

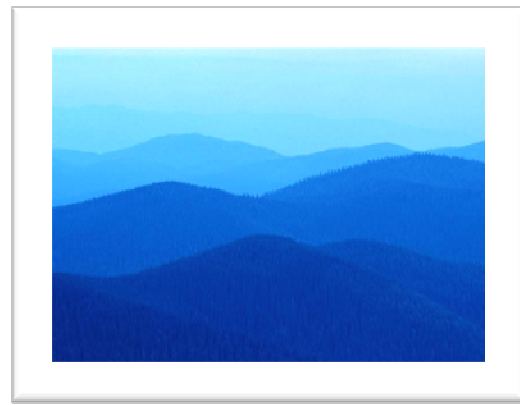
# Climate Action Revenue Incentive Program (CARIP) Public Report

## Climate Action Revenue Incentive (CARIP)

### Public Report for YEAR 2013

City of Fort St. John

Peace River Regional District



#### Report Submitted by

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#### General Information

<b>Name of Local Government</b>	City of Fort St. John
<b>Member of Regional District (RD)</b>	Peace River Regional District
<b>Regional Growth Strategy (RGS) in region</b>	No
<b>Population</b>	22,000

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## Community Wide Actions for 2013

### 1.1 Measure

#### Community Wide Measurement Actions

<b>Question</b>	Have you been using the Community Energy and Emissions Inventory (CEEI) to measure progress? What else have you been using instead of/in addition to CEEI?
<b>Answer</b>	Yes
<b>Additional Information</b>	This is the primary tool we are using to track progress at the community level.

### 1.2 Plan

#### Community Wide Targets

<b>Question</b>	Does your OCP(s) have targets, policies and actions to reduce GHG emissions, as per the requirements under the <i>Local Governments Act (LGA)</i> ? If yes, please identify the targets set. If no or in progress, please comment.
<b>Answer</b>	Yes
<b>Additional Information</b>	3% above 2007 levels by 2015 1% below 2007 levels by 2020 12% below 2007 levels by 2030

### 1.3 Reduce

#### Supportive Community Wide Actions

<b>Action Type</b>	Broad Planning
<b>Actions Taken this Year</b>	*Greenridge heights development model (City owned subdivision)
<b>Proposed Actions for Next Year</b>	*Greenridge heights market viability and developer agreement

<b>Action Type</b>
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Building and Lighting	
<b>Actions Taken this Year</b>	*proposal review for off-grid wind/PV street and trail lighting *conducted RfP for key City owned downtown site
<b>Proposed Actions for Next Year</b>	*Phase 2 of downtown revitalization to commence

Action Type	Energy Generation
<b>Actions Taken this Year</b>	*completion of a wind feasibility study for the south lagoon site and a preliminary analysis on the new hospital/reservoir site
<b>Proposed Actions for Next Year</b>	

Action Type	Green Space
<b>Actions Taken this Year</b>	
<b>Proposed Actions for Next Year</b>	

Action Type	Transportation
<b>Actions Taken this Year</b>	*transpiration analysis on downtown completed *continued on with idle less campaign
<b>Proposed Actions for Next Year</b>	*master transportation plan to commence *continuation of idle less campaign

Action Type	Waste
<b>Actions Taken this Year</b>	
<b>Proposed Actions for Next Year</b>	

Action Type	Water/Sewer
<b>Actions Taken this Year</b>	*downtown infrastructure assessed
<b>Proposed Actions for Next Year</b>	*partner with BC Hydro on their water conservation program

Action Type	Other Actions
<b>Actions Taken this Year</b>	
<b>Proposed Actions for Next Year</b>	*water infrastructure energy study to be conducted

#### Direct Community Wide Actions

Action Type	Buildings
<b>Actions Taken this Year</b>	*Passivhaus construction
<b>Proposed Actions for Next Year</b>	*completion and commissioning of Passivhaus

Action Type	Energy Generation
<b>Actions Taken this Year</b>	*deep geothermal feasibility study for Greenridge heights complete
<b>Proposed Actions for Next Year</b>	*district energy sharing system to be analyzed more in detail for Greenridge heights

Action Type	Transportation
<b>Actions Taken this Year</b>	*trail and sidewalk extensions *installation of regional electric vehicle charging stations
<b>Proposed Actions for Next Year</b>	*increase sidewalk and trail network

