Supporting Template

For the 2015 CARIP Climate Action/Carbon Neutral Progress Survey

This year's CARIP reporting process consists of a single online survey – the 2015 CARIP Climate

Action/Carbon Neutral Progress Survey – that combines the two surveys from last year into one. The
2015 survey has been simplified to make reporting easier

Local governments are required to submit the 2015 CARIP Climate Action/Carbon Neutral Progress Survey on or before June 1, 2016.

Local governments are also required to publicly report the information submitted in the 2015 CARIP Climate Action/Carbon Neutral Progress Survey. There are three ways a local government can report to the public, including using.

- the report generated by the 2015 CARIP Climate Action/Carbon Neutral Progress Survey (FluidSurveys software),
- a report based or the populated supporting template provided to local governments, or,
- a report in another format that contains the information submitted in the 2015 CARIP Climate Action/Carbon Neutral Progress Survey.

In response to local government input, this supporting template has been created to assist with collecting information for the 2015 CARIP Climate Action/Carbon Neutral Progress Survey, and follows the same structure.

Responses entered into the template can be cut and pasted into the survey. The survey asks for up to five actions in each category, and there is a place in the survey to report additional actions if desired. In the template, simply add more lines to the tables to report more than five actions.

Use of the template is **optional**. Local governments may choose to edit the populated template and use it for their public report, as an alternative to the report generated by the *2015 CARIP Climate Action/Carbon Neutral Progress Survey*.

Further information on CARIP can be found on the <u>Ministry of Community Sport and Cultural</u> Development's website.

Climate Action Revenue Incentive (CARIP) Public Report for 2015

Local Government: Abbotsford

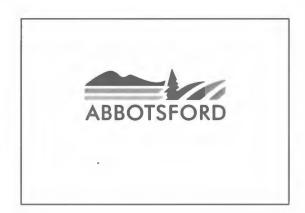
Report Submitted by: City of Abbotsford

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Phone: 604-864-5502

Date: June 1, 2016



The City of Abbotsford 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 The City of Abbotsford is going through an extensive process to update its Official Community Plan (OCP) through a project called Abbotsforward. The purpose of the OCP update is to articulate the

community's vision and shape the next phase of Abbotsford's growth and evolution as a city.

Community-Wide Actions Proposed for 2016

At the start of the project, Council and staff worked together to set a target population for the new OCP. The outcome of this discussion was to plan for a future city of 200,000 people. Growing to this target means accounting for an additional 60,000 people. In addition, this target presents both opportunities and challenges, as it does in many other growing cities. One of the key choices to make in Abbotsforward is how the city should grow in the future. In order to make an informed choice about how the city should grow, options were created to 'land' the next 60,000 people in three different ways – building the current OCP, supporting neighbourhood centres, and creating a city centre. This analysis to compare the growth options is a first step in understanding the implications of growing in different ways for Abbotsford. This first step is a significant shift in the history of planning for growth and development in Abbotsford. Through this exercise, both community elements and city infrastructure were used to compare the growth options. Community elements were qualitative in nature and considered: walk to groceries, working near home, diversity of housing options, convenient transit, greenhouse gas emissions and natural beauty. In addition, four significant areas of City infrastructure were studied: transportation, water, sanitary and drainage. The results show that neighbourhood centres and creating a city centre growth options outperformed the current OCP. In fact, there is a \$100 million infrastructure variation between the existing OCP and the city centre growth option.

This information is now being used to develop the first draft of the OCP, which is intended to be completed by June 2016.

Co	orporate Actions Taken in 2015	
	Continued and enhanced support for corporate anti-idling program.	
	Continued environmental engagement of staff	
	Expansion of compostable collection to recreation centers and city café.	
Со	orporate Actions Proposed for 2016	
	Support corporate anti-idling program.	
	Support the environmental engagement of staff	
	Re-establish corporate GHG working group	
	Work on "greening" city events	

Snapshot Ques	stions	
	uction targets are included in your local government's Official Community Plan bwth Strategy?	Yes/No
Are you familia	r with the Community Energy and Emission Inventory (CEEI)?	Yes/No
Does your loca measure progr	I government use the Community Energy and Emissions Inventory (CEEI) to ess?	Yes/No
Which of the fo	ollowing does your local government use to guide climate action n?	
•	Community Energy and Emissions (CEE) Plan	Yes/No
•	Climate Action Plan	Yes/No
•	Integrated Community Sustainability Plan	Yes/No
•	Official Community Plan (OCP)	Yes/No
•	Regional Growth Strategy (RGS)	Yes/No
•	Other:	Yes/No
Does your loca	I government have a climate action reserve fund?	Yes/No
Does your loca	I government have a Corporate Climate Action Plan?	Yes/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.

