City of **Kelowna**

Climate Action Reven Incentive Program (CARIF Public Report for 2017

May 2018

100

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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, centered) plays an especially important role in energy and GHG reduction.

Community-Wide Actions Taken in 2017		
	Launched the Kelowna Transportation Master Plan.	
	Continued preparation work for the Regional Transportation Plan.	
	Development of the Disruptive Mobility Strategy started, strategy will identify how emerging	
	trends in Transportation can be leveraged and harness to lower GHG emissions among other goals.	
	Started work on Capri-Landmark plan in early 2017. This urban centre plan is a key part of the City's	
	growth management strategy that is working toward focusing future growth in the city's urban	
	core and five urban centres. The plan is looking to shift the area from an employment hub to a	
	high-density complete community with a range of transportation options. Generally, the City's	
	urban centre are the areas with the greatest potential to support active modes of transportation.	
	Draft Community Climate Action Plan update.	
	Draft Healthy Housing Strategy which includes actions to improve energy efficiency in residential	
	buildings as well as aligning land use, housing and transportation in order to create complete,	
	compact communities.	
Со	mmunity-Wide Actions Proposed for 2018	
	Launched update to the Official Community Plan to 2040	
	Continue development of the Kelowna Transportation Master Plan (anticipated completion 2019).	
	Begin coordination of the Kelowna Transportation Master Plan with the 2040 Official Community	
	Plan.	
	Launch development of Phase 2 of the Regional Transportation Plan (anticipated completion	
	2019).	
	Complete development of the Disruptive Mobility Strategy.	
	Complete the Capri-Landmark Plan.	
	Complete the updated Community Climate Action Plan.	
	Complete the Healthy Housing Strategy.	

Со	Corporate Actions Taken in 2017	
	Draft the Corporate Energy and GHG Emissions Plan	
Со	Corporate Actions Proposed for 2018	
	Complete the Corporate Energy and GHG Emissions Plan	

Broad Planning		
What is (are) your current GHG reduction target(s)?	The City of Kelowna will, in partnership with: senior governi local residents and businesses; NGOs; external agencies; an providers, work towards reducing community greenhouse g emissions by 33% (from 2007 levels) by 2020.	d utility
	unity's community energy and emissions inventory (e.g.	Yes
CEEI or another inventory)?		
What plans, policies or guideline	s govern the implementation of climate mitigation in your	
community?		
 Community Energy and 	Emissions (CEE) Plan	No
 Community- Wide Clima 	te Action Plan	Yes
 Integrated Community S 	ustainability Plan	No
Official Community Plan	(OCP)	Yes
Regional Growth Strated		Yes
 Do not have a plan 		No
• Other:		
Does your local government hav	e a corporate GHG reduction plan?	Yes

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.

Со	mmunity-Wide Actions Taken in 2017
	Partnered with FortisBC and Seniors Outreach Society to encourage participation in the Energy
	Conservation Awareness Program to promote energy and economic savings for low to moderate
	income residents.
	Received a grant from FortisBC to hire a community energy specialist.
Со	mmunity-Wide Actions Proposed for 2018
	Continue partnership with FortisBC and Seniors Outreach Society to encourage participation in the
	Energy Conservation Awareness Program.
	Engage the building community on the regional Energy Step Code implementation strategy
	through an on-line survey and education opportunities such as the "Building to Energy Step Code:
	Above Grade Walls and Glazing Assemblies" hosted in partnership with FortisBC and the
	Community Energy Association.
	Update Kelowna's Building Bylaw to reference the Energy Step Code as a city-wide requirement for
	Part 9 buildings with an adoption timeline for Step 1 by April 2019, graduating to Step 3 by October
	2020 (carriage houses would require Step 2 compliance at this time).
	Relax the setback requirements in Kelowna's Zoning Bylaw to ensure thicker walls to
	accommodate more insulation (common to buildings constructed to the upper steps of the Energy
	Step Code (4 & 5)) are not penalized.
	Create a building permit fee rebate program for part 9 buildings to incentivize projects achieving
	the higher steps (4 & 5) of the Energy Step Code.
	Begin developing a community energy retrofit strategy including regulation and incentives to
	encourage existing building stock to become more energy efficient.