<b>Action Type</b>	<b>Waste</b>
<b>Actions Taken this Year</b>	*completion of liquid waste management plan
<b>Proposed Actions for Next Year</b>	

<b>Action Type</b>	<b>Water/Sewer</b>
<b>Actions Taken this Year</b>	
<b>Proposed Actions for Next Year</b>	*storm water management plan

<b>Action Type</b>	<b>Green Space</b>
<b>Actions Taken this Year</b>	
<b>Proposed Actions for Next Year</b>	

<b>Action Type</b>	<b>Other Actions</b>
<b>Actions Taken this Year</b>	
<b>Proposed Actions for Next Year</b>	

<b>Question</b>	Is there any activity that you have been engaged in over the past year(s) that you are particularly proud of and would like to share with other local governments? Please describe and add links to additional information where possible.
<b>Answer</b>	*Passivhaus (Passive House) ultra-low energy demo project The City of Fort St. John Passivhaus project. The City is acting as an owner builder in constructing an ultra-low energy demonstration project. It is to consume approximately 90% less energy for heating and cooling when compared to a standard code built home.

## Corporate Actions for 2013

### 2.1 Measure

#### Corporate Measurement Actions

<b>Question</b>	What steps has your local government taken toward completing its corporate emissions inventory?
<b>Answer</b>	An inventory has been completed and is updated monthly

<b>Question</b>	What tool are you using to measure, track and report on your corporate emissions?
<b>Answer</b>	Excel spreadsheet tool and an on-line utility bill monitoring service

### 2.2 Reduce

#### Supportive Corporate Actions

<b>Action Type</b>	Broad Planning
<b>Actions Taken this Year</b>	*Carbon neutral plan adopted by council with GHG targets and actions identified *sustainability planning is part of yearly strategic priority setting sessions
<b>Proposed Actions for Next Year</b>	*carbon neutral plan implementation

<b>Action Type</b>	Building and Lighting
<b>Actions Taken this Year</b>	
<b>Proposed Actions for Next Year</b>	

<b>Action Type</b>	Energy Generation
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<b>Actions Taken this Year</b>	*micro-hydro design development and working drawings complete (reusing of effluent at lagoon outfall)
<b>Proposed Actions for Next Year</b>	

<b>Action Type</b>	<b>Transportation</b>
<b>Actions Taken this Year</b>	
<b>Proposed Actions for Next Year</b>	*fleet management plan

<b>Action Type</b>	<b>Water/Sewer</b>
<b>Actions Taken this Year</b>	
<b>Proposed Actions for Next Year</b>	*water infrastructure energy study

<b>Action Type</b>	<b>Other Actions</b>
<b>Actions Taken this Year</b>	
<b>Proposed Actions for Next Year</b>	

### Direct Corporate Actions

<b>Action Type</b>	<b>Building and Lighting</b>
<b>Actions Taken this Year</b>	*Passivhaus construction  *energy conservation measures working drawings complete and ready to tender for various facility upgrades
<b>Proposed Actions for Next Year</b>	*Passivhaus completion



Action Type	Energy Generation
<b>Actions Taken this Year</b>	*district energy working drawings and tender package complete for recreation facility building cluster
<b>Proposed Actions for Next Year</b>	*micro-hydro project construction and commissioning

Action Type	Fleet
<b>Actions Taken this Year</b>	*installed EVSE at three (3) civic facilities *right sizing fleet (continuous)
<b>Proposed Actions for Next Year</b>	*expanded use of Cityworks to assist fleet management

Action Type	Waste
<b>Actions Taken this Year</b>	
<b>Proposed Actions for Next Year</b>	

Action Type	Water/Sewer
<b>Actions Taken this Year</b>	
<b>Proposed Actions for Next Year</b>	

Action Type	Green Space
<b>Actions Taken this Year</b>	
<b>Proposed Actions for Next Year</b>	

Action Type	Other Actions
<b>Actions Taken this Year</b>	
<b>Proposed Actions for Next Year</b>	*Further Cityworks utilization and implementation to establish an organization wide GIS-centric asset management system

