

Climate Action Revenue Incentive Plan (CARIP) Public Report

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Regional District of Nanaimo

Reported by
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General Information

Name of Local Government	<i>Regional District of Nanaimo</i>
Member of Regional District (RD)	<i>Regional District of Nanaimo</i>
Regional Growth Strategy (RGS) in region	<i>Yes</i>
Population	<i>est. 152,000 (incl. Member Municipalities, from BC Stats)</i>

Community Wide Actions for 2011

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	<i>We have used the Regional District of Nanaimo CEEI Report as a baseline emission inventory for Regional Community Energy and Emission planning purposes. We have also used the RDN CEEI Report to develop inventories for each of the Region's electoral areas using 2007 as the baseline year as provided by the CEEI Report. We have used this baseline to project emissions through to 2050, and to indicate what total emissions would be under an 80% reduction scenario by that time.</i>

1.2 Plan

Community Wide Targets

Question	Do your OCP(s) have targets, policies and actions to reduce GHG emissions, as per the requirements under the Local Governments Act (LGA)? If yes, please identify the targets set. If no or in progress, please comment.
Answer	Yes
Additional Information	<i>80% by 2050, with 33% by 2020 as an interim target.</i>

Question	If you are a Regional District, does your RGS have targets, policies and actions to reduce GHG emissions, as per the requirements under the Local Governments Act (LGA)? If yes, please identify the targets set. If no or in progress, please comment.
Answer	Yes
Additional Information	<i>80% by 2050, with 33% by 2020 as an interim target.</i>

1.3 Reduce

Supportive Community Wide Actions

Action Type	Broad Planning (e.g. creation/revision of OCPs, CEPs, transportation plans)
Actions Taken this Year	<i>Completion and Board Adoption of RGS; Completion of Electoral Area 'A'OCP, Initiated Electoral Area 'G' Implementation Plan, Completed Emission Inventories for Region's Electoral Areas; Completed Project Identifying Reduction Measures necessary to reach 80% Reduction by 2050 and interim 33% reduction by 2020; Designated new green neighbourhood in Cedar Village Centre; Increased protection for shoreline habitat.</i>
Proposed Actions for Next Year	<i>Undertake Cedar Main Street Design Charrette; Undertake regional growth centres study; complete regional secondary suite suitability analysis.</i>

Action Type	Building and Lighting (e.g. developed green building policy, increased density in the downtown)
Actions Taken this Year	<i>Revised a Sustainability Development Checklist for Green Building, with an incentive program to encourage use; Provided Green Building Workshops, Seminar Series and Open House Tour for residents.</i>
Proposed Actions for Next Year	<i>Continuing Green Building Seminar Series and Open House Tour; Research project exploring opportunities for improving energy efficiency of existing housing stock; Re-examine checklist scoring system to make it easier to access incentives.</i>

Action Type	Energy Generation (e.g. signed on to provincial 'solar ready' regulation, explored options for bioheating for buildings)
Actions Taken this Year	<i>Outreach and education on residential scale renewable energy systems as part of Green Building Outreach Program; Solar Hot Water Workshop for building officials.</i>
Proposed Actions for Next Year	<i>Renewable Energy Capacity Analysis for Region; Develop Residential Renewable Energy Generation Best Practices Guide</i>

Action Type	Green Space (e.g. developed urban forestry policy, adopted park acquisition policy)
Actions Taken this Year	<i>Completed Research Project exploring carbon sequestration opportunities in Regional and Community Parks</i>
Proposed Actions for Next Year	<i>Follow-up research into opportunities for Ecosystem-based carbon management on private rural parcels to encourage local residents to actively participate in climate action.</i>

Action Type	Transportation (e.g. developed sustainable transportation plan, completed bicycle master plan)
Actions Taken this Year	<i>Completed transit service expansion study; ongoing discussion around U-Pass program for Vancouver Island University; completion of Island Corridor Rail Trail Agreement.</i>
Proposed Actions for Next Year	<i>Electric Vehicle Community Readiness Plan, Renewable Fuel distribution pilot study; Exploring opportunities for compressed natural gas production from solid waste decomposition at landfill.</i>

