

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: Thompson-Nicola Regional District

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Date: May 30, 2017

The Thompson-Nicola Regional District 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, centered) plays an especially important role in energy and GHG reduction.

Community-Wide Actions Taken in 2016	
	Began formal review of the Regional Solid Waste Management Plan.
Community-Wide Actions Proposed for 2017	
	Continue with Regional Solid Waste Management Plan review process - to be completed in 2018. The plan will set new and aggressive solid waste reduction targets, and plan how they are to be achieved.
	Regional Growth Strategy Monitoring Indicators Report will be created based on collected data and 2016 Census results.
	Development of new North Thompson OCP to include dealing with challenges associated with decreased population and efficient access to services.

Corporate Actions Taken in 2016	
	Development of asset management framework.
	More advanced asset management strategies developed for water and wastewater systems.
	Launched long term capital and financial planning policies.
Corporate Actions Proposed for 2017	
	Development of Utility Systems Master Plan.
	Continued development/refining of asset management strategies.
	Evaluate and procure asset management software tools.
	Expand development of asset management strategies to all TNRD owned assets.

Broad Planning	
What is (are) your current GHG reduction target(s)?	<p>(Please provide details here)</p> <p>The TNRD Regional Growth Strategy calls for a reduction of 10%, in comparison to 2007 levels, by 2020; and a reduction of 33%, in comparison to 2007 levels, by 2050.</p> <p>For the areas covered by the Green Lake OCP projected is a reduction of 33%, in comparison to 2007 levels by 2012; and a reduction of 80%, in comparison to 2007 levels by 2050.</p>
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"> • Community Energy and Emissions (CEE) Plan • Climate Action Plan • Integrated Community Sustainability Plan • Official Community Plan (OCP) • Regional Growth Strategy (RGS) • Do not have a plan • Other: 	<p>No</p> <p>No</p> <p>No</p> <p>Yes</p> <p>Yes</p> <p>No</p> <p>No</p>
Does your local government have a corporate GHG reduction plan?	No
Does your local government have a climate reserve fund or something similar?	Yes

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	
	Provided funding to 5 not-for-profit non-governmental organizations for green capital projects
	Provided funding to 3 member municipalities to fund green capital projects; includes funding for geothermal heating for a new medical centre.
Community-Wide Actions Proposed for 2017	
	Continue to explore partnerships to implement green initiatives with non-governmental organizations and member municipalities.

	Prepare information circular for building permit applicants re achieving energy efficacy in new construction and renovation projects.
	Research and possible implementation of regional energy efficiency requirements beyond those identified in the BC Building Code.

Corporate Actions Taken in 2016	
	Upgraded exterior insulation and siding at a TNRD owned community hall.
	Upgraded lighting to energy efficient LED at a sewage treatment facility and TNRD Civic Building.
	The TNRD operates 13 libraries 2016 upgrades include: installation of sun shades at 2 libraries to reduce energy consumption related to air conditioning, new windows at 1 library, siding upgrades with Styrofoam insulation install at 1 library, upgrade lighting to energy efficient LEDs in 7 libraries and roof retrofit at 3 libraries resulting in improved insulation value..
	Deployed virtual servers thus eliminating on site equipment. Ongoing upgrade of IT equipment with energy efficient units. Move from tower PCs to desktop minis.
Corporate Actions Proposed for 2017	
	Continue to systematically complete energy efficiency upgrades at all TNRD owned facilities

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	
	N/A
Community-Wide Actions Proposed for 2017	
	N/A

Corporate Actions Taken in 2016	
	Commissioned report on viability of installing solar panels on the TNRD Civic Building
Corporate Actions Proposed for 2017	
	Pursue funding for solar panel installation at TNRD Civic Building

Energy Generation	
Is your local government developing, or constructing:	
<ul style="list-style-type: none"> • A district energy system • A renewable energy system 	No No
Is your local government operating:	
<ul style="list-style-type: none"> • A district energy system • A renewable energy system 	No 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 BC Climate Action Toolkit ?	Yes

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.

Community-Wide Actions Taken in 2016	
	N/A

Community-Wide Actions Proposed for 2017	
	N/A

Corporate Actions Taken in 2016	
	N/A
Corporate Actions Proposed for 2017	
	N/A

Greenspace	
Does your local government have urban forest policies, plans or programs?	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	
	Installation of community information boards at 5 eco-depots. Boards provide an opportunity to list items for swap, sale or free of charge. Placement of clothing donation bins providing a suite of reuse and donation options. Bins are serviced by local community societies, thrift shops and Big Brothers and Sisters of Kamloops.
	Sold 186 backyard, 3 cone and 2 worm composters.
	Achieved a waste diversion rate of 36%. Residual landfill rate of 427 kg/person/year is well below 2014 Provincial average of 520 kg/person/year.
	Established wood waste diversion program – chipped materials are provided to a co-generation facility in Williams Lake.
	Participation in 12 of 13 stewardship programs.

