



Climate Action Revenue Incentive (CARIP) Public Report for 2013



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Table of Contents

- General Information..... 2
- Community Wide Actions for 2013..... 3
 - 1.1 Measure 3
 - Community Wide Measurement Actions 3
 - 1.2 Plan 3
 - Community Wide Targets 3
 - 1.3 Reduce..... 3
 - Supportive Community Wide Actions 3
 - Direct Community Wide Actions 5
- Corporate Actions for 2013 8
 - 2.1 Measure 8
 - Corporate Measurement Actions..... 8
 - 2.2 Reduce..... 8
 - Supportive Corporate Actions 8
 - Direct Corporate Actions.....10
 - 2.3 Corporate Innovation11
- Carbon Neutral Progress Reporting12
 - 3.1 Carbon Neutral Progress Reporting.....12
 - 3.2 Making Progress on Your Carbon Neutral Commitment13

General Information

Name of Local Government	City of Nanaimo
Member of Regional District (RD)	District of Nanaimo
Regional Growth Strategy (RGS) in region	Yes
Population	87,515

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	Yes
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 (LGA)</i> ? If yes, please identify the targets set. If no or in progress, please comment.
Answer	Yes
Additional Information	Current target in our OCP is 33% below 2007 levels by 2020 and 80% of 2007 levels by 2050. The Community Sustainability Action Plan recommends the target be adjusted to 3% below 2007 levels by 2020 and 39% below 2007 levels by 2050. This is to be revised during the OCP review.

1.3 Reduce

Supportive Community Wide Actions

Action Type	Broad Planning
Actions Taken this Year	Implemented first year actions of CSAP including the promotion of energy efficiency to local developers and realtors, as well as supporting local cycling events.
Proposed Actions for Next Year	To continue promoting energy efficiency to local developers and realtors, and to continue to support local cycling events

Action Type	Building and Lighting
Actions Taken this Year	Through BC Hydro's Sustainable Communities Initiative, an energy efficiency section in the City's Harewood Neighbourhood Plan was completed.
Proposed Actions for Next Year	To have the OCP updated.

Action Type	Energy Generation
Actions Taken this Year	The construction of Reservoir #1 and the related energy recovery system.
Proposed Actions for Next Year	Examine power generation opportunities at our Water Treatment Plant under construction which would be consumed by plant.

Action Type	Green Space
Actions Taken this Year	Completed Invasive Plant Management Strategy. Community Wildfire Protection Plan process to be completed.
Proposed Actions for Next Year	To complete the Community Wildfire Protection Plan and develop Firesmart / Naturewise Management Plans.

Action Type	Transportation
Actions Taken this Year	Participated in the Community Charging Infrastructure Planning Grant Program and identified 10 commercial / business locations for Level II Electric Vehicle Charge Stations for public use. Also City-wide promotion and support of Bike to Work Week
Proposed Actions for Next Year	Collaborate with Nanaimo CarShare to expand CarShare fleet through amenity contributions as part of the development process.

Action Type	Waste
Actions Taken this Year	Executed zero waste programs and expanded curbside composting.
Proposed Actions for Next Year	To continue to work with the Regional District of Nanaimo and support zero waste education programs.

Action Type	Water/Sewer
Actions Taken this Year	Completed and adopted City Water Conservation Review.
Proposed Actions for Next Year	Toilet Rebate Program to be refocused to target existing multi-family developments.

Action Type	Other Actions
Actions Taken this Year	Completed focus group meetings with realtors on developing a Realtor Energy Efficiency Program that develops training and incentives for realtors to promote energy efficiency as part of home buying and selling. Successfully applied for funding from BC Hydro for this program.
Proposed Actions for Next Year	To proceed with the first phase of the Realtor Energy Efficiency Program and complete the development of the training program.

Direct Community Wide Actions

Action Type	Buildings
Actions Taken this Year	-
Proposed Actions for Next Year	Planned revision of zoning bylaw for green density bonus incentive in order to increase uptake.

