2014

CLIMATE ACTION REVENUE INCENTIVE PROGRAM

The District of West Vancouver provides annual CARIP reports publicly as required by the Province of BC as part of our commitment to reduce corporate and community-wide energy consumption and greenhouse gas emissions (GHG). This report also summarizes local efforts to achieve carbon neutrality.

CARIP PUBLIC REPORT



Broad Planning

BROAD PLANNING

Broad Planning refers to the high level, strategic planning that sets the stage for GHG reductions. Land use planning that focuses on Smart Growth principles (compact, complete, connected and centred) plays an especially important role in energy and GHG reduction. Plans that relate to a certain sector should be included in that sector, e.g. transportation plans in the 'Transportation' sector.

In the appropriate boxes below, please record all corporate and community-wide actions taken in 2014 and proposed for 2015. Number and type of actions will vary by community. Please refer to the 'Action Examples' tab above for assistance in understanding the type of information to include in each action category. If the action was taken in partnership, please indicate with whom.

	Yes	No	Please specify or comment
Since initially establishing OCP targets, policies, and actions for the reduction of greenhouse gas (GHG) emissions, as required by the Local Government Act, has your local government updated those targets, policies and actions?	False	True	A working group has been struck to lead the preparation of a Community Energy and Emissions Plan (CEEP). The work of this group is anticipated to lead to updated policies etc

Does your local government use the Community Energy and Emissions Inventory (CEEI) to measure progress?	No
Has your local government established Development Permit Areas (DPAs) for climate action (i.e. energy conservation, water conservation and/or GHG emission reduction)?	No

CORPORATE - Broad Planning

	Actions taken in 2014	Actions proposed for 2015
Feasibility Studies, Research, Analysis		
Plans, Policies, Regulations		
Policy Implementation		
Employee Training, Awareness		
Committees, Staffing		

Funding

COMMUNITY-WIDE - Broad Planning

	Actions taken in 2014	Actions proposed for 2015
Feasibility Studies, Research, Analysis		Various studies and analyses will be undertaken in 2015 to support a review of the OCP.
Plans, Policies, Regulations	The District's Regional Context Statement was revised to identify how the Official Community Plan works toward achieving the goals and strategies set out in The (Metro) Regional Growth Strategy.	The RCS has now been approved by the MetroVancouver Board. A review of the District's OCP is anticipated to begin in 2015. Climate action and a broad sustainability lens will be an important part of this review

Policy Implementation		The District continues to implement existing policies regarding climate action and sustainability.
Community Education, Engagement	The Upper Lands Working Group advanced its review of the Upper Lands. A major focus of their work relates to land and forest preservation (which supports carbon sequestration); and compact, sustainable, mixed-use development in the limited areas where new development may occur.	A Community Energy and Emissions Plan Working Group will be engaging the broader community. The Upper Lands Working Group is anticipated to submit its final report mid-year.
Committees, Staffing	Community Energy and Emissions Plan Working Group formed with staff and public volunteers.	
Funding	Funds rasied to carry out CEEP.	

Buildings

BUILDINGS

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 viewed over the long term.

In the appropriate boxes below, please record all corporate and community-wide actions taken in 2014 and proposed for 2015. Number and type of actions will vary by community. Please refer to the 'Action Examples' tab above for assistance in understanding the type of information to include in each action category. If the action was taken in partnership, please indicate with whom.

Does your local government have green building/construction policies, plans or programs?	Yes	
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CORPORATE - Buildings

	Actions taken in 2014	Actions proposed for 2015
Physical Improvements, Construction	Upgrade natural gas boiler and furnaces to new, efficient models in three buildings. Optimized schedules for heating and cooling systems in several buildings. Replaced lighting in several buildings with more energy efficient technology.	Upgrade to LED lighting for Ice Arena rink and other buildings.
Feasibility Studies, Research, Analysis	Updated corporate Strategic Energy Management Plan (SEMP).	Investigate pool exhaust heat recapture options for Aquatic Centre. Update SEMP.
Plans, Policies, Regulations		
Policy Implementation		
Employee Training, Awareness		Design and implement enhanced communciations plan for events and awareness related to energy management & Design amp; sustainability.
Committees, Staffing		
Funding		

COMMUNITY-WIDE - Buildings

	Actions taken in 2014	Actions proposed for 2015
Physical Improvements, Construction	As a result of green building policy in the OCP, several developments exceeded the building code requirements by incorporating higher EnerGuide ratings.	
Feasibility Studies, Research, Analysis		

Plans, Policies, Regulations	Seek public input on a purpose-built rental housing infill proposal, which would potentially increase residential density near transit routes and amenities while enabling a large rental tower to remain viable and less at risk for redevelopment.	Continued public input on rental housing infill. A review of the OCP is anticipated to begin in 2015. This will include climate action policies and a general sustainability lens.
Policy Implementation		A review of the current green homes checklist is anticipated to occur in 2015.
Community Education, Engagement		The OCP review will include significant community engagement over the coming years.
Committees, Staffing		
Funding		

Energy Generation

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.

