Climate Action Revenue Incentive (CARIP) Public Report for 2016

Local Government: City of White Rock

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The City of White Rock has completed the 2016 Climate Action Revenue Incentive Program (CARIP) Public Report as required by the Province of BC. The CARIP report summarizes actions taken in 2016 and proposed for 2017 to reduce corporate and community-wide energy consumption and greenhouse gas emissions (GHG) and reports on progress towards achieving carbon neutrality.

2016 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.

| Cor | Community-Wide Actions Taken in 2016 | |
|------------------------------------------|----------------------------------------------------------------------------|--|
| | Continued work on Official Community Plan | |
| | Continued support for Fraser Basin Council Society Regional Flood Strategy | |
| Community-Wide Actions Proposed for 2017 | | |
| | Adoption of Official Community Plan | |
| | Update Zoning Bylaw | |
| | | |

| Coi | Corporate Actions Taken in 2016 | |
|-------------------------------------|-------------------------------------------------------------------------------------------|--|
| | Replaced fuel powered ice resurfacer with an electric ice resurfacer | |
| Corporate Actions Proposed for 2017 | | |
| | Engaged a consultant in the development of a corporate green-house gas reduction strategy | |
| | Add electric vehicles to the City's fleet | |

| Broad Planning | | |
|-----------------------------------------------------|---------------------------------------------------------|---------|
| What is (are) your current GHG reduction target(s)? | 10% below 2007 levels by 2020 and 50% below 2007 levels | by 2050 |
| Has your local government used t measure progress? | he Community Energy and Emissions Inventory (CEEI) to | No |
| What plans, policies or guidelines community? | govern the implementation of climate mitigation in your | |
| • Commur | nity Energy and Emissions (CEE) Plan | Yes |
| Climate | Action Plan | Yes |
| • Integrate | ed Community Sustainability Plan | No |
| Official C | Community Plan (OCP) | Yes |
| Regional | Growth Strategy (RGS) | Yes |
| • Do not h | ave a plan | |
| • Other: | | |
| Does your local government have | a corporate GHG reduction plan? | No |
| Does your local government have | a climate reserve fund or something similar? | Yes |

2016 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.

| Со | Community-Wide Actions Taken in 2016 | | |
|----|----------------------------------------------------------------------------------------------|--|--|
| | Supported the Environmental Master Plan which promotes energy efficiency in City facilities, | | |
| | operational activities and the community | | |
| Со | Community-Wide Actions Proposed for 2017 | | |
| | Support the Environmental Master Plan which promotes energy efficiency in City facilities, | | |
| | operational activities and the community | | |

| Сог | Corporate Actions Taken in 2016 | | |
|-----|------------------------------------------------------------------------------------------------|--|--|
| | Upgraded from high pressure sodium to energy efficient LED streetlights along a portion of the | | |
| | City's promenade | | |
| Сог | Corporate Actions Proposed for 2017 | | |
| | Update community centre HVAC unit | | |
| | Continue to upgrade lighting along City's promenade | | |
| | Install additional energy efficient lighting at arena | | |
| | Hydro meter reconfiguration at community centre to provide user awareness of energy | | |
| | consumption | | |
| | Install indoor snow melt pit at arena to reduce the amount of hot water used to melt snow and | | |
| | enable the recycling of water | | |

2016 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.

| Сог | Community-Wide Actions Taken in 2016 | | |
|-----|------------------------------------------|--|--|
| | No response | | |
| Сог | Community-Wide Actions Proposed for 2017 | | |
| | No response | | |
| Сог | Corporate Actions Taken in 2016 | | |
| | No response | | |
| Сог | Corporate Actions Proposed for 2017 | | |
| | No response | | |

| Energy Genera | ation | |
|------------------------------------|------------------------------------------------------------------------------------|-----|
| Is your local go | overnment developing, or constructing: | |
| • | A district energy system | No |
| • | A renewable energy system | No |
| Is your local go | overnment operating: | |
| • | A district energy system | No |
| • | A renewable energy system | No |
| Is your local go energy provide | overnment connected to a district energy system that is operated by another er? | No |
| Are you aware <u>Toolkit</u> ? | of the Integrated Resource Recovery guidance page on the <u>BC Climate Action</u> | Yes |

