

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

**Local Government:**

Resort Municipality of Whistler

**Report Submitted by:**

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**Date:** May 31, 2018

The Resort Municipality of Whistler (RMOW) 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     |   |
|--|---|
|  | Encouraged community involvement in the development of updated Community Vision                                       |
|  | Encouraged community engagement and development of updated Official Community Plan                                    |
|  | Continued implementation of Community Energy & Climate Action Plan (CECAP)  |
|  | Continued public reporting to Council of annual Energy & GHG Emissions  |
|  | Significant investment and implementation consistent with Whistler's Wildfire Protection Plan                         |
|  | Continued implementation of the TAG Action Plan – phase two roll-out of the strategy outlined and approved by Council |
| Community-Wide Actions Proposed for 2018 |   |
|  | Adoption and implementation of updated Community Vision   |
|  | Adoption of implementation of updated Official Community Plan   |
|  | Continued implementation of Community Energy & Climate Action Plan (CECAP)  |
|  | Continued public reporting to Council of annual Energy & GHG Emissions  |

| Corporate Actions Taken in 2017     |  |
|-------------------------------------|--|
|                                     | Continued implementation of Community Energy & Climate Action Plan (CECAP) |
|                                     | Continued public reporting to Council of annual Energy & GHG Emissions     |
| Corporate Actions Proposed for 2018 |  |
|                                     | Continued implementation of Community Energy & Climate Action Plan (CECAP) |
|                                     | Continued public reporting to Council of annual Energy & GHG Emissions     |
|                                     | Application to FCM for new Climate Coordinator role                        |

| Broad Planning  |  |
|---|--|
| What is (are) your current GHG reduction target(s)?   | 33% below 2007 levels by 2020;<br>80% below 2007 levels by 2050;<br>90% below 2007 levels by 2060. |
| 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   | Yes |
| • Community- Wide Climate Action Plan   | Yes |
| • Integrated Community Sustainability Plan  | Yes |
| • Official Community Plan (OCP)   | Yes |
| • Regional Growth Strategy (RGS)  | Yes |
| • Do not have a plan  | No  |
| • Other:  | Yes |
| • Corporate Carbon Neutral Operations Plan  | 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     |  |
|--|--|
|  | Continued provisions and marketing of the 'Power Down' Third Party Residential Energy Assessment incentive program ( <a href="http://www.whistler.ca/powerdown">www.whistler.ca/powerdown</a> )  |
|  | Retrofitted additional LED streetlights (under TAG)  |
|  | Worked with Provincial and Utility partners on the development of new BC Energy Step Code regulations  |
|  | Support upgrades to the Cheakamus Crossing District Energy System (DES)  |
| Community-Wide Actions Proposed for 2018 |  |
|  | Continue promoting and evaluating the 'Power Down' Third Party Residential Energy Assessment Rebate program  |
|  | Plan for BC Energy Step Code: <ul style="list-style-type: none"> <li>• Initiate local stakeholder working group</li> <li>• Support community engagement in the form of open houses and surveys</li> <li>• Adoption of the BC Energy Step Code approach formally (i.e. building Bylaw amendment)</li> </ul> |

| Corporate Actions Taken in 2017     |   |
|-------------------------------------|---|
|                                     | LED lighting integration across key building inventory as well as valley trail and select parking lots                        |
|                                     | Evaluated new HVAC equipment for GHG footprint/energy efficiency upgrade opportunities  |
|                                     | Support the design and construction of the new Whistler Housing Authority Passivhaus affordable apartment development project |
|                                     | Undertook building stock asset management plan  |
| Corporate Actions Proposed for 2018 |   |
|                                     | Promote improving automated controls on heat tracing across Municipal owned buildings   |

|  |  |
|--|--|
|  | Continue to support development of the new Whistler Housing Authority Passivhaus affordable apartment building project |
|  | Execute on phased implementation of Building Asset management and upgrade plans  |

|   |                  |
|---|------------------|
| <b>Building and Lighting</b>  |                  |
| 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?  | Yes              |
| Is your local government implementing the BC Energy Step Code?  | Yes, in progress |

## 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.

|   |  |
|---|--|
| <b>Community-Wide Actions Taken in 2017</b>     |  |
|   | Continued to upgrade (and expand use of) the waste-heat recovery based DES at Cheakamus Crossing |
| <b>Community-Wide Actions Proposed for 2018</b> |  |
|   | Initiate planning for the expansion of DES loop for potential phase II lands                     |

|  |     |
|--|-----|
| <b>Energy Generation</b>   |     |
| Is your local government developing, or constructing:  |     |
| • A district energy system   | No  |
| • A renewable energy system  | No  |
| Is your local government operating:  |     |
| • A district energy system   | Yes |
| • 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 of the Integrated Resource Recovery guidance page on the <a href="#">BC Climate Action Toolkit</a> ?                                   | Yes |
| Are you familiar with the 2017 <a href="#">“List of Funding Opportunities for Clean Energy Projects Led by First Nations and Local Governments?”</a> | 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.

