

## Survey Template

### For the *2017 CARIP Climate Action/Carbon Neutral Progress Survey*

Local governments are required to submit the *2017 CARIP Climate Action/Carbon Neutral Progress Survey* on or before June 1, 2018.

#### Use Template to Collect Information

In response to local government input, this Survey Template has been created to assist with collecting information for the *2017 CARIP Climate Action/Carbon Neutral Progress Survey*, and follows the same structure as the survey.

Responses entered into this 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 this Template, simply add more lines to the tables to report more than five actions.

#### Use Template to Assist with Reporting

Local governments are also required to publicly report the information submitted in the *2017 CARIP Climate Action/Carbon Neutral Progress Survey*. There is no ability for survey respondents to generate a report of survey responses, in turn:

- A PDF copy of your survey responses will be sent to you once your completed survey has been submitted.
- Given that it is challenging to edit the PDF document, you are encouraged to use your populated version of this Template, or your own, to report your CARIP results publicly.
- You may also choose to create a report in another format that contains the information submitted in the *2017 CARIP Climate Action/Carbon Neutral Progress Survey*.

Further information on CARIP can be found on the [Ministry of Municipal Affairs and Housing 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. refer to others) in your responses to the survey.

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

**Local Government: Town of Oliver**

**Report Submitted by: Town of Oliver**

**Name: Devon Wannop**

**Role: Chief Financial Officer**

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**Phone: 250-485-6201**

**Date: May 29, 2018**

The [insert Local Government here] 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, and centred) plays an especially important role in energy and GHG reduction.

Community-Wide Actions Taken in 2017	
	OCP Adopted in 2017
	Council received the food secure Oliver plan
Community-Wide Actions Proposed for 2018	
	DCC bylaw update – Water, Sewer and General
	Asset Management Review
	Automated Cart Program

Corporate Actions Taken in 2017	
	No Response
Corporate Actions Proposed for 2018	
	No Response

Broad Planning		
What is (are) your current GHG reduction target(s)?	<b>Reduce Community GHG emissions by 2% from 2007 levels by 2020 and by 10% from 2007 levels by 2030. Also, reduce corporate GHG emissions by 10% from 2009 levels by 2020.</b>	
Are you familiar with your community's community energy and emissions inventory (e.g. CEEI or another inventory)?		<b>Yes</b>
What plans, policies or guidelines govern the implementation of climate mitigation in your community?		
•	Community Energy and Emissions (CEE) Plan	<b>No</b>
•	Community- Wide Climate Action Plan	<b>Yes</b>
•	Integrated Community Sustainability Plan	<b>No</b>
•	Official Community Plan (OCP)	<b>Yes</b>
•	Regional Growth Strategy (RGS)	<b>Yes</b>
•	Do not have a plan	<b>No</b>
•	Other:	<b>No</b>
Does your local government have a corporate GHG reduction plan?		<b>Yes</b>

## 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	
	Solar bollard lighting along Gala Park
	Various Street lighting changes to LED within the Town.
	Electric Charging Station Completion
Community-Wide Actions Proposed for 2018	
	Food Recovery Program (Food Secure Oliver)

Corporate Actions Taken in 2017	
	Changeover of various AC units in Town owned buildings
	Replacement of various pump house parts that were reducing efficiency.
Corporate Actions Proposed for 2018	
	Replacement of various pump house parts that were reducing efficiency.

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
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	Provided funding for various Not for profits for Solar Panel Installation – Food Bank, Air Cadets
<b>Community-Wide Actions Proposed for 2018</b>	
	Accept requests from not for profits for solar panel installation.

<b>Corporate Actions Taken in 2017</b>	
	Continued to explore grant funding for solar photovoltaic array
<b>Corporate Actions Proposed for 2018</b>	
	Continued to explore grant funding for solar photovoltaic array
	Explore changeover to solar panel installation at town owned buildings.

<b>Energy Generation</b>	
Is your local government developing, or constructing:	
<ul style="list-style-type: none"> <li>• A district energy system</li> <li>• A renewable energy system</li> </ul>	No No
Is your local government operating:	
<ul style="list-style-type: none"> <li>• A district energy system</li> <li>• A renewable energy system</li> </ul>	No No
Is your local government connected to a district energy system that is operated by another energy provider?	Yes
Are you aware of the Integrated Resource Recovery guidance page on the <a href="#">BC Climate Action Toolkit</a> ?	Yes
Are you familiar with the 2017 “ <a href="#">List of Funding Opportunities for Clean Energy Projects Led by First Nations and Local Governments?</a> ”	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.

<b>Community-Wide Actions Taken in 2017</b>	
	On larger subdivisions it is a requirement to connect to the walking trails
<b>Community-Wide Actions Proposed for 2018</b>	
	On larger subdivisions it is a requirement to connect to the walking trails

<b>Corporate Actions Taken in 2017</b>	
	Continued tree replacement program
	Riparian area designation protection on a property in the industrial zone.
<b>Corporate Actions Proposed for 2018</b>	
	Plan the development of a new Park within Town limits.

