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CLIMATE ACTION REVENUE INCENTIVE (CARIP) PUBLIC REPORT FOR 2017



July 18, 2018

Local Government: Village of Silverton

The Village of Silverton 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.

Climate Action Revenue Incentive (CARIP) Public Report for 2017

LOCAL GOVERNMENT: VILLAGE OF SILVERTON

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
Asset Management Plan and Assessment
Community Composting Program
Solar PV Facility Assessment
Climate Adaptation Program and Assessment
Eco-Asset Mapping
Community-Wide Actions Proposed for 2018
Facility Building Performance Assessment
Official Community Plan Review
Zoning Bylaw Update
Fleet Assessment

Corporate Actions Taken in 2017
Solar PV Facility Assessment
Asset Management Plan Implementation
Eco-Asset Management Assessment
Tree Inventory Assessment
Corporate Actions Proposed for 2018
Aquifer Assessment Plan
Watershed Assessment
Bull Trout WHA Application
Climate Adaptation Assessment

Broad Planning	
What is (are) your current GHG reduction target(s)?	10%
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?	NO NO
<ul style="list-style-type: none"> • Community Energy and Emissions (CEE) Plan • Community- Wide Climate Action Plan • Integrated Community Sustainability Plan • Official Community Plan (OCP) • Regional Growth Strategy (RGS) • Do not have a plan • Other: 	YES YES
Does your local government have a corporate GHG reduction plan?	YES

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
Upgrade to high efficiency lighting in 3 public buildings
Upgrade to a new heating and cooling system in Gallery building
Upgrade building performance envelope in 2 public buildings
Community-Wide Actions Proposed for 2018
Upgrade lighting in 3 public buildings
Upgrade building performance envelope in 2 public buildings

Corporate Actions Taken in 2017
Upgrade lighting in 3 public buildings
Upgrade insulation in 2 public buildings
Installation of new heating and cooling system in 1 public building
Installation of a new fire suppression system in 1 public building
Corporate Actions Proposed for 2018

Installation of level 2 electric vehicle stations
Work towards LED lighting in all buildings
Upgrade insulation in community hall

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 Code?	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.

Community-Wide Actions Taken in 2017

Replace oil heating system to mechanical heating system in 1 public building
Solar PV installation in 3 public buildings

Community-Wide Actions Proposed for 2018

Replace heating system in 1 public building
Solar PV installation in 3 public buildings

Corporate Actions Taken in 2017

LED lighting installations in 3 public buildings
Replace heating system in 1 public building

Corporate Actions Proposed for 2018

Building performance envelope improvements in 1 public building
Assessment of water reservoir performance
Fleet vehicle assessment

Energy Generation	
Is your local government developing, or constructing: • A district energy system • A renewable energy system	NO NO
Is your local government operating: • 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?”	YES

2017 GREENSPACE/NATURAL RESOURCE PROTECTION ACTIONS

GREEN SPACE 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
Trail development
Tree removal and replacement program
Community-Wide Actions Proposed for 2018
Tree removal and replacement program
Trail enhancement and development

Corporate Actions Taken in 2017
Tree removal and replacement program
Trail development
Corporate Actions Proposed for 2018
Continued tree removal and replacement program
Trail development
Implementation of a new outdoor exercise equipment placement

Green Space	
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?	YES

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	
Community composting program	
Waste diversion assessment	
Community-Wide Actions Proposed for 2018	
Community composting program	
Waste diversion initiatives	

Corporate Actions Taken in 2017	
Waste diversion policy development	
Waste diversion assessment	
Corporate Actions Proposed for 2018	
Waste diversion assessment	
Community recycling program	

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

2017 TRANSPORTATION ACTIONS

TRANSPORTATION ACTIONS

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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
Fleet assessment
Pavement strategy
Electric vehicle station
Community-Wide Actions Proposed for 2018
Electric vehicle station
Fleet assessment
Pavement management plan

Corporate Actions Taken in 2017
Pavement rehabilitation program
Sidewalk assessment program
Corporate Actions Proposed for 2018
Sidewalk replacement program
Pavement management program

Solid Waste	
Does your local government have policies, plans or programs to support: <ul style="list-style-type: none"> • Walking • Cycling • Transit Use • Electric Vehicle Use • Other (please specify) 	In Progress In Progress In Progress In Progress
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?	YES

2017 WATER AND WASTEWATER ACTIONS

WATER AND WASTEWATER ACTIONS

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

Community-Wide Actions Taken in 2017	
Water main replacement program	
Water reservoir assessment	
Community-Wide Actions Proposed for 2018	
Water reservoir upgrade assessment	
Water main replacement program	

Corporate Actions Taken in 2017	
Water main replacement program	
Water reservoir upgrades	
Corporate Actions Proposed for 2018	
Water reservoir upgrades	
Water main replacement program	
Water hydrant replacement program	

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

2017 CLIMATE CHANGE ADAPTATION ACTIONS

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 	✓ ✓ ✓

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• 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	YES
Risk Reduction Strategies	
Emergency response planning	YES
Asset management	
Natural/Eco asset management strategies	YES
Infrastructure upgrades (e.g. storm water system upgrades)	YES
Beach Nourishment projects	YES
Economic diversification initiatives	
Strategic and financial planning	
Cross-department working groups	
OCP policy changes	YES
Changes to zoning and other bylaws and regulations	YES
Incentives for property owner (e.g. reducing storm water run-off)	
Public education and awareness	
Research	YES
Mapping	
Partnerships	

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.
Working with stakeholders on climate adaptation planning
Working with regional district on mapping
Working with consultants on a watershed assessment
Working with consultants on wildfire mitigation plans
Climate Change Adaptation Actions Proposed for 2018
Partnering with regional district and RDI on climate adaptation plans and implementation plans
Wildfire mitigation implementation program
For more information please contact:
info@silverton.ca

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
Plan2Adapt	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	Useful
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)	Useful
Municipalities for Climate Innovation Program (MCIP)	Useful
Climate Adaptation Partner Grants (FCM)	Useful
Infrastructure Planning Grants (MAH)	Useful
Federal Gas Tax Fund	Useful

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 Other Actions in 2017	
Tree inventory assessment	
Eco-asset assessment	

Corporate Other Actions in 2016	
Asset management plan	
Aquifer assessment	
Other:	
Are you familiar with the Community Lifecycle Infrastructure Costing Tool (CLIC)?	YES
Have you used CLIC?	NO

INNOVATION AND 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 Actions

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Corporate Actions

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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

Federal Gas Tax Program Columbia Basin Trust Regional District of Central Kootenay Healthy Community Society Harvest Share WildSafe BC Lucerne Elementary Secondary School Village of New Denver

Village of Slocan

Adaptation

Programs and Funding
UBCM Strategic Wildfire Protection Program Slocan Integral Forestry Cooperative (SIFCO)

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
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 directly by your local government:	25
If your local government measured 2017 corporate GHG emissions, please report the number of corporate GHG emissions (in tonnes of carbon dioxide equivalent) from contracted services:	0
TOTAL A: CORPORATE GHG EMISSIONS FOR 2017	25 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
Energy Efficient Retrofits	
Solar Thermal	
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) = 0 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)) = 25 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

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:

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Level 1 – Demonstrating Progress on Charter Commitments	√
Level 2 – Measuring GHG Emissions	
Level 3 – Accelerating Progress on Charter Commitments	
Level 4 - Achievement of Carbon Neutrality	
Not Sure	