

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

**Local Government:**  
**DISTRICT OF TUMBLER RIDGE**

**Report Submitted by:**  
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The District of Tumbler Ridge 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	
	Installed energy efficient lights on Roman Walkway
	Installed LED lights at Community Centre
	Installed Commercial Water Meters
Community-Wide Actions Proposed for 2017	
	Complete installation of lighting on Roman Walkway
	Recreation Centre interior lighting upgrades
	Install Commercial Water Meters
	Purchase of fuel efficient waste removal truck and corresponding bins
Corporate Actions Taken in 2016	
	Explored methods to make the District of Tumbler Ridge community more energy efficient as a whole.
	Continued replacing lights with LED's
	Continue installing Commercial Water Meters
	Installed lights at Fire Hall
	Continue Asset Management Plan
Corporate Actions Proposed for 2017	
	Commission an Engineering Report on Aquatic Centre energy efficiency improvement.
	Install LED lights at Library
	Upgrade Fire Hall and Public Works buildings increase energy efficiency
	Replace three blowers at Sewer Lagoon
	Install electronics in Public Works vehicles to monitor down time, idling time etc.

Broad Planning	
What is (are) your current GHG reduction target(s)?	Section 14.2.1 sets the Districts' GHG emission reduction targets @ 15% by 2020, 25% by 2030 and 80% by 2050 from 2007 levels.
Has your local government used the Community Energy and Emissions Inventory (CEEI) to measure progress?	Yes

What plans, policies or guidelines govern the implementation of climate mitigation in your community? <ul style="list-style-type: none"> <li>• Community Energy and Emissions (CEE) Plan</li> <li>• Climate Action Plan</li> <li>• Integrated Community Sustainability Plan</li> <li>• Official Community Plan (OCP)</li> <li>• Regional Growth Strategy (RGS)</li> <li>• Do not have a plan</li> <li>• Other:</li> </ul>	<b>Yes</b> <b>Yes</b> <b>Yes</b> <b>Yes</b>
Does your local government have a corporate GHG reduction plan?	<b>Yes</b>
Does your local government have a climate reserve fund or something similar?	<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	
	Installed LED lighting at Community Centre/Arena/Curling Rink/Pool at a cost of \$102,006.28
	Installed LED lighting at Fire Hall at a cost of \$16, 941.06
	Replaced Pool Pumps & Equipment at a cost of \$77, 338.61
Community-Wide Actions Proposed for 2017	
	Replace with LED's – Budget 7,500.00
	Removed/replaced Cobra Head lighting with LED'S at a cost of \$55,766.13
	Replace Library lighting with LED lights \$5,000.00

Corporate Actions Taken in 2016	
	Work on Town Hall Building Envelope assessment report at a cost of \$17,821.09
Corporate Actions Proposed for 2017	
	Commission an Engineering Report on Aquatic Centre energy efficiency improvement-Budget \$150,000.00.
	Continue exploring methods to make the District of Tumbler Ridge community more energy efficient as a whole

## 2016 ENERGY GENERATION ACTIONS

### Energy Generation Actions

A transition to renewable or low-emission energy sources for heating, cooling and power supports large, long-term GHG emissions reductions. Renewable energy including waste heat recovery (e.g. from biogas and biomass), geo-exchange, micro hydroelectric, solar thermal and solar photovoltaic, heat pumps, tidal, wave, and wind energy can be implemented at different scales, e.g. in individual homes, or integrated across neighbourhoods through district energy or co-generation systems.

Community-Wide Actions Taken in 2016	
Community-Wide Actions Proposed for 2017	

Corporate Actions Taken in 2016	
Corporate Actions Proposed for 2017	

<b>Energy Generation</b>	
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?	
Are you aware of the Integrated Resource Recovery guidance page on the <a href="#">BC Climate Action Toolkit</a> ?	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>	
	Continued Leasing of Community Garden space in Tumbler Ridge
	Wildfire Awareness Program at a cost of \$6,233.85
<b>Community-Wide Actions Proposed for 2017</b>	
	Bear Smart Program – Budget \$7,500.006

<b>Corporate Actions Taken in 2016</b>	
	Ongoing commitment to Tumbler Ridge Community Forest Corporation
<b>Corporate Actions Proposed for 2017</b>	
	Ongoing commitment to Tumbler Ridge Community Forest Corporation


