

Climate Action Revenue Incentive (CARIP) Public Report for 2018

Local Government: City of Terrace

Report Submitted by:

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The City of Terrace has completed the 2018 Climate Action Revenue Incentive Program (CARIP) Public Report as required by the Province of BC. The CARIP report summarizes actions taken in 2018 and proposed for 2019 to reduce corporate and community-wide energy consumption and greenhouse gas emissions (GHG) and reports on progress towards achieving carbon neutrality.

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.

Q 6 + Q 7 Community-Wide Broad Planning Actions Taken in 2018 + Additional Actions	
	Updated Downtown Action Plan & Urban Design Guidelines
	Completed Grand Trunk Pathway Feasibility Review
	Implemented Downtown Parking Design Recommendations
	Completed Kalum-CN Pedestrian Overpass Feasibility Study
Q 8 Community-Wide Broad Planning Actions Proposed for 2019	
	Implement Recommendations from Downtown Action Plan – Parklet Pilot Project
	Complete Heritage Conservation Plan

Q 9 + Q 10 Corporate Broad Planning Actions Taken in 2018 + Additional Actions	
	Review and Update to Zoning Bylaw including regulations for urban agriculture and livestock
Q 11 Corporate Broad Planning Actions Proposed for 2019	
	Investigate possibility of incentives for development of mixed-use, compact development in downtown core

Broad Planning	
Q 12 What is (are) your current GHG reduction target(s)?	11% below 2007 levels by 2020; 80% below by 2050
Q 13 Are you familiar with your local government's community energy and emissions inventory (e.g. CEEI or another inventory)?	Yes
Q 14 What plans, policies or guidelines govern the implementation of climate mitigation in your community?	
<ul style="list-style-type: none"> • Community Energy and Emissions Plan • Integrated Community Sustainability Plan • Community- Wide Climate Action Plan • Official Community Plan • Regional Growth Strategy • Do not have a plan • Other: 	Yes No No Yes No No No
Q 15 Does your local government have a corporate GHG reduction plan?	Yes

2018 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.

Q 16 + Q 17 Community-Wide Building and Lighting Actions Taken in 2018 + Additional Actions	
	LED Streetlight Upgrading
	Completed the Construction & Renovation of Aquatic Centre
	New roof for PW Building – reduction in heat loss
Q 18 Community-Wide Building and Lighting Actions Proposed for 2019	
	Insulation of PW Building north wall
	Continue to switch lighting in City buildings to LED

Q 19 + Q 20 Corporate Building and Lighting Actions Taken in 2018 + Additional Actions	
Q 21 Corporate Building and Lighting Actions Proposed for 2019	

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	
Q 22 Is your local government aware of the BC Energy Step Code ?	Yes
Q 23 Is your local government implementing the BC Energy Step Code ?	Yes

P5 2018 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.

Q 24 + Q 25 Community-Wide Energy Generation Actions Taken in 2018 + Additional Actions	
	Investigation into the possibility of Solar generation incentives for homeowners
Q 26 Community-Wide Energy Generation Actions Proposed for 2019	
	Continue to Investigate the possibility of Solar generation incentives for homeowners

Q 27 + Q 28 Corporate Energy Generation Actions Taken in 2018 + Additional Actions	
Q 29 Corporate Energy Generation Actions Proposed for 2019	

Energy Generation	
Q 30 Is your local government developing, or constructing a <ul style="list-style-type: none"> • district energy system • renewable energy system • none of the above 	No No
Q 31 Is your local government operating a <ul style="list-style-type: none"> • district energy system • renewable energy system • none of the above 	No No
Q 32 Is your local government connected to a district energy system that is operated by another energy provider?	No
Q 33 Are you familiar with the 2018 List of Funding Opportunities for Clean Energy Projects Led by First Nations and Local Governments?	Yes

2018 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.

