

Climate Action Revenue Incentive Program 2013 Public Report

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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	The CEEI data is being used as a resource for more detailed community energy planning, mapping, and other regional sustainability strategies.



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	CVRD OCP targets have been set the same as Provincial targets of Greenhouse Gas emissions reduction of 33% below 2007 levels by 2020 and an 80% reduction below 2007 levels by 2050.

1.3 Reduce

1.3.1 Supportive Community Wide Actions

Supportive Community Wide Actions

Action Type	Broad Planning
Actions Taken this Year	"Initiate Regional Sustainability Strategy - a decision support framework that defines and guides the future of the region for the next 20 years. Airshed Protection Strategy- We held a meeting to bring together many of the regions stakeholders as well as various resource and technical groups. We noted through this meeting that there was substantial interest in and commitment to collaborative work on a plan for this region."
Proposed Actions for Next	"Completion of phase 1 and portion of phase 2 of Regional Sustainability Strategy. Develop a community focused climate change action plan to



Year

meet or beat provincial greenhouse gas emission targets.

Mapping of green infrastructure in the Cowichan Valley.

Airshed Protection Strategy - Complete a baseline emissions inventory, ambient air quality report and identify stakeholders.

Develop a rainwater management strategy - complete the development of the water balance model

Undertake a regional water management and governance study."

Action Type

Building and Lighting

Actions Taken this Year

Exploring Green Building Policy opportunities following established energy standards and hosted opportunity analysis meeting with City Green Solutions to review various standards and policies available commercially and from other local governments.

Proposed Actions for Next Year

"Develop regional green building policy.

Develop an Industrial and Commercial land inventory.

Develop ecosystem protection and enhancement guidelines for new development. "

Action Type

Energy Generation

Actions Taken this Year

Explored opportunities for district heating systems with neighbouring municipalities, univeristy, and high school in the Universty Village area.



Supportive Community Wide Actions

Proposed Actions for Next Year "Continue discussion and examination of opportunities for district energy in densified locations as well as feedstock availability of biomass.

Monitor projects in the region to understand pros and cons of various opportunities such as regional biomass."

Action
Type

Green Space

Actions Taken this Year

"Bright Angel Park Master Plan initiated

Area D Community Parks and Trails Master Plan to be completed.

Park Land Acquisistions in Areas A,B,D,E,F,G,I totalling 22.52 Ha. And 2.03 Ha regional park

".

Proposed Actions for Next Year

"Preliminary designs for Cowichan Valley Trail to Galloping Goose Connector.

Potential 14 sites of park land acquisition.

Develop an invasive Species action plan for the region.

"

Action Type

Transportation

Actions Taken this Year

"Worked with BC Transit and the consultant on Regional Paratransit Study. (how best to service rural areas).

Reviewed the handyDART pilot project servicing Shawnigan



Lake and Lake Cowichan area with BC Transit and confirm best use of hours.

Reviewed the 2012 transportation assistance pilot project with Cowichan Seniors Care Foundation and consider renewal and possible service expansion.

Conducted a transit fare review and present the findings to Transit Committee.

Participated in the CVRD Environmental Education Program, by providing funding and education tools for transit.

Met with MoTI & BCT to review suitable MoTI land for future park and ride lots south of Duncan.

Worked with the local operating company to collect a sample of ridership stats by stop for all trips across the system. "

"Completion of Regional Paratransit Study and work with BC Transit to complete the service review of items not addressed in the Paratransit study, and report to the Transit Committee.

Analyze the current transit fare products sold (tickets and passes) and ticket outlet distribution service and provide options for improvements.

Proposed Actions for Next Year Work with BC Transit to develop service performance standards, as a guiding tool for future service and route changes and expansion.

Review the 2013 transportation assistance services program with Cowichan Seniors Care Foundation, and consider renewal and possible service expansion.

Work with BC Transit and First Canada to prioritize Commuter service improvements for the proposed 700 expansion hours for 2015/16.