Со	Corporate Actions Taken in 2017	
	Water Treatment Facility Air Compressor Upgrade – 186,150 kWh/yr savings	
	KPSB – Designed 30% more energy efficient than ASHRAE 90.1 2010 – estimated savings of	
	156,604 kWh/yr, 4,216 GJ/yr	
Со	rporate Actions Proposed for 2018	
	City wide LED street light retrofit – 4,492,859 kWh/yr (4.5 GWh/yr)	
	Water Treatment Plant Industrial Energy Audit	
	Waste Water Treatment Plant Industrial Energy Audit	
	Rutland Arena Real Ice Installation – 73,363 kWh/yr, 264 GJ/yr	

Building and Lighting

The Province has committed to taking incremental steps to increase energy-efficiency requirements in the BC Building Code to make buildings net-zero energy ready by 2032. The BC Energy Step Code--a part of the BC Building Code--supports that effort

Is your local government aware of the BC Energy Step Code?	Yes
Is your local government implementing the BC Energy Step Code?	Yes

Energy Generation Actions

A transition to renewable or low-emission energy sources for heating, cooling and power supports large, longterm 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 2017

Okanagan College continues to be heated through clean wastewater effluent from Kelowna's Wastewater Treatment Facility and heat pumps.

Community-Wide Actions Proposed for 2018

Okanagan College continues to be heated through clean wastewater effluent from Kelowna's Wastewater Treatment Facility and heat pumps.

Corporate Actions Taken in 2017

Upgraded header pipe for the Landfill Gas system to allow for increased flow and provide better quality landfill gas. FortisBC commissioned the landfill gas system in March, which operated on and off for six months, however due to operational issues was shut down in late December.

Corporate Actions Proposed for 2018

Additional sub-header to be installed for the landfill gas system to allow for flexibility and additional landfill gas draw from the east side of the landfill. The landfill gas system should be operational in mid-2018.

Energy Generation	
Is your local government developing, or constructing:	
A district energy system	No
A renewable energy system	No
Is your local government operating:	
A district energy system	No
 A renewable energy system (Note: City works in partnership with FortisBC to provide landfill gas while Fortis operates the renewable energy system) 	No
Is your local government connected to a district energy system that is operated by another energy provider?	No
Are you aware of the Integrated Resource Recovery guidance page on the <u>BC Climate Action</u> <u>Toolkit</u> ?	No
Are you familiar with the 2017 "List of Funding Opportunities for Clean Energy Projects Led by First Nations and Local Governments?"	No

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.

Со	Community-Wide Actions Taken in 2017	
	Permanently protected 101,660 m ² of riparian areas via No Disturb Covenants or Park dedications	
	through the City's development process.	
	14,748 m ² (3.6 acres) of riparian area restored via landscaping through our development process.	
	Acquired 50.49 acres of parkland (approximately 16 acres of which are protecting riparian areas).	
	Sold 500 trees to residents for private property as part of NeighbourWoods campaign.	
Community-Wide Actions Proposed for 2018		
	Sold 500 trees to residents to plant on private properties as part of NeighbourWoods campaign.	

Corporate Actions Taken in 2017		
Planted 5,000 native ponderosa pine seedlings in Kelowna's natural parks.		
Planted 200 large caliper trees and developers planted 400 large caliper trees.		
Corporate Actions Proposed for 2018		
Plan to plant 250 large caliper trees.		
Greenspace		
Does your local government have urban forest policies, plans or programs?	Ves	

Does your local government have urban forest policies, plans or programs?	Yes
Does your local government have policies, plans or programs to support local food	Yes
production?	

Solid Waste Actions

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.