Q 34 + Q 36 Community-Wide Greenspace Actions Taken in 2018 + Additional Actions (Q 35 below Q 41)	
	Howe Creek Trail enhancements
	Grow Local Program – Gardening Workshops & Community Education
Q 37 Community-Wide Greenspace Actions Proposed for 2019	
	Continued Howe Creek Trail enhancements and infrastructure improvements
	Enhancement & Development of Court House Trail system
	Continuation of Grow Local Programming

Q 38 + Q 39 Corporate Greenspace Actions Taken in 2018 + Additional Actions	
	Initiated the Review of Brownfields and Contaminated Sites within City Limits
Q 40 Corporate Greenspace Actions Proposed for 2019	
	Continue to support and provide space for local Community Gardens & urban agriculture
	Continue to develop the inventory of brownfield and contaminated sites within the City

Greenspace	
Q 41 Does your local government have urban forest policies, plans or programs?	Yes
Q 35. Does your local government have policies, plans or programs to support local food production?	Yes

2018 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.

Q 42 + Q 43 Community-Wide Solid Waste Actions Taken in 2018 + Additional Actions	
	Funded and Supported the 2018 Garbathon (community-wide garbage clean-up)
	Continued to promote full-stream organics collection & diversion
	Continued closure works at former municipal landfill including Leachate treatment enhancements & landfill capping
Q 44 Community-Wide Solid Waste Actions Proposed for 2019	
	Continued landfill closure works
	Fund and Support the 2019 Garbathon (community-wide garbage clean-up)

Q 45 + Q 46 Corporate Solid Waste Actions Taken in 2018 + Additional Actions	
Q 47 Corporate Solid Waste Actions Proposed for 2019	

Solid Waste	
Q 48 Does your local government have construction and demolition waste reduction policies, plans or programs?	Yes
Q 49 Does your local government have organics reduction/diversion policies, plans or programs?	Yes

2018 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 and public transit, can contribute to reductions in GHG emissions and more livable communities.

Q 50 + Q 51 Community-Wide Transportation Actions Taken in 2018 + Additional Actions	
	Continued implementation of Transportation Master Plan including signage and crosswalk improvements
	Installation of Pedestrian activated crosswalk on major downtown arterial road (Lakelse Ave)
	Reconstructed two streets including additional sidewalk and pedestrian linkages
	Installed four new transit shelters at local hospital, university campus & downtown transit exchanges
	Promotion of Discounted Bus Ticket program for Schools wishing to use Public Transit for Field Trips
	Installation of Bike Pump at Library / George Little Park
Q 52 Community-Wide Transportation Actions Proposed for 2019	
	Continued implementation of Transportation Master Plan
	Reconstruction of 2 residential streets including adding sidewalks
	Bus stop infrastructure improvements including bench installations
	Installation of Bike Racks throughout Downtown
	Continued promotion of Discounted Bus Ticket program for Schools wishing to use Public Transit for Field Trips
	Lakelse Boulevard Improvement Reconstruction Project
	Pursue federal/provincial grant funding for major improvements to the linkage between major growth area of community and downtown. Proposed improvements include bike lanes, additional sidewalks and a pedestrian staircase
Q 53 + Q 54 Corporate Transportation Actions Taken in 2018 + Additional Actions	
	Promotion of Bike to Work Week
Q 55 Corporate Transportation - Actions Proposed for 2019	
	Promotion of Bike to Work Week
	Promotion of Staff Carpooling and Active Transportation Options for Commuting
	Installation of Electric Vehicle charging Stations

Transportation	
Q 56 Does your local government have policies, plans or programs to support: <ul style="list-style-type: none"> • Walking • Cycling • Transit Use • Electric Vehicle Use • Other (please specify) 	Yes Yes Yes Yes N/A
Q 57 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 behaviour)?	No
Q 58 Does your local government integrate its transportation and land use planning?	Yes

2018 WATER AND WASTEWATER ACTIONS

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 GHG emissions.

