# Climate Action Revenue Incentive Program (CARIP) Public Report for 2017

# **Columbia Shuswap Regional District**

Ben Van Nostrand, Team Leader Environmental Health Services <a href="mailto:bvannostrand@csrd.bc.ca">bvannostrand@csrd.bc.ca</a>
250.833.5940
May 22, 2018



The Columbia Shuswap Regional District 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, and centred) plays an especially important role in energy and GHG reduction.

| -  | Community-Wide Actions Taken in 2017   |  |  |
|--|--|--|--|
|  | No new Regional Growth Strategy, Official Community Plans, or Zoning Bylaws were adopted by the CSRD in 2017.  |  |  |
|  | CSRD continues to contribute to Shuswap Trails Roundtable – a regional leadership body working to advance active transportation in the Shuswap area. |  |  |
| Community-Wide Actions Proposed for 2018 |  |  |  |

| Co | Corporate Actions Taken in 2017                      |  |  |
|----|--|--|--|
|    | Continued work to ensure the CSRD is carbon neutral. |  |  |
|    |  |  |  |
| Co | Corporate Actions Proposed for 2018                  |  |  |
|    | Continued work to ensure the CSRD is carbon neutral. |  |  |

| Broad Planning  |  |     |
|---|--|-----|
| What is (are) your current GHG reduction target(s)?  To be carbon neutral.                              |  |     |
| Has your local government used the Community Energy and Emissions Inventory (CEEI) to measure progress? |  |     |
| What plans, policies or guidelines govern the implementation of climate mitigation in your community?   |  |     |
| Official Community Plan (OCP)   |  | Yes |
| Does your local government have a corporate GHG reduction plan?   |  | Yes |
| Does your local government have a climate reserve fund or something similar?                            |  | Yes |

## 2017 BUILDINGS AND LIGHTING ACTIONS

## **Building and Lighting Actions**

Community-Wide Actions Taken in 2017

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                        |  |  |
|---|---|--|--|
|   |   |  |  |
| C | ommunity-Wide Actions Proposed for 2018                     |  |  |
|   |   |  |  |
|   |   |  |  |
| C | Corporate Actions Taken in 2017                             |  |  |
|   | Continuous plans to upgrade buildings for energy efficiency |  |  |
|   |   |  |  |

Corporate Actions Proposed for 2018

Energy efficient lighting replacement where needed.

## 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.

| Č | Community-Wide Actions Taken in 2017    |  |
|---|---|--|
|   | Not applicable.                         |  |
|   |   |  |
| C | ommunity-Wide Actions Proposed for 2018 |  |
|   | Not applicable.                         |  |
|   |   |  |
| ŏ | orporate Actions Taken in 2017          |  |
|   | Not applicable                          |  |
|   |   |  |
| C | Corporate Actions Proposed for 2018     |  |
|   | Not applicable.                         |  |
|   |   |  |

| Energy Generation   |   |     |
|---|---|-----|
| Is your local government developing, or constructing:   |   |     |
| •   | A district energy system  | No  |
| •   | A renewable energy system   | No  |
| Is your local go  | vernment 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 Toolkit?  | of the Integrated Resource Recovery guidance page on the <u>BC Climate Action</u> | Yes |

# **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.

| Co | Community-Wide Actions Taken in 2017   |  |  |
|----|--|--|--|
|    | Purchase agreement approved for the Mara Lake/Sicamous rail corridor             |  |  |
|    | Ongoing Shuswap Regional Trails Roundtable meetings promoting greenway corridors |  |  |
|    |  |  |  |
| Co | Community-Wide Actions Proposed for 2018   |  |  |
|    | Mara Lake CP Rail trail system development                                       |  |  |
|    |  |  |  |

| Corporate Actions Taken in 2017   |  |  |
|---|--|--|
| No specific actions taken.  |  |  |
|   |  |  |
| Corporate Actions Proposed for 2018                                       |  |  |
| No specific plans for 2018.   |  |  |
|   |  |  |
| Greenspace  |  |  |
| Does your local government have urban forest policies, plans or programs? |  |  |

# **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  |  |  |  |
|---|--|--|--|
| The CSRD continued to advance programs related to commercial food waste composting. |  |  |  |
|   |  |  |  |
| Community-Wide Actions Proposed for 2018  |  |  |  |
| Working towards implementation of a commercial food waste ban.                      |  |  |  |
| Developing a composting facility in Revelstoke.                                     |  |  |  |
|   |  |  |  |
| Corporate Actions Taken in 2017   |  |  |  |
| Food waste collection program implemented at the main CSRD office building.         |  |  |  |
|   |  |  |  |
| Corporate Actions Proposed for 2018   |  |  |  |
|   |  |  |  |