Work with BC Transit and operating companies to prioritize conventional service improvements for the proposed 3,200 expansion hours for 2015/16.

Analyze the budget impact for the increase in fleet lease costs related to the replacement of the existing bus fleet.



Supportive Community Wide Actions

Action Waste Type Launched the CVRD in house waste trucking and collection system to collect residential waste and recycling materials. This program provides the CVRD a substantial opportunity to strategically maximize the use of in house collection collect waste and maintain a high quality and efficient fleet. The ability to expand the system to the collection of organics is currently being analyzed. Continued with "Clear the Air Cowichan" campaign, focusing on all aspects of burning, including: health effects, smarter home heating, and open burning regulation. Established Solid Waste Sub-Committee to the CVRD Environment Commission to act as the plan monitoring committee for the regions solid waste plan. The monitoring committee reviewed provided input and has now formally recommended the plans approval to the Board. Actions Taken this Participated in province-wide consultation process regarding Year the upcoming stewardship of packaging and printed paper (PPP) in May, 2014. This process culminated in contract negotiation and the signing on with Multi-Material BC (MMBC) as a collection service provider for curbside and depot PPP. Hosted a well-attended free Burn It Smart educational workshop on residential wood heating as part of a regional air quality initiative to decrease particulate emissions. An industry professional (president of the Wood Energy Technicians of BC (WETBC)) presented on smart burning practices for cleaner woodstove use, and provided tips and techniques on residential home heating. Continued to work with local First Nations communities to support better access to options for waste disposal and recycling. Continued our free Environmental School Education



Supportive Community Wide Actions

Program, provided in conjunction with a local non-profit group, to all schools in the region. Outreach at public events is included.

Promotion of the new online Cowichan *Recyclopedia* continued through 2013. This searchable database of information provides tips and techniques on how to reduce, reuse, and recycle hundreds of products and materials locally.

The "Recycled Tune of the Day" on the local radio station (where a song is prefaced with information on local recycling options and environmental tips) was continued through 2013.

The "CVRD Recycling Hotline" service was continued, allowing residents to call in toll-free to find out where/how to recycle any item locally and obtain information about CVRD curbside collection services and recycling drop-off depots.

Support the school district(s) in developing and implementing zero waste programs at local schools."Continued with "Clear the Air Cowichan" campaign, focusing on all aspects of burning, including: health effects, smarter home heating, and open burning regulation.

- -Established Solid Waste Sub-Committee to the CVRD Environment Commission.
- -Participated in province-wide consultation process regarding the upcoming stewardship of packaging and printed paper (PPP) in May, 2014. This process culminated in contract negotiation and the signing on with Multi-Material BC (MMBC) as a collection service provider for curbside and depot PPP.
- -Hosted a free Burn It Smart educational workshop on residential wood heating as part of a regional air quality initiative to decrease particulate emissions. An industry professional (president of the Wood Energy Technicians of BC (WETBC)) presented on smart burning practices for cleaner woodstove use, and provided tips and techniques on residential home heating.



- -Continued to work with local First Nations communities to support better access to options for waste disposal and recycling.
- -Continued our free Environmental School Education Program, provided in conjunction with a local non-profit group, to all schools in the region. Outreach at public events is included.
- -Promotion of the new online Cowichan Recyclopedia continued through 2013. This searchable database of information provides tips and techniques on how to reduce, reuse, and recycle hundreds of products and materials locally.
- -The "Recycled Tune of the Day" on the local radio station (where a song is prefaced with information on local recycling options and environmental tips) was continued through 2013.
- -The "CVRD Recycling Hotline" service was continued, allowing residents to call in toll-free to find out where/how to recycle any item locally and obtain information about CVRD curbside collection services and recycling drop-off depots.
- -Support the school district(s) in developing and implementing zero waste programs at local schools.

"

Proposed Actions for Next Year

Undertake extensive public education campaign leading up to, and following, the implementation of the new MMBC recycling program for residential PPP in May, 2014. Materials accepted for curbside and depot collection will change.