| Community-Wide Actions Taken in 2017     |   |
|--|---|
|  | Municipal purchase of large tract of undeveloped green space, Parkhurst lands, within municipal boundary (81Ha) for long term protection and future potential parkland development. |
|  | Continued support of the Cheakamus Community Forest carbon offset program. Both in terms of policy support as well as direct purchase commitments.                                  |
|  | Ongoing mapping and identification of Environmentally Sensitive Areas   |
| Community-Wide Actions Proposed for 2018 |   |
|  | Exploring the potential protection of additional open space through ongoing negotiation with relevant stakeholders  |
|  | Integration of mapping Environmental Sensitive Areas and associated development permit area guidelines into the updated OCP   |

| Greenspace  |     |
|---|-----|
| 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? | 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     |   |
|--|---|
|  | Significant update to all solid waste related bylaws to meet relevant recommendations of the regional Solid Waste Management Plan, and associated Municipal policy.                       |
|  | Introduced requirements for Solid Waste Management Plans for select businesses through the business licence process (primarily targeting compost diversion from the food service sector). |
|  | Developed pricing structures to support solid waste diversion goals   |
|  | Developed and introduced waste sorting bins and associated collateral for the commercial accommodation sector   |
| Community-Wide Actions Proposed for 2018 |   |
|  | Adopt updates to solid waste related bylaws to meet best practice and increase diversion of compost and recyclables   |

|  |  |
|--|--|
|  | Adopt prices and tipping fee schedules to better incentivize waste diversion to compost and recyclables                          |
|  | Continue communication to community with educational and motivational messages regarding waste reduction and diversion practices |

| <b>Corporate Actions Taken in 2017</b>     |   |
|--|---|
|  | Upgraded and installed municipal sorting bins across municipal building assets                  |
|  | Developed internal communication plan for increasing compliance with diversion goals            |
| <b>Corporate Actions Proposed for 2018</b> |   |
|  | Continue expansion of improved and streamlined recycling infrastructure in municipal facilities |

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

## 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.

| <b>Community -Wide Actions Taken in 2017</b>    |  |
|---|--|
|   | Implementation of phase II Transportation Advisory Group (TAG) recommendations <ul style="list-style-type: none"> <li>• Expanded free weekend transit service</li> <li>• Reduced transit pass pricing</li> <li>• Increased/expanded pay parking rates</li> <li>• Expanded bike parking options in Village</li> </ul> |
|   | Completion of phase one and phase two of the Gateway Loop multi-modal transportation hub.  |
| <b>Community-Wide Actions Proposed for 2018</b> |  |
|   | Expand transit system service levels   |
|   | Initiate carpool parking program   |
|   | Expand valley trail snow clearing to facilitate more preferred transportation options in winter  |
|   | Update Lot 4/5 parking rates   |
|   | Plan for next phase of TAG implementation actions  |
|   | Continue collaborative regional planning for regional transit system   |

| <b>Corporate Actions Taken in 2017</b> |  |
|--|--|
|  | Continued review of electric vehicle performance and planning for wider integration of electric vehicles within fleet. |

|  |  |
|--|--|
|  | Upgrade older Electric Vehicle Supple Equipment (EVSE)                   |
| <b>Corporate Actions Proposed for 2018</b> |  |
|  | Plan for additional EVSEs in new resident housing buildings              |
|  | Plan for expanded electric vehicle integration into corporate operations |

|  |            |
|--|------------|
| <b>Transportation</b>  |            |
| Does your local government have policies, plans or programs to support:  |            |
| • Walking  | <b>Yes</b> |
| • Cycling  | <b>Yes</b> |
| • Transit Use  | <b>Yes</b> |
| • Electric Vehicle Use   | <b>Yes</b> |
| • Other (please specify)   | <b>N/A</b> |
| 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)? | <b>Yes</b> |
| Does your local government integrate its transportation and land use planning?   | <b>Yes</b> |

## 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.

|   |  |
|---|--|
| <b>Community-Wide Actions Taken in 2017</b>     |  |
|   | Stakeholder engagement working group on water conservation bylaw regarding the regulation of Potable Water usage |
|   | Finalization of water distribution system upgrades in Alpine Meadows neighbourhood                               |
|   | Planning for water distribution system upgrades in Alta Vista neighbourhood                                      |
| <b>Community-Wide Actions Proposed for 2018</b> |  |
|   | Implement new potable water conservation bylaw   |
|   | Support new bylaw with communications campaign   |
|   | Expand online transparency re: water reserve(s) levels   |

|   |            |
|---|------------|
| <b>Water Conservation</b>   |            |
| Does your local government have water conservation policies, plans or programs? | <b>Yes</b> |