<b>Greenspace</b>	
Does your local government have urban forest policies, plans or programs?	<b>Yes</b>

**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.

<b>Community-Wide Actions Taken in 2016</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 re-used.
	Final payment for automatic recycling baler which will improve efficiency in the Districts' recycling program at a cost of \$87,765.63
	Purchased larger solid waste bins. These larger bins require less frequent emptying. Cost - \$45,879.99
<b>Community-Wide Actions Proposed for 2017</b>	
	Purchase fuel efficient waste removal truck (operator will pick up and dump bins while in vehicle thus reducing idling time.
	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 re-used.

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

Corporate Actions Proposed for 2017	

Solid Waste	
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>

## 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	
	Replaced asphalt walking trails on Monkman and Mackenzie making them more user friendly at a cost of \$404,360.38
Community-Wide Actions Proposed for 2017	
	Replace trail benches. This will make the trails more inviting to use – Budget \$9,000.00

Corporate Actions Taken in 2016	
Corporate Actions Proposed for 2017	

<b>Transportation</b>	
Does your local government have policies, plans or programs to support: <ul style="list-style-type: none"> <li>• Walking</li> <li>• Cycling</li> <li>• Transit Use</li> <li>• Electric Vehicle Use</li> <li>• Other (please specify)</li> </ul>	<b>Yes</b> <b>Yes</b> <b>No</b> <b>Yes</b> <b>No</b>
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 have policies, plans or programs to support local food production (thus reducing transportation emissions)?	<b>Yes</b>

## 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>	
	Install water meters in Commercial buildings at a cost of \$2,978.80
<b>Community-Wide Actions Proposed for 2017</b>	
	Continue installation of water meters in Commercial buildings – Budget \$30,000.00
	Sewer Lagoon System upgrades. This will greatly improve the efficiencies in the Sewer Treatment Plant – Budget \$1,050.00

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



Corporate Actions Proposed for 2017	
Water Conservation	
Does your local government have water conservation policies, plans or programs?	Yes

## 2016 CLIMATE CHANGE ADAPTATION ACTIONS

### Climate Change Adaptation Actions

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

Climate Change Adaptation Actions Taken in 2016	
Climate Change Adaptation Actions Proposed for 2017	
	Install 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 District’s carbon footprint – Budget \$4,000.00
	Purchase six fuel efficient pickups – Budget \$291,000.00
	Purchase two fuel efficient underbody plow trucks - \$483,000.00

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)**

Risk reduction strategies	Yes
Risk and Vulnerability assessment	Yes
Asset management	Yes
Infrastructure upgrades (e.g. stormwater system upgrades)	Yes
Cross-department working groups	
Emergency response planning	
Land-use policy changes (eg. OCP, DPA)	
Economic diversification initiatives	
Ecosystem-based approaches (incl. shorelines)	
Incentives (e.g. property owner reducing stormwater run-off)	
Public education and awareness	
Research (e.g. mapping, participation in studies)	
Other (Please Identify):	

## 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	
Community-Wide Actions Proposed for 2017	

Corporate Actions Taken in 2016	

<b>Corporate Actions Proposed for 2017</b>	

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

## INNOVATION AND PEER-TO-PEER LEARNING

### **Innovation**

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

<b>Community-Wide Innovative Action</b>
<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>
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## 2016 CARBON NEUTRAL REPORTING

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

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

### Reporting Emissions

Did you measure your local government's corporate GHG emissions in 2016?	Yes
If your local government measured 2016 corporate GHG emissions, please report the number of corporate GHG emissions (in tonnes of carbon dioxide equivalent) from services delivered <u>directly</u> by your local government:	5126.75
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:	
<b>TOTAL A: CORPORATE GHG EMISSIONS FOR 2016</b>	<b>5126.75</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 (tCO2e)) 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 2016</b>	<b>tCO2e</b>

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

OPTION 2 PROJECT NAME	REDUCTIONS
<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

<b>TOTAL D: OFFSETS PURCHASED FOR 2016</b>	<b>tCO2e</b>

**TOTAL REDUCTIONS AND OFFSETS FOR 2016 (Total B+C+D) = 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)) = 5126.75**

**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:**

<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	