

Climate Action Revenue Incentive (CARIP) Public Report for 2015

Local Government:
Town of Smithers

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The Town of Smithers has completed the 2015 Climate Action Revenue Incentive Program (CARIP) Public Report as required by the Province of BC. The CARIP report summarizes actions taken in 2015 and proposed for 2016 to reduce corporate and community-wide energy consumption and greenhouse gas emissions (GHG) and reports on progress towards achieving carbon neutrality. There is also an opportunity to report on climate adaptation actions.

2015 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 2015	
	Refer to the Community Energy and Emissions Plan to guide reduction initiatives. Refer to the Official Community Plan to guide future growth and development.
	Began process of Community Well-being indicators project – Community Report Card measuring indicators to more comprehensively describe the health of our community, including social, environmental and economic dimensions.
Community-Wide Actions Proposed for 2016	
	Update standard drawings in the Subdivision Servicing & Development Standards Bylaw to incorporate Alternative Design Standards, where appropriate.
	Continue to refer to the Community Energy and Emissions Plan to guide reduction initiatives. Continue to refer to the Official Community Plan to guide future growth and development.
	Continue to consult with the community on future community planning projects.
	Publish the first Community Report Card.
	Continue to implement one of Council’s strategic priorities, which includes investing in renewable energy systems, increasing the energy efficiency of current assets and implementing community energy initiatives in collaboration with residents. Council has directed that transforming the Town’s community energy profile will be the lens through which all Town programs and projects will be held to.

Corporate Actions Taken in 2015	
	Applied for, but were unsuccessful, the GTI Pilot Communities Initiative.
	Continue to implement recommendations from the 2012 Corporate and Emissions Plan.
	Use SMARTtool measure, track & report on corporate emissions.
Corporate Actions Proposed for 2016	
	Continue to implement recommendations from the 2012 Corporate and Emissions Plan.
	Continue to use SMARTtool.

Snapshot Questions

Are GHG reduction targets included in your local government's Official Community Plan or Regional Growth Strategy?	Yes
Are you familiar with the Community Energy and Emission Inventory (CEEI)?	Yes
Does your local government use the Community Energy and Emissions Inventory (CEEI) to measure progress?	No
Which of the following does your local government use to guide climate action implementation?	
• Community Energy and Emissions (CEE) Plan	Yes
• Climate Action Plan	No
• Integrated Community Sustainability Plan	No
• Official Community Plan (OCP)	Yes
• Regional Growth Strategy (RGS)	No
• Other: Corporate and Community Energy Emissions Plan 2012, and	Yes
• Town of Smithers Sustainable Resiliency Plan 2012	
Does your local government have a climate action reserve fund?	Yes
Does your local government have a Corporate Climate Action Plan?	No

2015 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 2015	
	Two workshops presented by the Town's building inspector for all builders on the new energy efficiency changes for residential buildings in the BC Building Code.
	Continued to use the Facilities Maintenance Plan to guide Town building improvements.
	Encouraged builders to incorporate SaferHome design elements to increase accessibility of a home.
	Installed LED walkway lights on the remaining section of the Fulton Multi-Use Pathway.
	Developed an LED Streetlight Replacement Program in partnership with BC Hydro to transition all Town streetlights from high pressure sodium to LED lights.
Community-Wide Actions Proposed for 2016	
	Continue to support educational initiatives regarding energy efficient building standards.
	Amend Subdivision Servicing & Development Standards Bylaw to require that all new street lights are to a new LED standard.
	Install LED replacements for all Town-owned Streetlights and work with BC Hydro and Ministry of Transportation & Infrastructure to replace and install LED lighting on all BC Hydro-owned streetlights and streetlights on the Highway 16 arterial.

Corporate Actions Taken in 2015	
	Central Park Building: Install solar reflective window blinds on all windows.
	Library Crawl Space and Central Park Building Crawlspace Insulation upgrades.
	Ranger Park Building roof re-build with increased insulation.
	Constructed a new Airport Equipment Storage Shop to assist in reduced idling time for airport runway equipment and built to the new BC Building Code energy standards. The building is heated using electric boilers and in-slab hydroponic heating.
Corporate Actions Proposed for 2016	
	Continue to update and use the Facilities Maintenance Plan to guide Town building improvements.
	Determine the best heating system upgrade for the Public Library; either air to air or ground source heat pump.
	Feasibility study on the gas-fired furnaces heating the LB Warner Centre's Community gymnastics Building.
	Look at all projects through the lens of always trying to reduce GHG emissions

2015 ENERGY GENERATION ACTIONS

Energy Generation

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 2015	
	None
Community-Wide Actions Proposed for 2016	
	None

Corporate Actions Taken in 2015	
	Made application to the Community Energy Leadership Program for the installation of demonstration solar power project on Town Hall.
	Application for Build Canada grant for Terminal expansion and geothermal district heating unit, but were unsuccessful in the 2015 round.
Corporate Actions Proposed for 2016	
	If the CELP grant is successful install Solar Panels on the roof of Town Hall.
	The Airport Terminal Modernization project will include a very green component with the goal of reducing GHG emissions. This could involve a District heating system.

