

Climate Action Revenue Incentive (CARIP) Public Report for 2017

Local Government:
Village of Fraser Lake
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Report Submitted by:
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The Village of Fraser Lake 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	

Community-Wide Actions Proposed for 2018	

Corporate Actions Taken in 2017	
	Participation in RDBN Solid Waste Management Plan review with a focus of improving Recycling Services within the municipality and Area D, RDBN. Have identified a suitable location on municipal property to establish a Recycle Depot for cardboard, paper, glass, tin, plastic. (Ongoing into 2018)
	Update of the Village of Fraser Lake Official Community Plan in conjunction with the RDBN Area D Official Community Plan (Ongoing into 2018)
	Completion of a Trails and Sidewalk study to review existing walking trails and sidewalks and to develop a community wide plan for future improvements/enhancements to make the community more walkable
Corporate Actions Proposed for 2018	
	Participation in the Community Forest Conference, Burns Lake, B.C. May 24 to 26, 2018. Exploring innovative methods and opportunities to improve use of low value fibre from our Community Forest as we ramp up for operations. (Planning)
	Community Transportation – Acquired and placed Community Vehicle into service. Services 4 area communities and two First Nations. (Active)

Broad Planning	
What is (are) your current GHG reduction target(s)?	(Please provide details here)
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 Emissions (CEE) Plan	No
• Community- Wide Climate Action Plan	No
• Integrated Community Sustainability Plan	No
• Official Community Plan (OCP)	Yes
• Regional Growth Strategy (RGS)	No
• Do not have a plan	No
• Other:	
Does your local government have 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.

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

Corporate Actions Taken in 2017	
	Discussions with BC Hydro regarding replacement of Metal Halide street lighting with LED
	Installation of a Real Ice system in our ice arena. Intended to reduce NG consumption with reduced need for heated water for flooding the rink. Also saw a significant reduction in run time hours on our ice plant (example: 50 hours less in one month)
	Replacement of low efficiency gas furnaces in Fire Hall with high efficiency radiant heat system. From 50 % efficiency to 90%.
	Any replacement of lighting throughout the Village is to LED
	Trail upgrade through White Swan Park and along the lakefront to facilitate active transportation
Corporate Actions Proposed for 2018	

	Replacement of our Ice Plant Condenser with installation of new condenser incorporating a closed loop glycol cooling system. This will significantly reduce water consumption at the arena that is currently used to cool the condenser and compressors.

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?	No
Is your local government implementing the BC Energy Step Code?	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	
Community-Wide Actions Proposed for 2018	

Corporate Actions Taken in 2017

Corporate Actions Proposed for 2018

Energy Generation	
Is your local government developing, or constructing: <ul style="list-style-type: none"> • A district energy system • A renewable energy system 	No Yes/No
Is your local government operating: <ul style="list-style-type: none"> • A district energy system • A renewable energy system 	No 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 ?	Yes
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.

Community-Wide Actions Taken in 2017	
	Wildfire mitigation – reduction of fuel load in Village greenspace
	Support of Community Garden

Community-Wide Actions Proposed for 2018	
	Wildfire mitigation – reduction of fuel load in Village Greenspaces
	Support of Community Garden

Corporate Actions Taken in 2017	
	Planting trees – 14 large stock trees
	Walking trail enhancement/maintenance
	Canoe project. “Our equipment/Your Adventure”. Canoes made available to the public to support non-motorized on the lake activity
Corporate Actions Proposed for 2018	
	Planting trees – 14 large stock trees
	Walking trail enhancements/maintenance
	Celebrating local agriculture – Theme for 2018 Canada Day celebrations

Greenspace	
Does your local government have urban forest policies, plans or programs?	No
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.

