# Climate Action Revenue Incentive (CARIP) Public Report for 2016

#### **Local Government:**

Resort Municipality of Whistler

Report Submitted by: Name: Ted Battiston

Role: Director, Corporate, Economic and Environmental Services

Email: tbattiston@whistler.ca

Phone: 604-932-0886

**Date:** June 1<sup>st</sup>, 2017

The Resort Municipality of Whistler 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			
	Formally adopted the updated Community Energy and Climate Action Plan (CECAP) and initial			
	phases of the associated implementation plan.			
	Continued the work of the Transportation Advisory Group (TAG), which was established in 2015			
	with a mandate to decrease congestion, decrease emissions associated with transportation and			
	increase safety both within and to/from Whistler.			
	Publish community wide energy and GHG inventory and trends analysis			
Cor	Community-Wide Actions Proposed for 2017			
	Significant investment and implementation consistent with the Whistler Wildfire Protection Plan,			
	itself a core element of the climate adaptation component of the CECAP.			
	Council approval of the recommended TAG Action Plan, and phase one roll-out of the			
	implementation strategy.			
	Publish community wide energy and GHG inventory and trends analysis.			

Co	Corporate Actions Taken in 2016		
	Compiled and published 2015 Annual corporate GHG and energy use inventory, and presented to		
	Council.		
Co	Corporate Actions Proposed for 2017		
	Publish community wide energy and GHG inventory and trends analysis.		

Broad Planning		
	33% below 2007 levels by 2020;	
What is (are) your current GHG reduction target(s)?	80% below 2007 levels by 2050;	
reduction target(s):	90% below 2007 levels by 2060.	
Has your local government used to measure progress?	the Community Energy and Emissions Inventory (CEEI) to	No

	licies or guidelines govern the implementation of climate mitigation in your	
community?		
•	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
•	Do not have a plan	No
•	Other:	No
•	Energy & Emissions Plan	Yes
•	Corporate Carbon Neutral Operations Plan	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

# **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.

Community-Wide Actions Taken in 2016			
	Continued to offer energy assessment rebates to residential home-owners		
	(www.whistler.ca/powerdown).		
	Explored options to extend energy assessment rebates to the commercial sector.		
	Supported the building of first PassivHaus in our local resident-restricted affordable housing		
	program.		
Coı	Community-Wide Actions Proposed for 2017		
	Continued provisions and marketing of the Powerdown incentive program		
	Working toward alignment and leveraging the new BC Step Code. Research, assessment and		
	strategic planning.		

Coi	Corporate Actions Taken in 2016		
	Continued LED retrofits in underground parkades.		
	Continued LED retrofits to Valley Trail lighting system.		
	Approvals and rebates secured for LED retrofits to overhead street lighting.		
Coi	Corporate Actions Proposed for 2017		
	Continued LED retrofits in underground parkades.		

Continued LED retrofits to Valley Trail lighting system.
Implementation of LED retrofits to overhead street lighting.
Preliminary assessments for a PV solar installation for Community Sports Centre.

## **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.

#### **Corporate Actions Proposed for 2017**

Preliminary assessments for a PV solar installation for Community Sports Centre.

Energy Generation	
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?	
Are you aware of the Integrated Resource Recovery guidance page on the <u>BC Climate Toolkit</u> ?	Action 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**

Continued support of the Cheakamus Community Forest carbon offset project. Policy support as well as direct purchase commitments.

Ongoing protection and management of identified ESAs

#### **Community-Wide Actions Proposed for 2017**

Continued support of the Cheakamus Community Forest carbon offset project. Policy support as well as direct purchase commitments.

Ongoing protection and management of identified ESAs

#### **Corporate Actions Proposed for 2017**

Municipal purchase of large tract of undeveloped green space within municipal boundary (81Ha) for long term protection and future potential parkland development.

#### Greenspace

Does your local government have urban forest policies, plans or programs?

Yes

## **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.

#### **Community-Wide Actions Taken in 2016**

Design and site preparation for a substantively improved recycling and waste depot at Nesters.

Continued expansion of compost diversion outreach and awareness programs – especially with strata and commercial properties

Implementation of updated solid waste and recycling stream pricing structures.

Expanded and improved messaging on public realm recycling bins through parks and Village.

#### **Community-Wide Actions Proposed for 2017**

Execution and marketing of new solid waste bylaw and associated regulations.

#### **Corporate Actions Taken in 2016**

Installation of improved and streamlined recycling infrastructure in municipal facilities.

#### **Corporate Actions Proposed for 2017**

Continued expansion of improved and streamlined recycling infrastructure in municipal facilities.

