

## Survey Template

### For the *2016 CARIP Climate Action/Carbon Neutral Progress Survey*

The 2016 CARIP Climate Action/Carbon Neutral Survey uses SurveyMonkey® software. SurveyMonkey® acquired FluidSurveys™, which is the software that was used for CARIP reporting for the past 2 years.

**Local governments are required to submit the *2016 CARIP Climate Action/Carbon Neutral Progress Survey* on or before June 1, 2017.**

Local governments are also required to publicly report the information submitted in the *2016 CARIP Climate Action/Carbon Neutral Progress Survey*. Local governments can generate a report by:

- creating a report based on the populated Survey Template; or,
- creating a report in another format that contains the information submitted in the 2016 CARIP Climate Action/Carbon Neutral Progress Survey.

In response to local government input, the Survey Template has been created to assist with collecting information for the *2016 CARIP Climate Action/Carbon Neutral Progress Survey*, and follows the same structure as the survey.

Responses entered into the Survey Template can be cut and pasted into the online survey. The survey asks for up to five actions in each category, and there is a place in the survey to report additional actions if desired. In the Survey Template, simply add more lines to the tables to report more than five actions.

Use of the Survey Template is recommended. Local governments are encouraged to edit the populated Survey Template and use it for their public report, **as the SurveyMonkey® survey will not enable survey respondents to generate a report of their responses.**

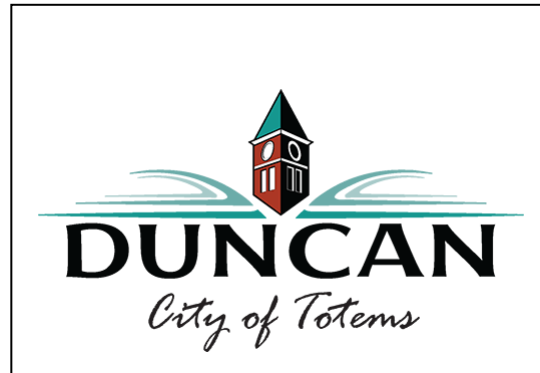
Further information on CARIP can be found on the [Ministry of Community Sport and Cultural Development's website](#).

The Government of BC will not collect, use, or disclose personal information using SurveyMonkey®. Please be aware however that IP addresses are collected by SurveyMonkey® itself, and these IP addresses and other information collected will be stored on SurveyMonkey®'s servers located outside of Canada. Please do not provide any third-party information (i.e. talk about others) in your responses to the survey.

# Climate Action Revenue Incentive (CARIP) Public Report for 2016

**Local Government: City of Duncan**

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**Date: May 2017**

The City of Duncan 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.

## 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	
	Draft new Zoning Bylaw.
Community-Wide Actions Proposed for 2017	
	Begin implementation of the Integrated Community Sustainability Plan (ICSP)
	Review and adopt new Zoning Bylaw.

Corporate Actions Taken in 2016	
	Update and review Official Community Plan.
	Continue to implement the University Village Sustainable Local Area Plan.
	Continued to meet with the Environment & Sustainability Committee to discuss opportunities to increase sustainability and environmental management.
Corporate Actions Proposed for 2017	
	Continue to liaise with the Sustainable Duncan Community Sustainability Advisory Team (CSAT) to address how ICSP targets can be met.
	Continue to work with other jurisdictions and partners on regional initiatives, such as the Regional Airshed Protection Strategy implementation and the Cowichan Watershed Board.
	Continue updating and reviewing Official Community Plan.
	Continue to implement the University Village Sustainable Local Area Plan.
	Continue to meet with the Environment & Sustainability Committee to discuss opportunities to increase sustainability and environmental management.

### Broad Planning

What is (are) your current GHG reduction target(s)?	<b>The City of Duncan is striving to be a carbon neutral community by 2040.</b>	
Has your local government used the Community Energy and Emissions Inventory (CEEI) to measure progress?		Yes/ <b>No</b>
What plans, policies or guidelines govern the implementation of climate mitigation in your community?		
• Community Energy and Emissions (CEE) Plan		Yes/ <b>No</b>
• Climate Action Plan		Yes/ <b>No</b>
• Integrated Community Sustainability Plan		<b>Yes</b> / <b>No</b>
• Official Community Plan (OCP)		<b>Yes</b> / <b>No</b>
• Regional Growth Strategy (RGS)		Yes/ <b>No</b>
• Do not have a plan		Yes/ <b>No</b>
• Other:		Yes/ <b>No</b>
Does your local government have a corporate GHG reduction plan?		Yes/ <b>No</b>
Does your local government have a climate reserve fund or something similar?		Yes/ <b>No</b>

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

Community-Wide Actions Taken in 2016	
	Continued to implement the Community Sustainability Checklist, offering incentives for developers who meet green building requirements.
Community-Wide Actions Proposed for 2017	
	Continue to implement the Community Sustainability Checklist, offering incentives for developers who meet green building requirements.

