

City of Port Moody

Climate Action Survey 2015



Public Reporting for the Climate Action
Revenue Incentive Program (CARIP)

Climate Action Revenue Incentive (CARIP) Public Report for 2015

Local Government: City of Port Moody

Report Submitted by:

Name: Winnie Yip

Role: Sustainability and Energy Specialist

Email: wyp@portmoody.ca

Phone: 604-469-4572

Date: June 1, 2016



The City of Port Moody 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.

Community-Wide Actions Taken in 2015	
	Initiated work on integrating energy reduction considerations into the City's Zoning Bylaw.
	Continued implementation of the City's OCP.
	Initiated the Coronation Park Neighbourhood plan, which is within the Inlet Centre Transit Oriented Development Area.
	Initiated development of a new Master Transportation Plan
Community-Wide Actions Proposed for 2016	
	Continue work to integrate energy and greenhouse gas emission reduction opportunities into the City's Zoning Bylaw, with expectation of adoption by 2016/2017.
	Initiate update to Community Sustainability Plan.
	Complete review and comments to the Province's Climate Leadership Plan update.
	Undertake research to better understand sources of community emissions.
	Initiate development of a Moody-Centre Transit-Oriented Area Plan.
	Initiate update to the City's Sustainability Checklist.
	Complete new Master Transportation Plan

Corporate Actions Taken in 2015	
	Continued implementation of the City's internal corporate carbon inventory system.
	Continued to advance City's carbon management program in accordance with Council adopted Carbon Neutral Principles.
	Continued engagement with internal staff during broad planning opportunities (e.g., facilities upgrades, etc.)
	Participated in REAC-CPS, a regional committee tasked with advancing climate protection initiatives, including carbon neutral efforts in local governments.
	Participated in development of universal specifications for purchase of LED streetlights in conjunction with BC Procurement Branch, BC Hydro, Surrey, Burnaby and Vancouver.
Corporate Actions Proposed for 2016	
	Continue actions taken in 2015.
	Explore opportunities for future offset actions.

Snapshot Questions	
What GHG reduction targets are included in your local government's Official Community Plan or Regional Growth Strategy?	Yes

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?	Yes
Which of the following does your local government use to guide climate action implementation? <ul style="list-style-type: none"> • Community Energy and Emissions (CEE) Plan • Climate Action Plan • Integrated Community Sustainability Plan • Official Community Plan (OCP) • Regional Growth Strategy (RGS) • Other: 	No No Yes Yes Yes
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	
	Undertook research on energy performance design guidelines.
	Continued implementation of the City's existing policies (e.g., OCP, Sustainability Checklist, etc.).
	Continued implementation of the City's Part 3 Building Energy Compliance Checklist.
	Continued implementing sections 932 and 936 of the BC Building Code which is intended to increase energy efficiency of newly constructed single and two family dwellings.
Community-Wide Actions Proposed for 2016	
	Explore development of energy performance design guidelines.
	Continue implementation of the City's existing policies.
	Continue implementation of the City's Part 3 Building Energy Compliance Checklist.
	Continue implementing sections 932 and 936 of the BC Building Code which is intended to increase energy efficiency of newly constructed single and two family dwellings.

Corporate Actions Taken in 2015	
	Completed a building envelope improvement project at the City's Westhill facility.
	Continued regular conversion to LED lights in appropriate City facilities.
	Initiated a lighting review for City Hall.
	Completed an upgrade to the City Hall's HVAC (heating, ventilation, air conditioning) Direct Digital Control system. Associated increased in system performance efficiency.
	Continued to maintain existing green roofs at City facilities.
Corporate Actions Proposed for 2016	
	Replace City Hall Galleria lights with greater efficiency LED lights.
	Review design options for major envelope renovations at City Hall and the Recreation Center, which are major capital projects that will significantly increase the energy efficiency at the respective buildings.
	Continue exploration of utility partnership and rebate options.

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.

Community-Wide Actions Taken in 2015	
	Continued implementation with the City's OCP, which has policies on renewable energy.
	Continued implementation of "solar ready" regulation.
Community-Wide Actions Proposed for 2016	
	Continue actions taken in 2015.