Community-Wide Actions Proposed for 2017	
	Eco-depot information board and donation bin initiative will be expanded to 3 more eco-depot sites.
	Continue waste reduction education and awareness campaigns specifically focused on promotion of reuse.
	Continue to develop and foster community partnerships and stewardship programs – including removal of refundable beverage containers from eco-depots and mattress take down program.
	Continue operations and improvements to current recycling offerings to residents, municipalities and businesses. This includes partnering with Provincial stewardship organizations.

Corporate Actions Taken in 2016	
	Methane oxidation bed technology installed at 4 closed landfills resulted in a reduction in of 1,740 tCO ₂ e in total since last report.
	Diverted surface water diversion away from 2 active landfills to mitigate potential for leachate generation and groundwater contamination.
	Application, at 2 active landfills, of bio-cover compost that passively treats fugitive methane emissions.

Corporate Actions Proposed for 2017	
	Assess other sites for viability of expanding methane oxidation bed program to other closed and active landfills.
	Report methane emission reductions based on bio-cover applied at active landfills in 2016.

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

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	
	Installation of a primary and backup electric vehicle fast charging station in Spences Bridge.
	11% increase in e/audio library resources reducing transportation associated with travelling to libraries.
Community-Wide Actions Proposed for 2017	
	Expansion of bookmobile service to outlying areas, thus reducing personal vehicle visits to regional libraries
	Undertake pilot project at Sun Peaks transfer station involving installation of compactor garbage bins. Anticipated to reduce number of hauls by 2/3.
	Tender of landfill operation and waste and recycling hauling contract, an evaluation criteria will be hauling efficiencies and GHG reduction initiatives proposed by the company submitting the tender.

Corporate Actions Taken in 2016	
	Implemented a Building Inspection approval via photo process, thus reducing Building Inspector travel.
Corporate Actions Proposed for 2017	

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

Community-Wide Actions Taken in 2016	
	Water consumption enforcement, conservation and education programs resulted in reduction in consumption of up to 39%
Community-Wide Actions Proposed for 2017	
	Continue to expand water conservation programs in keeping with the TNRD's mandate to Conserve, Preserve, Reserve.

Corporate Actions Taken in 2016	
	Installed a solids management removal system at the Pritchard Wastewater Treatment Plant to will improve treatment system efficiency and wastewater discharge quality.
Corporate Actions Proposed for 2017	
	Installation of an equalization basin at the Clearwater Septage Receiving Station. Basin will regulate septage release volumes to improve of wastewater treatment plant operations and ensure environmental compliance. Will also allow haulers to make less trips, reducing related emissions.
	Installation of backup generator at Pritchard Sewage Treatment Plant to ensure uninterrupted service and environmental impact due to system overloads.
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	

Resources you have used to support climate change adaptation (e.g. Plan2Adapt , Preparing for Climate Change: Implementation Guide)	

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	No
Emergency response planning	Yes
Land-use policy changes (eg. OCP, DPA)	Yes
Economic diversification initiatives	No
Ecosystem-based approaches (incl. shorelines)	No

Incentives (e.g. property owner reducing stormwater run-off)	No
Public education and awareness	Yes
Research (e.g. mapping, participation in studies)	Yes
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	
Corporate 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 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.

Community-Wide Innovative Action
Corporate Innovative Action

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.

Programs and Funding
TNRD supported a neighbouring Regional District in development of new transfer stations, scales and hauling system. TNRD hosted staff site visits, shared info and conducted 2 day expert review of proposed system design. In exchange neighbouring Regional District funded SWANA training opportunities for TNRD staff.

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:	433.33
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:	625.12
TOTAL A: CORPORATE GHG EMISSIONS FOR 2016	1058.45 tCO₂e

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
	N/A
Energy Efficient Retrofits	
Solar Thermal	
Household Organic Waste Composting	
Low Emission Vehicles	
Avoided Forest Conversion	
TOTAL B: REDUCTIONS FROM OPTION 1 PROJECTS FOR 2016	nil tCO₂e

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
Methane Oxidation Beds at Landfills	1058.45
TOTAL C: REDUCTIONS FROM OPTION 2 PROJECTS FOR 2016	1058.45 tCO2e

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
	N/A
TOTAL D: OFFSETS PURCHASED FOR 2016	Nil tCO2e

TOTAL REDUCTIONS AND OFFSETS FOR 2016 (Total B+C+D) = 1058.45 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)) = NIL 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:

PROJECT NAME:

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	X
<input type="checkbox"/>	Not Sure	