In the appropriate boxes below, please record all corporate and community-wide actions taken in 2014 and proposed for 2015. Number and type of actions will vary by community. Please refer to the 'Action Examples' tab above for assistance in understanding the type of information to include in each action category. If the action was taken in partnership, please indicate with whom

Has your local government undertaken district energy projects in 2014?	No
Has your local government undertaken renewable energy projects 2014?	No
Are you aware of the integrated resource recovery (IRR) guidance page on the BC Climate Action Toolkit? (http://www.toolkit.bc.ca/tool/integrated-resource-recovery-irr)	Yes

CORPORATE - Energy Generation

	Actions taken in 2014	Actions proposed for 2015
Physical Improvements, Construction		
Feasibility Studies, Research, Analysis		
Plans, Policies, Regulations		CEEP working group may identify high-level energy generation opportunities.
Policy Implementation		
Employee Training, Awareness		
Committees, Staffing		
Funding		

COMMUNITY-WIDE - Energy Generation

	Actions taken in 2014	Actions proposed for 2015
Physical Improvements, Construction		
Feasibility Studies, Research, Analysis		
Plans, Policies, Regulations		CEEP working group may identify high-level energy generation opportunities.
Policy Implementation		
Community Education, Engagement		
Committees, Staffing	CEEP Working Group established.	

Funding

Greenspace

GREENSPACE

Greenspace refers to parks and greenways, boulevards, community forests, urban agriculture, riparian areas, gardens, recreation/school sites, and other green spaces, such as remediated

brownfield/contaminated sites. Greenspaces support climate change mitigation (reducing emissions by absorbing and sequestering GHG) and adaptation (providing shade, cooling, deflecting strong wind, and improving air quality).

In the appropriate boxes below, please record all community-wide actions taken in 2014 and proposed for 2015 (Note: the 'Greenspace' sector only has a community-wide actions section). Number and type of actions will vary by community. Please refer to the 'Action Examples' tab above for assistance in understanding the type of information to include in each action category. If the action was taken in partnership, please indicate with whom If the action was taken in partnership, please indicate with whom.

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

(No response)

COMMUNITY-WIDE - Greenspace

	Actions taken in 2014	Actions proposed for 2015
Physical Improvements, Construction		
Feasibility Studies, Research, Analysis	Work to develop an invasive species strategy.	
Plans, Policies, Regulations	Invasive Plants Strategy adopted by Council in June 2014. Dedicated Whyte Lake Park.	Implement Invasive Plants Strategy – invasive plant removal and treatment; rehabilitating areas with native plants. Policy review for protection of trees on public property. Explore obtaining carbon credits from Whyte Lake Park dedication.
Policy Implementation	Continued implementation of the Parks Master Plan.	
Community Education, Engagement		The Upper Lands Working Group is anticipated to submit its final report mid-year.
Committees, Staffing		
Funding		

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.

In the appropriate boxes below, please record all corporate and community-wide actions taken in 2014 and proposed for 2015. Number and type of actions will vary by community. Please refer to the 'Action Examples' tab above for assistance in understanding the type of information to include in each action category. If the action was taken in partnership, please indicate with whom.

Does your local government have construction and demolition waste reduction policies, plans or programs?	No	
Does your local government have organics reduction/diversion policies, plans or programs?	Yes	

CORPORATE - Solid Waste

	Actions taken in 2014	Actions proposed for 2015
Physical Improvements, Construction	The addition of larger garbage cans in parks has reduced the number of vehicle trips to maintain them. Further additions of organic waste bins in facilities.	Add enhanced waste stations to improve recycling and organics diversion at corporate facilities.
Feasibility Studies, Research, Analysis		Complete solid waste plan for corporate facilities.
Plans, Policies, Regulations		
Policy Implementation		Increase amount of organics diversion at corporate locations.
Employee Training, Awareness		Awareness campaigns to focus on waste reduction for staff.
Committees, Staffing		
Funding		Budget funds approved to begin improving solid waste stations in main facilities.

COMMUNITY-WIDE - Solid Waste

	Actions taken in 2014	Actions proposed for 2015
Physical Improvements, Construction		
Feasibility Studies, Research, Analysis	• Developed strategy to inform and support multi-family residential buildings through transition to mandatory separated food scraps recycling in 2015	
Plans, Policies, Regulations		
Policy Implementation		
Community Education, Engagement		
Committees, Staffing		
Funding		_

Transportation

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.