2016 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 2016 | | |
|------------------------------------------|------------------------------------------------|--|
| | Supported invasive species community clean ups | |
| | Supported community planting of native plants | |
| | Supported local community garden program | |
| | Updating Parks and Recreation Master Plan | |
| | Supported community shore line clean ups | |
| Community-Wide Actions Proposed for 2017 | | |
| | Create a Waterfront Plan | |
| | Adopt an Urban Forest Management Plan | |
| | Complete Parks and Recreation Master Plan | |

| Cor | Corporate Actions Taken in 2016 | |
|-----|--------------------------------------------------|--|
| | Installation of new parks signage | |
| | Shoreline restoration | |
| | Began design for upgrades at Memorial Park | |
| Cor | Corporate Actions Proposed for 2017 | |
| | Shoreline restoration | |
| | Begin construction of upgrades for Memorial Park | |
| | Upgrades to Terry Parr Plaza | |

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

2016 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.

| Со | Community-Wide Actions Taken in 2016 | | |
|----|------------------------------------------------------------------------------------------------|--|--|
| | Continue with public education and outreach to improve diversion of solid waste | | |
| Со | Community-Wide Actions Proposed for 2017 | | |
| | Update public waste receptacles to encourage recycling and organics diversion in public spaces | | |

Updated recycling receptacles in some civic facilities

Corporate Actions Proposed for 2017

Update recycling receptacles in all civic facilities

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

2016 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.

| Cor | mmunity -Wide Actions Taken in 2016 |
|-----|-----------------------------------------------------------------------|
| | Updated bicycle network signage and pavement markings |
| Cor | mmunity-Wide Actions Proposed for 2017 |
| | Refreshed line painting throughout the City |
| | Additional sections of sidewalks to encourage more pedestrian traffic |
| | Improve the parks trail stairway at Centennial Park |
| | Upgrade Bryant Park pathway |

| Cor | Corporate Actions Taken in 2016 | |
|-----|--------------------------------------------------------------------------|--|
| | Public engagement in revitalizing the town centre | |
| | Installation of overhead pedestrian crosswalk signal for safety | |
| | Installation of electric vehicle charging station for new fleet vehicles | |
| Cor | porate Actions Proposed for 2017 | |
| | Design of town centre street scape | |
| | Installation of pedestrian crosswalk signals for safety | |
| | Extend the promenade walkway to encourage pedestrian traffic | |

| Transportation | |
|------------------------------------------------------------------------------------------|-----|
| Does your local government have policies, plans or programs to support: | |
| Walking | Yes |
| • Cycling | Yes |
| Transit Use | Yes |
| Electric Vehicle Use | No |
| Other (please specify) | |
| Does your local government have a transportation demand management (TDM) strategy (e.g. | No |
| 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 | No |
| production (thus reducing transportation emissions)? | |

2016 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.

| Со | Community-Wide Actions Taken in 2016 | |
|----|----------------------------------------------------------------------------------------------|--|
| | Held public meetings/open houses on water quality | |
| | Update Water Conservation Plan | |
| | Communicated water restrictions levels with public through digital and social media channels | |
| Со | mmunity-Wide Actions Proposed for 2017 | |
| | Review and update watering restrictions | |
| | Update Water Master Plan | |
| | Update Storm and Sanitary Master Plan | |

| Cor | Corporate Actions Taken in 2016 | |
|-----|---------------------------------------------------------------------------------|-----|
| | Began pilot study on arsenic and manganese treatment options (RES'EAU-WaterNET) | |
| | Construction to update reservoir and pumping station | |
| | Began work to complete secondary disinfection throughout water system | |
| Cor | porate Actions Proposed for 2017 | |
| | Prepare aquifer protection plan | |
| | Drill new well | |
| | Complete construction on new reservoir and pumping station | |
| Wa | ter Conservation | |
| Doe | es your local government have water conservation policies, plans or programs? | Yes |

2016 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.

