# Climate Action Revenue Incentive (CARIP) Public Report for 2017

**Local Government: District of North Saanich** 



Report Submitted by: Name: Stephanie Munro

Role: Director of Financial Services Email: stmunro@northsaanich.ca

Phone: 250-656-0781

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The District of North Saanich has completed the 2017 Climate Action Revenue Incentive Program (CARIP) Public Report as required by the Province of BC. The CARIP report summarizes actions taken in 2017 and proposed for 2018 to reduce corporate and community-wide energy consumption and greenhouse gas emissions (GHG) and reports on progress towards achieving carbon neutrality.

# 2017 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 2017**

OCP Section 6.0 Residential, Section 16.0 Regional Context Statement Section 18.7 GHG Reduction

Provincial Flood Area Hazard Management Guidelines - Planning OCP Section 4.0 Marine Action - staff is part of technical advisory committee

OCP Section 5.0 Agriculture, Section 16.0 Regional Context Statement District of North Saanich Climate Change Action Plan - Local food production

OCP Section 16.0 Regional Context Statement Actions CRD Regional Growth Stratedy Infrormal Feferral response Agriculture Strategy and Food Systems Component Comments

CRD Climate Action Team

#### **Community-Wide Actions Proposed for 2018**

OCP Section 6.0 Residential, Section 16.0 Regional Context Statement Section 18.7 GHG Reduction

Provincial Flood Area Hazard Management Guidelines - Planning OCP Section 4.0 Marine Action - staff is part of technical advisory committee

OCP Section 5.0 Agriculture, Section 16.0 Regional Context Statement District of North Saanich Climate Change Action Plan - Local food production

OCP Section 16.0 Regional Context Statement Actions CRD Regional Growth Stratedy Infrormal Feferral response Agriculture Strategy and Food Systems Component Comments

CRD Climate Action Team

Corporate	Actions Taken in 2017			
Adv	Advanced park improvements and transportation connectors			
Exter	sion of Bike Lane system on West Saanich Rd			
Corporate	e Actions Proposed for 2018			
1.	DNS Strategic Plan #1 Develop a template and guidelines for Environmental Impact Assessments for			
	development proposals			
2.	DNS Strategic Plan #2 - Staff to prepare a report to Council regarding the Climate Action Strategy monitoring and reporting			
3.	DNS Strategic Plan #2 - Prepare policies to guide marine and shoreline development (include planning for sea level rise)			
4.	DNS Strategic Plan #16 - Use grant funding to improve road, bike path and trail systems to support people powered travel within the District			
5.	DNS Strategic Plan #39 - Staff to bring forward the Energy Efficiency DP area report.			
6.	DNS Strategic Plan #18- Staff to prepare a report to address the benefits + costs of green resources and outdoor burning.			

Broad Planning		
What is (are) your current GHG reduction target(s)?	OCP Section 16.0 Regional Context Statement and Section 18.7 Greenhouse Gas Reduction.	
Are you familiar with your comm or another inventory)?	unity's community energy and emissions inventory (e.g. CEEI	Yes

What plans, policies community?	or guidelines govern the implementation of climate mitigation in your	
•	Community Energy and Emissions (CEE) Plan	No
•	Community- Wide Climate Action Plan	No
•	Integrated Community Sustainability Plan	Yes
•	Official Community Plan (OCP)	Yes
•	Regional Growth Strategy (RGS)	Yes
•	Do not have a plan	No
•	Other:	No
Does your local gove	rnment have a corporate GHG reduction plan?	Yes

# 2017 BUILDING 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 street lights and lights in parks or other public spaces.

#### **Community-Wide Actions Taken in 2017**

OCP Section 14.0 Development Permit Area, Section 16.0 Regional Context Statement, Section 18.7 GHG Reduction - report on DPA development permit area, zoning bylaw amendment

#### **Community-Wide Actions Proposed for 2018**

OCP Section 14.0 Development Permit Area, Section 16.0 Regional Context Statement, Section 18.7 GHG Reduction - report on DPA development permit area, zoning bylaw amendment

#### **Corporate Actions Taken in 2017**

Action - the Municipal Hall replacement project is the emergency operations centre for the area so it is designed and constructed seismically stable, energy efficient and offers new energy features such as solar panels which will allow the District hall to be operational in an emergency. The elements of the project include variable refrigeration flow heating and cooling system, natural lighting, LED lighting with motion sensors, roof water capture and use for flushing of toilets. The power from the solar panels will be stored in two battery packs for a total of 200 kW.