Co	mmunity-Wide Actions Taken in 2015
	Started building energy audit on all city buildings
	Replaced boiler at Centennial pool with high efficiency model
	Replaced gas fired dehumidifier at ARC with hydronic type with speed drive and ECM pumps
	New led scoreboard MRC
	LED in pool lights installed at MRC
	VFD installed on pump at ARC arena Brine for ice experience
	Added VFD to Swirl and Tots pools at ARC
Co	mmunity-Wide Actions Proposed for 2016
	Upgrade Gym lights to high bay/LED in CRC
	Ex park re-lamp project
	Continue energy audit on buildings
	Re-lamp heritage building at Trethewey House

Co	rporate Actions Taken in 2015
	Partner with BC hydro to reduce electricity
	Partner with Fortis to reduce natural gas use
	Use GHG fund for gas/GHG projects
Со	rporate Actions Proposed for 2016
	Continue energy audit on buildings and investigate potential resulting projects
	Re-lamp search and rescue
	Add motion control to MCA auditorium HVAC and lights
-	

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		
	City contracted compost facility investigated heat capture from compost piles	
	Support of development projects proposing alternative energy use	

nity-Wide Actions Proposed for 2016 contracted compost facility continues investigation of heat capture from compost pile
port of development projects proposing alternative energy use.

Co	rporate Actions Taken in 2015
	Methane capture for space and process heat production and conversion to electricity at the JAMES Plant.
	Geothermal energy used at the Reach Gallery.
Co	rporate Actions Proposed for 2016
	Methane capture for space and process heat production and conversion to electricity at the JAMES Plant.
	Review of cogeneration system for conversion to electricity at the JAMES Plant for replacement/expansion.
	Explore options for valley road landfill closure.
	Geothermal energy used at the Reach Gallery.
	Enhanced methane use for hot water heating at Ex-Park/Trethewey Landfill Disposal of curbside garbage at landfill with high efficiency methane capture and electrical conversion.

Snapshot Questions		
Is your local government developing, or constructing a district energy project?	Yes/No	
Is your local government operating a district energy system?	Yes/No	
Is your local government developing or constructing a renewable energy project?	Yes/No	
Is your local government operating a renewable energy project?	Yes/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/No	

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.

Co	mmunity-Wide Actions Taken in 2015
	Restoration of various parks in partnership with volunteers.
	Community partnerships with Fraser Valley Watershed Coalition, Fraser Valley Conservancy,
	Abbotsford Mission Nature Club and the Abbotsford Ravine Park Salmon Enhancement Society.
	Each partnership has resulted in restoration work within various green spaces.
	1000 trees and shrubs were planted as part of various community stewardship initiatives.
	Temporary Use Permit issued for a vacant lot to be used as a community garden.
Co	mmunity-Wide Actions Proposed for 2016
	Continued restoration of various parks with volunteers.
	Further partnerships with Fraser Valley Watershed Coalition, Fraser Valley Conservancy, Abbotsford
	Mission Nature Club and the Ravine Park Salmon Enhancement Society. These partnerships will
	bring various enhancement initiatives to our local greenspaces.
	Encourage the inclusion of community gardens in proposed development.
	Updating the Natural Environment Development Permit Area Guidelines and developing Steep
	Slope Development Permit Guidelines as part of the Abbotsforward initiative. These guidelines will
	help to conserve greenspace during development.
	Urban Agriculture will be reviewed as part of Phase 2 of the Zoning Bylaw update
	Updating the Tree Protection Bylaw.

Co	rporate Actions Taken in 2015
	463 Trees were planted by the Urban Forestry Team.
	MRC Sports Complex construction occurred during 2015 which will see the introduction of 3 new synthetic fields which will result in lower maintenance emissions.
	Increased our control of invasive plants, resulting in lower annual maintenance costs for vegetation management. Main focus was removal and conversion of Himalayan blackberry and Knotweed species. Working closely with City Environmental coordinators, FVRD and Invasive plant council. Reclaimed and replanted 600sq.m. of horticultural space around John Mahoney Park using CPTED measures.
	The Horticulture team has planted 42,000 bulbs and 17,250 flowers within various greenspaces.
Cc	prporate Actions Proposed for 2016
	400 trees projected within our Urban Forests and greenspaces.
	MRC Sports Complex completed with three new synthetic fields resulting in lower maintenance emissions.
	Continued park development using environmentally friendly materials and methods. New park development will consider long-term maintenance and how to reduce these maintenance needs

nrough design.	New park sites will also introduce new native vegetation and trees.

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

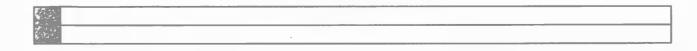
2015 SOLID WASTE ACTIONS

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.

Co	mmunity-Wide Actions Taken in 2015
	Implementation of compostable collection in the food services and food processing sector
	Garbage disposal contract awarded and initiated to landfill option with high efficiency gas collection and conversion to electricity
	Recycling and composting display at most major public events
Co	ommunity-Wide Actions Proposed for 2016
	Begin program development for multi-family compostable collection
	Prepare for FVRD organics ban in 2018

\rightarrow	Implementation of compostable collection program in the City café Expansion of compostable collection to some recreation facilities
E	Expansion of compostable collection to some recreation facilities
Corp	porate Actions Proposed for 2016
	Continued education and enforcement of recycling and composting initiatives



