

Climate Action Revenue Incentive Program (CARIP) Public Report

Climate Action Revenue Incentive (CARIP)

Public Report for YEAR 2013

District of Squamish

Squamish Lillooet Regional
District



Report Submitted by

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General Information

Name of Local Government	District of Squamish
Member of Regional District (RD)	Squamish Lillooet Regional District
Regional Growth Strategy (RGS) in region	Yes
Population	17,158

Table of Contents

- Community Wide Actions for 20122
 - 1.1 Measure2
 - Community Wide Measurement Actions.....2
 - 1.2 Plan.....2
 - Community Wide Targets2
 - 1.3 Reduce2
 - Supportive Community Wide Actions.....2
 - Direct Community Wide Actions.....5
- Corporate Actions for 20128
 - 2.1 Measure8
 - Corporate Measurement Actions8
 - 2.2 Reduce8
 - Supportive Corporate Actions.....8
 - Direct Corporate Actions9
 - 2.3 Corporate Innovation12
- Carbon Neutral Progress Reporting13
 - 3.1 Carbon Neutral Progress Reporting13
 - 3.2 Making Progress on Your Carbon Neutral Commitment.....13
 - 3.3 Offset Provider Information15

Community Wide Actions for 2013

1.1 Measure

Community Wide Measurement Actions

Question	Have you been using the Community Energy and Emissions Inventory (CEEI) to measure progress? What else have you been using instead of/in addition to CEEI?
Answer	No
Additional Information	

1.2 Plan

Community Wide Targets

Question	Does your OCP(s) have targets, policies and actions to reduce GHG emissions, as per the requirements under the <i>Local Governments Act</i> (LGA)? If yes, please identify the targets set. If no or in progress, please comment.
Answer	Yes
Additional Information	https://squamish.civicweb.net/Documents/DocumentList.aspx?ID=52352

1.3 Reduce

Supportive Community Wide Actions

Action Type	Broad Planning
Actions Taken this Year	Improved development services business process so community members have to make less trips to municipal hall, Expanded current zoning regulations and guidelines to support community gardens and local food production, Developed a liquid waste management plan and water master plan, Continued development of a new subdivision and development control bylaw with green design standards, Conducted a plan review of the Squamish Estuary Management Plan

Proposed Actions for Next Year	Continue to develop liquid waste management plan and water master plan, Continue development of a new subdivision and development control bylaw with green design standards, Continue plan review of the Squamish Estuary Management Plan
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Action Type Building and Lighting

Actions Taken this Year	Promoted earth hour 2013 to the community in partnership with local organizations, engaged in an inter-community energy reduction challenge and hosted glow in the dark skating sessions, engaged staff in the Kilowatt Crackdown an inter-building energy reduction challenge
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Proposed Actions for Next Year	Continue to promote earth hour 2014 to the community in partnership with local organizations, engage in an inter-community energy reduction challenge and host a glow in the dark skating session, engage staff in the Kilowatt Crackdown an inter-building energy reduction challenge
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Action Type Energy Generation

Actions Taken this Year	Supported co-compliant energy generating initiative in the community through our building permitting process, Under new development procedure bylaw to expedite permits that support solar energy devices, biomass boiler etc.
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Proposed Actions for Next Year	Continue to support co-compliant energy generating initiative in the community through our building permitting process, Under new development procedure bylaw to expedite permits that support solar energy devices, biomass boiler etc.
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Action Type Green Space

Actions Taken this Year	Finalized new landscape security policy for development permits to clearly define when a security is required, Under new development procedure bylaw to expedite permits that support community gardens and enhancement of riparian areas, Organized and promote the Hike-4-Habitat in conjunction with Pitch-in Week to clean up waste in green spaces and connect children to nature through Squamish Bear Aware Program, Participated as a program leader in the Squamish River Watershed Society's wetland education program shared the value of wetlands with 500 elementary students
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Proposed Actions for Next Year	Continue to organize and promote the Hike-4-Habitat in conjunction with Pitch-in Week to clean up waste in green spaces and connect children to nature through Squamish Bear Aware Program, Participate as a program leader in the Squamish River Watershed Society's
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wetland education program shared the value of wetlands with 500 elementary students