### 2.3 Corporate Innovation

Question	Is there any activity that you have been engaged in over the past year(s) that you are particularly proud of and would like to share with other local governments? Please describe and add links to additional information where possible.
<b>Answer</b>	<p>*Micro-hydro project The City is using the effluent outfall at our south lagoon site to generate approximately \$80,000 of revenue annually by selling the generated electricity back to the grid. The turbine-generator system is to be ~100kW in capacity.</p> <p>*District energy system in recreation building cluster The City will consolidate refrigeration systems into our one (new efficient) facility. This will result in electrical savings. Refrigeration waste heat is also available and one site and will be recovered. Pipes will supple cold brine and hot water to adjacent buildings. This project will save approximately \$160,000 annually in energy bills and reduce GHG emissions by 20-30%.</p>

## Carbon Neutral Progress Reporting

### 3.1 Carbon Neutral Progress Reporting

Emissions/Offsets	Tonnes CO2e
<b>Annual corporate emissions using SMARTTool or equivalent inventory tool</b>	<b>4945.69</b>
<i>Emissions from services delivered directly by the local government</i>	4420.64
<i>Emissions from contracted services</i>	525.05
<b>Less:</b> GHG reductions being claimed for this reporting year from Option 1 - GHG reduction project	<b>0</b>
<i>Energy Efficient Building Retrofits and Fuel Switching</i>	0
<i>Solar Thermal</i>	0
<i>Household Organic Waste Composting</i>	0
<i>Low Emissions Vehicles</i>	0
<b>Less:</b> GHG reductions being claimed for this reporting year from Option 2 - GHG reduction projects	<b>0</b>
<i>Option 2 Project A</i>	0
<i>Option 2 Project B</i>	0
<i>Sum of Other Option 2 Projects (if you have added projects below)</i>	<b>0</b>
<b>Less:</b> <i>Offsets purchased for this reporting year (Option 3). Please identify your offset provider in the offset provider information section below.</i>	0
<b>Balance of corporate emissions for this reporting year.</b> <i>(If the corporate emissions balance is zero, your local government is carbon neutral for this reporting year)</i>	<b>4945.69</b>
<b>Additional "Option 2" Projects</b>	
<i>Option 2 Project C</i>	
<i>Option 2 Project D</i>	
<i>Option 2 Project E</i>	
<i>Option 2 Project F</i>	
<i>Option 2 Project G</i>	
<i>Option 2 Project H</i>	

### 3.2 Making Progress on Your Carbon Neutral Commitment

<b>Question</b>	If your community has not achieved carbon neutrality for this reporting year please describe the actions that you intend to take next year to move you toward your carbon neutral goal.
<b>Answer</b>	The City of Fort St. John is committed to investing money in our community and corporate operations to reduce GHG emissions and associated costs, as much as feasible. The City will not

be purchasing carbon offsets at this time since most carbon offset projects are external to the community and region. A micro-hydro project will be constructed and commissioned in 2014, saving nearly \$80,000 per year on electricity costs. A district energy system based off refrigeration waste heat now has completed working drawings and is ready to tender coming 2015. Significant facility energy upgrades have also been identified with working drawings now complete to tender the projects in 2014 and 2015. Combined, these projects will directly reduce the City's corporate emissions by up to 30%. 2014 will be an important year for ramping up asset management efforts in the organization which will address the management, tracking and analysis of mobile assets, fuel usage, idling, safety, energy use and other costs. The City of Fort St. John has also taken on a leadership role by constructing a net-zero energy ready demonstration home, which will be completed in the summer of 2014. This project will achieve Passive House certification and consume approximately 90% less heating cooling energy when compared to a standard code built house. Plans will also continue in 2014 to revitalize the downtown in a sustainable, holistic manner. Furthermore, the City is nearing a decision on developing 110 acres of city owned lands as a sustainable neighborhood, which will be the manifestation of an integrated design charrette completed in 2008.

### 3.3 Offset Provider Information

<b>Question</b>	Please Identify the name(s) of your offset provider(s) (Please answer below):
<b>Answer</b>	N/A

<b>Question</b>	The offsets being claimed in this CARIP Report were purchased from the offset provider(s) indicated above prior to making this CARIP report public (please indicate yes or no):
<b>Answer</b>	N/A

<b>Question</b>	If your community has not achieved carbon neutrality for this reporting year please describe the actions that you intend to take next year to move you toward your carbon neutral goal.
<b>Answer</b>	N/A