Climate Action Revenue Incentive (CARIP) Public Report for 2015

Local Government:
CORPORATION OF THE CITY OF GRAND FORKS

Report Submitted by: Name: R Shepherd

Role: Chief Financial Officer Email: rshepherd@grandforks.ca

Phone: 250-442-8266

Date: May 31, 2016



The Corporation of the City of Grand Forks 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		
Continued implementing broad sustainability policies in the Sustainable Community Plan, including		
SCP target of reducing GHG emissions at 33% below 2007 levels by 2030.		
Community-Wide Actions Proposed for 2016		
Strategic Community Energy and Emissions Plan with Community Energy Association		
Engagement with community on smart growth, natural area protection, energy efficiency, and other		
sustainability issues being addressed in the Sustainable Community Plan and Zoning Bylaw update		
Begin developing sustainability checklists for developments in community		

Corporate Actions Taken in 2015		
Began researching options for supporting eco-homes and tiny homes for incorporation in the		
renewal of the Sustainable Community Plan and Zoning Bylaw		
Began identifying issues for renewal of Sustainable Community Plan, including Protected Natural		
Areas, Aquifer Protection, Natural Capital, small homes, urban agriculture / food security, and other		
issues		
2015-2019 Strategic Plan incorporating multiple sustainability components		
Corporate Actions Proposed for 2016		
Opening up the SCP and expanding the environment and sustainability policies and zoning bylaw		
(smart growth)		
Incorporate energy efficiency and sustainability criteria in all infrastructure and capital projects		
Continued implementation of Strategic Plan sustainability actions		

Snapshot Questions	
Are GHG reduction targets are included in your local government's Official Community Plan	Yes
or Regional Growth Strategy?	
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?	Yes
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:	No
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.

Coı	Community-Wide Actions Taken in 2015		
	Ongoing: promoting electricity, natural gas and other energy efficiency programs		
	Ongoing: educating and supporting compliance on building code energy efficiency		
Coı	Community-Wide Actions Proposed for 2016		
	Planning to consider options for supporting tiny home, small house and eco-home developments in		
	Sustainable Community Plan		
	Ongoing: promoting electricity, natural gas and other energy efficiency programs and Business		
	Energy Advisor assessments		
	Ongoing: educating and supporting compliance on building code energy efficiency		
	Planning to research Development Permit Areas for enhancing energy performance		
	Planning to incorporate further measures for supporting density and infill development in SCP		
	update		

Cor	Corporate Actions Taken in 2015	
	Implement LED street lighting pilot project	
	LED lighting for Grand Forks Library	
	Initiate Airport Beacon Solar project	
Cor	Corporate Actions Proposed for 2016	
	Developed plan for LED street lighting pilot project	
	Implement Airport Beacon Solar project	
	LED lighting for Airport Beacons	

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.

Cor	Community-Wide Actions Taken in 2015		
Cor	mmunity-Wide Actions Proposed for 2016		
Cor	porate Actions Taken in 2015		

Coı	rporate Actions Proposed for 2016

Snapshot Questions	
Is your local government developing, or constructing a district energy project?	No
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 (http://www.toolkit.bc.ca/tool/integrated-resource-recovery-irr)?	Yes

2015 GREENSPACE/ NATURAL RESOURCE PROTECTION ACTIONS

Greenspace

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.

Coi	Community-Wide Actions Taken in 2015	
Coi	Community-Wide Actions Proposed for 2016	
	Planned for sensitive ecosystem inventory / wetland inventory to initiate as part of identifying and	
	inventory of natural / ecological assets	
	Planned for moving forward with Environment Canada Ecological Gifts Program eligibility	

Coı	Corporate Actions Taken in 2015		
	Began process of identifying City-owned properties potentially suitable for protection		
	Adopted contaminated sites standard that recognizes the City's liability associated with		
	contaminated sites that contain substances in concentrations that exceed environmental standards.		
	City has inventoried active and inactive sites which may be subject to environmental contamination.		
Coı	Corporate Actions Proposed for 2016		
	Planned for rezoning and protecting significant ecosystems as Protected Natural Areas, including		
	the 22 acre Johnson Flats Wetland		
	Planned for phase 1 of urban forest inventory using Lidar data and iTree software		
	Planned for modeling of storm water and aquifer protection benefits of natural capital		
	Planned for tree inventory and began researching tree policy		
	Planned contaminated site evaluation review and classification according to their potential for		
	environmental concern.		