Action Type	Transportation
<p>Actions Taken this Year</p>	<p>Develop and implement a transit promotion plan to increase ridership, Support active transportation through the implementation of a sidewalk maintenance policy, Implement transportation demand management based service upgrades to transit schedules and routing in accordance with our 2012 transit service effectiveness review, Continue to enforce the District's anti-idling traffic bylaw using an educational model of enforcement, Under new development procedure bylaw expedite permits that support active transportation improvements and infrastructure and new equipment for electric vehicle charging stations, Have a bylaw presence at the downtown community police office to offer a walkable point of contact for residents, Lead and promoted Bike to Work Week in partnership with the Sea to Sky Clean Air Society</p>
<p>Proposed Actions for Next Year</p>	<p>Continue to develop and implement a transit promotion plan to increase ridership, Support active transportation through the implementation of a sidewalk maintenance policy, Implement transportation demand management based service upgrades to transit schedules and routing in accordance with our 2012 transit service effectiveness review, Continue to enforce the District's anti-idling traffic bylaw using an educational model of enforcement, Under new development procedure bylaw expedite permits that support active transportation improvements and infrastructure and new equipment for electric vehicle charging stations, Have a bylaw presence at the downtown community police office to offer a walkable point of contact for residents, Lead and promoted Bike to Work Week in partnership with the Sea to Sky Clean Air Society</p>

Action Type	Waste
<p>Actions Taken this Year</p>	<p>Undertake a cost benefit analysis for a food scraps collection program for implementation in 2014, Develop a Zero Waste Action Team in partnership with the Squamish Climate Action Network, Lead, promote and participate in the annual Pitch-in Week Challenge</p>
<p>Proposed Actions for Next Year</p>	<p>Continue to undertake a cost benefit analysis for a food scraps collection program for implementation in 2014, Develop a Zero Waste Action Team in partnership with the Squamish Climate Action Network, Lead, promote and participate in the annual Pitch-in Week Challenge</p>

Action Type	Water/Sewer
<p>Actions Taken this Year</p>	<p>Continue to enforce the District's Water Conservation Strategy using an educational model of enforcement</p>

Proposed Actions for Next Year	Continue to enforce the District's Water Conservation Strategy using and educational model of enforcement
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Action Type	Other Actions
Actions Taken this Year	Sponsor community for the UBC School of Landscape Architecture graduate students projects focusing on design solutions for greenway connectivity, storm water management, brownfield reclamation, densification and waste management solutions
Proposed Actions for Next Year	Continue to lease district owned land to the Farmers Market Association to host a weekly Farmers market and support local food security, Lead the e-reader outreach sessions in the community to foster the acceptance of paper-free technology, Updated our website so more online information is readily available to the public reducing visits to municipal hall, Support the Fruit-Tree Project where by volunteers picked over 1600 pounds of fruit in partnership with Squamish Bear Aware and Squamish Climate Action Network

Direct Community Wide Actions

Action Type	Buildings
Actions Taken this Year	N/A
Proposed Actions for Next Year	N/A

Action Type	Energy Generation
Actions Taken this Year	N/A
Proposed Actions for Next Year	N/A

Action Type	Transportation
Actions Taken this Year	Support active transportation by expanding our bike network though the addition of more east/west bike lane connectors, Install 50 torch on bike lane decals in on new road side bike lanes to foster a culture of active transportation, Install new transit shelters through UBCM's public transit infrastructure program, Re-write solid waste contracts to further support a culture of waste reduction, Establish 2 formal rideshare parking lots within district boundaries that are connected to our bike network and are serviced by public

	transit to support multi-modal transportation options
Proposed Actions for Next Year	Continue to expand bike lane network and make improvements to the Corridor Trail

Action Type	Waste
Actions Taken this Year	Implement a community wide curbside residential yard waste collection program, Establish a food scraps collection facilities at the Helping Hands Emergency Shelter
Proposed Actions for Next Year	Continue to implement a community wide curbside residential yard waste collection program, Establish a food scraps collection facilities at the Helping Hands Emergency Shelter

Action Type	Water/Sewer
Actions Taken this Year	N/A
Proposed Actions for Next Year	Develop a water conservation bylaw

Action Type	Green Space
Actions Taken this Year	N/A
Proposed Actions for Next Year	N/A

Action Type	Other Actions
Actions Taken this Year	Led and supported the Kilowatt Crackdown Program in the RCMP building and was very successful.
Proposed Actions for Next Year	

Question	Is there any activity that you have been engaged in over the past year(s) that you are
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particularly proud of and would like to share with other local governments? Please describe and add links to additional information where possible.

Answer

Sponsor community for the UBC School of Landscape Architecture graduate students projects focusing on design solutions for greenway connectivity, storm water management, brownfield reclamation, densification and waste management solutions. Also, Through the Plug in BC initiative, Squamish is hosting an electric vehicle fast charging station and participating in the EVDC pilot program in partnership with the province and BC Hydro to determine best management practices for electric vehicle infrastructure:
http://www2.news.gov.bc.ca/news_releases_2009-2013/2013ENV0002-000067.htm

Corporate Actions for 2013

2.1 Measure

Corporate Measurement Actions

Question	What steps has your local government taken toward completing its corporate emissions inventory?
Answer	Participated in SMARTtool Pilot Study. Compiled energy and fuel data. New staff to be trained on SMARTtool.