Со	Community-Wide Actions Taken in 2017	
	Sold 457 units as part of a composter sale promotion to encourage composting.	
	Hosted 2 repair cafés to encourage reuse.	
	Hosted 2 trunk sales to encourage reuse.	
	Hosted a pilot bulky item collection pilot program.	
	Performed commercial and residential waste monitoring including education for mandatory	
	recyclables and curbside recycling cart inspection.	
	Illegal dump monitoring and cleanup.	
Со	mmunity-Wide Actions Proposed for 2018	
	Implement curbside bulky item collection program.	
	Assess depot and transfer station service in the region.	
	Continue with programming including composter sale, reuse events, community clean up and	
	region wide education.	

(Corporate Actions Taken in 2017	
		Added additional leachate recirculation infrastructure
(Corporate Actions Proposed for 2018	
		Start a controlled phase in of leachate recirculation.

Solid Waste	
Does your local government have construction and demolition waste reduction policies,	Yes
plans or programs?	
Does your local government have organics reduction/diversion policies, plans or programs?	Yes
(Biweekly yard waste pick up and annual composter sales to divert organics from the waste	
stream.)	

Transportation Actions

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	mmunity -Wide Actions Taken in 2017	
	Produced all new cycle network map with online and 7,500 print copies for initial run.	
	15 th annual Bike to Work and School Week and 11 th annual Walk to School Week region wide. 310	
	BTW teams, 2,619 station attendees, 424 new cyclists, 53% female participants, 1,581 trips logged,	
	77,804 km cycled, 18.1 tons of GHG emissions avoided – all records.	
	Registered 1,100 residents from the region for carpool.ca.	
	Installed 6 new transit shelters, 21 benches, accessibility improvements at 10 bus stops (boarding	
	platforms), constructed 4 new accessible transit stops and 1 transit pull-out on major arterial	
	roadway (Gordon Drive).	
	Increasing Saturday service on 2 major routes (1, 8) and mid-day service on one local route (13) and	
	targeted investments to maintain service reliability on high-demand routes.	
	Continued Clean Air and Safe Routes 4 School in Pearson, Raymer, and Belgo Elementary.	
	Developed the first stationless or dockless bikeshare pilot to be deployed at scale in a city in	
	Canada. First system in north America to have cash payment option and a text to unlock function	
	to make the service truly accessible.	
	Built 1.48 km of sidewalks, 0.7 km of Cycle Track / Shared paths and upgrade 3 km of bike lanes to	
	buffered bike lanes.	
	Improvements for pedestrian access including 2 cross walk flashers at intersections, 2 curb	
	extensions and 2 roundabout treatments.	
	Developed policy to support Car sharing in Kelowna, integrating it into the development	
	application review process as a way to reduced parking requirements. By supporting Car sharing we	
	are reducing reliance on SOVs, supporting the shift to a low-carbon economy.	
	Expanded partnership with OGO Car Share to include additional City Fleet for a total of 8 City fleet	
	vehicles in the car share.	
	Piloted a community bike share in partnership with Ogo Car Share.	
Со	mmunity-Wide Actions Proposed for 2018	
	Transit – system wide AVL system implementation (Fall) with real-time/mobile schedule app (BC	
	Transit partnership project).	
	Outfit 40 conventional transit buses with Transit Signal Priority radio equipment (30 outfitted	
	today).	
	Restructure transit service in the Glenmore-Midtown areas of Kelowna adding a new route linking	
	downtown to UBCO campus via Glenmore, introduce bus service to the University Heights student	
	housing development, improve service reliability on major routes adding total of 5,000 service	
	hours.	
	Upgrade 4 transit stops to improve accessibility, capacity and safety and comfort.	
	Construct 12 new transit stops/platforms including one bus bay and one major transit stations	
	(Kelowna General Hospital).	
	Finalize Transit Service Standards and Transit Future Action Plan (1-10Yr horizon transit servicing	
	plan).	