Action Type	Energy Generation
Actions Taken this Year	-
Proposed Actions for Next Year	-

Action Type	Transportation
Actions Taken this Year	Completed and published the updated Transportation Master Plan as well as the installation of a "Level 3" DC Fast Charger in conjunction with the Province of BC and BC Hydro in early 2013.
Proposed Actions for Next Year	Continue to look for efficiencies in the fleet and to explore partnerships with groups like Nanaimo CarShare to see if CarShare can be an option to augment vehicle fleet needs.

Action Type	Waste
Actions Taken this Year	Worked with the Regional District of Nanaimo to organize and coordinate the 2013 Woodstove Exchange Program for the Regional District of Nanaimo and the City of Nanaimo.
Proposed Actions for Next Year	To continue to work with the Regional District to organize and coordinate the 2014 Woodstove Exchange Program for the Region and City.

Action Type	Water/Sewer
Actions Taken this Year	Coordinated water conservation education with RDN Team WaterSmart.
Proposed Actions for Next Year	-

Action Type	Green Space
Actions Taken this Year	250 street trees planted as well as 130 acres of parkland acquired and zoned as Natural Parkland.
Proposed Actions for Next Year	Planned planting of 400 trees.

Action Type	Other Actions
Actions Taken this Year	-
Proposed Actions for Next Year	-

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	Installed three 111 KW energy recovery turbines on Reservoir #1 water supply.

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	Since the Climate Action Charter was signed in 2007, the City of Nanaimo has completed a corporate energy and emissions inventory. A review of all corporate assets was completed to ensure that the data being used to calculate GHG emissions is complete. The City of Nanaimo has followed the methodology outlined in the "2013 B.C. Best Practices Methodology for Quantifying Greenhouse Gas Emissions."

Question	What tool are you using to measure, track and report on your corporate emissions?
Answer	The City of Nanaimo is using Microsoft Excel to track and report our corporate and contracted emissions.

2.2 Reduce

Supportive Corporate Actions

Action Type	Broad Planning
Actions Taken this Year	Updated Transportation Master Plan and Water Conservation Strategy.
Proposed Actions for Next Year	Transportation Master Plan to be adopted by Council. Water Conservation Plan to be adopted by Council

Action Type	Building and Lighting
Actions Taken this Year	Developed and implemented energy-reduction plans for numerous corporate buildings.
Proposed Actions for Next Year	Continue to develop energy-reduction plans in 2014 to reduce energy use in numerous corporate buildings

Action Type	Energy Generation
Actions Taken this Year	Construction of Reservoir #1 with energy generation and recovery systems installed.
Proposed Actions for Next Year	To explore power generation opportunities at Water Treatment Plant to be consumed by the plant.

Action Type	Transportation
Actions Taken this Year	Completed and published the updated Transportation Master Plan.
Proposed Actions for Next Year	Support Bike to Work Week / Bike to School 2014.

Action Type	Water/Sewer
Actions Taken this Year	Completion of an updated 2013 Water Conservation Strategy.
Proposed Actions for Next Year	To participate and promote "Drinking Water Week 2014" to be held in May 2014.

Action Type	Other Actions
Actions Taken this Year	Completed the Community Wildfire Protection Plan.
Proposed Actions for Next Year	-