### Corporate Actions Taken in 2016

	Include LED lighting in the Canada Avenue and Government Street / Trunk Road intersection update design.
<b>Corporate Actions Proposed for 2017</b>	
	Update City Hall lighting.
	Increase Green Building Requirements to reduce environmental impact of developments.

## 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.

<b>Community-Wide Actions Taken in 2016</b>	
<b>Community-Wide Actions Proposed for 2017</b>	

<b>Corporate Actions Taken in 2016</b>	

<b>Corporate Actions Proposed for 2017</b>	
	Explore opportunities for energy innovation, including district energy, with regional partners, including for jointly owned buildings and infrastructure.

<b>Energy Generation</b>	
Is your local government developing, or constructing:	
• A district energy system	Yes/ <b>No</b>
• A renewable energy system	Yes/ <b>No</b>
Is your local government operating:	
• A district energy system	Yes/ <b>No</b>
• A renewable energy system	Yes/ <b>No</b>
Is your local government connected to a district energy system that is operated by another energy provider?	Yes/ <b>No</b>
Are you aware of the Integrated Resource Recovery guidance page on the <a href="#">BC Climate Action Toolkit</a> ?	<b>Yes</b> /No

## 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.

<b>Community-Wide Actions Taken in 2016</b>	
	A pilot project began in Fall 2015 for composting organic waste onsite at the Public Works Yard. Eight months later, the first batch of organic rich compost was distributed for use in our parks.
<b>Community-Wide Actions Proposed for 2017</b>	
	Establish guidelines permitting the creation of urban food gardens in the new Zoning Bylaw.


Corporate Actions Taken in 2016	

Corporate Actions Proposed for 2017	
	Continue to work with the Joint Utilities Board (JUB) to assess options for the removal of the JUB outfall from the Cowichan River and review best practices for treatment options.
	Establish a 30m environmental reserve setback from the Cowichan River and its tributaries in the new Zoning Bylaw.
	Assess opportunities for new tree plantings along the Trans Canada Highway as part of the Gateway Project.
	Continue implementation of the Urban Forest Strategy and Tree Protection Bylaw

Greenspace	
Does your local government have urban forest policies, plans or programs?	Yes/No

## 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	
	Efforts to reduce the recycling contamination rate have been successful; from 15% - 5%
Community-Wide Actions Proposed for 2017	

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Corporate Actions Taken in 2016	
Corporate Actions Proposed for 2017	

Solid Waste	
Does your local government have construction and demolition waste reduction policies, plans or programs?	Yes/No
Does your local government have organics reduction/diversion policies, plans or programs?	Yes/No

## 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	
	Continued the transit pass rebate program and working with partners on transit improvements.
Community-Wide Actions Proposed for 2017	

Corporate Actions Taken in 2016	
	Followed regular maintenance programs, considered fuel efficiency for fleet replacement, and



	monitored vehicle usage.
	Continued the implementation of the Trans Canada Corridor Management Plan and Duncan Area Active Transportation Plan- including planning active transportation safety improvements, such as a multi-use pathway on the east side of the highway.
<b>Corporate Actions Proposed for 2017</b>	
	Continue the implementation of the Trans Canada Corridor Management Plan and Duncan Area Active Transportation Plan- including planning active transportation safety improvements, such as a multi-use pathway on the east side of the highway.