Snapshot Questions	
Is your local government developing, or constructing a district energy project?	Yes
Is your local government operating a district energy system?	No
Is your local government developing or constructing a renewable energy project?	No
Is your local government operating a renewable energy project?	No
Are you aware of the Integrated Resource Recovery guidance page on the BC Climate Action Toolkit (insert link here)?	Yes

2015 GREENSPACE/ NATURAL RESOURCE PROTECTION 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 2015	
	In-door walking track constructed around the new ice arena. Provides a safe and age friendly multi-use green space for year round in Smithers.
	Re-purposing aged and degraded baseball fields to create a new rugby field. Included to new plantings and seeding with no irrigation.

Community-Wide Actions Proposed for 2016	
	As per Council priorities 2015-2018 Develop a Plan for Central Park.
	The BV Naturalists have proposed to add additional native plants and trees to the Willowvale Wetlands.

Corporate Actions Taken in 2015	
	Ongoing improvements to Bovill Square (remediated & redeveloped site that was purchased by the Town).
	Town continues to jointly hold the Community Forest tenure with the Village of Telkwa.
Corporate Actions Proposed for 2016	
	Proposed upgrade to the Chandler Park playing fields including re-planting and new vegetative landscaping.
	Proposed extension and connection of the Smithers Perimeter Trail from the bottom of 10 th Ave.
	Continue Community Forest Partnership.
	Continue to look for funding and partnership opportunities to improve green space areas.

Snapshot Question	
Does your local government have urban forest policies, plans or programs?	Yes

2015 SOLID WASTE ACTIONS

Solid Waste

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 2015	
	Repurposed garbage cans on Main Street to further promote recycling in the downtown core

Community-Wide Actions Proposed for 2016	
	The Regional District has implemented a cardboard ban. The Town of Smithers is committed to assisting in keeping Cardboard out of the landfill by devoting resources to public education, resources for downtown business for cardboard recycling and considering the potential of community cardboard recycling bins.
	Continue to provide recycling information to the public.

Corporate Actions Taken in 2015	
	The Town has continued to develop a community composting facility at the works yard. This facility composts all organic matter for residential, commercial users as well as what is collected from the town parks and maintenance crews.
Corporate Actions Proposed for 2016	
	Continue the development of the Community composting facility and consider adding provisions and processes to compost chicken waste from residential backyard chicken keepers.

Snapshot Questions	
Does your local government have construction and demolition waste reduction policies, plans or programs?	No
Does your local government have organics reduction/diversion policies, plans or programs?	No

2015 TRANSPORTATION ACTIONS

Transportation

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 2015	
	Promoted safe cycling education through community policing and the coordination and promotion of bike to work week 2015.
	The Town paved 19 th Ave, reducing road dust and assisting with improved air quality issues in the industrial area of town.
	Constructed a new section of concrete sidewalk along Princess Street to connect Princess Crescent with the Fulton Pathway.
	Town representative on Access Smithers Committee to improve local accessibility.
	Funding partner of the Smithers and District Transit System.
Community-Wide Actions Proposed for 2016	
	Continue promotion of safe cycling education through community policing and the coordination and promotion of bike to work week 2016.
	Continue to support community education/outreach initiatives.
	Investigate the use of recycled rubber sidewalk material.
	Continue to work with local groups to improve accessibility.
	Continue to sponsor the Smithers and District Transit System. The partners of the Smithers and District Transit system have requested that BC Transit approve an expansion to the fixed route service between Smithers and Telkwa by adding an additional hour at the end of the workday so that more commuters can take the bus home to Telkwa after work.

Corporate Actions Taken in 2015	
	The Airport Department replaced 4 vehicles in accordance with the Vehicle Purchasing Policy ADM-020.
	The Town replaced the gas powered ice re-surfacer machine with a new electric powered Ice Re-surfacer.
Corporate Actions Proposed for 2016	
	Continue to replace corporate fleet in accordance with Vehicle Purchasing Policy ADM-020, which considers emissions, life cycle costs, efficiency & environmental impact.
Snapshot Questions	
Does your local government have policies, plans or programs to support:	
• Walking	Yes
• Cycling	Yes
• Transit Use	Yes
• Electric Vehicle Use	No
• Other	Yes/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	No

encourage individuals to modify travel behavior)?	
Does your local government have policies, plans or programs to support local food production (thus reducing transportation emissions)?	Yes

2015 WATER AND WASTEWATER ACTIONS

Water and Wastewater

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 2015	
	Participated in Drinking Water Awareness Week.
Community-Wide Actions Proposed for 2016	
	Continue to participate in Drinking Water Awareness Week.

