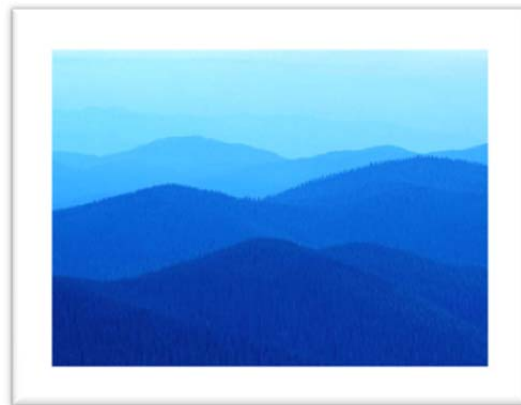


Climate Action Revenue Incentive Program (CARIP) Public Report
**Climate Action Revenue Incentive (CARIP)
Public Report for YEAR 2013**



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General Information

Name of Local Government	Abbotsford
Member of Regional District (RD)	Fraser Valley Regional District
Regional Growth Strategy (RGS) in region	Yes
Population	140,000

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Community Wide Actions for 2013

1.1 Measure

Community Wide Measurement Actions

Question	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?
Answer	Yes
Additional Information	Staff included "Agricultural Methane" as an additional sector in the inventory.

1.2 Plan

Community Wide Targets

Question	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.
Answer	Yes
Additional Information	<p>Buildings Target: 15% by 2025, 35% by 2040 (per-capita reduction)</p> <p>Transportation Target: 20% by 2025, 50% by 2040 (per-capita reduction)</p> <p>Solid Waste Target: 20% by 2025, 40% by 2040 (per-capita reduction)</p> <p>Agricultural Methane Target: 25% by 2025, 50% by 2040 (per-capital reduction)</p> <p>City-wide Target: 20% by 2025, 45% by 2040 (per-capita reduction)</p> <p>See the OCP, Part 3, Section 3.3 for a list of OCP policies supporting GHG Targets, Sequestration and Adaptation</p> <p>http://abbotsford.civicweb.net/Documents/DocumentList.aspx?ID=16829</p>

1.3 Reduce

Supportive Community Wide Actions

Action Type	Broad Planning
Actions Taken this Year	Completion of the Community Sustainability Planning Initiative which included the Community Sustainability Strategy, the Green Energy Plan (aka a Community Energy and Emissions Plan), the Green Economic Investment Strategy and the Green Community Plan, Transit Future Plan, and Water Efficiency Plan for the region.
Proposed Actions for Next Year	Implementation of the Community Sustainability Planning Initiative,, Transit Future Plan, and Water Efficiency Plan for the region. Commence OCP Review/Update.

Action Type	Building and Lighting
Actions Taken this Year	Completion of the U-District Vision, which includes reduced building-related GHG emissions and energy consumption along with examining potential renewable energy sources
Proposed Actions for Next Year	Use the U-District Vision to develop the U-District Neighbourhood Plan.

Action Type	Energy Generation
Actions Taken this Year	Signed on to the Provincial “solar ready” regulation, continued support and promotion of new alternative energy sources (i.e. anaerobic digestion in the agriculture sector).
Proposed Actions for Next Year	Continue 2013 actions

Action Type	Green Space
Actions Taken this Year	Adoption of the Green Community Plan, which supports land use decision-making that balances growth with the need to protect natural areas. Organization and implementation of Arbour Day, which had ~1500 participants.

Proposed Actions for Next Year	Continue work on the production of guidelines to assist with the implementation of Environmental Development Permits. Initiate a stream classification inventory and continue mapping streams. Continued organization and implementation of Arbour Day activities.
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Action Type Transportation

Actions Taken this Year	Continued implementing the Transit Future Plan through an efficiency review. Continued support of transit oriented development with enhanced pedestrian and cyclist-friendly public realm, review of development applications to ensure transit-friendly components are included.
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Proposed Actions for Next Year	Continue implementing the Transit Future Plan. Changes for improved transit efficiency are scheduled for August 2014. Continued support of transit oriented development with enhanced pedestrian and cyclist-friendly public realm, review of development applications to ensure transit-friendly components are included.
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Action Type Waste

Actions Taken this Year	Initiated curbside compostable collection for all single family residences, changed garbage collection frequency from weekly to bi-weekly for all single family residences, mandated ICI recycling.
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Proposed Actions for Next Year	Begin program development for ICI compostable collection (focused on food service and processing sectors) and multi-family compostable collection. Continue promotion of reduction, recycling and composting programs in the school and to residents, to increase diversion.
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Action Type Water/Sewer

Actions Taken this Year	Continued high efficiency toilet and washing machine rebates, continued selling subsidized indoor and outdoor water conservation kits and rain barrels, continued landscape and irrigation assessments for residential and ICI properties, provided grade 4 and 10 water education program, introduced an irrigation rebate program, continued water audits of ICI properties, and provided tours of Water Treatment Plant to the public in May.
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Proposed Actions for Next Year	Continue all 2013 actions, begin development of a customer water portal to allow customers to view their consumption, and introduce ESL water education courses.
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Action Type	Other Actions
Actions Taken this Year	Worked on a Climate Change Adaptation Plan and a Green Economic Investment Study that will explore the opportunities to promote and support the transition to a green economy.
Proposed Actions for Next Year	Continued work on these plans.