Renew "Clear the Air Cowichan" campaign efforts,



especially regarding awareness of the new backyard burning bylaw in five electoral areas.

Host a free Burn It Smart educational workshop on residential wood heating in February, 2014, as part of a regional air quality initiative to decrease particulate emissions. An industry professional will present on smart burning practices for cleaner woodstove use, and provide tips and techniques on residential home heating.

Develop Zero Waste certification standards for schools, businesses and residents (as part of the Cowichan Zero Waste Challenge initiative).



Supportive Community Wide Actions

Action Type	Water/Sewer
Actions Taken this Year	5 yr research partnership with RES'EAU WaterNet to study changes in Shawnigan Lake's water quality in response to climate change; vulnerability of the lake as a natural system and drinking water source to these changes, and the risk of exposure to pathogens as a result of these changes.
Proposed Actions for Next Year	"Considering options for managing stormwater as part of the South Sector Liquid Waste Management Plan amendment. Updating/amending the Central, and South Sector Liquid Waste Management Plans to ensure existing commitments are met (educating the public about volume reduction/water conservation) and emerging issues are considered (eg. changes in precipitation and impacts on drainage systems). Host symposia of the Partners for Water Sustainability Conduct a regional water management governance review Establish Framework for a Watershed Management Plan for the north end of the Regional District (Town of Ladysmith, and Electoral Areas G and H) " Developed a homeowner web based tool to help them assess their properties ability to manage rainwater and protect watershed health with specific targets based on their location within the regions watersheds. Developed supporting communications materials and provided training to all local governments as well as local stewardship groups.



1.3.2 Direct Community Wide Actions

Direct Community Wide Actions

Action Type	Buildings
Actions Taken this Year	None at this time
Proposed Actions for Next Year	"Develop web based education materials and tools to support residents interested in voluntary environmentally sensitive development. Develop accessible information for the local business community on water, energy and air quality."
Action Type	Energy Generation
Actions Taken this Year	None at this time
Proposed Actions for Next Year	None at this time



Action Type	Transportation
Actions Taken this Year	"Installed electric vehicle charging stations at Kerry Park Recreation Centre, Shawnigan Lake Community Centre, Island Savings Centre, and Lake Cowichan Sports Arena. Implement the transit service expansion from Duncan to Ladysmith, including infrastructure such as: new signs, road markings, schedule holders, etc. Work with BC Transit and the Town of Ladysmith to produce a full new riders guide to include the Ladysmith Service expansion Work with BC Transit to implement Google Transit across the CVRD. (service improvement) Work with BC Transit to implement various regional and local marketing initiatives. Completed Valleyview Commuter Park and Ride transit shelter installation."
Proposed Actions for Next Year	"Implement additional operating hours for the Commuter transit service. Work with BC Transit to implement the first stage of approved recommendations from Paratransit study. Work with BC Transit and First Canada to determine the best option for improving communication (i.e. social media) with Cowichan Valley Commuter passengers in case of service disruption or delay."



Action Type	Waste
Actions Taken this Year	Implemented new automated curbside collection program (recycling and MSW) for 12,500 homes in the electoral areas. New trucks are more efficient and can service more homes per day, therefore less fuel usage. Other regions that have implemented this program have seen increases in recycling rates by as much as 30% with the roomier totes. Extensive educational campaign associated with this.
	Implemented CVRD Smoke Control Bylaw No. 3716 (a backyard burning bylaw to control and regulate nuisance smoke pollution) in five electoral areas, including related education and outreach campaign.
	Undertook Peerless Road Recycling Drop-Off Depot major facility upgrade and remediation of the onsite incinerator ash landfill. Final design for the state-of-the-art recycling facility included re-use of existing building components and many green design features onsite.
	Offered a 2013 Regional Woodstove Exchange Program whereby 111 uncertified stoves were switched out for cleaner-burning, EPA-certified appliances; old appliances were recycled.
	New technology stoves can significantly reduce wood smoke by up to 90%, increase energy efficiency, and consequently reduce the amount of wood needed to heat a home. Well over 500 stoves have now been swapped out within the region, over the course of several successive programs (since 2009).
	Completed Stage 2 Preliminary Site Investigation of the brownfield site on the surplus lands at Bings Creek Solid Waste Management Complex.
	The free Zero Waste Event Program continued in 2013 providing equipment/signage/pick-up to the public/businesses using portable four-stream collection stations (organics, recyclables, refundables, garbage), along with free tipping.



