



DISTRICT OF CENTRAL SAANICH

Climate Action Revenue Incentive (CARIP) Public Report for 2016



The District of Central Saanich has completed the 2016 Climate Action Revenue Incentive Program (CARIP) Public Report as required by the Province of BC. The CARIP report summarizes actions taken in 2016 and proposed for 2017 to reduce corporate and community-wide energy consumption and greenhouse gas emissions (GHG) and reports on progress towards achieving carbon neutrality.

Report Submitted by:
Name: Bonnie McKenzie
Role: Manager of Community Services
Email: bonnie.mckenzie@csaanich.ca
Phone: (250) 652.4444

2016 BROAD PLANNING ACTIONS

Broad Planning Actions

Broad Planning refers to high level planning that sets the stage for GHG emissions reductions, including plans such as Official Community Plans, Integrated Community Sustainability Plans, Climate Action Plans or Community Energy Emissions Plans. Land use planning that focuses on Smart Growth principles (compact, complete, connected, centred) plays an especially important role in energy and GHG reduction.

Community-Wide Actions Taken in 2016	
	Completion of Keating Corridor Study (including triple bottom line approach to industrial infill).
	Provided input into the Capital Regional District (CRD) update of the Regional Growth Strategy.
	Drafted and undertook public consultation on DCC Discount bylaw.
Community-Wide Actions Proposed for 2017	
	Implementation of the Keating Business District Plan.
	Input into CRD update of Regional Growth Strategy.
	Adoption of DCC Discount bylaw to improve incentives for more compact, energy efficient and lower GHG forms of development.
	Update policies on servicing rural areas to strengthen growth containment regulations.

Corporate Actions Taken in 2016	
	Strategic planning focused on fundamental principles of the Official Community Plan (OCP), including addressing the causes and impacts of climate change.
	Initiated a review of corporate capacity to deliver on OCP priorities, including growth management and GHG reductions.
	Created walkable, community-oriented neighbourhoods and village centres.
	Developed proposal for Development Cost Charge Discount Program for low GHG, transit-supportable and energy efficient buildings.
Corporate Actions Proposed for 2017	
	Complete review of corporate capacity to deliver on OCP priorities including growth management and GHG reductions.
	Strategic planning focused on OCP fundamental principles including addressing the causes and impacts of climate change.
	Create walkable community-oriented neighbourhoods and village centres.
	Implement Development Cost Charge Discount Program for low GHG, transit-supportable and energy efficient buildings.
	Update Corporate Purchasing Policy to include environment components.

Broad Planning	
What is (are) your current GHG reduction target(s)?	Target of 33% reduction in GHG emissions below 2007 levels by 2020, and 80% below by 2050.
Has your local government used the Community Energy and Emissions Inventory (CEEI) to measure progress?	Yes
What plans, policies or guidelines govern the implementation of climate mitigation in your community?	
<ul style="list-style-type: none"> • Community Energy and Emissions (CEE) Plan • Climate Action Plan • Integrated Community Sustainability Plan • Official Community Plan (OCP) • Regional Growth Strategy (RGS) • Sustainable Asset Management Plan • 	Yes Yes No Yes Yes Yes
Does your local government have a corporate GHG reduction plan?	Yes
Does your local government have a climate reserve fund or something similar?	Yes

2016 BUILDINGS AND LIGHTING ACTIONS

Building and Lighting Actions

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 when calculated over the long term. This category also includes reductions realized from energy efficient streetlights and lights in parks or other public spaces.

Community-Wide Actions Taken in 2016	
	Implemented the ReAction Program. Financial incentives available to community groups (providing “non-traditional” services) leasing District-owned buildings. Phase 1 - funding of up to 90% of costs to have a building energy audit completed; and Phase 2 – funding of up to 75% of project costs, to a maximum of \$3,000, to undertake building upgrades that improve energy efficiency and/or reduce GHG emissions.
	Storm windows installed on a district-owned historic residence, used for a non-traditional local government service.
	Continued to require minimum EnerGuide80 when rezoning for infill development.
	Produced bulletins to assist the public in understanding new code requirements.
Community-Wide Actions Proposed for 2017	
	Review new provincial “Step Code” Building code with an eye to updating policy of seeking Energuide 80 or better for development.
	Public consultation on infill and densification in existing, serviced residential areas.