Corporate Actions Taken in 2015	
	Utilized and regularly maintained the geothermal energy generation infrastructure at the City's Police Station building.
Corporate Actions Proposed for 2016	
	Continue actions taken in 2015.

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?	Yes
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

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 2015	
	Continued implementation of the City's: <ul style="list-style-type: none"> • Environmentally Sensitive Areas management policies, • Streamside Protection and Enhancement Areas policies, • Tree Bylaw and Policy, • Pesticide Use Control Bylaw, and • Naturescape Policy.
	Completed an Invasive Plant inventory on City lands.
	Continued development of the City's Parks and Recreation Master Plan.
	Updated the City's Tree Protection on Bylaw.
	Initiated development of the City's Knotweed Action Plan.
	Implement removal and control actions on Spartina in partnership with external agency.
	Continued supportive and engagement actions to enhance public stewardship of natural areas and assets.
	Developed a source of groundwater for City use for watering City gardens and landscaping.
	Continued invasive species removal actions.
Community-Wide Actions Proposed for 2016	
	Adopt Parks and Recreation Master Plan.
	Adopt updates to the City's Tree Management on City Lands Policy.
	Adopt and implement the City's Knotweed Action Plan.
	Continue removal and control actions of invasive plants throughout City.
	Continue implementation of the City's: <ul style="list-style-type: none"> • Environmentally Sensitive Areas management policies, • Streamside Protection and Enhancement Areas policies, • Tree Bylaw and Policy, • Pesticide Use Control Bylaw, and • Naturescape Policy.
	Continue supportive and engagement actions to enhance public stewardship of natural areas and assets.
Corporate Actions Taken in 2015	
	See Community Actions. These Actions also represent Corporate Actions of the City.
Corporate Actions Proposed for 2016	
	See Community Actions. These Actions also represent Corporate Actions.

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

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.

Community-Wide Actions Taken in 2015	
	Continued to implement the Adopt-A-Street Program, a cooperative effort between community volunteers and the City to help maintain litter-free public sidewalks, bike paths and walkways. By the end of 2015, the City signed up 84 participants, adopting almost 70 blocks.
	Continued to expand green waste servicing expansion to multi-family units. By the end of 2015, 306 new units were added to existing services.
	Established a new Segregated Glass Collection program for residents.
	Organized Community Centralized Recycling Day, where 80 yards of single stream recycling was collected in a one-day event following the Christmas holidays.
	Overall waste diversion of 76% was achieved.
	Support provided for Community Gardens - free green waste collection at community gardens within the City of Port Moody.
	Continued support of the DreamRider Student Education program.
Community-Wide Actions Proposed for 2016	
	Initiate the "Let's Clean Up Our Recycling" campaign, with a goal to decrease contamination.
	Strengthen the City's Solid Waste Bylaw regulatory mechanisms with strategic expansion of services to commercial sectors.
	Replace appropriate waste collection equipment to increase servicing efficiency.
	Increase support, engagement and outreach to Multi-Family and commercial sectors as related to organics and recycling programs.
	Complete Public Annual Reports to showcase, benchmark and foster future diversion successes.

Corporate Actions Taken in 2015	
	In-house Zero Waste Reduction initiative began with the removal of garbage cans under personal desks and moved to a single centralized location.
	Administrative policy updated to reflect current diversion of special waste and disposal ban management.
	Waste Reduction Stations placed and operated at all corporate events.
	Recycled corporate e-waste by donating used computers to the local school district.
Corporate Actions Proposed for 2016	
	Develop business plan for new solid waste infrastructure within facilities for 5 streams of waste.
	Expand Zero Waste Reduction initiative (e.g., add more facilities, designate waste ambassadors, etc.)

Snapshot Questions	
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

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	
	Continued development of the City's Master Transportation Plan.
	Continued City's support of the expansion of Sky Train system to Port Moody.
	Promoted Bike to Work Week.
	Continued implementation of the City's OCP transportation policies.
	Added a shared bike lane on Ungless Way.
	Added new solar-powered Rectangular Rapid Flashing Beacon technology for a new crosswalk.
Community-Wide Actions Proposed for 2016	
	Continue actions taken in 2015.
	Initiate development of a Moody-Centre Transit-Oriented Area Plan.
	Revise traffic signal coordination timing and implemented a traffic signal operations centre to reduce congestions and corresponding GHG emissions. Continue adjustments to traffic signal crossing times to promote walking and transit.

