local government's corporate GHG emissions in 2016?	Yes
If your local government measured 2016 corporate GHG emissions, please report the number of corporate GHG emissions (in tonnes of carbon dioxide equivalent) from services delivered <u>directly</u> by your local government:	1857.69
If your local government measured 2016 corporate GHG emissions, please report the number of corporate GHG emissions (in tonnes of carbon dioxide equivalent) from <u>contracted</u> services:	59.31
TOTAL A: CORPORATE GHG EMISSIONS FOR 2016	1917 tCO₂e

Reporting Reductions and Offsets

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

- undertake GCC-supported Option 1 Projects
- undertake GCC-supported Option 2 Projects (community GHG emissions reduction projects that meet project eligibility requirements)
- purchase carbon offsets from a credible offset provider

If applicable, please report the 2016 GHG emissions reductions (in tonnes of carbon dioxide equivalent (tCO₂e)) being claimed from Option 1 GHG Reduction Projects:

OPTION 1 PROJECTS	REDUCTIONS
Energy Efficient Retrofits	

Solar Thermal	
Household Organic Waste Composting	
Low Emission Vehicles	
Avoided Forest Conversion	
TOTAL B: REDUCTIONS FROM OPTION 1 PROJECTS FOR 2016	tCO2e

If applicable, please report the names and 2016 GHG emissions reductions (in tonnes of carbon dioxide equivalent (tCO2e)) being claimed from Option 2 GHG Reduction Projects:

OPTION 2 PROJECT NAME	REDUCTIONS
TOTAL C: REDUCTIONS FROM OPTION 2 PROJECTS FOR 2016	tCO2e

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

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

OFFSET PROVIDER NAME	OFFSETS
TOTAL D: OFFSETS PURCHASED FOR 2016	tCO2e

TOTAL REDUCTIONS AND OFFSETS FOR 2016 (Total B+C+D) = tCO₂e

Corporate GHG Emissions Balance for 2016

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

CORPORATE GHG EMISSIONS BALANCE FOR 2016 = (A – (B+C+D)) = 1917 tCO₂e

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

GCC CLIMATE ACTION RECOGNITION PROGRAM

Green Communities Committee (GCC) Climate Action Recognition Program

The joint Provincial-UBCM Green Communities Committee (GCC) is pleased to be continuing the Climate Action Recognition Program again this year. This multi-level program provides the GCC with an opportunity to review and publicly recognize the progress and achievements of each Climate Action Charter (Charter) signatory.

This year a new recognition level has been added – **Level 3: Accelerating Progress on Charter Commitments**–. Recognition is provided on an annual basis to local governments who demonstrate progress on their Charter commitments, according to the following:

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

Level 2 – Measuring GHG Emissions: for local governments that achieve level 1, and who have measured their Corporate GHG Emissions for the reporting year and demonstrate that they are familiar with the Community Energy and Emissions Inventory (CEEI)

Level 3 – Accelerating Progress on Charter Commitments: for those local governments who have achieved level 1 and 2 and have demonstrated undertaking significant action (corporately

or community wide) to reduce GHG emissions in the reporting year (ie: through undertaking a GHG reduction project, purchasing offsets, establishing a reserve fund).

Level 4 - Achievement of Carbon Neutrality: for local governments who achieve carbon neutrality in the reporting year.

For purposes of Level 3 recognition, if applicable, please identify any new or ongoing corporate or community wide GHG reduction projects (other than an Option 1 or Option 2 project) undertaken by your local government that reflects a significant investment of time or financial resources and is intended to result in significant GHG reductions:

PROJECT NAME:

Based on your local government's 2016 CARIP Climate Action/Carbon Neutral Progress Survey, please check the GCC Climate Action Recognition Program level that best applies:

<input type="checkbox"/>	Level 1 – Demonstrating Progress on Charter Commitments	
<input checked="" type="checkbox"/>	Level 2 – Measuring GHG Emissions	
<input type="checkbox"/>	Level 3 – Accelerating Progress on Charter Commitments	
<input type="checkbox"/>	Level 4 - Achievement of Carbon Neutrality	
<input type="checkbox"/>	Not Sure	