	Continuation of the ReAction program, first introduced in 2015. Financial incentives available to community groups (providing “non-traditional” services) which lease District-owned buildings, to encourage energy efficiencies and reduction of GHG emissions.
	Storm windows to be installed on a district-owned historic residence, used for a non-traditional local government service.
	Replacement of lighting, air handling equipment and hot water tanks within district-owned buildings, used for non-traditional local government services, with energy efficient options.

Corporate Actions Taken in 2016	
	Installed programmable thermostats; reduced heat loss/gain by weather-stripping, added insulation and energy efficient windows. Selected energy efficient technologies for space heating equipment, exhaust fans and hot water tank replacements.
	Use of the Carbon Reserve Fund to support local projects which reduce corporate and/or community greenhouse gas emissions.
	Lighting upgrade within the Municipal Hall (Council Chambers and high-bay lighting of Fire Station #2).
	Provided waste sorting bins within civic buildings and major parks to encourage composting and recycling, to reduce overall volume of waste going to the landfill.
	Renovation of shower/change room within the municipal Police Station to encourage employee fitness and commuting by bicycle.
Corporate Actions Proposed for 2017	
	Continue with actions identified in 2016, including: Installation of programmable thermostats; occupancy sensors for lighting; reduce heat loss/gain by weather-stripping, added insulation and selection of energy efficient windows and storefronts. Selection of energy efficient technologies for lighting, HVAC equipment, exhaust fans, overhead door openers and hot water tank replacements. Replace taps, toilets, urinals and shower heads with those that conserve water.
	Proposed conversion of existing streetlights from high-pressure sodium (HPS) to energy efficient light-emitting diode (LED) alternatives.
	Replacement of large skylight feature within the Municipal Hall with a traditional roof system to reduce heat loss/gain to the building and improve HVAC system efficiencies.

2016 ENERGY GENERATION ACTIONS

Energy Generation Actions

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.

Community-Wide Actions Taken in 2016	
	Inclusion of District energy system as a potential option in discussion of future growth scenarios, when providing input into updated Regional Growth Strategy.
Community-Wide Actions Proposed for 2017	
	Consider District energy systems when implementing the Keating Business District Plan.

Corporate Actions Taken in 2016	
	Installation of solar-powered pedestrian crosswalks and traffic speed-reader boards.
Corporate Actions Proposed for 2017	
	Develop policy options for community energy systems, in future industrial growth areas, for consideration as OCP amendment (following adoption of new Regional Growth Strategy).
	Investigate short and long-term opportunities for use of photovoltaic and solar hot water systems.
	Installation of solar-powered pedestrian crosswalks and traffic speed-reader boards.

Energy Generation	
Is your local government developing, or constructing:	
<ul style="list-style-type: none"> • A district energy system • A renewable energy system 	No No
Is your local government operating:	
<ul style="list-style-type: none"> • A district energy system • A renewable energy system 	No No
Is your local government connected to a district energy system that is operated by another energy provider?	No
Are you aware of the Integrated Resource Recovery guidance page on the BC Climate Action Toolkit ?	Yes

2016 GREENSPACE/ NATURAL RESOURCE PROTECTION ACTIONS

Greenspace Actions

Greenspace/Natural Resource Protection refers to the creation of parks and greenways, boulevards, community forests, urban agriculture, riparian areas, gardens, recreation/school sites, and other green spaces, such as remediated brownfield/contaminated sites as well as the protection of wetlands, waterways and other naturally occurring features.

Community-Wide Actions Taken in 2016	
	The Farmlands Trust Society's continued agricultural stewardship of the District-owned historic Newman Farm, including 'field to plate' initiative - whereby, produce grown and harvested at Newman Farm is donated to Our Place Society.
Community-Wide Actions Proposed for 2017	
	Apply for grant funding for tree planting programs and partner with stewardship/community groups, First Nations and educational facilities.
	Continue to seek opportunities to acquire or protect areas of sensitive habitat and community connections.
	The Farmlands Trust Society's continued agricultural stewardship of the District-owned Newman Farm.

Corporate Actions Taken in 2016	
	Proclamation of 3 rd annual Urban Tree Appreciation Day, including a public tree/shrub planting event.
	On-going tree planting in natural spaces. On-going invasive plant removal program with local stewardship groups and First Nations education program. Over 300 trees and shrubs planted. In order to enhance the existing ecosystems, all plants were native species.
	Consultant selection for detailed design of Maber Flats site, including agricultural and ecological function. Initiated public consultation and preliminary design.
Corporate Actions Proposed for 2017	
	Annual Tree Appreciation Day tree/shrub planting event.
	Continue design of the Maber's Flats agricultural drainage and water management design.
	Update tree protection and replacement bylaws and policies.