Free year-round drop off of Yard & Garden materials continued in 2013, at all CVRD Recycling Drop-Off Depots and a private business in South Cowichan, as an air quality initiative to decrease particulate matter emissions (by circumventing backyard burning).

Pursued greater loading efficiencies with waste export (increased shipping container weights (aiming to be at capacity) = less trips = reduced GHG emissions).

Implemented new mattress and boxspring recycling program at all three CVRD recycling drop-off depots, to keep these bulky items from taking up valuable landfill space.

Offered as many new (and existing) stewardship programs as possible at all CVRD recycling depots. Participated in ongoing consultation with stewards as new programs are developed.

Continued to offer many free recyclables at all CVRD recycling depots; materials that do have a fee are priced lower than garbage, as an incentive to increase recycling and keep unnecessary items out of the landfill.

Continued to offer Free Stores at two of our recycling depot locations to encourage reuse.

Enforcement of the CVRD Land-Clearing Management Regulation Bylaw, banning the open-burning of land clearing debris in electoral areas.

Continued enforcement of Solid Waste Management Charges and Regulation Bylaw, including commercial organic ban; haulers monitored for infractions and fined accordingly.

Continued to enforce Waste Stream Management Licensing Bylaw, a facility licensing bylaw to help mitigate social and environmental impacts.

Continued to offer free residential tipping of organic food waste at Bings Creek Solid Waste Management Complex (eg. 5 gallon pail/day).

Continued to offer "Community Clean-up Fund" to local groups that volunteer to clean up illegal dumping sites. Free tipping of material collected/ supplies for clean-up/ and lunch provided.



Began upgrade to existing infrastructure at Bings Creek Solid Waste Management Complex in order to provide three stream tipping capacity. This will decrease the amount of driving necessary for split-packer collection trucks who have historically driven to a second facility to tip curbside recyclables.

Complete upgrades and remediation of the Peerless Road Recycling Drop-off Depot / incinerator ash landfill. Officially open the new state-of-the-art recycling facility. The facility will boast a large number of recyclable materials in a convenient one-stop-drop format.

Begin contract for curbside and depot collection service provision for MMBC on May 19, 2014, when PPP officially falls under extended producer responsibility via the provincial recycling regulation.

Run pilot project with MMBC to include PPP from CVRD multi-product neighbourhood recycling bins. This would save on transport as it would allow commingled shipment of multi-bin PPP with curbside PPP to the post-collection processing facility.

Proposed Actions for Next Year

Continue with the remediation of brownfield site on surplus lands at Bings Creek Solid Waste Management Complex.

Construct an Asbestos Waste Transfer Area at Bings Creek Solid Waste Management Complex. While the overriding intention is to create safer conditions for staff by minimizing the risk of asbestos exposure, this will also eliminate the current requirement to drive the material to a proper containment area in either Victoria or Nanaimo. In addition to the reduced driving, by having a local solution for disposal, it is also expected that illegal dumping of this previously hard to dispose of material will be decreased.

Complete upgrade of existing infrastructure at Bings Creek Solid Waste Management complex in order to accommodate three stream tipping capacity.

Continue with development of a remediation and closure plan for the incinerator ash landfill at Meade Creek Recycling Drop-off Depot.

Undertake review of current regional waste tracking



methodology.

Apply for any new product stewardship programs for all CVRD recycling depots.

Continue to explore long term solid waste disposal solutions.