Action Type	Waste (e.g. introduced composting and recycling education programs)
Actions Taken this Year	<i>Prepared two region-wide Zero Waste newsletters; Produced two region Curbside Collection Newsletters; Hosted Information Booths at 12 community events across region.</i>
Proposed Actions for Next Year	<i>Ongoing education and outreach related to Regional Zero Waste Program</i>

Action Type	Water/Sewer (e.g. participated in water smart initiatives, implemented Water Action Plan, introduced rebates on low flush toilets)
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Actions Taken this Year	<i>Expanded Drinking Water/ Watershed Protection Function to include all Electoral Areas and three member municipalities; Continued successful Team WaterSmart outreach and Education Program, including Septic Smart Program; Created Development Permit Area for water conservation requiring new construction within DPA to include rainwater capture in an 18,000 litre capacity system</i>
Proposed Actions for Next Year	<i>Ongoing outreach and communications; Completing Rainwater Harvesting Best Practices Guide.</i>

Action Type	<i>Other Actions</i>
Actions Taken this Year	<i>Participating Local Government in the development of a Community Emissions Modelling Tool; Participating Local Government in Green Building Leaders Group.</i>

Direct Community Wide Actions

Action Type	Buildings (e.g. implement use of sustainability checklists and development permit guidelines for new buildings)
Actions Taken this Year	<i>Provided electoral area residents with financial rebates for the exchange of older wood stoves, the installation of domestic solar hot water systems, the use of site cut timber in structures requiring a building permit, and for home energy assessments that result in an EnerGuide Rating for that home; Implemented a revised sustainable development checklist and attached \$500, \$750, and \$1000 incentives depending on score; Provided free 1-hour green building consultation with any interested resident.</i>
Proposed Actions for Next Year	<i>Continue rebates, outreach and consultation actions outlined in 2011.</i>

Action Type	Energy Generation (e.g. implement district energy, geothermal, solar)
Actions Taken this Year	<i>Installed 330 kw cogen facility at Greater Nanaimo Pollution Control Centre, to be operational early 2012; Maintained relationship with Cedar Landfill Gas Inc. to convert landfill methane into electricity.</i>
Proposed Actions for Next Year	<i>Expand Landfill gas collection for electricity production; Commission and activate co-gen at GNPCC.</i>

Action Type	Transportation (e.g. implement bike lanes, pedestrian paths, upgrade transit service and infrastructure, improve roads, parking fees etc.)
Actions Taken this Year	<i>Introduced free shuttle service between new Cruise ship terminal and Downtown Nanaimo for cruise ship passengers; Provided a 100% accessible transit fleet; Bus shelter improvements, including the development of solar powered mini-stops throughout region; Substantially completed accessible 2.5 km portion of Lighthouse Country trail.</i>
Proposed Actions for Next Year	<i>Major expansion to transit services with increased frequency and expanded service area; Incorporating infrastructure to enable Compressend Natural Gas buses as part of mechanical bay expansion at regional transit facility.</i>

Action Type	Waste (e.g. introduce composting and recycling programs)
Actions Taken this Year	<i>Expanded Curbside Organic Collection to include 17,500 households within the City of Nanaimo; completed Cell One, Stage One Closure at Landfill, Initiated conversion to Cell One Nature Park; Completed construction of Church Road Transfer Station to LEED Gold Standard (not certified).</i>
Proposed Actions for Next Year	<i>Continued leadership in Zero Waste Program Implementation.</i>

Action Type	Water/Sewer (e.g. implement water conservation and reduction initiatives)
Actions Taken this Year	<i>Rebates for installing low flow or high efficiency toilets; rebates for installing 18,000 litre plus rainwater cisterns; Began Construction of Third Digester at Greater Nanaimo Pollution Control Centre</i>
Proposed Actions for Next Year	<i>Mobile energy monitoring unit for water conveyance infrastructure, estimating energy savings attributable water conservation measures; Installing energy efficient mixing technology at GNPCC Third Digester;</i>