Corporate Actions Taken in 2015	
	The Airport Department conducted a Water Supply feasibility Study for the Airport Lands and future airport industrial development.
Corporate Actions Proposed for 2016	
	Complete an Airport Water Master Plan with focus on improving the potable water source.

Snapshot Questions	
Does your local government have water conservation policies, plans or programs?	Yes

2015 CLIMATE CHANGE ADAPTATION ACTIONS

Climate Change Adaptation

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.

Community-Wide Actions Taken in 2015	
	Adopted a Backyard Hen Keeping Bylaw, thereby providing regulations that allow residents a local food source.
Community-Wide Actions Proposed for 2016	
	<p>In 2011 the Community Energy Plan was prepared and then adopted by Council in 2012. In February 2013 the Town adopted Bylaw 1712 (Official Community Plan Amendment 13-01) which include a section in the OCP to comply with Section 877 (3) of the LGA and meeting the commitments under the Climate Action Charter. This OCP section stated that the Town committed to a visionary greenhouse gas reduction target to contribute to the provincial effort of mitigating climate change. It also established a baseline at 2007 emission levels of reducing Community GHG reduction targets of 13% by 2017.</p> <p>Provincial statistics about Community GHG emissions are only showing statistics from 2010 so it is difficult to determine if the Community of Smithers is achieving Community GHG emission reductions.</p>

Corporate Actions Taken in 2015	
	<p>In 2011 a Corporate Energy and Emissions Plan was completed. This report identified 2004 as a base year with 976 GHG emissions. The goal recommended in the plan was to reduce Corporate GHG emissions by 31% by 2015.</p> <p>However this 976 tonnes included an estimate for solid waste emissions and Airport buildings and fleet usage, none of which are reported under the Climate Action Charter measurement process. Taking these items out of the original 2004 calculation (less the solid waste GHG estimates of 62 tonnes and less Airport buildings and fleet emissions of 129 tonnes) brings the comparable 2004 GHG calculation to 785 tonnes for “in-scope” fleet and buildings.</p>

In 2015 the Town's reported GHG emissions (under the in-scope guidelines of the Community Charter reporting process) is **569 tonnes**, (however according to SMARTTool some emissions do not require offsets therefore for offset calculation the Town's GHG Emissions would be 504). This represents a measured **reduction of 216 tonnes**, which is a **27.5% GHG emissions reduction**, including the new arena. The new arena has produced an estimated additional 8 tonnes of GHG emissions so the overall reduction between 2004 and 2015 would have been 28.5% without the new arena. The Town is close to its GHG emissions reduction target recommended within the Corporate Energy and GHG Emissions Plan.

In 2015: 53.3% of the emissions came from the fleet and 46.7% came from buildings/lighting/waste and wastewater whereas in 2004: 36.8% of the GHG emissions came from the fleet and 63.2% came from the building/lighting and waste/wastewater emissions. The largest of the Town's emissions in 2004 was its buildings, now it is its fleet.

Building GHG emissions have been reduced considerably from 496 tonnes in 2004 to 266 tonnes in 2015 (including the new arena) but the largest component of the Town's Corporate GHG emissions now comes from the fleet (up from 289 tonnes in 2004 to 303 tonnes in 2015).

The Town has made great strides in reducing its building GHG emissions. Had it not been for the new arena and the increase in the fleet GHG emissions the Town would have been even closer to its targeted 31% goal. The reduction in the building GHG emissions is a result of the initiatives and upgrades that the Town has completed within its facilities over the past few years (i.e. installing more energy efficient furnaces, replacing single pane windows, improving roofs, purchasing more energy efficient vehicles, monitoring heat consumption etc).

In terms of the Fleet GHG emissions, this is very fluctuating due to winter conditions. Diesel units represent the largest component of the Fleet GHG Emissions at 75% of the fleet's 2015 GHG emissions.

Corporate Actions Proposed for 2016

A Council priority is to create a Community Food System Task Force to identify potential projects for prioritization.