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

## 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.

<b>Community-Wide Actions Taken in 2017</b>	
	Research of the benefits of the automated cart program.
<b>Community-Wide Actions Proposed for 2018</b>	
	Implementation of the automated cart program

<b>Corporate Actions Taken in 2017</b>	
	Provided Christmas tree and spring yard waste chipping to residents
	Continue composting organics to make soil.
	Improved educational materials for the different types of products.
<b>Corporate Actions Proposed for 2018</b>	
	Championing the changeover of the automated carts by being leader in change.
	Continue composting organics to make soil.
	Improved educational materials for the different types of products.
	Provided Christmas tree and spring yard waste chipping to residents

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

## 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	
	Continue to partner with BC transit to provide transit services.
	Worked with RDOS to implement a transit system between Osoyoos and Kelowna. Stop in Oliver
	The traffic calming study with BC infrastructure.
Community-Wide Actions Proposed for 2018	
	Continue to partner with BC transit to provide transit services.
	Continue to work RDOS to implement a transit system between Osoyoos and Kelowna. Stop in Oliver
	Research the on demand bus stopping program with Transit BC.

Corporate Actions Taken in 2017	
	Continue to replace vehicle fleet with more efficient models
Corporate Actions Proposed for 2018	
	Continue to replace vehicle fleet with more efficient models

Transportation	
Does your local government have policies, plans or programs to support:	
• Walking	Yes
• Cycling	No
• Transit Use	No
• Electric Vehicle Use	No
• Other (please specify)	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)?	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.

<b>Community-Wide Actions Taken in 2017</b>	
	Received various applications from the utility leak adjustment policy – implemented in 2016
	Continue to provide leak letters to residents with leaks
	Completed the assessment of the Town’s canal irrigation water system
	Drought management plan completed
<b>Community-Wide Actions Proposed for 2018</b>	
	Assessing different options for variable frequency drives.

<b>Corporate Actions Taken in 2017</b>	
	Member of the “OBWB make water work”
<b>Corporate Actions Proposed for 2018</b>	
	Member of the “OBWB make water work”
	Continue to monitor and apply for grants for the Aeration cells due to desludging

<b>Water Conservation</b>	
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.

<b>Please identify the THREE climate impacts that are most relevant to your Local Government.</b>	
<ul style="list-style-type: none"> <li>• Warmer winter temperatures reducing snowpack</li> <li>• Changes to temperature and precipitation causing seasonal drought</li> <li>• Heatwaves impacting population health</li> <li>• Increased temperatures increasing wildfire activity</li> <li>• Increased temperatures affecting air quality</li> <li>• Changing temperatures influencing species migration and ecosystem shifts</li> <li>• Extreme weather events contributing to urban and overland flooding</li> <li>• Sea level rise and storms causing coastal flooding and/or erosion</li> </ul>	
Other:	

<b>In 2017 has your local government addressed the impacts of a changing climate using any of the following?</b>	
Risk and Vulnerability Assessments	No
Risk Reduction Strategies	No



Emergency response planning	No
Asset management	No
Natural/Eco asset management strategies	No
Infrastructure upgrades (e.g. storm water system upgrades)	Yes
Beach Nourishment projects	No
Economic diversification initiatives	No
Strategic and financial planning	Yes
Cross-department working groups	No
OCP policy changes	Yes
Changes to zoning and other bylaws and regulations	Yes
Incentives for property owner (e.g. reducing storm water run-off)	No
Public education and awareness	No
Research	No
Mapping	No
Partnerships	No
Other:	

<b>Climate Change Adaptation Actions Taken in 2017</b>	
Please elaborate on key actions and/or partnerships your local government has engaged in to prepare for, and adapt to a changing climate. Add links to key documents and information where appropriate.	
<input type="checkbox"/>	OBWB
<b>Climate Change Adaptation Actions Proposed for 2018</b>	
<input type="checkbox"/>	OBWB
<b>For more information please contact:</b>	
<input type="checkbox"/>	



Continue to promote complaints online rather than telephone or paper.
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Other	
Are you familiar with the <a href="#">Community Lifecycle Infrastructure Costing Tool (CLIC)</a> ?	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 [CEA's Climate and Energy Action Awards](#), [UBCM Climate and Energy Action Award](#), [FCM Sustainable Communities Awards](#) or through submissions to [FCM's National Measures Report](#).

Community-Wide Action
No Response
For more information contact:
Corporate Action
No Response

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

Federal Gas Tax  
UBCM – Asset Management  
FCM- Asset Management

### Adaptation

#### Programs and Funding

No Response

## 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 [Becoming Carbon Neutral: A Guide for Local Governments in British Columbia](#).

