Climate Action Revenue Incentive (CARIP) Public Report for 2015

Local Government:

Regional District of Bulkley-Nechako

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The Regional District of Bulkley-Nechako has completed the 2015 Climate Action Revenue Incentive Program (CARIP) Public Report as required by the Province of BC. The CARIP report summarizes actions taken in 2015 and proposed for 2016 to reduce corporate and community-wide energy consumption and greenhouse gas emissions (GHG) and reports on progress towards achieving carbon neutrality. There is also an opportunity to report on climate adaptation actions.

2015 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.

| Coi | Community-Wide Actions Taken in 2015 | |
|--|--|--|
| | Distributed the Sustainable Rural Land Development Checklist. | |
| | Initiated the process to review the Official Community Plan for Electoral Areas B & E. | |
| Community-Wide Actions Proposed for 2016 | | |
| | Initiation of the process to develop a region-wide land use strategy. | |
| | Finish reviewing the Official Community Plan for Electoral Areas B & E. | |
| | Continue to distribute the Sustainable Rural Land Development Checklist document. | |

| Coi | Corporate Actions Taken in 2015 | |
|-----|-------------------------------------|--|
| | | |
| Coi | Corporate Actions Proposed for 2016 | |
| | | |

| Snapshot Questions | |
|---|-----|
| Are GHG reduction targets are included in your local government's Official Community Plan | Yes |
| or Regional Growth Strategy? | |
| Are you familiar with the Community Energy and Emission Inventory (CEEI)? | Yes |
| Does your local government use the Community Energy and Emissions Inventory (CEEI) to measure progress? | |
| Which of the following does your local government use to guide climate action implementation? | |
| Community Energy and Emissions (CEE) Plan | Yes |
| Climate Action Plan | Yes |
| Integrated Community Sustainability Plan | Yes |
| Official Community Plan (OCP) | Yes |
| Regional Growth Strategy (RGS) | No |
| Other: | No |
| Does your local government have a climate action reserve fund? | Yes |
| Does your local government have a Corporate Climate Action Plan? | Yes |

2015 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 2015

Funded numerous community energy upgrades with Gas Tax Community Works funds.

Community-Wide Actions Proposed for 2016

Continue to work with community groups to realize energy efficiencies at their facilities.

Corporate Actions Taken in 2015

Replaced all exterior lighting at the Bulkley Valley Pool with LED bulbs. Also added onto the Distribution Digital Control (DDC) system (main air handling unit and heat system) by expanding it to the fitness and multi-purpose rooms. The control allows for setting controls automatically based on outside air temperatures and ratios, thus using less energy. The saturated exterior building insulation and stucco (at seams) has also been replaced, which helps with heating and cooling as well.

Corporate Actions Proposed for 2016

Explore the possibility of energy efficiencies at transfer stations with LED lighting.

Continue to upgrade lighting at the BV Pool, looking at the pool natatorium lights. Also planning to upgrade hot water system to save energy output. Add to the DDC system by installing a controller to the main pool boiler.

2015 ENERGY GENERATION ACTIONS

Energy Generation

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.

| Coi | Community-Wide Actions Taken in 2015 | | |
|-----|--|--|--|
| | Worked with a community church in Burns Lake to install a heat pump in their system to make it | | |
| | more efficient. | | |
| | Worked with various community groups looking for green energy choices. | | |
| Coi | Community-Wide Actions Proposed for 2016 | | |
| | Continue to work with community groups to acquire funding and make older facilities more | | |
| | efficient. | | |

| Co | Corporate Actions Taken in 2015 | | |
|----|-------------------------------------|--|--|
| | | | |
| Со | Corporate Actions Proposed for 2016 | | |
| | | | |

| Snapshot Questions | |
|--|-----|
| Is your local government developing, or constructing a district energy project? | No |
| Is your local government operating a district energy system? | No |
| Is your local government developing or constructing a renewable energy project? | No |
| Is your local government operating a renewable energy project? | No |
| Are you aware of the Integrated Resource Recovery guidance page on the BC Climate Action Toolkit (insert link here)? | Yes |

2015 GREENSPACE/ NATURAL RESOURCE PROTECTION 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.

| Coi | Community-Wide Actions Taken in 2015 | |
|-----|--|--|
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| Coi | Community-Wide Actions Proposed for 2016 | |
| | | |

| Corporate Actions Taken in 2015 | |
|-------------------------------------|--|
| | |
| Corporate Actions Proposed for 2016 | |
| | |

| Snapshot Question | |
|---|----|
| Does your local government have urban forest policies, plans or programs? | No |

2015 SOLID WASTE ACTIONS

Solid Waste

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.

| Coi | Community-Wide Actions Taken in 2015 | |
|-----|--|--|
| | Provided direct funding to local community based recycling groups to support waste reduction | |
| | initiatives. | |
| | Helped expand recycling at Houston Bottle Depot by adding in plastics. MMBC depot operations | |
| | were implemented in both Burns Lake and Smithers. | |
| | Continued promoting backyard composting with the sale of subsidized composters. | |
| Coi | Community-Wide Actions Proposed for 2016 | |
| | Implementing a cardboard ban for the landfills. | |
| | Continued promotion of backyard composting. | |

| Coi | Corporate Actions Taken in 2015 | |
|-----|---|--|
| | Additional landfill closure work completed at the Vanderhoof site. Top dressed the area and | |
| | brought in additional top soil. Grass seed added. | |
| | Wetland plant augmentation (increased carbon intake) at Knockholt Landfill. | |
| | The RDBN took over operations at two landfills in our region. This included the purchase of new | |
| | fuel efficient equipment. | |
| Coi | rporate Actions Proposed for 2016 | |
| | Developing a portable recycling station for events at our facilities. | |
| | Review of Solid Waste Management Plan. | |
| | Remaining closure works at Vanderhoof Landfill site. | |
| | Adding hybrid power to weigh scales at Knockholt and Clearview Landfills. | |

| Snapshot Questions | |
|---|-----|
| 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 |

2015 TRANSPORTATION ACTIONS

Transportation

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 2015 | | | |
|---------------------------------------|--|--|--|
| | | | |
| Co | Community-Wide Actions Proposed for 2016 | | |
| | | | |

Corporate Actions Taken in 2015

Research process before purchasing any vehicles, to ensure we are making the best choices in terms of needs and fuel consumption.