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

# **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.

| C  | Community -Wide Actions Taken in 2017                       |  |  |
|----|---|--|--|
|    | Continued planning on parallel trail construction programs. |  |  |
|    |   |  |  |
| Co | ommunity-Wide Actions Proposed for 2018                     |  |  |
|    | Improved biking and trail systems                           |  |  |
|    |   |  |  |
| Co | Corporate Actions Taken in 2017                             |  |  |
|    |   |  |  |
|    |   |  |  |

| Corporate Actions Proposed for 2018  |   |     |
|--|---|-----|
|  |   |     |
| Transportatio  | n   |     |
| Does your loca   | al government have policies, plans or programs to support:                  |     |
| •  | Walking   | Yes |
| •  | Cycling   | Yes |
| •  | Transit Use   | No  |
| •  | Electric Vehicle Use  | No  |
| •  | Other   | Yes |
| Electoral A  | Area C Parks Plan is recommending an active transportation plan for Area C. |     |
| Does your local government have a transportation demand management (TDM) strategy              |   | No  |
| (e.g. to reduce single-vehicle occupancy trips, increase travel options, provide incentives to |   |     |
| encourage ind  | ividuals to modify travel behavior)?  |     |
| Does your loca   | al government have policies, plans or programs to support local food        | Yes |
| production (th   | us reducing transportation emissions)?                                      |     |

## 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  |  |  |
|---|--|--|
| Upgrades to community water systems   |  |  |
|   |  |  |
| Community-Wide Actions Proposed for 2018  |  |  |
| Sunnybrae water system to be commissioned for service in 2018.                      |  |  |
|   |  |  |
| Corporate Actions Taken in 2017   |  |  |
| Area C sewer upgrade planning work  |  |  |
|   |  |  |
| Corporate Actions Proposed for 2018   |  |  |
| Continued work related to a community sewer system for Electoral Area C.            |  |  |
|   |  |  |
| Water Conservation  |  |  |
| Does your local government have water conservation policies, plans or programs? Yes |  |  |

## **2017 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 2017   |     |
|---|-----|
| Ongoing risk assessment work.   |     |
|   |     |
| Climate Change Adaptation Actions Proposed for 2018   |     |
| Nothing specific to report.   |     |
|   |     |
| Resources you have used to support climate change adaptation                                  |     |
| (e.g. Plan2Adapt, Preparing for Climate Change: Implementation Guide)                         |     |
| Provincial government supplied education and resource materials                               |     |
| In 2017 did you consider climate change impacts in any of the following areas? (check if yes) |     |
| in 2017 and you consider change impacts in any or 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)  | Yes |
| Economic diversification initiatives  |     |
| Ecosystem-based approaches (incl. shorelines)   |     |
| Incentives (e.g. property owner reducing stormwater run-off)                                  |     |
| Public education and awareness  | Yes |
| Research (e.g.mapping, participation in studies)  |     |
| Other (Please Identify):  |     |
|   |     |

# **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.

| Co | Community-Wide Actions Taken in 2017     |  |  |
|----|--|--|--|
|    | Not applicable.                          |  |  |
|    |  |  |  |
| Co | Community-Wide Actions Proposed for 2018 |  |  |
|    | Not applicable.                          |  |  |
|    |  |  |  |

| C | Corporate Actions Taken in 2017     |  |  |
|---|-------------------------------------|--|--|
|   | Not applicable.                     |  |  |
|   |                                     |  |  |
| C | Corporate Actions Proposed for 2018 |  |  |
|   | Not applicable.                     |  |  |
|   |                                     |  |  |

| 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**

The CSRD continues to work towards planning and operational initiatives that incorporate carbon neutral/carbon reduction principles.

#### **Corporate Innovative Action**

Continuous improvements to corporate building and corporate capital goods.

## **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**

Partnerships with the Columbia Basin Trust for funding food waste diversion programs in Revelstoke.

## **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 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 2017?       | Yes       |
|--|-----------|
|  |           |
| If your local government measured 2017 corporate GHG emissions, please report  | 494.59    |
| 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  | 48.51     |
| the number of corporate GHG emissions (in tonnes of carbon dioxide equivalent) |           |
| from <u>contracted</u> services:   |           |
| TOTAL A: CORPORATE GHG EMISSIONS FOR 2017                                      | 543 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 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         | Not applicable |
|                                    |                |
| Solar Thermal                      | Not applicable |
|                                    |                |
| Household Organic Waste Composting | Not applicable |
|                                    |                |

| Low Emission Vehicles                               | Not applicable |
|---|----------------|
|   |                |
| Avoided Forest Conversion                           | Not applicable |
|   |                |
| TOTAL B: REDUCTIONS FROM OPTION 1 PROJECTS FOR 2017 | 0 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 |
|---|------------|
|   |            |
| Landfill Gas Collection, Transmission, and/or Flaring System for the Salmon Arm | 543        |
| Landfill  |            |
| TOTAL C: REDUCTIONS FROM OPTION 2 PROJECTS FOR 2017                             | 543 tCO2e  |

If applicable, please report the 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 |
|-------------------------------------|---------|
|                                     |         |
| Not applicable                      |         |
|                                     |         |
| TOTAL D: OFFSETS PURCHASED FOR 2017 | 0 tCO2e |

TOTAL REDUCTIONS AND OFFSETS FOR 2017 (Total B+C+D) = 543 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)) = 0 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 (i.e.: through undertaking a GHG reduction project, purchasing offsets, establishing a reserve fund).

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

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

| PROJECT NAME: |  |  |
|---------------|--|--|
|               |  |  |

Based on your local government's 2017 CARIP Climate Action/Carbon Neutral Progress Survey, please check the GCC Climate Action Recognition Program level that best applies:

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