Community-Wide Actions Taken in 2017	
	Spring clean up – Municipal pick up of large items/materials (sorting of materials for recycling and Solid waste disposal)
	Maintenance of a Community Compost area – Yard waste/grass clipping/brush
	Men’s Shed recycling. Taking dilapidated tools, repairing them and re selling them

Community-Wide Actions Proposed for 2018	

Corporate Actions Taken in 2017	
	Participation in RDBN Solid Waste Management Plan review with a focus of improving Recycling Services within the municipality and Area D, RDBN . Have identified a suitable location on municipal property to establish a Recycle Depot for cardboard, paper, glass, tin, plastic. (Ongoing into 2018)
Corporate Actions Proposed for 2018	
	Participation in the Community Forest Conference, Burns Lake, B.C. May 24 to 26, 2018. Exploring innovative methods and opportunities to improve use of low value fibre from our Community Forest as we ramp up for operations. (Planning)
	Adoption of Good Neighbour Bylaw. Enables the Municipality to deal with wrecked vehicles and other large debris stored on private properties within the municipality.
	Maintenance of a Community Compost area – Yard waste/grass clipping/brush

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	
Community-Wide Actions Proposed for 2018	

Corporate Actions Taken in 2017	
	Municipal support of the Ministry of Transportation Highway 16 Corridor Transportation System. Maintenance of bus shelter/selling bus tickets – Public transportation
Corporate Actions Proposed for 2018	
	Initiation of our Community Vehicle program. Provides affordable public transportation within the municipality and out into the rural areas surrounds Fraser Lake. Program serves Fraser Lake, two FN Communities and 3 small rural communities.

Transportation		
Does your local government have policies, plans or programs to support:		
•	Walking	Yes
•	Cycling	No
•	Transit Use	Yes
•	Electric Vehicle Use	Yes

• 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 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.

Community-Wide Actions Taken in 2017	
	Summer Season discussion of water conservation in Village Newsletter
	Sprinkling bylaw restricting water usage for watering lawns
Community-Wide Actions Proposed for 2018	
	Pressure reduction in RV water fill. Better manage water from Community Drinking water system
	Door to door deliver of "Good Neighbour" booklet with information on Water Restrictions for watering lawns/gardens

Corporate Actions Taken in 2017	
Corporate Actions Proposed for 2018	
	Planning and design of 4 th sewer lagoon to manage extreme precipitation events and spring freshet

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: Quicker onset of spring temperatures which accelerate and increase spring freshet	

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)	No
Beach Nourishment projects	No
Economic diversification initiatives	No
Strategic and financial planning	No
Cross-department working groups	No
OCP policy changes	Yes
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:

Working on obtaining funding to Plan, design and construct a 4th Sewer Lagoon to address sudden and significant influx of spring freshet

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.

	Grant applications – 4 th Sewer lagoon

Climate Change Adaptation Actions Proposed for 2018

	Planning and Design activity for 4 th Sewer Lagoon

For more information please contact:

	Rodney J. Holland – phone: (250) 699-6257
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<p>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?</p>	
<p> Indicators of Climate Change for British Columbia, 2016 Plan2Adapt Climate Projections for Metro Vancouver Climate Projections for the Capital Region Climate Projections for the Cowichan Valley Regional District Province of BC's BC Adapts Video Series Preparing for Climate Change: An Implementation Guide for Local Governments The Public Infrastructure and Engineering Vulnerability Committee's (PIEVC) protocol Sea Level Rise Primer BC Regional Adaptation Collaborative Webinars www.ReTooling.ca Water Balance Model The Water Conservation Calculator Funding: National Disaster Mitigation Program (NDMP) Community Emergency Preparedness Fund (CEPF) Municipalities for Climate Innovation Program (MCIP) Climate Adaptation Partner Grants (FCM) Infrastructure Planning Grants (MAH) Federal Gas Tax Fund </p>	<p> Haven't Used Haven't Used Haven't Used Haven't Used Haven't Used Haven't Used Haven't Used Haven't Used Haven't Used Haven't Used Haven't Used Haven't Used Haven't Used Haven't Used Haven't Used Haven't Used Haven't Used Haven't Used Haven't Used Usefull </p>
<p>Other:</p>	

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.

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

Corporate Actions Taken in 2017	
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 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

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 [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?	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	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	
2017 Energy Audit. Pursuing Audit recommendations. Arena Ice Plant retro fit to reduce water. Natural gas and electrical consumption. Ice plant running 50 hours less per month	
Solar Thermal	
Household Organic Waste Composting	
Community Compost site; household waste, yard waste, small brush	

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)) = 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?	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 checked="" type="checkbox"/>	Level 1 – Demonstrating Progress on Charter Commitments	x
<input 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	