

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: Regional District of Central Kootenay

Report Submitted by:

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Date: June 15, 2018

The RDCK 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.

Community-Wide Actions Taken in 2017	
	Senior Energy Specialist (SES) partnership with FortisBC
	Sustainable Community Energy Emissions Plans (SCEEP) Implementation
	Resource Recovery Plan update - commenced
Community-Wide Actions Proposed for 2018	
	Regional Residential Retrofit
	New Build Efficiency program
	Implementation of SES recommendations
	Resource Recovery Plan update - complete

Corporate Actions Taken in 2017	
	Senior Energy Specialist (SES) partnership with FortisBC
	Re-activation of Sustainability Service & hiring of a Sustainability Coordinator
	Area G Official Community Plan – pending completion
	Area I Official Community Plan - initiated
Corporate Actions Proposed for 2018	
	Implementation of SES recommendations
	Area G Official Community Plan adoption

Broad Planning	
What is (are) your current GHG reduction target(s)?	Working towards carbon neutrality; 80% reduction of 2007 emissions by 2050

Are you familiar with your community's community energy and emissions inventory (e.g. CEEI or another inventory)?	Yes/No
What plans, policies or guidelines govern the implementation of climate mitigation in your community?	
• Community Energy and Emissions (CEE) Plan	Yes/No
• Community- Wide Climate Action Plan	Yes/No
• Integrated Community Sustainability Plan	Yes/No
• Official Community Plan (OCP)	Yes/No
• Regional Growth Strategy (RGS)	Yes/No
• Do not have a plan	Yes/No
• Other:	Yes/No
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 street lights and lights in parks or other public spaces.

Community-Wide Actions Taken in 2017	
	Glade Community Hall Energy retrofit
	City of Nelson Civic Centre electrical modernization
	North Shore Hall building upgrade
	Tarrys & District Community Hall energy upgrade amendment
	Balfour Community Hall roof replacement
	LED Lighting for Starbelly Jam Children's Program
	Stepping Stones windows replacement (Area J)
Community-Wide Actions Proposed for 2018	

Corporate Actions Taken in 2017	
	Castlegar Arena energy efficiency upgrades
	Creston & District Community Complex Curling Club windows upgrade – phase 2
	Creston & District Community Complex LED lighting conversion

Corporate Actions Proposed for 2018	
	Castlegar Arena renovation and retrofit
	Implementation of Portfolio Manager to track GHG in all three recreation facilities

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/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.

Community-Wide Actions Taken in 2017	
	Solar PV Design Comparison & Evaluation for Balfour Hall
Community-Wide Actions Proposed for 2018	
	Balfour Community Hall Solar Panels installation.

Corporate Actions Taken in 2017	
Corporate Actions Proposed for 2018	
	Commitment to 100% Renewable Energy by 2050
	Specified Risk Material/Livestock disposal study underway with intent to assess if potential source of RNG

Energy Generation	
Is your local government developing, or constructing:	
<ul style="list-style-type: none"> • A district energy system • A renewable energy system 	Yes/No Yes/No
Is your local government operating:	
<ul style="list-style-type: none"> • A district energy system • A renewable energy system 	Yes/No Yes/No
Is your local government connected to a district energy system that is operated by another energy provider?	Yes/No
Are you aware of the Integrated Resource Recovery guidance page on the BC Climate Action Toolkit ?	Yes/No
Are you familiar with the 2017 “List of Funding Opportunities for Clean Energy Projects Led by First Nations and Local Governments?”	Yes/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.

Community-Wide Actions Taken in 2017	
	Central Kootenay Food Policy Council

Columbia & Trail Society trail upgrade
South Nelson Elementary Natural Play Space
Living Lakes Canada Brilliant Headpond sensitive habitat Mapping and Document
Restoration, landscaping and signage for Nakusp Rail Society
Community-Wide Actions Proposed for 2018

Corporate Actions Taken in 2017	
	Crescent Valley Beach Regional Park development
	Kootenay Lake Shoreline Guidance Mapping & Document
	Agricultural Land Use Inventory & Agricultural Water Demand Modelling
Corporate Actions Proposed for 2018	
	Crawford Bay Regional Park establishment
	Lardeau Beach Regional Park Management Plan underway
	Conservation Guidance Document for Kootenay Lake