Corporate Actions Taken in 2015	
	Continued promotion and use of the MODO car share program for corporate travel.
	Continued promotion of Bike to Work week.
	Continued use of low-carbon fleet vehicles (e.g. full EVs and hybrid utilities vehicles)
	Continued use and maintenance of City's 6 public electric vehicle charging stations.
Corporate Actions Proposed for 2016	
	Continue 2015 actions.
	Participate in the BC Commuter Challenge.

Snapshot Questions	
Does your local government have policies, plans or programs to support: <ul style="list-style-type: none"> Walking Cycling Transit Use Electric Vehicle Use Other 	Yes Yes Yes Yes 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

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	
	Participation in the development of a draft Integrated Stormwater Management Plan for the Chines area.
	Purchased new standardised leak detection equipment, and trained staff on the use of this equipment.
	Completed the Chestnut Way pump station upgrade to improve the efficiency and control of this water distribution system.
	Implemented a Water Loss Management Program.
	Administered and subsidized rain barrel purchases for City residents.
	Enforced Metro Vancouver water restrictions under its Water Shortage Response Plan.
Community-Wide Actions Proposed for 2016	
	Participate in the completion of the City's Integrated Stormwater Management Plan for the Chines area.
	Construction of a new water main in the Glenayre/College Park area to improve the efficiency and control of this section of the water distribution system.
	Work with Metro Vancouver to explore measures for improving onsite rainwater management for single lot developments.
	Continue to enforce Metro Vancouver water restrictions under its Water Shortage Response Plan.
	Continue the City's rain barrel program.

Corporate Actions Taken in 2015	
	Harvested non-potable water (e.g., rain water, groundwater, etc.) City irrigation purposes.
	Participated in regional Municipal Water Conservation coordinator's meetings.
Corporate Actions Proposed for 2016	
	Continue actions taken in 2015.
	Continue to explore opportunities to install additional water fixtures at appropriate City facilities.
	Implement water conservation pads under the plants as they are planted to reduce the frequency of watering and provide additional resiliency for the plants during drought conditions.
	Increasing the planting of drought tolerant plants to provide extra resiliency for the City's green landscapes to possible drought conditions.

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	
	Continued implementation of OCP, which includes climate change and energy policies.
	Participated on the Fraser Basin Council’s Joint Flood Management Program Committee.
Community-Wide Actions Proposed for 2016	
	Continue actions taken in 2015.
	Explore opportunities to integrate climate change adaptation into new developments.

Corporate Actions Proposed for 2016	
	Explore opportunities to integrate climate change adaptation into storm management planning and other strategic plans.
	Increase the planting of drought tolerant plants to provide extra resiliency for the City’s green landscapes to possible drought conditions.

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

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
BC Hydro – partnership funding to support staff resourced for climate and energy actions. TransLink - Partnership funding for bike lanes and facilities.

2015 CARBON NEUTRAL REPORTING

Reporting Emissions

Did you measure your local government's corporate GHG emissions in 2015? (Yes/No)	Yes
If your local government measured 2015 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:	1518 tCO2e
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:	162 tCO2e
TOTAL A: CORPORATE GHG EMISSIONS FOR 2015	1680 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 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	N/A
Solar Thermal	N/A
Household Organic Waste Composting	584 tCO2e
Low Emission Vehicles	N/A
Avoided Forest Conversion	N/A
TOTAL B: REDUCTIONS FROM OPTION 1 PROJECTS FOR 2015	584 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
Vancouver Landfill Gas Optimization Project	1096 tCO ₂ e
TOTAL C: REDUCTIONS FROM OPTION 2 PROJECTS FOR 2015	1096 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
Not Applicable	
TOTAL D: OFFSETS PURCHASED FOR 2015	0 tCO₂e

TOTAL REDUCTION AND OFFSETS FOR 2015 (Total B+C+D) = 1680 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)) = 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. 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:

<input type="checkbox"/>	Level 1 - Progress on Charter Commitments	
<input type="checkbox"/>	Level 2 - Measurement	
<input type="checkbox"/>	Level 3 - Achievement of Carbon Neutrality	✓
<input type="checkbox"/>	Not Sure	

Appendix D: Sample Contracted Emissions Template

Reporting Year: 2015

This form is also available online at <http://www.toolkit.bc.ca/carbon-neutral-government>. Local governments may choose alternate formats to the templates provided; however the substance must be the same as those provided in the sample templates.