Со	Community-Wide Actions Proposed for 2018 con't		
	Improvements for pedestrian access including 5 new signed and marked crosswalks, 4 crosswalks with flashers at intersections, and 3 crosswalks with half signals.		
	Deploy the first stationless or dockless bikeshare pilot to be deployed at scale in a city in Canada. First system in north America to have cash payment option and a text to unlock function to make the service truly accessible.		
	Delivered a 50% increase to the cost shared bike rack program where business pay half the cost of bike rack on their site if the racks are publicly accessible.		
	Expand the bike and pedestrian counter program with \$20,000 budget for the year.		
	Planning commenced for the Houghton Overpass project to be designed this year and delivered in 2020.		
	Complete the Okanagan Rail Trail through Kelowna with a paved surface from Downtown to Kelowna to Lake Country forming the backbone of Kelowna's AAA bicycle network.		
	Formalize the Bike Corral pilot into an established program.		
	Update the Bike Parking Requirements in the Kelowna Land Use By-Law.		
	Develop bike parking guidelines for developers in Kelowna.		
	Continue delivery of the Class Rides Free program.		
	Building 6.7 km of rails with trails multi-use path, 2.8 km of multi-use path, 2.5 km of sidewalk, 8.3 km of bike lanes and upgrade 6.0 km of bike lanes to buffered bike lanes.		
	Building improved pedestrian crossings including 1 Half signal, 3 Pedestrian flashers and 5 signed and marked cross walks.		
	Construction of Phase 2 of Rutland Transit exchange to facilitate transit rerouting and optimization.		
	Bring forward bylaw amendments for Car Sharing in 2018, this will allow for full implementation of the Policy council endorsed in fall 2017.		
	Continue Clean Air and Safe Routes 4 School at new schools (schools to be determined in 2018).		
	Presenting Anti-Idling Bylaw for adoption.		
	Working with OGO Car Share to assist in expansion / transition to Modo Car Share.		

Со	Corporate Actions Taken in 2017	
	Continued to use bio-diesel up to 20% in City fleet vehicles.	
	Continued to use the automatic vehicle locator system in fleet vehicles to look for opportunities for	
	efficiencies	
	Added 3 hybrid vehicles to City's fleet.	
	Purchased 2 electric assist trikes.	
Со	rporate Actions Proposed for 2018	
	Add 3 electric vehicles to City's fleet.	
	Investigate partnering with Dropbike for employee use.	
	Optimizing vehicle preventive maintenance schedules reducing oil changes.	
	The City signed a formal agreement with Modo Car Share to continue using the car share as part of	
	the City's fleet transportation.	

Transportation	
 Does your local government have policies, plans or programs to support: Walking Cycling Transit Use Electric Vehicle Use Other (please specify) 	Yes Yes Yes Yes
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)?	Yes
Does your local government integrate its transportation and land use planning?	Yes

Water and Wastewater Actions

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.

Со	Community-Wide Actions Taken in 2017	
	Partnered with Okanagan Basin Water Board to sell rain barrels during the composter sale.	
Community-Wide Actions Proposed for 2018		
	Partner with Okanagan Basin Water Board to sell rain barrels during the composter sale.	

Water Conservation

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

Yes

Climate Change Adaptation Actions

This section of the CARIP survey is designed to collect information related to the types of climate impacts local governments are experiencing and how they are being addressed.

Please identify the THREE climate impacts that are most relevant to your Local Government.	
 Warmer winter temperatures reducing snowpack 	
 Changes to temperature and precipitation causing seasonal drought 	\checkmark
 Heatwaves impacting population health 	
 Increased temperatures increasing wildfire activity 	~
 Increased temperatures affecting air quality 	
Changing temperatures influencing species migration and ecosystem shifts	
 Extreme weather events contributing to urban and overland flooding 	v
 Sea level rise and storms causing coastal flooding and/or erosion 	
Other: Most of the above could have impacts in Kelowna area.	