Action Water/Sewer Type "Douglas Hill Water: located all water services in the subdivision to implement a metered billing schedule. Complete a wellhead protection plan. New Treatment Plant for Carlton Water System. New Treatment Plant for Shellwood Water System, including new reservoir. Saltair Water System: Upgrades to PRV/Treatment Plant, new reservoir and water main upgrades, design work for Stocking lake dam upgrades (in partnership with Town of Ladysmith). Actions Taken this Year

Honeymoon Bay Water System: Develop new well, design and upgrades of new water main to cross Sutton Creek (currently 2" line).

Shawnigan Lake North Water System: Installation of solar mixer at reservoir.

Cowichan Bay Sewer: Spare pump and Pumpstation upgrades, VFD conversion and HMI instrumentation.

Sentinel Ridge Sewer: Environmental Controls upgrades.

Eagle Heights Sewer: Replace Force main air valves, pump rebuild and/or replacement.

Maple Hills Sewer: Installation of Bio-filter."



Proposed Actions for Next Year

"Working to obtain more hydrometric data for watersheds in south Cowichan areas. E.g. Plans to install continuous flow monitors in creeks of interest, with respect to fish habitat and stormwater drainage.

Collecting baseline creek water quality data in partnership with the Ministry of Environment and local stewardship groups; monitoring temperature, turbidity and dissolved oxygen, among other parameters.

Completion of web based Water Balance Express tool "

"Invasive Species Treatment Area B Parks Grey water system for new washroom facility at Cobble Hill Area C Designed 5 km of new upgraded trails on Cobble Hill Mountain Area C	Action Type	Green Space
Actions Taken this Year Taken this	Taken this	Grey water system for new washroom facility at Cobble Hill Area C Designed 5 km of new upgraded trails on Cobble Hill Mountain Area C Development of a new playground at Creighton Park in Area E Design New potable water service in Bright Angel Park — South Cowichan Parks Design new Trail resurfacing to provide fully accessible loop at Bright Angel Park — South Cowichan Parks Design new Trail system expanded at Bright Angel Park — South Cowichan Parks • Design Improve Bright Angel Park facility and access;



	Trail ".
Proposed Actions for Next Year	 "Undertake Sandy Pool boat launch redevelopment and fisheries restoration with the following objectives: Reduce erosion on the outside bend of the river by building shoreline and/ or in-river structures to deflect the thalweg (i.e., mainsteam flow) back to the original channel configuration. This will re-create the fisheries pool and decrease erosional force on the opposing river bank. Redevelop the boat launch to reduce the impact of public access and use on recreational fisheries. Enhance the recreational fishery by enhancing the overwintering side channel and re-establishing riparian vegetation where it has been impacted. Protect the recreational fisheries gravel beds/ spawning area.
	Implement New potable water service in Bright Angel Park – South Cowichan Parks. • Implement new Trail resurfacing to provide fully accessible loop at Bright Angel Park – South Cowichan Parks. • Implement new Trail system expanded at Bright Angel Park – South Cowichan Parks. • Implement Improve Bright Angel Park facility and access; Kinsol Interpretive Pavilion – providing historic and rehabilitation information for the public".

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.



"Partnered with Province to implement Electric Vehicle charging stations at 4 community centres including a pilot DC fast charge station at the Island Saving Centre.

Official opening of the blending pump at the Cowichan Biofuels Facility in 2013; fuel is now properly blended onsite to power CVRD machinery. The Cowichan Biofuels Facility is located at the CVRD's Bings Creek Solid Waste Management Complex. It is a unique recycling partnership, between the CVRD and the Cowichan Energy Alternatives Society, boasting a commercial-scale plant that enables waste cooking oil to be recycled into sustainable vehicle fuel (petro-diesel alternative). Cooking oil is collected from the public onsite (in addition to area restaurants), and the resultant biodiesel is used to power CVRD machinery onsite, amongst other uses. This new community biodiesel processor closes the loop on local energy solutions – taking waste cooking oil, processing it into biodiesel, and also selling it at the 2999 Allenby Road card lock to Cowichan Biodiesel Co-op members.