Direct Community Wide Actions

Action Type	Buildings
Actions Taken this Year	Use our corporate buildings to set an example to the community.
Proposed Actions for Next Year	Focus on corporate buildings

Action Type	Energy Generation
Actions Taken this Year	Continued methane capture for space and process heat production and conversion to electricity at the JAMES Plant, continued expansion of the production of the enhanced Val-E-Gro™ biosolids-based soil.
Proposed Actions for Next Year	Continued methane capture for space and process heat production at the JAMES Plant, implementation of an alternative method for biosolids beneficial use.

Action Type	Transportation
Actions Taken this Year	Completed several sidewalk construction projects, improved some bike lanes, improved roads, continued work on Transit Future Plan
Proposed Actions for Next Year	Several sidewalk construction projects, bike lanes, improved roads, continued work on Transit Future Plan

Action Type	Waste
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Actions Taken this Year	Initiated curbside compostable collection for all single family residences, changed garbage collection frequency from weekly to bi-weekly for all single family residences, mandated ICI recycling.
Proposed Actions for Next Year	Begin program development for ICI compostable collection (focused on food service and processing sectors) and multi-family compostable collection.

Action Type	Water/Sewer
Actions Taken this Year	Continued high efficiency toilet and washing machine rebates, continued selling subsidized indoor and outdoor water conservation kits and rain barrels, continued landscape and irrigation assessments for residential and ICI properties, provided grade 4 and 10 water education program, introduced an irrigation rebate program, continued water audits of ICI properties, and provided tours of Water Treatment Plant to the public in May.
Proposed Actions for Next Year	Continue all 2013 actions, begin development of a customer water portal to allow customers to view their consumption, and introduce ESL water education courses.

Action Type	Green Space
Actions Taken this Year	Planted 960 trees, and continued community garden project.
Proposed Actions for Next Year	Plant a minimum of 1000 trees and continued community garden project.

Action Type	Other Actions
Actions Taken this Year	
Proposed Actions for Next Year	Implement select recommendations from the Community Sustainability Planning Initiative, Transit Future Plan, Water Efficiency Plan and Green Economic Investment Study.

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
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possible.

Answer

Initiation of weekly curbside compostable collection for 25,000 homes, as well as mandatory recycling at all ICI properties.

Corporate Actions for 2013

2.1 Measure

Corporate Measurement Actions

Question	What steps has your local government taken toward completing its corporate emissions inventory?
Answer	A corporate Energy and Emissions baseline was completed by Pembina Institute in 2006. Staff have developed software tools for the 2007 to 2013 inventory.

Question	What tool are you using to measure, track and report on your corporate emissions?
Answer	An Excel based spreadsheet.

2.2 Reduce

Supportive Corporate Actions

Action Type	Broad Planning
Actions Taken this Year	Establishment of the Climate Action Reserve Fund Bylaw, and corresponding management policy. Continued partnering with BC Hydro for funding of an energy manager. Continued work from the Green Team.
Proposed Actions for Next Year	Continue planning and educating on carbon emission reductions with support from the Climate Action Reserve Fund. Continued partnering with BC Hydro for funding of an Energy Manager, and continued work from the Green Team.

Action Type	Building and Lighting
Actions Taken this Year	Continued consultation with BC Hydro on implementation of energy efficiency opportunities. Continued building and lighting education and awareness.
Proposed Actions for Next Year	Continued consultation with BC Hydro on implementation of energy efficiency opportunities. Continued building and lighting education and awareness.

Action Type	Energy Generation
Actions Taken this Year	Continued methane capture for space and process heat production and conversion to electricity at the JAMES Plant, continued expansion of the production of the enhanced Val-E-Gro™ biosolids-based soil.
Proposed Actions for Next Year	Continued methane capture for space and process heat production at the JAMES Plant, implementation of an alternative method for biosolids beneficial use.

Action Type	Transportation
Actions Taken this Year	Continuation of carpool program, City-wide anti-idling program, and bike-to-work week promotion.
Proposed Actions for Next Year	Continuation of carpool program, City-wide anti-idling program, and bike-to-work week promotion.

Action Type	Water/Sewer
Actions Taken this Year	<p>Installation of rainwater harvesting system at Tradex for toilet flushing, continued use of rainwater harvesting systems at the yard and AESC, installation of a rain sensor for the City hall irrigation system, and installation of high efficiency toilets at recreational facilities.</p> <p>Continued methane capture for space and process heat production and conversion to electricity at the JAMES Plant, continued expansion of the production of the enhanced Val-E-Gro™ biosolids-based soil.</p>
Proposed Actions for Next Year	<p>Retrofit of old irrigation systems, continuation of current programs, and installation of more rainwater harvesting systems with payback less than five years.</p> <p>Continued methane capture for space and process heat production at the JAMES Plant, implementation of an alternative method for biosolids beneficial use.</p>

Action Type	Other Actions
Actions Taken this Year	Continue development of a Climate Change Adaptation Plan

**Proposed
Actions for
Next Year**

Direct Corporate Actions

Action Type	Building and Lighting
Actions Taken this Year	Air to water heat pump installed at Centennial Pool, door seal installed at ARC, occupancy ventilation control installed at Police building, many other small projects.
Proposed Actions for Next Year	Boiler replacement with heat pump at airport, install control measures at airport, roof top unit (air handler) replacement, many other small projects.