In 2017 has your local government addressed the impacts of a changing climate using any of the following?

tollowing?	
Risk and Vulnerability Assessments	Yes
Risk Reduction Strategies	Yes
Emergency response planning	Yes
Asset management	No
Natural/Eco asset management strategies	No
Infrastructure upgrades (e.g. storm water system upgrades)	Yes
Beach Nourishment projects	No
Economic diversification initiatives	No
Strategic and financial planning	Yes
Cross-department working groups	No
OCP policy changes	No
Changes to zoning and other bylaws and regulations	No
Incentives for property owner (e.g. reducing storm water run-off)	No
Public education and awareness	Yes
Research	No
Mapping	Yes
Partnerships	Yes

Climate Change Adaptation Actions Proposed for 2018

Revised the 1:200-year event flow for Upper Vernon Creek which included a contingency for climate change impacts. Increase channel capacity in Upper Vernon Creek to address these changes as well as adding 18 pools and riffles, long reach of cascades and an impermeable liner to protect the groundwater table. Large woody debris and a robust replanting plan will complete the project.

Stream recognizance of Mill Creek from airport to Okanagan Lake to determine flood probability.
 Update Bylaw 7900: Subdivision, Development & Servicing Bylaw to update standards as a result of changing climate. Intensity, Duration and Frequency curves, approach to stormwater retention

	and investigate your best management are stigged to avoid domage to success in the future because	
	and investigate new best management practices to avoid damage to creeks in the future because	
	of climate change.	
	In partnership with local municipalities, the Okanagan Basin Water Board will complete flood	
	mapping for the entire Okanagan basin to evaluate flood risk and where adaptation is required.	
	Increase flow measurement on creeks to gather data to understand how creeks are responding.	
	Investigate how to attenuate the higher peak flows that are being noticed upstream of the airport	
	on Mill Creek to avoid impacts through the airport.	
	In partnership with local municipalities, the Okanagan Basin Water Board will investigate the	
	impacts of Climate Change on Okanagan Lake water quality and potential effects to water	
	treatment.	
	Continue to work on Kelowna Integrated Water Supply Plan which will create resilient and robust	
	networks for both domestic and agricultural water use.	
For	For more information, please contact:	
	Rod MacLean Utility Planning Manager, <u>rmaclean@kelowna.ca</u>	

The following are key resources that may be helpful to your local government in identifying climate impacts, as well as, strategies, actions and funding to deal with them. For those resources that you have used, please indicate whether they were useful in advancing your work in climate change adaptation?

Indicators of Climate Change for British Columbia, 2016	Useful
Plan2Adapt	Useful
Climate Projections for Metro Vancouver	Haven't Used
Climate Projections for the Capital Region	Haven't Used
Climate Projections for the Cowichan Valley Regional District	Haven't Used
Province of BC's BC Adapts Video Series	Haven't Used
Preparing for Climate Change: An Implementation Guide for Local Governments	Haven't Used
The Public Infrastructure and Engineering Vulnerability Committee's (PIEVC)	Haven't Used
protocol	
Sea Level Rise Primer	Haven't Used
BC Regional Adaptation Collaborative Webinars	Haven't Used
www.ReTooling.ca	Useful
Water Balance Model	Haven't Used
The Water Conservation Calculator	Haven't Used
Funding:	
National Disaster Mitigation Program (NDMP)	Haven't Used
Community Emergency Preparedness Fund (CEPF)	Haven't Used
Municipalities for Climate Innovation Program (MCIP)	Haven't Used
Climate Adaptation Partner Grants (FCM)	Haven't Used
Infrastructure Planning Grants (MAH)	Haven't Used
Federal Gas Tax Fund	Useful

2017 Other Climate Actions

This section provides local governments the opportunity to report other climate actions that are not captured in the categories above.

