

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

**Local Government:**  
**District of Tumbler Ridge**

**Report Submitted by:**  
**Name:** Laura Sanders  
**Role:** Director of Finance  
**Email:** [lsanders@dtr.ca](mailto:lsanders@dtr.ca)  
**Phone:** (250) 242-4242

**Date:** June 18, 2018



The District of Tumbler Ridge 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	
	Recreation Centre Interior Lighting upgrades
	Continued with installation of Commercial Water Meters
	Purchased fuel efficient waste removal truck and corresponding bins
	Purchased six (6) fuel efficient pickups
	Purchased two (2) fuel efficient underbody plow trucks
Community-Wide Actions Proposed for 2018	
	Upgrade Recreation Centre Refrigeration Plant
	Upgrade Curling Rink Piping
	Finish Commercial Water Meters Installation

Corporate Actions Taken in 2017	
	Installed LED lights at Library
	Replaced three (3) blowers at Sewer Lagoon
	Installed electronics in Public Works vehicles to monitor down time, idling time etc.
Corporate Actions Proposed for 2018	
	Sewer Lagoon Aeration upgrade

Broad Planning	
What is (are) your current GHG reduction target(s)?	<b>Section 14.2.1 sets the Districts' GHG emission reduction targets @ 15% by 202, 25% by 2030 and 80% by 2050 from 2007 levels.</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?	<b>Yes</b> <b>Yes</b> <b>Yes</b> <b>Yes</b>
• Community Energy and Emissions (CEE) Plan	
• Community- Wide Climate Action Plan	
• Integrated Community Sustainability Plan	
• Official Community Plan (OCP)	
• Regional Growth Strategy (RGS)	
• Do not have a plan	
• Other:	
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	
	Upgrade to LED lighting at a cost of \$10,325.54
	Upgrade Firehall to LED lighting at a cost of \$3,050.07
	Upgrade Library to LED lighting at a cost of \$839.06
Community-Wide Actions Proposed for 2018	
	Upgrade Curling Rink piping to increase efficiency and safety – Budget \$109,000.00
	Upgrade Recreation Centre Refrigeration Plant – Budget \$35,222.00

Corporate Actions Taken in 2017	
	Town Hall Building Envelope Assessment at a cost of \$14,128.66
	Firehall Building Assessment Report at a cost of \$27,157.50
	Public Works Building Assessment Report at a cost of \$36,355.15
	Commissioned an Engineering Report on Aquatic Centre Energy Efficiency Improvement at a cost of \$139,891.96.

<b>Corporate Actions Proposed for 2018</b>	
	Complete Town Hall Building Envelope Building Assessment – Budget \$50,000.00
	Continue exploring methods to make the District of Tumbler Ridge community more energy efficient as a whole.

<b>Building and Lighting</b>	
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?	No

## 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.

<b>Community-Wide Actions Taken in 2017</b>	
<b>Community-Wide Actions Proposed for 2018</b>	

Corporate Actions Taken in 2017	
Corporate Actions Proposed for 2018	

Energy Generation	
Is your local government developing, or constructing:	
• A district energy system	No
• A renewable energy system	No
Is your local government operating:	
• A district energy system	No
• A renewable energy system	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 <a href="#">BC Climate Action Toolkit</a> ?	No
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.

Community-Wide Actions Taken in 2017	
	Bear Smart Program at a cost of \$3,612.86
	Continue Leasing of Community Garden Space in Tumbler Ridge



	believe may be reused.
<b>Community-Wide Actions Proposed for 2018</b>	
	The District actively encourages its residents to reduce solid waste by such activities as recycling and composting. Residents who wish may visit the landfill site and retrieve material or items they believe may be reused.
	Construction of a "Share Shed" – Budget \$3,500.00

<b>Corporate Actions Taken in 2017</b>	
<b>Corporate Actions Proposed for 2018</b>	

<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.

<b>Community -Wide Actions Taken in 2017</b>	
	Replaced trail benches at a cost of \$5,905.54

<b>Community-Wide Actions Proposed for 2018</b>	
	Interpretive Trail Construction – The trail is proposed for the pond area behind the Visitor Information Centre (VIC). The trail will be a circular route from the VIC around the pond and back. It will incorporate a gravel trail with a portion of wooden boardwalk and viewing around the west side of the pond. For the whole length of the trail there will be interpretive signs explaining the local fauna, flora and other points of interest. Signs will be both in English & Beaver – Budget \$430,000.00,

<b>Corporate Actions Taken in 2017</b>	
<b>Corporate Actions Proposed for 2018</b>	

<b>Transportation</b>	
Does your local government have policies, plans or programs to support:	
• Walking	<b>Yes</b>
• Cycling	<b>Yes</b>
• Transit Use	
• Electric Vehicle Use	<b>Yes</b>
• Other (please specify)	
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)?	<b>No</b>
Does your local government integrate its transportation and land use planning?	<b>Yes</b>



## 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.

Community-Wide Actions Taken in 2017	
	Continued installation of Commercial water meters at a cost of \$18,132.50
	Sewer Lagoon System Upgrades at a cost of \$567,756.97
Community-Wide Actions Proposed for 2018	
	Complete installation of Commercial water meters – Budget \$20,000.00
	Sewer Lagoon Aeration Upgrades – Budget \$1,434,300.00

Corporate Actions Taken in 2017	
Corporate Actions Proposed for 2018	

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 <b>THREE</b> climate impacts that are most relevant to your Local Government.	
<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>	Yes Yes
Other: Seasonal Drought re: Wildfires	

In 2017 has your local government addressed the impacts of a changing climate using any of the following?	
Risk and Vulnerability Assessments	Yes
Risk Reduction Strategies	Yes
Emergency response planning	Yes
Asset management	Yes
Natural/Eco asset management strategies	
Infrastructure upgrades (e.g. storm water system upgrades)	
Beach Nourishment projects	
Economic diversification initiatives	
Strategic and financial planning	
Cross-department working groups	
OCP policy changes	
Changes to zoning and other bylaws and regulations	
Incentives for property owner (e.g. reducing storm water run-off)	
Public education and awareness	
Research	
Mapping	
Partnerships	

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.	
	Installed electronic monitoring system in District vehicles. This will monitor down time, idling time and time on the road. This will enable the District to formulate a policy regarding emissions in order to reduce the Districts' carbon footprint – Cost \$3,348.52. There is a monthly monitoring cost of \$1,282.12
	Purchased six (6) fuel efficient pickups at a cost of \$264,303.48
	Purchased two (2) fuel efficient underbody plow trucks at a cost of \$483,189.13
<b>Climate Change Adaptation Actions Proposed for 2018</b>	
<b>For more information please contact:</b>	



Corporate Actions Taken in 2017	
Corporate Actions Proposed for 2017	

Other	
Are you familiar with the <a href="#">Community Lifecycle Infrastructure Costing Tool (CLIC)</a> ?	No
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](#).



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:	4,762.07
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:	
<b>TOTAL A: CORPORATE GHG EMISSIONS FOR 2017</b>	<b>4,762.07</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>tCO2e</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>TOTAL D: OFFSETS PURCHASED FOR 2017</b>	<b>tCO2e</b>

**TOTAL REDUCTIONS AND OFFSETS FOR 2017 (Total B+C+D) = 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.

$$\text{CORPORATE GHG EMISSIONS BALANCE FOR 2017} = (A - (B+C+D)) = \quad \text{tCO}_2\text{e}$$

**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>Yes/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 type="checkbox"/>	Level 4 - Achievement of Carbon Neutrality	
<input type="checkbox"/>	Not Sure	