Snapshot Questions

Are you aware of the Plan2Adapt guidance page on the BC Climate Action Toolkit ?	Yes
Are you aware of the <i>Preparing for Climate Change, An Implementation Guide for Local Governments in BC</i> on the BC Climate Action Toolkit ?	Yes
Have you visited the climate change adaptation guidance page on the BC Climate Action Toolkit ?	Yes

2015 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 2015	
	None
Community-Wide Actions Proposed for 2016	
	None

Corporate Actions Taken in 2015	
	<p>Council adopted “Greenhouse Gas Emission Reduction Reserve” bylaw in 2013. This is a reserve established for the purpose of funding projects that reduce greenhouse gas emissions. Annually the Town budgets to place a carbon offset equivalent into this reserve, instead of paying for carbon offsets to an offset provider. Council made a motion during the 2015 budget process that the amount to be transferred annually would be based on \$35 per tonnes.</p> <p>In 2015 the Greenhouse Gas Emissions Reduction Reserve funding was used to contribute part funding (\$45,500) towards the Airport Storage Building.</p>
Corporate Actions Proposed for 2016	
	<p>The Town will continue to pay its resulting GHG emission tonnes at \$35/tonnes into its GHG Emissions Reduction Statutory reserve, instead of paying it to an offset provider. The amount budgeted to go into the GHG Reserve in 2016 is based on the 2014 GHG emissions reported to Council April 2015 or 482 tonnes times \$35 = \$16,870.</p> <p>The amount that will go into the Reserve in 2017 will be based on the GHG Emissions from 2015 reported to Council in May 2016, which will be \$17,640.</p> <p>In 2016 the Greenhouse Gas Emissions Statutory Reserve funds will be used to contribute as a funding source toward installation of a ground source heat pump for the Library.</p> <p>The estimated December 31, 2016 balance in the Greenhouse Gas Emissions Reserve is \$27,736.</p>

INNOVATION AND PEER-TO-PEER LEARNING

Innovation

This section provides the opportunity to showcase an innovative Corporate and/or Community-Wide reduction or adaptation activity that your local government has undertaken and that has had a significant impact 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
None known
Corporate Innovative Action
None known

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 appropriate box below.

Programs and Funding
None

2015 CARBON NEUTRAL REPORTING

Reporting Emissions

Did you measure your local government's corporate GHG emissions in 2015? (Yes/No)	yes
If your local government measured 2015 corporate GHG emissions, please report	504

the number of corporate GHG emissions (in tonnes of carbon dioxide equivalent) from services delivered <u>directly</u> by your local government:	
If your local government measured 2015 corporate GHG emissions, please report the number of corporate GHG emissions (in tonnes of carbon dioxide equivalent) from <u>contracted</u> services:	
TOTAL A: CORPORATE GHG EMISSIONS FOR 2015	504 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 Option 1 Projects (GCC-supported)
- undertake Option 2 Projects (alternative) community GHG emissions reduction projects that meet project eligibility requirements
- purchase carbon offsets from a credible offset provider

If applicable, please report the 2015 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	
TOTAL B: REDUCTIONS FROM OPTION 1 PROJECTS FOR 2015	tCO₂e

If applicable, please report the names and 2015 GHG emissions reductions (in tonnes of carbon dioxide equivalent (tCO₂e)) being claimed from Option 2 GHG Reduction Projects:

OPTION 2 PROJECT NAME	REDUCTIONS

TOTAL C: REDUCTIONS FROM OPTION 2 PROJECTS FOR 2015	tCO2e
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If applicable, please report the number of offsets purchased (in tonnes of carbon dioxide equivalent (tCO2e)) from an offset provider for the 2015 reporting year:

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

OFFSET PROVIDER	REDUCTIONS
TOTAL D: OFFSETS PURCHASED FOR 2015	tCO2e

TOTAL REDUCTION AND OFFSETS FOR 2015 (Total B+C+D) = **tCO2e**

Corporate GHG Emissions Balance for 2015 **504 tCO2e**

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 2015 = (A – (B+C+D)) = **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. Recognition is provided on an annual basis to local governments who demonstrate progress on their Charter commitments, according to the following:

Level 1 - Progress on Charter Commitments: for local governments who demonstrate progress on fulfilling one or more of their Charter commitments

Level 2 - Measurement: for local governments 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 - Achievement of Carbon Neutrality: for local governments who achieve carbon neutrality in the reporting year.

Based on your local government's 2014 CARIP Public Report, please check the GCC Climate Action Recognition Program level that best applies:

<input type="checkbox"/>	Level 1 - Progress on Charter Commitments	
<input type="checkbox"/>	Level 2 - Measurement	√
<input type="checkbox"/>	Level 3 - Achievement of Carbon Neutrality	
<input type="checkbox"/>	Not Sure	