Local Government Information			
Name of local government	City of Port Moody		
Designate Appointed to Sign Off on Estimation Template	Provide the name, phone and e-mail of the Project Designate duly authorized and having the legal capacity to sign off on this Template (e.g., CAO, CFO) Paul Rockwood Name CFO (General Manager, Financial Services) Title 604-469-4504 Phone PRockwood@portmoody.ca Email		
Estimation Methodology Information			
Rationale for Applying an Estimation Methodology	Describe why an estimation methodology is being used rather than reporting actual emissions data as provided by the contractor Estimation methodology is used due to limited access to actual fuel consumption information from all contractors.		
Contracted Emissions			
For each contract, indicate (1) the name and value of the contract (2) the estimation methodology option(s) used, and (3) the estimated annual emissions associated with each contract, organized by traditional service area. Estimation Methodologies Option 1: Ask Your Contractor for an Estimate Option 2: Proxy Fuel Consumption Value Based on a Sample of Contracts Option 3: Vehicle/Equipment Type and Hours or Kilometers of Usage			
Drinking, Storm and Wastewater	CONTRACT NAME	ESTIMATION OPTION USED	ESTIMATED ANNUAL GHGS
	MAR-TECH UNDERGROUND SERVICES LTD	Option 2	2.3 t CO ₂ e

	TOTAL ANNUAL CONTRACTED EMISSIONS FOR TRADITIONAL SERVICE AREA		2.3 t CO2e
Solid Waste Collection, Transportation and Diversion	CONTRACT NAME	ESTIMATION OPTION USED	ESTIMATED ANNUAL GHGS
	Harvest Fraser Richmond Organics* Progressive Waste Solutions Canada Inc.	Option 1* Option 1	54.8 t CO2e* 6.4 t CO2e
	*Previous years fuel % estimate is used to prevent unrealistically low GHG estimates based on average.		
	TOTAL ANNUAL CONTRACTED EMISSIONS FOR TRADITIONAL SERVICE AREA		61.2 t CO2e
Roads and Traffic Operations	CONTRACT NAME	ESTIMATION OPTION USED	ESTIMATED ANNUAL GHGS
	Winvan Paving Ltd	Option 1	53.4 t CO2e
	CMDT Concrete Ltd	Option 1	4.5 t CO2e
	Cobra Electric	Option 1	5.9 t CO2e
	Scottish Line Painting	Option 1	6.4 t CO2e
	Mainroad Group Network	Option 1	0.3 t CO2e
	Universal Flagging	Option 2	2.3 t CO2e
	UCC Group Inc	Option 2	3.6 t CO2e
	Raybern Erectors Ltd	Option 2	2.3 t CO2e
TOTAL ANNUAL CONTRACTED EMISSIONS FOR TRADITIONAL SERVICE AREA		78.7 t CO2e	
Arts, Recreation and Cultural Services	CONTRACT NAME	ESTIMATION OPTION USED	ESTIMATED ANNUAL GHGS
	Alpine Landscaping	Option 2	12.7 t CO2e
	Tree-Mendous Arb Care	Option 2	5.0 t CO2e
	Hawleyscape Tree Service	Option 2	2.4 t CO2e
TOTAL ANNUAL CONTRACTED EMISSIONS FOR TRADITIONAL SERVICE AREA		20.1 t CO2e	
Fire Protection	CONTRACT NAME	ESTIMATION OPTION USED	ESTIMATED ANNUAL GHGS
	TOTAL ANNUAL CONTRACTED EMISSIONS FOR TRADITIONAL SERVICE AREA		t CO2e
Estimated Contracted Emissions: Authorization and Sign Off			

The information provided in this Contracted Emissions template is to the best of my knowledge correct and complete.

A handwritten signature in blue ink, appearing to read "P. Rockwood", is written over a light blue rectangular background.

Designate Signature

Paul Rockwood, CFO (General Manager, Financial Services)

Title

Date

June 1, 2016