Greenspace	
Does your local government have urban forest policies, plans or programs?	Yes
Policy on trees in public spaces needs updating	

2016 SOLID WASTE ACTIONS

Solid Waste Actions

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.

Community-Wide Actions Taken in 2016	
	Community initiatives to separate/collect returnable beverage containers, to divert them from the waste stream.
Community-Wide Actions Proposed for 2017	
	Community initiatives to separate/collect returnable beverage containers, to divert them from the waste stream.

Corporate Actions Taken in 2016	
	Tree wood waste repurposed for defining informal recreational trails (Adam Kerr Park and Newman Farm).
	On-going recycling of wood waste, compost material, metals (brass water-meter housings), plastics, batteries and oil containers at Public Works.
	Separation and recycling of soft-plastics, styrofoam, rigid plastics, foil-lined packaging, milk cartons, batteries, cardboard, paper and returnable beverage containers at the Municipal Hall/Police Station, Public Services, Fire Station #1 and Central Saanich Cultural Centre.
Corporate Actions Proposed for 2017	
	Separation and recycling of soft-plastics, styrofoam, rigid plastics, foil-lined packaging, milk cartons, batteries, cardboard, paper and returnable beverage containers at the Municipal Hall/Police Station, Public Services, Fire Station #1 and Central Saanich Cultural Centre.
	Continue recycling materials from worksites, concrete, asphalt and wood waste.
	On-going recycling wood waste, compost material, metals (brass water-meter housings), plastics, batteries and oil containers at Public Works.
	Continued roll-out of the Food Scraps Diversion program within District facilities and major parks.
	Recycling of redundant electronics from municipal operations.

Solid Waste	
Does your local government have construction and demolition waste reduction policies, plans or programs?	Yes
Does your local government have organics reduction/diversion policies, plans or programs?	Yes

2016 TRANSPORTATION ACTIONS

Transportation Actions

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.

Community -Wide Actions Taken in 2016	
	Upgraded pedestrian/cyclist signalization at West Saanich Road – Keating Cross Rd intersection (intersection of two cycling routes).
	Developed Regional Context Statement in OCP to implement long-range growth containment and transit-supportive development policies.
	Replacement of 3 bus stops to enhance transit experience/ridership. Implemented additional upgrades through local transit authority.
	Added a bike lane between Sluggett Rd south towards Bryrwood Crt.
	Two Level 2 - Electric vehicle charging stations provided for public use (no charge).
Community-Wide Actions Proposed for 2017	
	Installation of 2 bus stops to enhance transit experience/ridership.
	Crosswalk enhancement on Keating Cross Rd.
	Crosswalk installation in Saanichton Village
	Two Level 2 - Electric vehicle charging stations provided for public use (no charge).

Corporate Actions Taken in 2016	
	Right-sizing fleet and reduction in emissions with new vehicle purchases.
	LED lighting with new vehicle acquisitions reduced vehicle idling.
	Expansion of dedicated bicycle lane network.
	Promotion of and staff participation in Bike/Walk to Work Week.
	Consultation on Residential Densification.
	Public opening of the Brown’s Wood Trail - connecting Butterfield Park with the Gail Wickens Trail.
Corporate Actions Proposed for 2017	
	Continue to consider rezoning applications for added density in existing village centers to locate additional housing in close proximity to jobs, services and transit.
	Expansion of dedicated bicycle lane network.
	Promotion of and staff participation in Bike/Walk to Work Week.
	Consider Community Amenity Contribution Proposal that includes electrical charging stations and car share alternatives.

Transportation	
Does your local government have policies, plans or programs to support:	
• Walking	Yes
• Cycling	Yes
• Transit Use	Yes
• Electric Vehicle Use	Yes
Does your local government have a transportation demand management (TDM) strategy (e.g. to reduce single-vehicle occupancy trips, increase travel options, provide incentives to encourage individuals to modify travel behavior)?	No

Does your local government have policies, plans or programs to support local food production (thus reducing transportation emissions)?	Yes
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2016 WATER AND WASTEWATER ACTIONS

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.

Community-Wide Actions Taken in 2016	
	Promotion of water conservation practises.
Community-Wide Actions Proposed for 2017	
	Promotion of water conservation practises.