#### **Corporate Actions Proposed for 2018**

Action - the newly constructed Municipal Hall remains the emergency operations center for the area so it is designed and constructed seismically stable, energy efficient and offers new energy features such as solar panels which will allow the District hall to be operational in an emergency. The elements of the project include variable refrigeration flow heating and cooling system, natural lighting, LED lighting with motion sensors, roof water capture and use for flushing of toilets. The power from the solar panels will be stored in two battery packs for a total of 200 kW.

#### **Building and Lighting**

The Province has committed to taking incremental steps to increase energy-efficiency requirements in the BC Building Code to make buildings net-zero energy ready by 2032. The BC Energy Step Code--a part of the BC Building Code--supports that effort

Is your local government aware of the BC Energy Step Cost?	Yes
Is your local government implementing the BC Energy Step Code?	Yes

### 2017 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 2017**

OCP Section 16.0 RCS Section 18.7 GHG Reduction - Energy and Water Conservation and GHG Reduction Development Permit Area

#### **Community-Wide Actions Proposed for 2018**

OCP Section 16.0 RCS Section 18.7 GHG Reduction - Energy and Water Conservation and GHG Reduction Development Permit Area

#### **Corporate Actions Taken in 2017**

OCP Section 18.7 GHG Reduction - noted in overview, new Municipal Hall project energy reduction

#### **Corporate Actions Proposed for 2018**

OCP Section 18.7 GHG Reduction - noted in overview, new Municipal Hall project energy reduction

<b>Energy General</b>	ation	
Is your local government developing, or constructing:		
•	A district energy system	Yes
•	A renewable energy system	Yes

Is your local government operating:	
A district energy system	Yes
A renewable energy system	Yes
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 <u>BC Climate Action</u> <u>Toolkit</u> ?	Yes
Are you familiar with the 2017 "List of Funding Opportunities for Clean Energy Projects Led by First Nations and Local Governments?"	Yes

# 2017 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 2017**

Jubilee Park playground - Phase 1 completion

Advance park improvements, beach access identified in North Saanich Parks Master Plan

Tree planting initiatives

Contribution to Rhododendran ravine restoration

#### **Community-Wide Actions Proposed for 2018**

Jubilee Park playground - Phase 2

Advance park improvements, beach access identified in North Saanich Parks Master

Tree planting initiative

#### **Corporate Actions Taken in 2017**

Continue to advance park improvements

Continue tree planting initiatives

#### **Corporate Actions Proposed for 2018**

Continue municipal apple orchard and gardens

Continue tree planting initiatives

Scoter Trail Upgrade

Greenspace	
Does your local government have urban forest policies, plans or programs?	No
Does your local government have policies, plans or programs to support local food production?	Yes

# **2017 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 2017**

Solid waste is managed by the Capital Regional District

### **Community-Wide Actions Proposed for 2018**

Solid waste is managed by the Capital Regional District

# **Corporate Actions Taken in 2017**

Operate a Green Waster and Clean Construction Waste drop-off program

#### **Corporate Actions Proposed for 2018**

Operate a Green Waster and Clean Construction Waste drop-off program

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

# **2017 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 2017**

New BC Transit Shelters Installed Charging stations at municipal hall.