Action Type	Green Space (e.g. plant trees, conserve forest etc.)
Actions Taken this Year	<i>Acquired Moorecroft Regional Park; development master plans for three major regional parks</i>
Proposed Actions for Next Year	<i>Exploring opportunities for avoided deforestation projects on private lands for the purpose of carbon sequestration.</i>

1.4 Community Wide 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	<i>The Regional Zero Waste Program, including the diversion of organic waste from the landfill is a flagship sustainability program that is prolonging the life of the regional landfill, and reducing landfill emissions by over 3,000 tonnes annually.</i>

Corporate Actions for 2011

2.1 Measure

Corporate Measurement Actions

Question	What steps has your local government taken toward completing its corporate emissions inventory (e.g. corporate assets gathered related to energy and fuel data and calculated GHG emissions from energy use)?
Answer	<i>Corporate inventory complete, systems formalized to maintain inventory in future years; Tracked bills for all in-scope energy purchases, applied accepted emissions factors for all energy sources; calculated total emissions and offset costs for all services and functions within the RDN, established a budgetary line item for offset purchases in all RDN accounts that make energy purchases.</i>

Question	What tool are you using to measure, track and report on your corporate emissions (e.g. SMARTtool, other tools including excel spreadsheets)?
Answer	<i>Excel Spreadsheets, energy purchase invoices, FortisBC and BC Hydro websites for consumption data; using "BC Methodology for Reporting BC Local Government Greenhouse Gas Emissions" as guidance, also using BC Hydro GRI data for electricity emission factors.</i>

2.2 Reduce

Supportive Corporate Actions

Action Type	Broad Planning (e.g. developed corporate climate action plan)
Actions Taken this Year	<i>Completed Strategic Energy Management Plan; Established 10% Electricity conservation target by policy; Completed full account of emissions for every service and function within the RDN; Included line item in 2012 budget for the purchase of offsets.</i>

Proposed Actions for Next Year	<i>Revise and update Strategic Energy Management Plan; Formalize opportunities for collaboration with member municipalities on carbon neutral operations.</i>
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Action Type	<i>Building and Lighting</i> (e.g. developed energy reduction plan for all corporate buildings)
Actions Taken this Year	<i>Established Wood First Policy for RDN Facilities; Completed design for Nanoose Bay Fire Hall, construction underway and projecting a 95% reduction in emissions relative to prior fire hall; Completed an Integrated Design Process Manual for RDN Managers to assist with implementation of the RDN Green Building Policy.</i>
Proposed Actions for Next Year	<i>To be determined.</i>

Action Type	<i>Energy Generation</i> (e.g. undertook feasibility study of green energy generation for civic buildings)
Actions Taken this Year	
Proposed Actions for Next Year	<i>Explore off grid energy infrastructure for remote facilities (eg. Regional Park infrastructure); Considering feasibility of geothermal heating for one recreational facility</i>

Action Type	<i>Transportation</i> (e.g. created anti-idling policy for city vehicles, bike to work week promotion)
Actions Taken this Year	<i>Promoted bike to work week.</i>
Proposed Actions for Next Year	<i>Promote carpooling, Bike to Work Week, Corporate policies will be considered.</i>

Action Type	<i>Other Actions</i>
Actions Taken this Year	<i>Established Corporate Climate Action Reserve Fund to finance investment in high efficiency systems, infrastructure, equipment, vehicles, etc. Revenue source for fund is the Provincial CARIP rebate; Reached all staff with presentations and other information on energy conservation initiatives, and carbon neutral commitment.</i>
Proposed Actions for Next Year	<i>Allocate up to \$50,000 out of Corporate Climate Action Fund toward investment in direct emission reductions; Initiate recognition program for staff that demonstrate high level commitment to energy conservation and emission reductions; Establish Corporate Emissions Reductions Reserve Fund with revenues from interdepartmental transfers for carbon offsets.</i>