Action Type	Building and Lighting
Actions Taken this Year	Upgraded lighting in numerous facilities including; Mansfield Park Field House, Cemetery office, Bastion Parkade exterior, Fire Station 1 exterior, Departure Bay Field House and Bowen Admin store room. Also upgraded Beban Pool ozone water treatment to Ultraviolet and installed Variable Frequency Drive controls to Beban Pool pumps and fans. As well, insulation was upgraded at Fire station #2, Fire Station #3, the Public Works Repair Shop and the Public Works Purchasing Building. Controls were also installed on overhead doors at the Public Works Repair Shop and Fire Station #3 to shut off heat when doors are opened, and existing heat controls were upgraded at the Public Works Purchasing Building, Cemetery office and City Hall. We upgraded the oil furnace to cleaner, high-efficiency natural gas boiler at City Hall and lastly upgraded the old air conditioner at the Public Works Purchasing building to a heat pump.
Proposed Actions for Next Year	Planned activities include; continued lighting upgrades as technology improves, heat recovery at Frank Crane Arena and Beban Leisure pool, upgrading the Beban HVAC and to eliminate Caledonia and Fire Station #1 oil furnaces in favour of cleaner-burning, more efficient technology units.

Direct Corporate Actions

Action Type	Energy Generation
Actions Taken this Year	Commissioned solar hot water system on Service and Resource Centre building.
Proposed Actions for Next Year	Installed three 111 KW energy recovery turbines on Reservoir #1 water supply.

Action Type	Fleet
Actions Taken this Year	Converted three pickup trucks to dual fuel propane / gasoline, downsized fleet by removing one car and one pickup truck as well as purchased electric zamboni.
Proposed Actions for Next Year	Propose to purchase a CNG powered garbage truck as well as look for more opportunities to move from gasoline to propane. We also plan to downsize fleet by one more vehicle and consider entering into partnership with Nanaimo Car Share.

Action Type	Waste
Actions Taken this Year	We continued focus on Zero Waste in corporate operations and in the community.

Proposed Actions for Next Year	We plan to continue this Zero Waste focus.
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Action Type	Water/Sewer
Actions Taken this Year	-
Proposed Actions for Next Year	-

Action Type	Green Space
Actions Taken this Year	-
Proposed Actions for Next Year	Continued focus on acquisition of natural areas and green spaces.

Action Type	Other Actions
Actions Taken this Year	Completed and finalized the new Tree Protection Bylaw.
Proposed Actions for Next Year	Planned completion of the Watercourse Setback Variance Review.

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	Our proudest environmental project and achievement continues to be our Water Treatment Plant which is currently undergoing construction. The design of the plant takes advantage of our gravity-fed water supply allowing the water to flow through the plant and be treated with minimal energy required. We also took advantage of our gravity-fed system through the construction of an Energy Recovery Facility at Reservoir #1 through the use of turbines and we continue to investigate energy recovery opportunities at the Water Treatment Plant which will be used to help power the plant itself.

Carbon Neutral Progress Reporting

3.1 Carbon Neutral Progress Reporting

Emissions/Offsets	Tonnes CO2e
Annual corporate emissions using SMARTTool or equivalent inventory tool	4,766
<i>Emissions from services delivered directly by the local government</i>	4,490
<i>Emissions from contracted services</i>	276
Less: GHG reductions being claimed for this reporting year from Option 1 - GHG reduction project	1,605
<i>Energy Efficient Building Retrofits and Fuel Switching</i>	
<i>Solar Thermal</i>	
<i>Household Organic Waste Composting</i>	1,605
<i>Low Emissions Vehicles</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>	3,161

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	<p>The City of Nanaimo continues to be committed to environmentally sustainable governance. The largest project reducing the City's environmental impact is our Water Treatment Plant currently under construction. Our gravity-fed system eliminates the need for water to be continuously pumped and we have captured the opportunity to generate electricity at Reservoir #1 through the use of turbines. This year we plan on exploring more energy recovery possibilities at the Water Treatment Plant which will be consumed by the plant itself. We also continue to contribute funds to a Regional Emission Reduction Projects Reserve instead of purchasing carbon offsets to enable the region to undertake emission reduction projects. Meetings have been held with interest groups in the city to discuss possible beneficial projects. On a smaller scale the city is making efforts to reduce GHGs in various ways as discussed previously in this report. This includes, fleet reductions, CarShare options, energy reduction plans for corporate buildings, lighting upgrades, heat recovery projects, elimination of oil furnaces etc.</p>