Q 59 + Q 60 Community-Wide Water and Wastewater Actions Taken in 2018 + Additional Actions	
	Installation of new \$3.5M influent screening system at municipal Waste Water Treatment Plant (WWTP)
	Upgraded Lagoon influent system at WWTP
	Completed City-wide water main leak detection program; located and repaired several significant leaks
	Replaced approximately 500m of Asbestos Cement water main with new PVC
Q 61 Community-Wide Water and Wastewater Actions Proposed for 2019	
	Replacement of approximately 600m of Asbestos Cement water main with new PVC
	Phase 2 of leak detection and repair program
	Implementation of Phase 1 of WWTP SCADA System for treatment
	Video inspection of most major sanitary trunk mains

Q 62 + Q 63 Corporate Water and Wastewater Actions Taken in 2018 + Additional Actions	
Q 64 Corporate Water and Wastewater Actions Proposed for 2019	
	Continued Public Education regarding water restrictions for summer usage and overall water use reduction strategies

Water Conservation	
Q 65 Does your local government have water conservation policies, plans or programs?	Yes

2018 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.

Q 66 Please identify the THREE climate impacts that are most relevant to your Local Government.	
<ul style="list-style-type: none"> • Warmer winter temperatures reducing snowpack • Changes to temperature and precipitation causing seasonal drought • Heatwaves impacting population health • Increased temperatures increasing wildfire activity • Increased temperatures affecting air quality • Changing temperatures influencing species migration and ecosystem shifts • Changing temperatures influencing ecosystem shifts • Extreme weather events contributing to urban and overland flooding • Sea level rise and storms causing coastal flooding and/or erosion 	
Other (please specify):	
Q 67 In 2018 has your local government addressed the impacts of a changing climate using any of the following?	
Risk and Vulnerability Assessments	Yes/No
Risk Reduction Strategies	Yes/No
Emergency Response Planning	Yes/No
Asset Management	Yes/No
Natural/Eco Asset Management Strategies	Yes/No
Infrastructure Upgrades (e.g. stormwater system upgrades)	Yes/No
Beach Nourishment Projects	Yes/No
Economic Diversification Initiatives	Yes/No
Strategic and Financial Planning	Yes/No
Cross-Department Working Groups	Yes/No
Official Community Plan Policy Changes	Yes/No
Changes to Zoning and other Bylaws and Regulations	Yes/No
Incentives for Property Owners (e.g. reducing storm water run-off)	Yes/No
Public Education and Awareness	Yes/No
Research	Yes/No
Mapping	Yes/No
Partnerships	Yes/No
Other (please specify):	

2018 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.

Q 72 Community-Wide Other Actions Taken in 2018	
<input type="checkbox"/>	
<input type="checkbox"/>	
Q 73 Corporate Other Actions Taken in 2018	
<input type="checkbox"/>	
<input type="checkbox"/>	

Other	
Q 74 Are you familiar with the Community Lifecycle Infrastructure Costing Tool (CLIC)?	Yes
Q 75 Is your local government using the CLIC tool?	Yes

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 highlight 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 making applications to [CEA’s Climate and Energy Action Awards](#), [FCM Sustainable Communities Awards](#) or to [FCM’s National Measures Report](#).

Q 76 Community-Wide Innovation Action
Q 77 Corporate Innovation Action
Q 78 For more information on actions described above 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 separated by a forward slash (e.g. program1/program2).

Mitigation

Q 79 Mitigation Programs, Partnerships and Funding

Adaptation

Q 80 Adaptation Programs, Partnerships and Funding

2018 CARBON NEUTRAL REPORTING

Local governments are required to report on their progress in achieving their carbon neutral goal under the [B.C. 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 [Workbook](#) and [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 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

Q 81 Did your local government measure corporate GHG emissions for 2018?	Yes
Q 82 If your local government measured 2018 corporate GHG emissions, please report the number of corporate GHG emissions from services delivered directly by your local government (in tonnes of carbon dioxide equivalent)	920
Q 83 If your local government measured 2018 corporate GHG emissions, please report the number of corporate GHG emissions from contracted services (in tonnes of carbon dioxide equivalent)	0
Q 84 TOTAL A: CORPORATE GHG EMISSIONS FOR 2018 (Direct GHGs + Contracted GHGs)	920 tCO₂e

Reporting Reductions and Offsets

To be carbon neutral, a local government must balance their TOTAL corporate GHG emissions generated in 2018 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

For more information about options to balance or offset corporate GHG emissions please refer to [Becoming Carbon Neutral: A Guidebook for Local Governments in British Columbia](#).