In the appropriate boxes below, please record all corporate and community-wide actions taken in 2014 and proposed for 2015. Number and type of actions will vary by community. Please refer to the 'Action Examples' tab above for assistance in understanding the type of information to include in each action category. If the action was taken in partnership, please indicate with whom.

Does your local government have policies, plans or programs to support alternative modes and technologies of transportation (e.g. walking, cycling, transit, electric vehicles)	Yes
Does your local government have a transportation demand management (TDM) strategy? (http://www.toolkit.bc.ca/resource/transportation-demand-management-small-and-mid-sized-communities-toolkit)	Yes
Does your local government have policies, plans or programs to support local food production (thus reducing transportation emissions)?	Yes

CORPORATE - Transportation

	Actions taken in 2014	Actions proposed for 2015
Physical Improvements, Construction	• Replaced a tandem truck Tier 1 diesel vehicle with a Tier 4 compliant diesel vehicle. • Replaced a single rear axle dump truck V-10 vehicle with a vehicle with a more fuel efficient V-8 engine, smaller chassis, and lighter aluminum dump body. • Replaced 2, V-8 front line Police vehicles with more fuel efficient V-6 vehicles equipped with "smart idle" feature. • Replaced a Tier 1 diesel ride-on mower with a Tier 3 compliant diesel ride-on mower.	• Provision of rideshare spaces for municipal staff at larger facilities • Replace 3, V-8 police vehicles with more fuel efficient V-6 vehicles. • Replace a backhoe equipped with a Tier 2 diesel engine with a Tier 4 diesel engine. • Replace a tandem dump truck equipped with a Tier 1 diesel engine with a Tier 4 diesel vehicle. • Replace a utility vehicle equipped with a gasoline engine with a vehicle with electric motor. • Replaced a Bylaws gasoline vehicle with a hydrib vehicle.
Feasibility Studies, Research, Analysis		Corporate CEEP process will map out emissions related to vehicle fleet.
Plans, Policies, Regulations		
Policy Implementation		
Employee Training, Awareness		
Committees, Staffing		
Funding		

COMMUNITY-WIDE - Transportation

	Actions taken in 2014	Actions proposed for 2015
Physical Improvements, Construction	• Constructed Spirit Trail from Cranley Drive to Gleneagles Community Centre • Installation of Spirit Trail wayfinding signage – Whonnoak Street to 13th Street • Clyde/Keith Traffic Calming – Phase 1 traffic calming and bikeway improvements • Improvements to Capilano Pacific Trail – Bridge Road to Marine Drive • Installation of signage for Phase 2 priority bike routes * Installed two public electric vehicle charging stations at the Municipal Hall.	Clyde/Keith Traffic Calming – Phase 2 pedestrian safety improvements • Construction of Spirit Trail from Gleneagles Community Centre to Exit 0 in Horseshoe Bay • Installation of Spirit Trail signage – Argyle Ave from 13th Street to 19th Street; Cranley Drive to Exit 0 • Installation of signage for Phase 3 priority bike routes and pavement markings for Phases 1, 2 and 3 • Installation of priority pedestrian letdowns
Feasibility Studies, Research, Analysis	• Pedestrian Network Study initiated • Survey of sidewalk network within the District completed • Pedestrian data counts on Marine Drive corridor completed • Investigate locations to pilot LED retrofit for streetlights	• Complete Pedestrian Network Study • Consultation on Spirit Trail route from Gleneagles Elementary to Horseshoe Bay
Plans, Policies, Regulations	As a result of stating preference for alternative fuel vehices for new solid waste hauler contract, half of the new garbage truck fleet will be natural gas powered.	
Policy Implementation		
Community Education, Engagement		
Committees, Staffing		
Funding		

Water and Wastewater

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.

In the appropriate boxes below, please record all corporate and community-wide actions taken in 2014 and proposed for 2015. Number and type of actions will vary by community. Please refer to the 'Action Examples' tab above for assistance in understanding the type of information to include in each action category. If the action was taken in partnership, please indicate with whom.

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

Yes

CORPORATE - Water and Wastewater

	Actions taken in 2014	Actions proposed for 2015
Physical Improvements, Construction		
Feasibility Studies, Research, Analysis		* Explore energy-efficiency improvements for Engineering Department-owned pump and lift stations.
Plans, Policies, Regulations		
Policy Implementation		
Employee Training, Awareness		
Committees, Staffing		
Funding		

COMMUNITY-WIDE - Water and Wastewater

	Actions taken in 2014	Actions proposed for 2015
Physical Improvements, Construction		
Feasibility Studies, Research, Analysis	Evaluate water conservation outreach and related programs	• Recommend adjustments to water conservation outreach and related programs. • Commission review to evaluate opportunity for improved power generation capabilities at one existing C2 Turbine (now offline) • Considering and evaluating new locations with opportunities for micropower generation. • Continue working with the Trenchless Technology industry to identify carbon reduction benefit of trenchless rehab.
Plans, Policies, Regulations		
Policy Implementation		
Community Education, Engagement		
Committees, Staffing		
Funding	F	Page 10

Other Climate Actions

OTHER CLIMATE ACTIONS

This section is intended to give local governments a chance to record other climate actions that could not be captured in the above sectors, including climate change adaptation actions and air quality actions.