Solid Waste	
Does your local government have construction and demolition waste reduction policies, plans	
or programs?	
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	Community -Wide Actions Taken in 2016		
	Continued to support the multi-stakeholder Transportation Advisory Group (established in 2015) to		
	evaluate options and opportunities to reduce local and regional congestion issues and decrease		
	transportation-related GHG emissions.		
	Prepared (design/tender etc) for the construction of planned improvements to the Gateway Loop		
	multi-model transportation hub.		
	Evaluated additional opportunities to expand transit service levels.		
	Completion of critical link in self-propelled Valley Trail network between Alpine Meadow and		
	Nesters neighborhoods.		
	Finished the installation and opened level 3 EVSE station		
Cor	mmunity-Wide Actions Proposed for 2017		
	Completion of phase one and phase two of the Gateway Loop multi-model transportation hub.		
	Implementation of phase one TAG recommendations (updated parking regulations, increased		
	transit, expanded marketing for preferred modes of transport, long term funding strategy for		
	transit, end-of trip facilities for cyclists etc)		
	Upgraded the Level 3 EVSE area with additional floor and wall markings, signage and marketing to		
	increase uptake.		
	Enhancing Valley Trail alignment (usability, safety) near Community Sports Centre (MPSC)		

Co	Corporate Actions Taken in 2016		
	Completed the purchase of a new electric fleet vehicle.		
	Reduced average GHG-intensity of diesel fuel use across corporate fleet		
Co	Corporate Actions Proposed for 2017		
	Continued review of electric vehicle performance and planning for wider integration of electric vehicles within fleet.		

Transportation		
Does your local government have policies, plans or programs to support:		
•	Walking	Yes
•	Cycling	Yes
•	Transit Use	Yes
•	Electric Vehicle Use	Yes
•	Other (please specify)	N/A
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)?		Yes
Does your local government have policies, plans or programs to support local food production (thus reducing transportation emissions)?		No

## **2016 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 2016		
	Undertook Phase Two replacement of old (leaky) neighborhood water distribution system in Alpine	
	Meadows neighborhood.	
	Participated in national water week.	
Community-Wide Actions Proposed for 2017		
	Finalization of water distribution system upgrades in Alpine Meadows neighbourhood	
	Planning for water distribution system upgrades in Alta Vista neighbourhood	

Corporate Actions Taken in 2016			
	Developed and executed a conservation strategy for municipal irrigation systems.		
Wa	Water Conservation		
Does 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.

Clin	Climate Change Adaptation Actions Taken in 2016		
	Formally adopted a new community adaptation plan as part of the Community Energy and Climate		
	Action Plan (CECAP).		
Clin	Climate Change Adaptation Actions Proposed for 2017		
	Large scale Interface fire protection and associated fuel thinning		
	Development of landscape level fuel breaks		
	Significant deployment of Fire Smart marketing and property assessments		
	Identification and phase one fuel thinning on identified critical infrastructure sites in the		
	municipality		

Resources you have used to support climate change adaptation (e.g. Plan2Adapt, Preparing for Climate Change: Implementation Guide)	
Plan2Adapt	
Preparing for Climate Change	
Implementation Guide	
PCIC	

Risk reduction strategies	Yes
Risk and Vulnerability assessment	Yes
Asset management	Yes
Infrastructure upgrades (e.g. stormwater system upgrades)	Yes Yes
Cross-department working groups	Yes
Emergency response planning	Yes
Land-use policy changes (eg. OCP, DPA)	Yes
Economic diversification initiatives	Yes
Ecosystem-based approaches (incl. shorelines)	No
Incentives (e.g. property owner reducing stormwater run-off)	Yes
Public education and awareness	Yes
Research (e.g.mapping, participation in studies)	Yes
(- U - 1717 ··· O)   Part and part and in the control of the	
Other (Please Identify):	
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.

Other	
Are you familiar with the Community Lifecycle Infrastructure Costing Tool (CLIC)?	Yes
Have you used CLIC?	No

## INNOVATION 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)
FCM

## **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 the number of corporate GHG emissions (in tonnes of carbon dioxide equivalent) from services delivered <u>directly</u> by your local government:	1510
If your local government measured 2016 corporate GHG emissions, please report the number of corporate GHG emissions (in tonnes of carbon dioxide equivalent) from <u>contracted</u> services:	299
TOTAL A: CORPORATE GHG EMISSIONS FOR 2016	1809 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 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
Cheakamus Community Forest	1810
TOTAL: OFFSETS PURCHASED FOR 2016	1810 tCO2e

#### TOTAL REDUCTIONS AND OFFSETS FOR 2016 = 1810 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 = -1 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.

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	