Сог	Community-Wide Actions Taken in 2017	
	Discussed, analyzed and recommended "Strategies to Reduce PM2.5 in the Okanagan"; including	
	new programs and bylaw changes to improve air quality in the area.	
	Continued Woodstove Exchange Program – 12 exchanges in 2017- One Wood Heating Workshop	
	Continue Agricultural Chipping Program - A total of 4639 m ³ of wood chips were produced in 2017,	
	instead of burning.	
	Through the Air Quality Initiatives (Agricultural Chipping program, Woodstove Exchange, TDM	
	etc.) an estimation of 111 tons of particulate matter (PM10 and PM2.5), 227 tons of CO, 19 Tons of	
	VOC's and 18 tons of GHG-CO2 equivalents were not released into the air in 2017.	
Cor	mmunity-Wide Actions Proposed for 2017	
	Presenting "Strategies to Reduce PM2.5 in the Okanagan" to the regional board. Update bylaw 773.	
	Continuing Woodstove Exchange Program - 58 Rebates are available for 2018 and a wood Heating	
	Workshop.	
	Continuing Agricultural Chipping Program and expand the program with a Mow/Chip Rent it	
	rebates.	

Other	
Are you familiar with the Community Lifecycle Infrastructure Costing Tool (CLIC)?	Yes
Have you used CLIC?	Yes

Innovation and Peer to Peer Learning

Innovation

This section provides the opportunity to showcase an innovative Corporate and/or Community-Wide GHG reduction and/or climate change adaptation activity that your local government has undertaken and that has had, or has the potential to have, a significant impact. You are welcome to repeat an action that has already been listed.

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.

Communities that have conducted innovative initiatives may want to consider raising their profile through applications to <u>CEA's Climate and Energy Action Awards</u>, <u>UBCM Climate and Energy Action Award</u>, <u>FCM</u> <u>Sustainable Communities Awards</u> or through submissions to <u>FCM's National Measures Report</u>.

Community-Wide Action

The Kelowna Bikeshare pilot employs an innovative partnership model to deliver bikeshare service. Our pilot is the largest test of dockless bikeshare in Canada with up to 1500 bikes deployed through the summer. It will also be the first dockless bikeshare system in North America to deliver both a text-to-unlock feature as well as cash payments to provide more access options for residents.

The Pilot will also deliver vast datasets about the nature of short trips in Kelowna that can be used for land use and transportation planning going forward. In typical bikeshare systems, data collected consists of the start and end point of trips as well user id. For Kelowna Bikeshare Pilot, as a result of the chosen technology, we receive multiple points through a trip which delivers a more robust data set that will include the ability to assess route selection, acceleration and many other applications.

Our partnership with the bikeshare operator is also relatively for Canada where the municipality is not purchasing any infrastructure or paying an operating fee for bikeshare to set-up in our community. There will be tremendous potential for learning from our pilot. In the end if success our model can be replicated in other mid-sized cities to allow the delivery of low-cost, scalable transportation options while providing multiple community benefits.

For more information contact: Matt Worona, Active Transportation Coordinator, mworona@kelowna.ca

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 box below.

Mitigation

moderate income residents

Programs and Funding
• Continue supporting Cycling in Cities Research Program (SFU/UBC) – conducting research on
attitudes towards cycling in Kelowna.
• Deliver Bike to Work and School Week in the Central Okanagan with 60,000 dollars of sponsorship.
• FortisBC funded a Community Energy Specialist position for the City of Kelowna in 2018
• FortisBC provided \$20,000 of funding for the Kelowna's Community Climate Action Plan update
• Real Estate Foundation of BC provided funding for the development of the Capri-Landmark urban
centre plan.
• Partnership with FortisBC and Seniors Outreach Society to encourage partnership opportunities for
the Energy Conservation Awareness Program to promote energy and economic savings for low to

• Funding from FortisBC to offer educational workshop: "Building to Energy Step Code: Above Grade Walls and Glazing Assemblies"

2017 Carbon Neutral Reporting

Local governments are required to report on their progress in achieving their carbon neutral goal under the Climate Action Charter. Working with B.C. local governments, the joint Provincial-UBCM Green Communities Committee (GCC) has established a common approach to determining carbon neutrality for the purposes of the Climate Action Charter, including a Carbon Neutral Framework and supporting guidance for local governments on how to become carbon neutral.