In the appropriate boxes below, please record all corporate and community-wide actions taken in 2014 and proposed for 2015. Number and type of actions will vary by community. Please refer to the 'Action Examples' tab above for assistance in understanding the type of information to include in each action category. If the action was taken in partnership, please indicate with whom.

Has your local government begun to integrate the impacts of a changing climate (adaptation) into its planning and operations?	Yes	
Are you aware of the climate change adaptation guidance page on the BC Climate Action Toolkit? (http://www.toolkit.bc.ca/adaptation-challenges-and-opportunities)	Yes	

CORPORATE - Other Climate Action

	Actions taken in 2014	Actions proposed for 2015
Physical Improvements, Construction		
Feasibility Studies, Research, Analysis		Community Energy and Emisisons Plan process
Plans, Policies, Regulations		
Policy Implementation		
Employee Training, Awareness		
Committees, Staffing		
Funding		

COMMUNITY-WIDE - Other Climate Action

	Actions taken in 2014	Actions proposed for 2015
Physical Improvements, Construction		
Feasibility Studies, Research, Analysis		
Plans, Policies, Regulations		
Policy Implementation		
Community Education, Engagement		
Committees, Staffing		
Funding		

Innovation

INNOVATION

This section is intended to give your local government an opportunity to describe any energy and GHG emission reduction activities that have been undertaken over the past year(s) that your local government is particularly proud of and would like to share with other local governments.

CORPORATE - Innovation

Please describe any innovative corporate actions taken in 2014 and add links to additional information where possible.

(No response)

COMMUNITY-WIDE - Innovation

Please describe any innovative community-wide actions taken in 2014 and add links to additional information where possible.

(No response)

Local Government Information

LOCAL GOVERNMENT INFORMATION

LOCAL GOVERNMENT INFORMATION Name of Local Government	West Vancouver, The Corporation of the District of
LOCAL GOVERNMENT INFORMATION Name of member Regional District (RD)	Greater Vancouver (Metro)
LOCAL GOVERNMENT INFORMATION Regional Growth Strategy (RGS) in your region	Yes
LOCAL GOVERNMENT INFORMATION Population	10,000-49,999

Submitted by:

Submitted by: Name	David McKee
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District of West Vancouver Climate Action Revenue Incentive Program (CARIP) Public Reporting - Carbon Neutral Progress Survey 2014

MEASURING CORPORATE GHG EMISSIONS

- Q1. Did you measure your local government's corporate GHG emissions in 2014? Yes.
- Q2. What were your local government's 2014 corporate GHG emissions from services delivered directly by your local government? (in tonnes of carbon dioxide-equivalent, tCO2e). **2,475 tCO2e.**
- Q3. What were your local government's 2014 corporate GHG emissions from contracted services? (in tonnes of carbon dioxide-equivalent, tCO2e). **256 tCO2e**.

Total Corporate GHG Emissions for 2014. 2,731 tCO2e.

Reporting Reductions and Offsets

To be carbon neutral, a local government must: balance their TOTAL corporate GHG emissions by undertaking Option 1 (GCC-supported) or Option 2 (alternative) community GHG emissions reduction projects that meet project eligibility requirements; and/or; purchase carbon offsets from a credible offset provider.

Q4. If applicable, please report the 2014 GHG emissions reductions being claimed from

Option 1 GHG Reduction Projects.

Household Organic Waste Composting. 535 tCO2e.

Avoided Forest Conversion. 18,898 tCO2e.

Total Reductions from Option 1 Projects. 19,433 tCO2e

Q5. If applicable, please list the names of and report the 2014 GHG emissions reductions being claimed from Option 2 GHG Reduction Projects.

Option 2 Project Name GHG Emissions Reduced Vancouver Landfill Gas Capture. **1,812 tCO2e.** Total Reductions from Option 2 Projects. **1,812 tCO2e.**

Q6. If applicable, please report the number of offsets you purchased from an offset provider for the 2014 reporting year. **Not applicable.**

Q7. If you have purchased offsets, please identify the name of your offset provider. **Not applicable.**

Total Reductions from Projects and Offsets for 2014. 21,245 tCO2e.

A 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 2014. -18,514 tCO2e

If the Corporate GHG Emissions Balance is negative or zero, the local government is carbon neutral.