Answer

The CVRD was awarded (Innovative Category) Gas Tax Funding for their plan to reuse the existing incinerator ash at the Peerless Road Recycling Drop-Off Depot as fill, in a state-of-the-art engineered cell, underneath the new depot during the upgrade in 2013. The incinerator ash was mined for metals prior to be being placed in the lined cell, with the recovered metals being recycled. The Government of Canada supported this through a \$950,000 investment from the Gas Tax Fund. The Peerless Road project has two main goals: first, to upgrade and expand the existing recycling depot; second, to clean up 40,000 tonnes of toxic ash produced by the now decommissioned incinerator to protect local residents, waterways and the environment.

"

Official opening of the blending pump at the Cowichan Biofuels Facility in 2013; fuel is now properly blended onsite to power CVRD machinery. The Cowichan Biofuels Facility is located at the CVRD's Bings Creek Solid Waste Management Complex. It is a unique recycling partnership, between the CVRD and the Cowichan Energy Alternatives



Society, boasting a commercial-scale plant that enables waste cooking oil to be recycled into sustainable vehicle fuel (petro-diesel alternative). Cooking oil is collected from the public onsite (in addition to area restaurants), and the resultant biodiesel is used to power CVRD machinery onsite, amongst other uses. This new community biodiesel processor closes the loop on local energy solutions – taking waste cooking oil, processing it into biodiesel, and also selling it at the 2999 Allenby Road card lock to Cowichan Biodiesel Co-op members.

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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	All corporate assets identified related to energy and fuel emissions. Currently working on developing protocol and collecting of data from third party contracted emissions.
Question	What tool are you using to measure, track and report on your corporate emissions?
Answer	Smart Tool, Excel Spreadsheets



2.2 Reduce

2.2.1 Supportive Corporate Actions

Supportive Corporate Actions

Action Type	Broad Planning
Actions Taken this Year	Developed greenhouse gas emissions inventory and reduction plan.
Proposed Actions for Next Year	"Update ghg inventory and plan to reflect current footprint, opportunities and progress on plan. Development of corporate green building policy suite to guide how CVRD facilities will be built and renovated to meet green standards."
Action Type	Building and Lighting
Actions Taken this Year	"Developed Strategic Energy management plan with set targets and timelines for the next 5 years. Completed Energy Audits on all major CVRD facilities. Initiated suite of corporate green building policies with draft Corporate lighting policy.
Proposed Actions for Next Year	"Update corporate strategic energy plan to include opportunities identified in energy studies, ongoing projects and new challeges.



Supportive Corporate Actions

	Review options for patron counters at recreation facilities to provide better metrics for energy benchmarking."
Action Type	Energy Generation
Actions Taken this Year	Initial examination of resources available from CVRD waste division including clean waste wood biomass and recycled plastics.
Proposed Actions for Next Year	"Research potential for clean energy generation from Water system PRV stations and biomass from waste wood, recycled plastics to oil. Look at possibilities for snow melt pit at ISC using waste heat recovered from compressors. Review options to catpture and reuse waste heat cooling tower water at CLSA."
Action Type	Transportation
Actions Taken this Year	"Bike to work week promotion Assured Parking incentive for staff that carpool". Assured parking space incentive for staff that carpool.
Proposed Actions for Next Year	"Corporate Anti-Idling Policy development. Continued promotion of Bike to Work Week for all CVRD staff.



Update inventory listings of corporate vehicles including age, condition, usage, and maintenance.

Draft report with recommendations on possible sharing of corporate fleet vehicles and vehicle maintenance.

CVRD examining the possibility of extending biodiesel usage to remainder of CVRD diesel fleet vehicles, reducing carbon footprint significantly."

Action Type

Waste

Actions Taken this Year

Corporate paper use benchmarking exercise undertaken by CVRD Green Team.