Action Type	Energy Generation
Actions Taken this Year	Continued methane capture for space and process heat production and conversion to electricity at the JAMES Plant, continued expansion of the production of the enhanced Val-E-Gro™ biosolids-based soil.
Proposed Actions for Next Year	Continued methane capture for space and process heat production at the JAMES Plant, implementation of an alternative method for biosolids beneficial use.

Action Type	Fleet
Actions Taken this Year	Reduced fleet by two vehicles and replaced 20 units (eight years old) with 2013 model year that have better fuel mileage and lower emissions. Continued to promote idle reduction throughout all facilities.
Proposed Actions for Next Year	Replace 15+ vehicles average 10 years old with newer technology, four of which will be alternate fuel. Plan to replace older small equipment (blowers and trimmers) with rechargeable ones. Fleet reduction of at least four vehicles.

Action Type	Waste
Actions Taken this Year	Continuation of the food waste composting program and weekly workstation garbage pick-up. Promotion of composting and recycling at city events.
Proposed Actions for Next Year	Continuation of the food waste composting program and weekly workstation garbage pick-up. Promotion of composting and recycling at city events. Assess compostable collection

for City Hall café.

Action Type **Water/Sewer**

Actions Taken this Year Installation of rainwater harvesting system at Tradex for toilet flushing, continued use of rainwater harvesting systems at the yard and AESC, installation of a rain sensor for the City hall irrigation system, and installation of high efficiency toilets at recreational facilities.

Proposed Actions for Next Year Retrofit of old irrigation systems, and installation of more rainwater harvesting systems with payback less than five years

Action Type **Green Space**

Actions Taken this Year Participated in arbour day, planted 960 trees City-wide, continued use of on-site groundwater source with direct discharge to aquifer for Mill Lake water spray park, replaced gas-powered weed cutting boat with solar charged, battery powered boat, replaced PRC vehicle with vehicle receiving better mileage.

Proposed Actions for Next Year Participate in arbour day, plant a minimum of 1000 trees City-wide, continued use of on-site groundwater source with direct discharge to aquifer for Mill Lake water spray park.

Action Type **Other Actions**

Actions Taken this Year

Proposed Actions for Next Year

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.

Answer

Carbon Neutral Progress Reporting

3.1 Carbon Neutral Progress Reporting

Emissions/Offsets	Tonnes CO2e
Annual corporate emissions using SMARTTool or equivalent inventory tool	5998
<i>Emissions from services delivered directly by the local government (includes some contractor)</i>	5609
<i>Emissions from contracted services</i>	389
Less:	0
GHG reductions being claimed for this reporting year from Option 1 - GHG reduction project	
<i>Energy Efficient Building Retrofits and Fuel Switching</i>	
<i>Solar Thermal</i>	
<i>Household Organic Waste Composting (2013 curbside program collected 9,300 T of organic waste)</i>	
<i>Low Emissions Vehicles</i>	
Less:	0
GHG reductions being claimed for this reporting year from Option 2 - GHG reduction projects	
<i>Option 2 Project A</i>	
<i>Option 2 Project B</i>	
<i>Sum of Other Option 2 Projects (if you have added projects below)</i>	0
Less:	
<i>Offsets purchased for this reporting year (Option 3). Please identify your offset provider in the offset provider information section below.</i>	
Balance of corporate emissions for this reporting year. <i>(If the corporate emissions balance is zero, your local government is carbon neutral for this reporting year)</i>	0
Additional "Option 2" Projects	
<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

Question	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.
Answer	<p>Continued consultation with BC Hydro on implementation of energy efficiency opportunities. Continued building and lighting education and awareness.</p> <p>Continued methane capture for space and process heat production at the JAMES Plant, implementation of an alternative method for biosolids beneficial use.</p> <p>Continuation of carpool program, City-wide anti-idling program, and bike-to-work week promotion.</p> <p>Retrofit of old irrigation systems, continuation of current programs, and installation of more rainwater harvesting systems with payback less than five years.</p> <p>Continued methane capture for space and process heat production at the JAMES Plant, implementation of an alternative method for biosolids beneficial use.</p> <p>Boiler replacement with heat pump at airport, install control measures at airport, roof top unit (air handler) replacement, many other small projects.</p> <p>Continuation of the food waste composting program and weekly workstation garbage pick-up. Promotion of composting and recycling at city events. Assess compostable collection for City Hall café.</p> <p>Education and promotion of weekly curbside recycling and compostable waste collection to further increase waste diversion.</p>

3.3 Offset Provider Information

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

Question	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):
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Answer

N/A

Question

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.

Answer