| Clir | Climate Change Adaptation Actions Taken in 2016 | |
|------|-----------------------------------------------------|--|
| | Review of Street and Traffic Bylaw | |
| Clir | Climate Change Adaptation Actions Proposed for 2017 | |
| | Adopt updated Street and Traffic Bylaw | |
| | Update Parks Bylaw | |

| In 2016 did you consider climate change impacts in any of the following areas? (check if yes) | | |
|-----------------------------------------------------------------------------------------------|--------------------------------------------------------------|--|
| | Risk reduction strategies | |
| | Risk and Vulnerability assessment | |
| \checkmark | Asset management | |
| \checkmark | Infrastructure upgrades (e.g. stormwater system upgrades) | |
| \checkmark | Cross-department working groups | |
| \checkmark | Emergency response planning | |
| \checkmark | Land-use policy changes (eg. OCP, DPA) | |
| | Economic diversification initiatives | |
| \checkmark | Ecosystem-based approaches (incl. shorelines) | |
| \checkmark | Incentives (e.g. property owner reducing stormwater run-off) | |
| \checkmark | Public education and awareness | |
| | Research (e.g. mapping, participation in studies) | |
| | Other (Please Identify): | |

2016 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.

| Со | Community-Wide Actions Taken in 2016 | |
|----|------------------------------------------|--|
| | No response | |
| Со | Community-Wide Actions Proposed for 2017 | |
| | No response | |

| Со | Corporate Actions Taken in 2016 | |
|----|-------------------------------------|--|
| | No response | |
| Со | Corporate Actions Proposed for 2017 | |
| | No response | |

Other

| Are you familiar with the Community Lifecycle Infrastructure Costing Tool (CLIC)? | Yes |
|-----------------------------------------------------------------------------------|-----|
| 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 |
|----------------------------------|
| No response |
| Corporate Innovative Action |
| No response |
| |

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 No response

2016 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 2016? | Yes |
|--------------------------------------------------------------------------------|------------|
| | |
| If your local government measured 2016 corporate GHG emissions, please report | 802 |
| the number of corporate GHG emissions (in tonnes of carbon dioxide equivalent) | |
| from services delivered directly by your local government: | |
| | |
| If your local government measured 2016 corporate GHG emissions, please report | 398 |
| the number of corporate GHG emissions (in tonnes of carbon dioxide equivalent) | |
| from <u>contracted</u> services: | |
| TOTAL A: CORPORATE GHG EMISSIONS FOR 2016 | 1200 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 2016 GHG emissions reductions (in tonnes of carbon dioxide equivalent (tCO2e)) being claimed from Option 1 GHG Reduction Projects:

| OPTION 1 PROJECTS | REDUCT | TIONS |
|-----------------------------------------------------|--------|-------|
| Energy Efficient Retrofits | | |
| Solar Thermal | | |
| Household Organic Waste Composting | 490 | |
| Low Emission Vehicles | | |
| Avoided Forest Conversion | | |
| TOTAL B: REDUCTIONS FROM OPTION 1 PROJECTS FOR 2016 | 490 | tCO2e |

If applicable, please report the names and 2016 GHG emissions reductions (in tonnes of carbon dioxide equivalent (tCO2e)) being claimed from Option 2 GHG Reduction Projects:

| OPTION 2 PROJECT NAME | REDUCTIONS |
|-----------------------------------------------------|------------|
| Offsets from previous years | 1009 |
| TOTAL C: REDUCTIONS FROM OPTION 2 PROJECTS FOR 2016 | tCO2e |

If applicable, please report the number of offsets purchased (in tonnes of carbon dioxide equivalent (tCO2e)) from an offset provider for the 2016 reporting year:

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

| OFFSET PROVIDER NAME | OFFSETS |
|-------------------------------------|---------|
| n/a | |
| TOTAL D: OFFSETS PURCHASED FOR 2016 | tCO2e |

TOTAL REDUCTIONS AND OFFSETS FOR 2016 (Total B+C+D) = 1200 tCO2e

Corporate GHG Emissions Balance for 2016

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 2016 = (A – (B+C+D)) = -299 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 (ie: 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 2016 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 | |