Question	What tool are you using to measure, track and report on your corporate emissions?
Answer	SMARTtool

2.2 Reduce

Supportive Corporate Actions

Action Type	Broad Planning
Actions Taken this Year	Integrate GHG tracking mechanisms into all RFP tenders
Proposed Actions for Next Year	Continue to Integrate GHG tracking mechanisms into all RFP tenders

Action Type	Building and Lighting
Actions Taken this Year	Encourage staff to participate in Earth hour, Run a 4 month hydro reduction competition between district buildings
Proposed Actions for Next Year	Continue to encourage staff to participate in Earth hour, Run a 4 month hydro reduction competition between district buildings

Action Type

Energy Generation

Actions Taken this Year	Attended waste to energy workshop
Proposed Actions for Next Year	Explore options to pursue waste to energy projects

Action Type Transportation

Actions Taken this Year	Staff participation in bike to work week, Participate in BC Transit’s Regional Transit Future Plan, Evaluate priorities of the 2031 Multi-Modal Transportation Plan, take inventory to work completed and create a long term budget to realize the objectives of this plan
Proposed Actions for Next Year	Hire a Transportation Coordinator, Continue to participate in bike to work week, Participate in BC Transit’s Regional Transit Future Plan, Evaluate priorities of the 2031 Multi-Modal Transportation Plan, create a long term budget to realize the objectives of this plan

Action Type Water/Sewer

Actions Taken this Year	Continue development of a Liquid Waste Management Plan
Proposed Actions for Next Year	Continue development of a Liquid Waste Management Plan

Action Type Other Actions

Actions Taken this Year	N/A
Proposed Actions for Next Year	N/A

Direct Corporate Actions

Action Type Building and Lighting

Actions Taken this Year	Replacement of 36 metal halide high bay lights with LED fixtures in Brennan Park Arena, Saving an estimated 0.3 GHG per year, Replaced 33 exterior metal halide wall pack and car
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park lights with LED fixtures at Brennan Park Recreation Centre, saving an estimated 0.5 GHG per year, Motion sensors installed in several buildings to control lights in meeting rooms, washrooms, lunch rooms and firehall truck bays, Large gaps around all windows and doors at Adventure Centre were sealed to better insulate the building and prevent heat and cooling loss, Tinted window film was added in Adventure Centre to prevent the building interior getting too warm when the sun shines in, Duct cleaning throughout all buildings was performed to ensure the efficient running of the ventilation system, Established a Spring staff challenge between buildings to encourage savings in energy consumption, New heat pumps were installed in Senior Centre (reliability issues was the main concern in the old units); Air handling unit for the pool deck was replaced which will save approximately 0.9 tonnes of GHG per year. The old unit was old and inefficient and had passed its service life; Installed staff shower and bike storage at City Hall to encourage staff to ride bikes to work; new automated field lighting based on booking system to have lights on only when needed.

**Proposed
Actions for
Next Year**

Replace all roof top units in Forestry building for heat, cooling and air will be replaced with high efficiency units, Service the well pump for the heat exchanger in the RCMP building (part of the geothermal system providing heat and cooling), Replace current hot water heater for the ice re surface in Brennan Park Arena with an energy efficient model (Saving an estimated 3 GHG per year), Continue to improve energy efficiency at District buildings with motion sensor installation and replacement of exterior metal halide wall pack lights with LED as they fail.

Action Type Energy Generation

**Actions
Taken this
Year**

Air handling unit for the pool deck at Brennan Park Aquatic Centre was replaced which will save approximately 0.9 tonnes of GHG per year. The old unit was old and inefficient and had passed its service life, Heat exchanger in RCMP building (an integral part of the geothermal system to assist in heating/cooling building) was cleaned and flushed.

**Proposed
Actions for
Next Year**

N/A

Action Type Fleet

**Actions
Taken this
Year**

Continue to procure/replace vehicles/equipment to optimize fleet fuel efficiency; Replace certain units (6 automotive vehicles replaced with new and some vintage, 11 light-duty / medium-duty vehicles replaced with new and some vintage). This will significantly reduce GHG emissions and energy consumption by updating older unit to new ones that have greener technologies such as more fuel efficient engines. Also during vehicle replacement intervals, all department usage needs are reviewed to maximize usage efficiencies and sizing for fleet needs. The light-duty/ medium-duty fleet will have GHG emission reductions with updating from pre-Tier 1 emission levels to Tier 4 emission levels in engine technology. Presently we have one 2014 medium-duty truck with Urea injection (Tier 4 emission levels).