Corporate Actions Taken in 2016	
	Implementation of the Water Master Plan.
	On-going replacement of aging water services system.
	On-going wastewater system upgrades.
Corporate Actions Proposed for 2017	
	Brentwood Bay Watermain upgrades.
	Complete Phase 1 of Brentwood Sewer design.
Water Conservation	
Does your local government have water conservation policies, plans or programs?	Yes

2016 CLIMATE CHANGE ADAPTATION ACTIONS

Climate Change Adaptation Actions

For local governments, adaptation to a changing climate can take the form of changes in policy, management, technology and behaviour that minimize negative impacts or exploit opportunities. It can involve both “hard” and “soft” solutions, including: changes in infrastructure engineering, planning, zoning, bylaws, and public education.

Climate Change Adaptation Actions Taken in 2016	
	Continued to promote regional water conservation programs.

	Continued to implement water, sewer, integrated stormwater and facilities long-term Master Plans.
	Encouraged the public to eat and shop locally.
Climate Change Adaptation Actions Proposed for 2017	
	Continue to promote regional water conservation programs.
	Selection of drought-resistant native plant species for climate change adaptation.
	Preliminary feasibility design for an agricultural drainage facility for the Martindale Valley.
	Sizing of drainage infrastructure to incorporate anticipated increase of flows based on climate change projections.
	Encourage the public to eat and shop locally.

Resources you have used to support climate change adaptation (e.g. Plan2Adapt, Preparing for Climate Change: Implementation Guide)	
	Plan2Adapt; Preparing for Climate Change: Implementation Guide; The Workbook: Helping Local Governments Understand How to be Carbon Neutral in their Corporate Operations; Becoming Carbon Neutral – A Guidebook for Local Governments in BC; Climate Action Plan.

In 2016 did you consider climate change impacts in any of the following areas? (check if yes)	
Risk reduction strategies	
Risk and Vulnerability assessment	
Asset management	Yes
Infrastructure upgrades (e.g. stormwater system upgrades)	Yes
Cross-department working groups	Yes
Emergency response planning	Yes
Land-use policy changes (eg. OCP, DPA)	
Economic diversification initiatives	
Ecosystem-based approaches (incl. shorelines)	
Incentives (e.g. property owner reducing stormwater run-off)	Yes
Public education and awareness	Yes
Research (e.g. mapping, participation in studies)	Yes
Other:	

2016 OTHER CLIMATE ACTIONS

Other Climate Actions

This section provides local governments the opportunity to report other climate actions that are not captured in the categories above.

Community-Wide Actions Taken in 2016	
<input type="checkbox"/>	
<input type="checkbox"/>	
Community-Wide Actions Proposed for 2017	
<input type="checkbox"/>	
<input type="checkbox"/>	
Corporate Actions Taken in 2016	
<input type="checkbox"/>	
<input type="checkbox"/>	
Corporate Actions Proposed for 2017	
<input type="checkbox"/>	
<input type="checkbox"/>	

Other	
Are you familiar with the Community Lifecycle Infrastructure Costing Tool (CLIC) ?	Yes
Have you used CLIC?	No

INNOVATION AND PEER-TO-PEER LEARNING

Innovation

This section provides the opportunity to showcase an innovative Corporate and/or Community-Wide GHG reduction or climate change adaptation activity that your local government has undertaken and that has had or has the potential to have a significant impact. Projects included here may be featured as success stories on the B.C. Climate Action Toolkit and/or shared with other local governments to inspire further climate action. Please add links to additional information where possible.

Community-Wide Innovative Action
Corporate Innovative Action

Programs, Partnerships and Funding Opportunities

Local governments often rely on programs, partnerships and funding opportunities to achieve their climate action goals. Please share the names of programs and organizations that have supported your local government's climate actions by listing each entry in the box below.

Programs and Funding

2016 CARBON NEUTRAL REPORTING

Local governments are required to report on their progress in achieving their carbon neutral goal under the Climate Action Charter. Working with B.C. local governments, the joint Provincial-UBCM Green Communities Committee (GCC) has established a common approach to determining carbon neutrality for the purposes of the Climate Action Charter, including a Carbon Neutral Framework and supporting guidance for local governments on how to become carbon neutral.

Prior to completing this survey, please ensure that you are familiar with guidance available on the B.C. Climate Action Toolkit website, especially *Becoming Carbon Neutral: A Guide for Local Governments in British Columbia*.