## 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 <b>THREE</b> climate impacts that are most relevant to your Local Government.  |  |
|--|--|
| <ul style="list-style-type: none"> <li>• <b><u>Warmer winter temperatures reducing snowpack</u></b></li> <li>• Changes to temperature and precipitation causing seasonal drought</li> <li>• Heatwaves impacting population health</li> <li>• <b><u>Increased temperatures increasing wildfire activity</u></b></li> <li>• Increased temperatures affecting air quality</li> <li>• Changing temperatures influencing species migration and ecosystem shifts</li> <li>• <b><u>Extreme weather events contributing to urban and overland flooding</u></b></li> <li>• Sea level rise and storms causing coastal flooding and/or erosion</li> </ul> |  |

| 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   | Yes |
| 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  | Yes |
| Strategic and financial planning  | Yes |
| Cross-department working groups   | Yes |
| OCP policy changes  | Yes |
| Changes to zoning and other bylaws and regulations  | No  |
| Incentives for property owner (e.g. reducing storm water run-off)   | Yes |
| Public education and awareness  | Yes |
| Research  | Yes |
| Mapping   | Yes |
| Partnerships  | Yes |
| Other:  |     |
| Incentives for Fire Smart treatments on private lands (chipper costs)                                     |     |



| <b>Climate Change Adaptation Actions Taken in 2017</b>  |  |
|---|--|
| 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. |  |
|   | Wildfire protection through fuel thinning in wildland urban interface as well as landscape level fuel breaks |
|   | Fire Smart assessments and private/strata support programs   |
|   | Integration into emergency management planning and OCP   |
|   | Increased water conservation planning  |
|   | Critical infrastructure mapping, planning and fuel thinning  |
| <b>Climate Change Adaptation Actions Proposed for 2018</b>  |  |
|   | Implementation of new potable water conservation framework   |
|   | Wildfire protection through fuel thinning in wildland urban interface as well as landscape level fuel breaks |
|   | Fire Smart assessments and private/strata support programs   |
|   | Critical infrastructure fuel thinning, public lands fuel thinning  |
|   | Development Permit area for wildfire protection developed  |
| <b>For more information please contact:</b>   |  |
|   | <a href="mailto:tbattiston@whistler.ca">tbattiston@whistler.ca</a>   |

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

## 2017 OTHER CLIMATE ACTIONS

### Other Climate Actions

| Other  |     |
|--|-----|
| Are you familiar with the <a href="#">Community Lifecycle Infrastructure Costing Tool (CLIC)</a> ? | Yes |
| Have you used CLIC?  | No  |

## 2017 INOVATION AND PEER-TO-PEER LEARNING

### 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                             |
|--|
| Pacific Climate Impacts Consortium (PCIC)<br>FCM |

## 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](#).

### Reporting Emissions

|  |                               |
|--|-------------------------------|
| Did you measure your local government's corporate GHG emissions in 2017?   | <b>Yes</b>                    |
| 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: | <b>1,705 tCO<sub>2</sub>e</b> |
| 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:                                  | <b>680 tCO<sub>2</sub>e</b>   |
| <b>TOTAL A: CORPORATE GHG EMISSIONS FOR 2017</b>   | <b>2,385 tCO<sub>2</sub>e</b> |

### 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:

| OFFSET PROVIDER NAME                       | OFFSETS                       |
|--|-------------------------------|
| <b>Cheakamus Community Forest</b>          | <b>2,385 tCO<sub>2</sub>e</b> |
| <b>TOTAL D: OFFSETS PURCHASED FOR 2017</b> | <b>2,385 tCO<sub>2</sub>e</b> |

**TOTAL REDUCTIONS AND OFFSETS FOR 2017 = 2,385 tCO<sub>2</sub>e**

**CORPORATE GHG EMISSIONS BALANCE FOR 2017 = (GHG Emissions – Offset) = 0 tCO<sub>2</sub>e**

**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 – 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.

**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 type="checkbox"/>            | Level 1 – Demonstrating Progress on Charter Commitments |   |
| <input type="checkbox"/>            | Level 2 – Measuring GHG Emissions                       |   |
| <input type="checkbox"/>            | Level 3 – Accelerating Progress on Charter Commitments  |   |
| <input checked="" type="checkbox"/> | Level 4 - Achievement of Carbon Neutrality              | X |
| <input type="checkbox"/>            | Not Sure  |   |