Proposed Actions for Next Year	Continue to procure/replace vehicles/equipment to optimize fleet fuel efficiency. Purchase a GPS system for Operations to dispatch and manage equipment usage as efficiently as possible.
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Action Type **Waste**

Actions Taken this Year	Implement an enhanced waste diversion program at municipal hall to facilitate composting and paper towel recycling
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Proposed Actions for Next Year	Hire a Zero Waste Coordinator
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Action Type **Water/Sewer**

Actions Taken this Year	Continue to replace aging water, sewer and storm water infrastructure, Continue to improve the supervisor control and data acquisition system (SCADA) allowing for water, drainage and waste-water systems to run more efficiently
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Proposed Actions for Next Year	Continue to replace aging water, sewer and storm water infrastructure, Continue to improve the supervisor control and data acquisition system (SCADA) allowing for water, drainage and waste-water systems to run more efficiently
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Action Type **Green Space**

Actions Taken this Year	Worked in partnership with the Sea to Sky Invasive Species Council to control the spread of invasive species on District owned land, Upgraded community soccer field to an artificial turf field reducing emissions associated with mowing and conserving water, Follow best management practices to create fisheries habitat with felled danger trees on District owned property, Use mulch on District gardens to suppress weed, avoid the need for herbicide, and conserve water
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Proposed Actions for Next Year	Plant trees along the Corridor Trail, Continue to manage Invasive Species on municipally owned land
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Action Type **Other Actions**

Actions Taken this Year	Installed staff shower and bike storage at City Hall to encourage staff to ride bikes to work. Increased opportunities for recycling; increase in electronic filing; purchase of refillable
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pens; digital inspection forms for Building Inspectors; digital property files which are easier to archive; turned scrap paper into small note pads; Phased conversion to SharePoint file systems which resulted in dramatic decrease in paper consumption; upgraded computer servers to high efficiency computer servers that do not require air conditioning; used SCADA to identify gaps in efficiency of water pumps; Ensured computer monitors and lights were turned off every night in Operations Department; Initiated a compost program in the Operations Department.

**Proposed
Actions for
Next Year**

Purchase a tablet for Human Resources to use for interview notes and other job competition documents to eliminate paper; Continue to lead and support the RCMP office to keep electricity usage to a minimum thereby reducing wasted electricity.

2.3 Corporate Innovation

Question Is there any activity that you have been engaged in over the past year(s) that you are particularly proud of and would like to share with other local governments? Please describe and add links to additional information where possible.

Answer

Carbon Neutral Progress Reporting

3.1 Carbon Neutral Progress Reporting

Emissions/Offsets	Tonnes CO2e
Annual corporate emissions using SMARTTool or equivalent inventory tool	1073
<i>Emissions from services delivered directly by the local government</i>	1044
<i>Emissions from contracted services</i>	29
Less: GHG reductions being claimed for this reporting year from Option 1 - GHG reduction project	0
<i>Energy Efficient Building Retrofits and Fuel Switching</i>	
<i>Solar Thermal</i>	
<i>Household Organic Waste Composting</i>	
<i>Low Emissions Vehicles</i>	
Less: GHG reductions being claimed for this reporting year from Option 2 - GHG reduction projects	0
<i>Option 2 Project A</i>	
<i>Option 2 Project B</i>	
<i>Sum of Other Option 2 Projects (if you have added projects below)</i>	0
Less: <i>Offsets purchased for this reporting year (Option 3). Please identify your offset provider in the offset provider information section below.</i>	
Balance of corporate emissions for this reporting year. <i>(If the corporate emissions balance is zero, your local government is carbon neutral for this reporting year)</i>	1073
Additional "Option 2" Projects	
<i>Option 2 Project C</i>	
<i>Option 2 Project D</i>	
<i>Option 2 Project E</i>	
<i>Option 2 Project F</i>	
<i>Option 2 Project G</i>	
<i>Option 2 Project H</i>	

3.2 Making Progress on Your Carbon Neutral Commitment

Question	If your community has not achieved carbon neutrality for this reporting year please describe the actions that you intend to take next year to move you toward your carbon neutral goal.
Answer	We have started tracking our GHG emissions for contracted services as of January 2013, and have transitioned our 2012 pilot yard waste collection program into a community wide core

service. The yard waste collection program qualifies as an option 1 offset program. To date our carbon tax credits have sat in reserve savings. District staff will be providing District of Squamish Council with a climate action charter update and a strategic plan to apply the carbon tax reserve credit and staff resources to lead carbon neutral and GHG tracking initiatives in keeping with our climate action charter commitments.

3.3 Offset Provider Information

Question Please Identify the name(s) of your offset provider(s) (Please answer below):

Answer

Question The offsets being claimed in this CARIP Report were purchased from the offset provider(s) indicated above prior to making this CARIP report public (please indicate yes or no):

Answer

Question If your community has not achieved carbon neutrality for this reporting year please describe the actions that you intend to take next year to move you toward your carbon neutral goal.

Answer