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

	Several sidewalk construction projects, improved some bike lanes, improved roads.
	Launch the Fraser Valley Express bus service, additional sidewalk, bike lane and road construction projects.
	Worked with FVRD, BC Transit and City of Chilliwack to plan Fraser Valley Express bus service to connect the region.
	Zoning Bylaw Update changes: Off-street bicycle parking requirements, reduced parking requirements in areas intended to be pedestrian and transit-oriented, and electric vehicle charging added to definition of a service station.
	Transit Future Plan implementation, support transit-oriented development with enhanced pedestrian and cyclist-friendly public realm, review development applications to ensure transit-friendly components are included.
	Negotiated car share and vehicle charging stations in several development applications
Co	mmunity-Wide Actions Proposed for 2016
	Transit Future Plan implementation, support transit-oriented development with enhanced pedestrian and cyclist-friendly public realm, review development applications to ensure transit-friendly components are included.
	Reviewing road profile standards to incorporate a cycle track.
	Continue to support car share and vehicle charging stations in development applications

0	Corporate Actions Taken in 2015	
	Anti-idling policy	
	Carpool program.	
	Bike to work week promotion	

Co	rporate Actions Proposed for 2016
	Investigate possibility of adding fully electric vehicles to the fleet.
	Anti-idling policy.
	Carpool program.
	Bike-to-work week promotion.
	Commuter challenge participant

Snapshot Que	stions	
Does your loca	I government have policies, plans or programs to support:	
•	Walking	Yes/No
•	Cycling	Yes/No
•	Transit Use	Yes/No
•	Electric Vehicle Use	Yes/No
•	Other	Yes/No
to reduce sing	I government have a transportation demand management (TDM) strategy (e.g. e-vehicle occupancy trips, increase travel options, provide incentives to	Yes/No
encourage ind	viduals to modify travel behavior)?	
,	I government have policies, plans or programs to support local food us reducing transportation emissions)?	Yes/No

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.

Co	mmunity-Wide Actions Taken in 2015
	Continued on-going water conservation program – water restrictions, toilet and washing machine rebates, irrigation and landscape assessments, public and school education, indoor and outdoor water saving kits and rain barrels.
	Continued use of bi-monthly billing, AMI water meters, and leak letters.
Co	mmunity-Wide Actions Proposed for 2016
	Continue on-going water conservation program including rebates for efficient irrigation and landscapes and investigate rainwater harvesting rebates and ICI capacity buyback program.

	Continued conservation through AMI program
E	explore new program options for increased water conservation.

Co	rporate Actions Taken in 2015
	Municipal facilities shut off fountains and left passive lawn areas to go dormant during the summer. Use of rain water for watering of trees and shrubs
	Employ sprinkler patrol to enforce watering restrictions bylaw
Co	rporate Actions Proposed for 2016
	Retrofit of municipal irrigation systems to improve efficiency

Snapshot Questions	
Does your local government have water conservation policies, plans of	or programs? Yes/No

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.

Co	ommunity-Wide Actions Taken in 2015
	Review of OCP
	Implementation of compostable collection Bylaw for Food Services and Food Processing Sector
	Continued enforcement of 2014 Zoning Bylaw
_	
Co	ommunity-Wide Actions Proposed for 2016
	Continued review of OCP

Explore Bylaw development for multi-fam	y compostable collect	tion	
Explore implications of new FVRD Solid W	ste Management Plan	n	

Co	rporate Actions Taken in 2015
	Staff attend many public events with water conservations and waste reduction program information
Co	rporate Actions Proposed for 2016
	Staff attend many public events with water conservations and waste reduction program information

Snapshot Questions	
Are you aware of the Plan2Adapt guidance page on the <u>BC Climate Action Toolkit</u> ?	Yes/No
Are you aware of the <i>Preparing for Climate Change</i> , An <i>Implementation Guide for Local Governments in BC</i> on the <u>BC Climate Action Toolkit</u> ?	Yes/No
Have you visited the climate change adaptation guidance page on the <u>BC Climate Action</u> <u>Toolkit</u> ?	Yes/No

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		
	Participation in Fraser Valley Agricultural Adaptation Strategy	

Participation in Fraser Valley Agricultural Adaptation Strategy Corporate Actions Taken in 2015 Continued awareness of environmental and climate impacts for all staff
Continued awareness of environmental and climate impacts for all staff
Corporate Actions Proposed for 2016
Continued awareness of environmental and climate impacts for all staff
nnovation
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
The state of the s
significant impact or has the potential to have a significant impact. Projects included here may be
eatured 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
N/A
N/A
N/A
N/A
Corporate Innovative Action

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
		N/A

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:	5130
If your local government measured 2015 corporate GHG emissions, please report the number of corporate GHG emissions (in tonnes of carbon dioxide equivalent) from contracted services:	829
TOTAL A: CORPORATE GHG EMISSIONS FOR 2015	5959 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	N/A
Solar Thermal	N/A
Household Organic Waste Composting	N/A
Low Emission Vehicles	N/A
Avoided Forest Conversion	N/A
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	REDUCTION	
	N/A	
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	
	N/A	
TOTAL D: OFFSETS PURCHASED FOR 2015	tCO2e	

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

0.0 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)) = 5959 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	
Level 3 - Achievement of Carbon Neutrality	
Not Sure	