Direct Corporate Actions

Action Type	Building and Lighting (e.g. energy efficiency retrofits to municipal buildings)
Actions Taken this Year	<i>195,000 kwh savings or avoided consumption across organization; completed building energy assessment for Cedar Heritage Centre</i>
Proposed Actions for Next Year	<i>Renovate Cedar Heritage Centre, resulting in an estimated 13-tonne reduction in emissions annually; Estimated projection of 380,000 kwh saved or avoided due to conservation initiatives and investment in higher efficiency systems in RDN facilities in 2012.</i>

Action Type	Energy Generation (e.g. implemented heat recovery systems, solar)
Actions Taken this Year	<i>Installation of 2 solar hot water systems on RDN facilities (Ravensong Pool, Church Road Transfer Station), result is up to 1200 GJ reduction in natural gas consumption at Ravensong Pool, 38% reduction in energy use per metre squared at the Church Road Transfer Station (also due to efficient HVAC system and significant use of natural lighting); Installation of co-gen facility at Greater Nanaimo Pollution Control Centre</i>
Proposed Actions for Next Year	<i>Consider heat recovery options assessment for French Creek Pollution Control Centre, completion of Nanoose Bay Fire Hall, including innovative heat recovery systems.</i>

Action Type	Fleet (e.g. anti-idling policies for fleet vehicles, purchasing of hybrid)
Actions Taken this Year	<i>Purchased one all electric transit crew vehicle; purchased three electric vehicle charging stations.</i>
Proposed Actions for Next Year	<i>Purchase up to two additional electric vehicles.</i>

Action Type	Waste (e.g. introduction of composting and recycling programs and education)
Actions Taken this Year	<i>Introduced organic collection at RDN Main Administration Building</i>

Action Type	Other Actions
Actions Taken this Year	<i>Revised HVAC schedule at RDN Main Admin building, saving up to 20,000 kwh per year. Ongoing real time energy monitoring at 7 RDN facilities; established key energy performance metrics for all RDN facilities;</i>
Proposed Actions for Next Year	<i>Achieve Carbon Neutral Operations.</i>

2.3 Corporate Innovations

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	<i>Working collaboratively with member municipalities to calculate corporate emissions, and identify regional emission reduction projects.</i>

Carbon Neutral Progress Reporting

	Tonnes CO2e
Corporate emissions using SMARTTool or equivalent inventory tool	2258.26
Emissions from services delivered directly by the local government	1638.75
<i>Emissions from contracted services</i>	619.51
	0
Less:	
GHG reductions being claimed for this reporting year from Option 1 - GHG reduction project	
<i>Energy Efficient Building Retrofits and Fuel Switching</i>	
<i>Solar Thermal</i>	
Household Organic Waste Composting	
<i>Low Emissions Vehicles</i>	
	0
Less:	
GHG reductions being claimed for this reporting year from Option 2 - GHG reduction projects	
<i>Please list all Option 2 Projects Implemented (insert title of the projects(s) as per project plan template. If you have more than two Option 2 projects you can add more lines at the bottom of this sheet)</i>	
Less:	
Offsets purchased for this reporting year (Option 3)	
	2258.26
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>	

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><i>The RDN and the City of Nanaimo have the opportunity to claim a combined total of 3,174 tonnes of reductions in 2011 as a result of instituting the Option 1 GHG reduction project: household organic waste composting through its zero waste program. Several hundred additional tonnes of reductions through the same program are also available for the period between October 1 and December 31, 2010. Prior to claiming these reductions, the RDN is required to communicate its intention to claim these reductions to its private sector partners. These efforts will occur prior to March 31, 2012, at which point the RDN and member municipalities with either claim, share or defer these reductions for claiming at the conclusion of 2012. In addition, the RDN and member municipalities will explore several Option 2 projects over 2012 for the purpose of achieving carbon neutral operations.</i></p>