Prior to completing this portion of the survey, please ensure that you are familiar with guidance available on the B.C. Climate Action Toolkit website, especially the <u>Becoming Carbon Neutral: A Guide for Local</u> <u>Governments in British Columbia.</u>

Please note: As a result of the BC Recycling Regulation, local governments are no longer required to account for greenhouse gas (GHG) emissions from vehicles, equipment and machinery required for the collection, transportation and diversion of packaging and printed paper, in their annual Climate Action Revenue Incentive Program (CARIP) reports.

Reporting Emissions

Did you measure your local government's corporate GHG emissions in 2017?	Yes/No
If your local government measured 2017 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:	
If your local government measured 2017 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 2017	tCO2e

Reporting Reductions and Offsets

To be carbon neutral, a local government must balance their TOTAL corporate GHG emissions generated in 2017 by one or a combination of the following actions:

- undertake GCC-supported Option 1 Project(s)
- undertake GCC-supported Option 2 Project(s)
- purchase carbon offsets from a credible offset provider

If applicable, please report the 2017 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 2017	tCO2e

If applicable, please report the names and 2017 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 2017	tCO2e

If applicable, please report the name of the offset provider, type of project and number of offsets purchased (in tonnes of carbon dioxide equivalent (tCO2e)) from an offset provider for the 2017 reporting year:

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

OFFSET PROVIDER NAME	OFFSETS
TOTAL D: OFFSETS PURCHASED FOR 2017	tCO2e

TOTAL REDUCTIONS AND OFFSETS FOR 2017 (Total B+C+D) = tCO2e

Corporate GHG Emissions Balance for 2017

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 2017 = (A – (B+C+D)) = tCO2e

If your Corporate GHG Emissions Balance is negative or zero, your local government is carbon neutral. CONGRATULATIONS!

If applicable, please record any emissions reductions you will be carrying over for future years and the source of the emissions reductions, including the year they were earned (E.g., Organics diversion, 2016 100 tCO2e).

SOURCE OF CARRY OVER EMISSION REDUCTIONS (and year earned)	REDUCTIONS
BALANCE OF REDUCTIONS ELIGIBLE FOR CARRY OVER TO NEXT YEAR	tCO2e

Carbon Neutral Reporting	
Does your local government have a climate reserve fund or something similar?	Yes/No

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 – Demonstrating Progress on Charter Commitments: for local governments who demonstrate progress on fulfilling one or more of their Charter commitments Level 2 – Measuring GHG Emissions: for local governments that achieve level 1, and who have measured their Corporate GHG Emissions for the reporting year and demonstrate that they are familiar with their community's energy and emissions inventory (i.e. CEEI) Level 3 – Accelerating Progress on Charter Commitments: for those local governments who have achieved level 1 and 2 and have demonstrated undertaking significant action (corporately or community wide) to reduce GHG emissions in the reporting year (i.e. through undertaking a GHG reduction project, purchasing offsets, establishing a reserve fund).

Level 4 - Achievement of Carbon Neutrality: for local governments who achieve carbon neutrality in the reporting year.

For purposes of Level 3 recognition, if applicable, please identify any new or ongoing corporate or community wide GHG reduction projects (other than an Option 1 or Option 2 project) undertaken by your local government that reflects a significant investment of time or financial resources and is intended to result in significant GHG reductions:

PROJECT NAME:	
N/A	

Based on your local government's 2017 CARIP Climate Action/Carbon Neutral Progress Survey, please check the GCC Climate Action Recognition Program level that best applies:

Level 1 – Demonstrating Progress on Charter Commitments	
Level 2 — Measuring GHG Emissions	
Level 3 – Accelerating Progress on Charter Commitments	
Level 4 - Achievement of Carbon Neutrality	
Not Sure	Х