Policy regarding staff carpooling when traveling to conferences, seminars and meetings continues to be in force.

Corporate Actions Proposed for 2016

Development of an anti-idling policy for RDBN vehicles and education for the public regarding benefits of reduced idling times.

| Snapshot Questions | |
|--|----|
| Does your local government have policies, plans or programs to support: | |
| Walking | No |
| Cycling | No |
| Transit Use | No |
| Electric Vehicle Use | No |
| • Other | 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)? | |
| Does your local government have policies, plans or programs to support local food | |
| production (thus reducing transportation emissions)? | |

2015 WATER AND WASTEWATER ACTIONS

Water and Wastewater

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 2015

Water restriction notices were distributed to residents in the unincorporated community of Fort Fraser.

Community-Wide Actions Proposed for 2016

Distribute a notice to all residents regarding ways to be "water-wise", i.e. minimize water usage, best times to water lawns, etc.

Review existing studies regarding water system and develop plan for completing studies necessary for infrastructure grant application.

Corporate Actions Taken in 2015

A number of water distribution leaks were repaired in Fort Fraser. This will reduce water demand and pump operation.

Corporate Actions Proposed for 2016

Desludging the lagoon at Knockholt Landfill. This will improve the operation and efficiency of the leachate/septage treatment system.

Snapshot Questions

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

Yes

2015 CLIMATE CHANGE ADAPTATION ACTIONS

Climate Change Adaptation

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.

Community-Wide Actions Taken in 2015

A sustainability newsletter with green ideas and tips, along with earth-friendly recipes and ideas was distributed throughout the region on a bi-monthly basis. This also inspired a spin-off sustainability Facebook page.

Community-Wide Actions Proposed for 2016

Continue to promote sustainable living through the newsletter and other related public education.

| Corporate Actions Taken in 2015 | | | |
|---------------------------------|-------------------------------------|--|--|
| | | | |
| Co | Corporate Actions Proposed for 2016 | | |
| | | | |

| Snapshot Questions | | |
|---|-----|--|
| Are you aware of the Plan2Adapt guidance page on the <u>BC Climate Action Toolkit</u> ? | Yes | |
| Are you aware of the <i>Preparing for Climate Change, An Implementation Guide for Local Governments in BC</i> on the <u>BC Climate Action Toolkit</u> ? | Yes | |
| Have you visited the climate change adaptation guidance page on the <u>BC Climate Action</u> <u>Toolkit</u> ? | Yes | |

2015 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 2015 | | | |
|--------------------------------------|--|--|--|
| | | | |
| Co | Community-Wide Actions Proposed for 2016 | | |
| | | | |

| Corporate Actions Taken in 2015 | | | |
|---------------------------------|-------------------------------------|--|--|
| | | | |
| Co | Corporate Actions Proposed for 2016 | | |
| | | | |

INNOVATION AND PEER-TO-PEER LEARNING

Innovation

This section provides the opportunity to showcase an innovative Corporate and/or Community-Wide reduction or adaptation activity that your local government has undertaken and that has had a significant impact 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 appropriate box below.

| Programs and Funding | |
|----------------------|--|
| | |

2015 CARBON NEUTRAL REPORTING

Reporting Emissions

| If your local government measured 2015 corporate GHG emissions, please report the number of corporate GHG emissions (in tonnes of carbon dioxide equivalent) from <u>contracted</u> services: | 5 |
|---|-----|
| , | 5 |
| , | 5 |
| | |
| | |
| from services delivered <u>directly</u> by your local government: | |
| the number of corporate GHG emissions (in tonnes of carbon dioxide equivalent) | |
| If your local government measured 2015 corporate GHG emissions, please report | 667 |
| | |
| (Yes/No) | |
| Did you measure your local government's corporate GHG emissions in 2015? | Yes |

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

If applicable, please report the 2015 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 2015 | tCO2e |

If applicable, please report the names and 2015 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 2015 | tCO2e |

If applicable, please report the number of offsets purchased (in tonnes of carbon dioxide equivalent (tCO2e)) from an offset provider for the 2015 reporting year:

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

| OFFSET PROVIDER | REDUCTIONS |
|-------------------------------------|------------|
| | |
| | |
| | |
| | |
| | |
| | |
| | |
| TOTAL D: OFFSETS PURCHASED FOR 2015 | tCO2e |

TOTAL REDUCTION AND OFFSETS FOR 2015 (Total B+C+D) = tCO2e

Corporate GHG Emissions Balance for 2015

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 2015 = (A - (B+C+D)) = 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. Recognition is provided on an annual basis to local governments who demonstrate progress on their Charter commitments, according to the following:

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

Level 2 - Measurement: for local governments 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 - Achievement of Carbon Neutrality: for local governments who achieve carbon neutrality in the reporting year.

Based on your local government's 2014 CARIP Public Report, please check the GCC Climate Action Recognition Program level that best applies:

| | Level 1 - Progress on Charter Commitments | |
|--|--|---|
| | Level 2 - Measurement | х |
| | Level 3 - Achievement of Carbon Neutrality | |
| | Not Sure | |