Snapshot Question	
Does your local government have urban forest policies, plans or programs?	No

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.

Coi	Community-Wide Actions Taken in 2015		
	Note: Solid waste is handled through the Regional District of Kootenay Boundary / Environmental		
	Services. They have implemented City-wide (and now regional) household organics diversion and		
	composting		
	Support Agriculture Society's Learning Garden Project and Kettle River Community Garden in		
	promoting composting and soil-building with food and yard waste		

Coi	Community-Wide Actions Proposed for 2016	
	Continue supporting Learning Garden and Community Garden projects promoting composting and	
	soil-building with food and yard waste	

Cor	Corporate Actions Taken in 2015	
Cor	rporate Actions Proposed for 2016	
	Consider compost collection system for community garden initiatives	

Snapshot Questions	
Does your local government have construction and demolition waste reduction policies, plans	Through
or programs?	RDKB
Does your local government have organics reduction/diversion policies, plans or programs?	Through
	RDKB

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.

Co	Community -Wide Actions Taken in 2015	
	Installed an electric vehicle charging station adjacent City Hall in downtown Grand Forks	
	Continued compliance and enforcement of anti-idling bylaw	
	Continued implementation of asset management plan to assess efficiencies of vehicles and	
	equipment	

Coı	Community-Wide Actions Proposed for 2016		
	Participate in "Fueling the Kootenays" Electric Vehicle (EV) Charging Station Infrastructure Strategy		
	Planning to consider active transportation and bicycle network in Sustainable Community Plan		
	Researching and implementing measures to improve active transportation infrastructure, including		
	bicycle network upgrades and sidewalk and pathway systems associated with new development		
	Continued implementation of asset management plan to assess efficiencies of vehicles and		
	equipment		

Cor	Corporate Actions Taken in 2015		
	Continued implementation of asset management plan to assess efficiencies of vehicles and		
	equipment		
Cor	Corporate Actions Proposed for 2016		
	Planning for purchase of electric Can-EV 'Might-e' work truck for public works to replace an aging		
	gas-fueled ½ ton truck. (http://www.canev.com/might_e_truck.php)		
	Additional public information kiosks to be installed in key pedestrian / green space / bicycle		
	network sites		

Snapshot Questions		
Does your loca	al government have policies, plans or programs to support:	
•	Walking	Yes
•	Cycling	Yes
•	Transit Use	Yes
•	Electric Vehicle Use	Yes
•	Other	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 encourage individuals to modify travel behavior)?		No
•	al government have policies, plans or programs to support local food us reducing transportation emissions)?	Yes

2015 WATER AND WASTEWATER ACTIONS

Water and Wastewater 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.

Cor	nmunity-Wide Actions Taken in 2015
Cor	nmunity-Wide Actions Proposed for 2016
	Sustainable landscaping and permaculture demonstration at the Learning Garden in conjunction with Agricultural Society
	Continued support of Kettle River Watershed Management Plan including Drought Management Plan
Cor	porate Actions Taken in 2015
Cor	porate Actions Proposed for 2016
	Planning for updating floodplain mapping and dike monitoring and maintenance
Sna	pshot Questions
Are	you aware of the Plan2Adapt guidance page on the <u>BC Climate Action Toolkit</u> ? Yes

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

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.

Coi	Community-Wide Actions Taken in 2015	
Coi	mmunity-Wide Actions Proposed for 2016	

Coı	orporate Actions Taken in 2015	
	Electrical Voltage Conversion – increase in efficiency	
Coı	Corporate Actions Proposed for 2016	
	Continued implementation of electric voltage conversion and system upgrades	

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
Corporate Innovative Action
Planning to participate in Municipal Natural Capital Initiative as pilot community to inventory natural
assets and model storm water benefits and associated ecosystem services (carbon, biodiversity, water
storage) of wetlands, riparian areas, floodplains and landscape features
storage, or wettamas, ripulian areas, moodplains and landscape reactives
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

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 the number of corporate GHG emissions (in tonnes of carbon dioxide equivalent) from services delivered <u>directly</u> by your local government:	249
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	249 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

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. OFFICETC DUDGUACED FOR 2015	+002
TOTAL D: OFFSETS PURCHASED FOR 2015	tCO2e

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

Corporate GHG Emissions Balance for 2015

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)) = 249 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:

	Level 1 - Progress on Charter Commitments	
	Level 2 - Measurement	٧
	Level 3 - Achievement of Carbon Neutrality	
·	Not Sure	