#### **Community-Wide Actions Proposed for 2018**

BC Transit continues to review options to expand into Dean Park

### **Corporate Actions Taken in 2017**

Planning commenced for bike lanes on West Saanich Road - \$2M project

# **Corporate Actions Proposed for 2018**

Design and construction of bike lanes on West Saanich Road - \$2M project

Electric vehicle purchase - building inspector vehicles

Transportation		
Does your local government have policies, plans or programs to support:		
•	Walking	Yes
•	Cycling	Yes
•	Transit Use	Yes
•	Electric Vehicle Use	Yes
•	Other (please specify)	
to reduce single	government have a transportation demand management (TDM) strategy (e.gvehicle occupancy trips, increase travel options, provide incentives to iduals to modify travel behavior)?	No
Does your local	government integrate its transportation and land use planning?	Yes

# **2017 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.

Co	Community-Wide Actions Taken in 2017		
	CRD Water conservation bylaws.		
Col	mmunity-Wide Actions Proposed for 2018		
	CRD water conservation bylaws		

Co	Corporate Actions Taken in 2017			
	Completion of a District of North Saanich Water System Master Plan			
Coı	Corporate Actions Proposed for 2018			
	Initiate the development of a District of North Saanich Drainage Master Plan			
	Development of a new Leak Adjustment Policy			

Water Conservation	
Does your local government have water conservation policies, plans or programs?	Yes

# **2017 CLIMATE CHANGE ADAPTATION ACTIONS**

This section of the CARIP survey is designed to collect information related to the types of climate impacts local governments are experiencing and how they are being addressed.

## Please identify the THREE climate impacts that are most relevant to your Local Government.

- Increased temperatures increasing wildfire activity
- Changing temperatures influencing species migration and ecosystem shifts
- Sea level rise and storms causing coastal flooding and/or erosion

Other:

In 2017 has your local government addressed the impacts of a changing climate using any of the following?	
Risk Reduction Strategies	Yes
Emergency response planning	Yes
Asset management	Yes
Natural/Eco asset management strategies	No
Infrastructure upgrades (e.g. storm water system upgrades)	Yes
Beach Nourishment projects	Yes
Economic diversification initiatives	No
Strategic and financial planning	Yes
Cross-department working groups	Yes
OCP policy changes	No
Changes to zoning and other bylaws and regulations	No
ncentives for property owner (e.g. reducing storm water run-off)	No
Public education and awareness	Yes
Research	Yes

Mapping	Yes
Partnerships	Yes
Other:	
Climate Change Adaptation Actions Taken in 2017	
Please elaborate on key actions and/or partnerships your local government has engaged in to	orepare
for, and adapt to a changing climate. Add links to key documents and information where appro	•
RGS- initiate process of GHG requirement review of consistency with RCS.	•
100- initiate process of Orio requirement review of consistency with 100.	
Climate Change Adaptation Actions Proposed for 2018	
Development of Coastal Flood Mitigation Bylaw	
Review GHG requirements in RCS for consistency with newly adopted RGS	
For more information please contact:	

The following are key resources that may be helpful to your local government in	
identifying climate impacts, as well as, strategies, actions and funding to deal with	
them. For those resources that you have used, please indicate whether they were	
useful in advancing your work in climate change adaptation?	
Indicators of Climate Change for British Columbia, 2016	Useful
<u>Plan2Adapt</u>	Useful
Climate Projections for Metro Vancouver	Haven't Used
Climate Projections for the Capital Region	Useful
<u>Climate Projections for the Cowichan Valley Regional District</u>	Haven't Used
Province of BC's BC Adapts Video Series	Useful
Preparing for Climate Change: An Implementation Guide for Local Governments	Useful
The Public Infrastructure and Engineering Vulnerability Committee's (PIEVC) protocol	Haven't Used
Sea Level Rise Primer	Useful
BC Regional Adaptation Collaborative Webinars	Useful
www.ReTooling.ca	Haven't Used
Water Balance Model	Haven't Used
The Water Conservation Calculator	Haven't Used
Funding:	
National Disaster Mitigation Program (NDMP)	Haven't Used
Community Emergency Preparedness Fund (CEPF)	Useful
Municipalities for Climate Innovation Program (MCIP)	Haven't Used
Climate Adaptation Partner Grants (FCM)	Haven't Used
Infrastructure Planning Grants (MAH)	Useful
<u>Federal Gas Tax Fund</u>	Useful
Other:	

# **2017 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.

Coı	Community-Wide Actions Taken in 2017	
Coı	mmunity-Wide Actions Proposed for 2017	

Coi	Corporate Actions Taken in 2017	
Coi	rporate Actions Proposed for 2017	

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 and/or climate change adaptation activity that your local government has undertaken and that has had, or has the potential to have, a significant impact. You are welcome to repeat an action that has already been listed.