*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?	<b>Yes</b>
If your local government measured 2017 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:	203.2383
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:	48.1997
<b>TOTAL A: CORPORATE GHG EMISSIONS FOR 2017</b>	<b>251.4380 tCO<sub>2</sub>e</b>

## 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 (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	
Low Emission Vehicles	
Avoided Forest Conversion	
<b>TOTAL B: REDUCTIONS FROM OPTION 1 PROJECTS FOR 2017</b>	<b>tCO<sub>2</sub>e</b>

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
<b>TOTAL C: REDUCTIONS FROM OPTION 2 PROJECTS FOR 2017</b>	<b>tCO2e</b>

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
<b>Offsetters</b>	<b>252.00</b>
<b>TOTAL D: OFFSETS PURCHASED FOR 2017</b>	<b>tCO2e</b>

**TOTAL REDUCTIONS AND OFFSETS FOR 2017 (Total B+C+D) = 252.00 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)) = -0.5620 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 tCO<sub>2</sub>e).**

SOURCE OF CARRY OVER EMISSION REDUCTIONS (and year earned)	REDUCTIONS
<b>BALANCE OF REDUCTIONS ELIGIBLE FOR CARRY OVER TO NEXT YEAR</b>	<b>tCO<sub>2</sub>e</b>

Carbon Neutral Reporting	
Does your local government have a climate reserve fund or something similar?	<b>No</b>

## 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:**

<b>PROJECT NAME:</b>

**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:**

<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	<b>YES</b>
<input type="checkbox"/>	Not Sure	



**Carbon Tax Calculation Form**  
**Under the Climate Action Revenue Incentive Program**

<b>Local Government Name:</b>	Town of Oliver
<b>Contact Information:</b>	
<b>Name:</b>	Devon Wannop
<b>Position:</b>	Chief Financial Officer
<b>Telephone Number:</b>	250-485-6201
<b>Email address:</b>	dwannop@oliver.ca

**Calculation of carbon tax paid directly by the local government  
for fuel purchased between January 1 and December 31, 2017**

Fuel Type	Unit measure	Units	Tax Rate per unit, January 1, 2017 to December 31, 2017	Carbon Tax paid
<b>Most common fuels in a local government context:</b>				
Gasoline	Litre	27268.43	0.0667	1818.8
Diesel	Litre	22547.49	0.0767	1729.39
Bio-Diesel <sup>2</sup>	Litre		0.0767	0
Natural Gas	Gigajoule <sup>3</sup>	1298.6	1.4898	1934.65
Natural Gas	m <sup>3</sup>		0.057	0
Propane	Litre	415	0.0462	19.17
<b>Other fuels which are taxed:</b>				
Heating Oil	Litre		0.0767	0
Locomotive Fuel	Litre		0.0767	0
Heavy Fuel Oil	Litre		0.0945	0
Aviation Fuel	Litre		0.0738	0
Jet Fuel	Litre		0.0783	0
Kerosene	Litre		0.0783	0
Naphtha	Litre		0.0765	0
Methanol	Litre		0.0327	0
Butane	Litre		0.0528	0
Ethane	Litre		0.0294	0
Refinery Gas	m <sup>3</sup>		0.0528	0
Coke Oven Gas	m <sup>3</sup>		0.0483	0
Coal -- Low Heat Value <sup>4</sup>	Tonne		53.31	0
Coal -- High Heat Value <sup>4</sup>	Tonne		62.31	0
Coke	Tonne		74.61	0
Petroleum Coke	Litre		0.1101	0
Tires -- shredded <sup>5</sup>	Tonne		71.73	0
Tires -- whole <sup>5</sup>	Tonne		62.4	0
Peat	Tonne		30.66	0

**Total Carbon Tax Paid:** 5502.01

1. Only list fuels that were purchased for the local government's own use, on which carbon tax was paid, and where that carbon tax was not refunded or recovered from another party (e.g., through a lease arrangement). Also do not include any fuels that were exempted from carbon tax (for more information on
2. Bio-diesel blends must be prorated in order to claim the diesel and bio-diesel portions on the appropriate line. The proportion of the blend (B5, B10, B15 etc) that is conventional hydrocarbon-based diesel is included on the diesel line; consequently, the bio-diesel pro-rated amount must be entered on the bio-diesel line. For example, a 10,000 litre purchase of B10, which is 10% bio-diesel and 90% hydrocarbon-based diesel, would be recorded as 9,000 litres hydrocarbon-based diesel (90% of 10,000
3. Marketable Natural Gas may be recorded at either Gigajoules or m<sup>3</sup>
4. Low Heat Value Coal includes Sub-Bituminous Coal; High Heat Value Coal includes Bituminous Coal
5. Only include tires if they are combusted

I declare that the information contained in this Carbon Tax Calculation Form is true and correct and based on actual accounting records and not estimates. I am also aware of the requirement to report publicly by June 1st.

Signature of Financial Officer