If applicable, please report the 2018 GHG emissions reductions (in tonnes of carbon dioxide equivalent (tCO₂e)) being claimed from any of the following Option 1 GHG Reduction Projects:

OPTION 1 PROJECTS	REDUCTIONS
Q 85 Energy Efficient Retrofits (in tonnes of carbon dioxide equivalent (tCO₂e))	
Q 86 Solar Thermal (in tonnes of carbon dioxide equivalent (tCO₂e))	
Q 87 Household Organic Waste Composting (in tonnes of carbon dioxide equivalent (tCO₂e))	
Q 88 Low Emission Vehicles (in tonnes of carbon dioxide equivalent (tCO₂e))	
Q 89 Avoided Forest Conversion (in tonnes of carbon dioxide equivalent (tCO₂e))	
Q 90 TOTAL B: REDUCTIONS FROM ALL OPTION 1 PROJECTS FOR 2018	0 tCO₂e

Q 91 If applicable, please report the names and 2018 GHG emissions reductions (in tonnes of carbon dioxide equivalent (tCO₂e)) being claimed from Option 2 GHG Reduction Projects:

Option 2 Project Name	REDUCTIONS
Option 2 GHGs Reduced (tCO₂e)	
Option 2 Project Name	
Option 2 GHGs Reduced (tCO₂e)	
Option 2 Project Name	
Option 2 GHGs Reduced (tCO₂e)	
Q 92 TOTAL C: REDUCTIONS FROM ALL OPTION 2 PROJECTS FOR 2018	0 tCO₂e

Offsets

Q 93 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 2018 reporting year:

NOTE: DO NOT INCLUDE ANY FUNDS THAT MAY BE SET ASIDE IN A CLIMATE ACTION RESERVE FUND.

Offset Provider Name	OFFSETS
Offsets (tCO ₂ e)	
Offset Provider Name	
Offsets (tCO ₂ e)	
Q 94 TOTAL D: OFFSETS PURCHASED FOR 2018	0 tCO₂e

Q 95 TOTAL REDUCTIONS AND OFFSETS FOR 2018 (Total B+C+D) = 0 tCO₂e

Corporate GHG Emissions Balance for 2018

Your local government's Corporate GHG Emissions Balance is the difference between total corporate offsettable GHG emissions (direct + contracted emissions) and the GHG emissions reduced through GCC Option 1 and Option 2 projects and/or the purchase of offsets.

Q 96 CORPORATE GHG EMISSIONS BALANCE FOR 2018 = (A – (B+C+D)) = 920 tCO₂e

**If your Corporate GHG Emissions Balance is negative or zero,
your local government is carbon neutral.
CONGRATULATIONS!**

Q 97 If your local government was carbon neutral in 2018, please record any emissions reductions you will be carrying over for future years and the source of the reductions, including the year they were earned (e.g. organics diversion, 2018 100 tCO₂e)

SOURCE OF CARRY OVER EMISSION REDUCTIONS (and year earned)	REDUCTIONS
Q 98 BALANCE OF REDUCTIONS ELIGIBLE FOR CARRY OVER TO NEXT YEAR	tCO₂e



Carbon Neutral Reporting	
Q 99 Does your local government set aside funds in a climate reserve fund or similar?	No

GCC CLIMATE ACTION RECOGNITION PROGRAM

Green Communities Committee 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 (e.g. 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.

Q 100 Based on your local government's 2018 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 checked="" type="checkbox"/>	Level 2 – Measuring GHG Emissions	x
<input type="checkbox"/>	Level 3 – Accelerating Progress on Charter Commitments	
<input type="checkbox"/>	Level 4 - Achievement of Carbon Neutrality	
<input type="checkbox"/>	Not Sure	

Q 101 Related to 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 and/or financial resources and is intended to result in significant GHG reductions: n/a