<b>Transportation</b>	
Does your local government have policies, plans or programs to support:	
• Walking	Yes/No
• Cycling	Yes/No
• Transit Use	Yes/No
• Electric Vehicle Use	Yes/No
• Other (please specify)	Yes/No
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)?	Yes/No
Does your local government have policies, plans or programs to support local food production (thus reducing transportation emissions)?	Yes/No

## 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.

<b>Community-Wide Actions Taken in 2016</b>	
	Continue to implement the residential water-metering program
	The City of Duncan offered free water and energy savings kits (limited) to City residents. The kits include a showerhead, two faucet aerators, thread seal tape and instructions
	The Cowichan Valley region implemented Stage Two water restrictions, limiting local water use

<b>Community-Wide Actions Proposed for 2017</b>	
	Continue to offer free water and energy saving kits to City residents with increased focus on multi-family properties.
	Continue to implement the residential water-metering program

<b>Corporate Actions Taken in 2016</b>	
	Work with regional partners on water management.
	Continue to implement the Storm Water Study recommendations.
<b>Corporate Actions Proposed for 2017</b>	
	Continue to work with the JUB to assess options for the removal of the JUB outfall from the Cowichan River and review best practices for treatment options.
	Continue to work with regional partners on water management.
	Continue to implement the Storm Water Study recommendations.
<b>Water Conservation</b>	
Does your local government have water conservation policies, plans or programs?	<b>Yes/No</b>

## 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.

<b>Climate Change Adaptation Actions Taken in 2016</b>	
	Provided feedback to the Province on the Climate Action Plan update, with a letter from Council as well as staff participation in regional events.
<b>Climate Change Adaptation Actions Proposed for 2017</b>	
	Dike to improve public safety is now complete thanks to \$4.133 million in funding from the federal

	and provincial governments and the Cowichan Valley Regional District (CVRD)

Resources you have used to support climate change adaptation (e.g. <a href="#">Plan2Adapt</a> , <a href="#">Preparing for Climate Change: Implementation Guide</a> )	

In 2016 did you consider climate change impacts in any of the following areas? (check if yes)	
<p><b>Risk reduction strategies</b></p> <ul style="list-style-type: none"> <li>Risk and Vulnerability assessment</li> <li>Asset management</li> <li>Infrastructure upgrades (e.g. stormwater system upgrades)</li> <li>Cross-department working groups</li> <li>Emergency response planning</li> </ul> <p><b>Land-use policy changes</b> (eg. OCP, DPA)</p> <ul style="list-style-type: none"> <li>Economic diversification initiatives</li> <li>Ecosystem-based approaches (incl. shorelines)</li> <li>Incentives (e.g. property owner reducing stormwater run-off)</li> <li>Public education and awareness</li> <li>Research (e.g. mapping, participation in studies)</li> </ul> <p>Other (Please Identify):</p>	

## 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	



<b>Corporate Innovative Action</b>

### **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.

<b>Programs and Funding</b>
<ul style="list-style-type: none"> <li>- Advertised upgrade to heat pump option (Feb 2016 newsletter)</li> <li>- Woodstove rebate program (Feb 2016 newsletter)</li> <li>- Federal funding received for construction of a new treated effluent pump station at the treatment plant, along with a 13 kilometer pipeline from the pump station to Satellite Channel. Construction of the pump station is anticipated to commence in 2018, with construction of the pipeline anticipated to follow in 2019.</li> </ul>

## **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/No
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:	197.52
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:	124.62
<b>TOTAL A: CORPORATE GHG EMISSIONS FOR 2016</b>	<b>322.14 tCO<sub>2</sub>e</b>

## 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 (tCO<sub>2</sub>e)) being claimed from Option 1 GHG Reduction Projects:**

OPTION 1 PROJECTS	REDUCTIONS
Energy Efficient Retrofits	
Solar Thermal	
Household Organic Waste Composting	86.3
Low Emission Vehicles	
Avoided Forest Conversion	
<b>TOTAL B: REDUCTIONS FROM OPTION 1 PROJECTS FOR 2016</b>	<b>86.3 tCO<sub>2</sub>e</b>

**If applicable, please report the names and 2016 GHG emissions reductions (in tonnes of carbon dioxide equivalent (tCO<sub>2</sub>e)) being claimed from Option 2 GHG Reduction Projects:**

OPTION 2 PROJECT NAME	REDUCTIONS
<b>TOTAL C: REDUCTIONS FROM OPTION 2 PROJECTS FOR 2016</b>	<b>tCO2e</b>

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
Community Carbon Marketplace	236
<b>TOTAL D: OFFSETS PURCHASED FOR 2016</b>	<b>236 tCO2e</b>

**TOTAL REDUCTIONS AND OFFSETS FOR 2016 (Total B+C+D) = 322.3 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:**

<b>PROJECT NAME:</b>

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:



Level 1 – Demonstrating Progress on Charter Commitments	
Level 2 – Measuring GHG Emissions	✓
Level 3 – Accelerating Progress on Charter Commitments	
Level 4 - Achievement of Carbon Neutrality	
Not Sure	