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.

Communities that have conducted innovative initiatives may want to consider raising their profile through applications to <u>CEA's Climate and Energy Action Awards</u>, <u>UBCM Climate and Energy Action Awards</u>, <u>FCM Sustainable Communities Awards</u> or through submissions to <u>FCM's National Measures Report</u>.

Community-Wide Action
Community-wide Action
Con Loyal Disa Warkshans
Sea Level Rise Workshops
Resilience Planning Workshops and Planning
For more information contact:
Corporate Action
For more information contact:
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.
, , ,
Mitigation
Programs and Funding
Adaptation
· map mation
Programs and Funding

#### 2017 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 portion of the survey, please ensure that you are familiar with guidance available on the B.C. Climate Action Toolkit website, especially the <u>Becoming Carbon Neutral: A Guide for Local Governments in British Columbia</u>.

Please note: As a result of the BC Recycling Regulation, local governments are no longer required to account for greenhouse gas (GHG) emissions from vehicles, equipment and machinery required for the collection, transportation and diversion of packaging and printed paper, in their annual Climate Action Revenue Incentive Program (CARIP) reports.

# **Reporting Emissions**

Did you measure your local government's corporate GHG emissions in 2017?	Yes
If your local government measured 2017 corporate GHG emissions, please report	
the number of corporate GHG emissions (in tonnes of carbon dioxide equivalent)	258.7
from services delivered <u>directly</u> by your local government:	
If your local government measured 2017 corporate GHG emissions, please report	
the number of corporate GHG emissions (in tonnes of carbon dioxide equivalent)	
from <u>contracted</u> services:	
TOTAL A: CORPORATE GHG EMISSIONS FOR 2017	258.7
	tCO2e

# **Reporting Reductions and Offsets**

To be carbon neutral, a local government must balance their TOTAL corporate GHG emissions generated in 2017 by one or a combination of the following actions:

- undertake GCC-supported Option 1 Project(s)
- undertake GCC-supported Option 2 Project(s)
- purchase carbon offsets from a credible offset provider

If applicable, please report the 2017 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	67.3
Low Emission Vehicles	
Avoided Forest Conversion	
TOTAL B: REDUCTIONS FROM OPTION 1 PROJECTS FOR 2017	67.3
	tCO2e

If applicable, please report the names and 2017 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 2017	tCO2e

If applicable, please report the name of the offset provider, type of project and number of offsets purchased (in tonnes of carbon dioxide equivalent (tCO2e)) from an offset provider for the 2017 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 2017	tCO2e

## TOTAL REDUCTIONS AND OFFSETS FOR 2017 (Total B+C+D) = 67.3 tCO2e

## **Corporate GHG Emissions Balance for 2017**

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 2017 = (A - (B+C+D)) = 191.4 tCO2e

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

If applicable, please record any emissions reductions you will be carrying over for future years and the source of the emissions reductions, including the year they were earned (E.g., Organics diversion, 2016 100 tCO2e).

SOURCE OF CARRY OVER EMISSION REDUCTIONS (and year earned)	REDUCTIONS
BALANCE OF REDUCTIONS ELIGIBLE FOR CARRY OVER TO NEXT YEAR	tCO2e

Carbon Neutral Reporting	
Does your local government have a climate reserve fund or something similar?	Yes

# 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.

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 their community's energy and emissions inventory (i.e. 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 (i.e. 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 2017 CARIP Climate Action/Carbon Neutral Progress Survey, please check the GCC Climate Action Recognition Program level that best applies:

Level 1 – Demonstrating Progress on Charter Commitments	
Level 2 – Measuring GHG Emissions	
Level 3 – Accelerating Progress on Charter Commitments	Yes
Level 4 - Achievement of Carbon Neutrality	