Proposed Actions for Next Year

Green team to host staff education on 4-stream recycling throughout CVRD Facilities. Use of water and sewer database to set energy consumption baseline and key performance indicators for pump stations and sewage treatment plants.

Action Type

Water/Sewer

Actions Taken this Year

Development and completion of the water and sewer database that provides staff with access to data from stations throughout the regional district. This system allows for accurate tracking and monitoring of a variety of parameters for both water and sewer.

Proposed Actions for

Use of water and sewer database to set energy consumption baseline and key performance indicators for



Next Year

pump stations and sewage treatment plants. Use of water and sewer database to set energy consumption baseline and key performance indicators for pump stations and sewage treatment plants.



2.2.2 Direct Corporate Actions

Direct Corporate Actions

Action Type	Building and Lighting	
Actions Taken this Year	"Completed Heat Pump upgrades at 4 community halls and 2 fire stations, replacing inefficient and high emissions oil furnaces. Initiated participation in FortisBC pilot project for cold water flooding at Island Savings Centre and Kerry Park in 2014"	
Proposed Actions for Next Year	"Island Savings Centre building energy upgrades including new refrigeration compressors, boilers and HVAC controls updates. Kerry Park ice arena upgrades including new slab, refrigeration lines, underslab heating, heat recovery, new compressors. Lighting Upgrades at multiple facilities to eliminate older inefficient T-12 lighting to standard high efficiency linear fluorescent lighting. Pilot project with FortisBC for Realice coldwater arena flooding at the Island Savings Centre and Kerry Park. Lighting policy implementation for all facilities. Upgrade Elsie Miles Facility with Heat pumps, new windows, lighting and septic system. Upgrade Shawnigan Lake Community Centre heating system from electric furnaces to high efficiency heat pumps."	



Direct Corporate Actions

Action Type	Energy Generation
Actions Taken this Year	Planning heat recovery potential from Arena Facilities.
Proposed Actions for Next Year	Kerry Park and Island Savings Centre refrigeration plant heat recovery systems for domestic hot water pre-heating and HVAC and exploring opportunity to share waste heat with public Cowichan Aquatic Centre.
Action Type	Fleet
Actions Taken this Year	Use of hybrid and electric car as much as possible
Proposed Actions for Next Year	"Anti-idling policy roll out across CVRD fleet. Pilot biodiesel use in CVRD fleet vehicles."



Direct Corporate Actions

Action Type	Waste
Actions Taken this Year	Four-stream recycling in the lunchroom at CVRD Administrative Building. Default double-sided printing in Engineering & Environmental Services Department. All CVRD events are Zero Waste Events, with four stream recycling stations/signage.
Proposed Actions for Next Year	Green Team to initiate 4-stream containers in more locations on each floor at Ingram Street office.
Action Type	Water/Sewer
Actions Taken this Year	Designed grey water system for CVRD operated public washroom at Cobble Hill
Proposed Actions for Next Year	"Connection of the Kerry Park Recreation Centre to the Kerry Village Sewer system to improve efficiency and safety. Cobble Hill Park washrooms grey water system implementation."



Carbon Neutral Progress Reporting

Emissions/Offsets	Tonnes CO ₂ e
Annual corporate emissions using SMARTTool or equivalent inventory tool	1674
Emissions from services delivered directly by the local government	1428
Emissions from contracted services	246
Less: GHG reductions being claimed for this reporting year from Option 1 - GHG reduction project	(1674)
Energy Efficient Building Retrofits and Fuel Switching*	(28.8)
Household Organic Waste Composting**	(1645.2)
Less: GHG reductions being claimed from Option 2 projects	0
Less: Offsets purchased for this reporting year (Option 3).	0
Balance of corporate emissions for this reporting year. (If the corporate emissions balance is zero, your local government is carbon neutral for this reporting year)	0

^{*}see separate Report "Cowichan Station Hub – Fuel Switching: Carbon Credits for Carbon Neutral Reporting 2013"

^{**}see separate Report "Organics Diversion: Carbon Credits for Carbon Neutral Reporting 2013"