Reporting Emissions

Did you measure your local government's corporate GHG emissions in 2016?	Yes
If your local government measured 2016 corporate GHG emissions, please report the number of corporate GHG emissions (in tonnes of carbon dioxide equivalent) from services delivered <u>directly</u> by your local government:	291, of which 281 require offsets
If your local government measured 2016 corporate GHG emissions, please report the number of corporate GHG emissions (in tonnes of carbon dioxide equivalent) from <u>contracted</u> services:	0
TOTAL A: CORPORATE GHG EMISSIONS FOR 2016	281 tCO₂e

Reporting Reductions and Offsets

To be carbon neutral, a local government must balance their TOTAL corporate GHG emissions by one or a combination of the following actions:

- undertake GCC-supported Option 1 Projects
- undertake GCC-supported Option 2 Projects (community GHG emissions reduction projects that meet project eligibility requirements)
- purchase carbon offsets from a credible offset provider

If applicable, please report the 2016 GHG emissions reductions (in tonnes of carbon dioxide equivalent (tCO2e)) being claimed from Option 1 GHG Reduction Projects:

OPTION 1 PROJECTS	REDUCTIONS
Energy Efficient Retrofits	
Solar Thermal	
Household Organic Waste Composting	281
Low Emission Vehicles	
Avoided Forest Conversion	
TOTAL B: REDUCTIONS FROM OPTION 1 PROJECTS FOR 2016	281 tCO2e

If applicable, please report the names and 2016 GHG emissions reductions (in tonnes of carbon dioxide equivalent (tCO2e)) being claimed from Option 2 GHG Reduction Projects:

OPTION 2 PROJECT NAME	REDUCTIONS
TOTAL C: REDUCTIONS FROM OPTION 2 PROJECTS FOR 2016	0 tCO2e

If applicable, please report the number of offsets purchased (in tonnes of carbon dioxide equivalent (tCO2e)) from an offset provider for the 2016 reporting year:

(NOTE: DO NOT INCLUDE ANY FUNDS THAT MAY BE SET ASIDE IN A CLIMATE ACTION RESERVE FUND)

OFFSET PROVIDER NAME	OFFSETS
TOTAL D: OFFSETS PURCHASED FOR 2016	0 tCO2e

TOTAL REDUCTIONS AND OFFSETS FOR 2016 (Total B+C+D) = 281 tCO2e

Corporate GHG Emissions Balance for 2016

Your 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 2016 = (A – (B+C+D)) = 0 tCO₂e

**If your Corporate GHG Emissions Balance is negative or zero,
your local government is carbon neutral.
CONGRATULATIONS!**

GCC CLIMATE ACTION RECOGNITION PROGRAM

Green Communities Committee (GCC) Climate Action Recognition Program

The joint Provincial-UBCM Green Communities Committee (GCC) is pleased to be continuing the Climate Action Recognition Program again this year. This multi-level program provides the GCC with an opportunity to review and publicly recognize the progress and achievements of each Climate Action Charter (Charter) signatory.

This year a new recognition level has been added – **Level 3: Accelerating Progress on Charter Commitments**–. Recognition is provided on an annual basis to local governments who demonstrate progress on their Charter commitments, according to the following:

Level 1 – Demonstrating Progress on Charter Commitments: for local governments who demonstrate progress on fulfilling one or more of their Charter commitments

Level 2 – Measuring GHG Emissions: for local governments that achieve level 1, and who have measured their Corporate GHG Emissions for the reporting year and demonstrate that they are familiar with the Community Energy and Emissions Inventory (CEEI)

Level 3 – Accelerating Progress on Charter Commitments: for those local governments who have achieved level 1 and 2 and have demonstrated undertaking significant action (corporately or community wide) to reduce GHG emissions in the reporting year (ie: through undertaking a GHG reduction project, purchasing offsets, establishing a reserve fund).

Level 4 - Achievement of Carbon Neutrality: for local governments who achieve carbon neutrality in the reporting year.

For purposes of Level 3 recognition, if applicable, please identify any new or ongoing corporate or community wide GHG reduction projects (other than an Option 1 or Option 2 project) undertaken by

your local government that reflects a significant investment of time or financial resources and is intended to result in significant GHG reductions:

PROJECT NAME:

Based on your local government's 2016 CARIP Climate Action/Carbon Neutral Progress Survey, please check the GCC Climate Action Recognition Program level that best applies:

<input type="checkbox"/>	Level 1 – Demonstrating Progress on Charter Commitments	
<input type="checkbox"/>	Level 2 – Measuring GHG Emissions	
<input type="checkbox"/>	Level 3 – Accelerating Progress on Charter Commitments	
<input checked="" type="checkbox"/>	Level 4 - Achievement of Carbon Neutrality	YES
<input type="checkbox"/>	Not Sure	