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

	Mobile fruit and vegetable press
	Slocan Valley organics diversion pilot planning
Community-Wide Actions Proposed for 2018	

Corporate Actions Taken in 2017	
	Update of Resource Recovery Plan to include community level organics diversion and zero waste strategies and corporate level upgrades to landfill and transfer facilities
Corporate Actions Proposed for 2018	
	Specified Risk Material/Livestock disposal study underway with intent to assess if potential source of RNG
	New Denver organics diversion pilot

Solid Waste	
Does your local government have construction and demolition waste reduction policies, plans or programs?	Yes/No
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	
	Development and construction of Accelerate Kootenays Electric Vehicle network
	Electric Vehicle Charger for Village of Slocan
Community-Wide Actions Proposed for 2018	
	Launch of EV network
	Participation in Smart Kootenays travel project
	Participation in Kootenays Rideshare expansion discussion

Corporate Actions Taken in 2017	
	RDCK Fleet purchase of Toyota Prius
Corporate Actions Proposed for 2018	
	RDCK Fleet purchase of hybrid vehicle

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

Community-Wide Actions Taken in 2017	
	Wynndel Irrigation District Reservoir Replacement
	Nakusp Centennial Golf Club Washroom modernization
Community-Wide Actions Proposed for 2018	

Corporate Actions Taken in 2017	
	Arrow creek/Erickson Water System upgrade
	Kitchener Improvement District Water System Intake improvement
Corporate Actions Proposed for 2018	
	Balfour Water system upgrade

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.	
<ul style="list-style-type: none"> • 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 • Extreme weather events contributing to urban and overland flooding • Sea level rise and storms causing coastal flooding and/or erosion 	
Other: Flood Hazards – debris torrents, debris floods, landslides	

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/No
Infrastructure upgrades (e.g. storm water system upgrades)	Yes/No
Beach Nourishment projects	Yes/No
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/No
Public education and awareness	Yes/No
Research	Yes/No
Mapping	Yes/No
Partnerships	Yes/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.	
	Development of Climate Adaptation Indicators with Rural Development Institute
	Participation in Columbia Basin Trust Climate Action workshop
	Successful application for National Disaster Mitigation Program – Regional Flood Hazard Risk Assessment
	Launch of Kootenay and Boundary Farm Advisors
	Support for Central Kootenay Food Policy Council
	WaterSmart Ambassadors
	FireSmart Ambassadors - FireSmart Canada Community Recognition program
	Community Wildfire protection plans Fuel Management prescriptions
	Regional Collaborative Planning working group for Fuel Treatment
Climate Change Adaptation Actions Proposed for 2018	
	National Disaster Mitigation Program Stream 2 Floodmapping and Policy
	FireSmart Home Partners Program (mitigation specialists)
For more information please contact:	

Corporate Actions Taken in 2017	
Corporate Actions Proposed for 2018	

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 [CEA’s Climate and Energy Action Awards](#), [UBCM Climate and Energy Action Award](#), [FCM Sustainable Communities Awards](#) or through submissions to [FCM’s National Measures Report](#).

Community-Wide Action
For more information contact:
Corporate Action
For more information contact:

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
Columbia Basin Trust Rural Development Institute at Selkirk College National Disaster Mitigation Program Municipalities for Climate Innovation Program Natural Resources Canada

Adaptation

Programs and Funding
Columbia Basin Trust Rural Development Institute at Selkirk College National Disaster Mitigation Program Municipalities for Climate Innovation Program Natural Resources Canada

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 [Becoming Carbon Neutral: A Guide for Local Governments in British Columbia](#).

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 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 the number of corporate GHG emissions (in tonnes of carbon dioxide equivalent) from <u>contracted</u> services:	
TOTAL A: CORPORATE GHG EMISSIONS FOR 2017	1,840tCO₂e

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	4.3 tonnes
Low Emission Vehicles	
Avoided Forest Conversion	
TOTAL B: REDUCTIONS FROM OPTION 1 PROJECTS FOR 2017	4.3 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
Creston Landfill 2017 GHG Reduction Quantification (Sperling Hansen Assoc)	1,604
TOTAL C: REDUCTIONS FROM OPTION 2 PROJECTS FOR 2017	1,604tCO₂e

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) = 1,604tCO2e

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)) = 236tCO2e

**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?	Yes/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:

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