

# Report to Council



**Date:** May 30, 2016  
**File:** 0710-70  
**To:** City Manager  
**From:** Tracy Guidi, Sustainability Coordinator and  
Brydan Tollefson, Energy Specialist  
**Subject:** Climate Action Revenue Incentive Program Reporting Requirements

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## **Recommendation:**

That Council receives, for information, the report from the Sustainability Coordinator and Energy Specialist, dated May 30, 2016, with respect to the Climate Action Revenue Incentive Program reporting requirements and corporate greenhouse gas (GHG) emissions data.

## **Purpose:**

To report on the progress made in 2015 and the plans for 2016 to meet the City's climate action goals in order to fulfill the public reporting requirement for the provincial Climate Action Revenue Incentive Program grant. Further, the report also presents the latest corporate GHG emissions data and highlights GHG emissions reduction projects.

## **Background:**

The Climate Action Revenue Incentive Program (CARIP) is a provincial conditional grant program that provides funding to BC Climate Action Charter signatories equivalent to 100 percent of the carbon taxes they pay directly. This funding supports local governments in their efforts to reduce greenhouse gas emissions and move forward on achieving their Charter goals. The City of Kelowna signed the Charter in 2007, committing to take action and develop strategies to achieve the following 3 goals:

1. being carbon neutral in corporate operations by 2012 (the Province allows for "making progress towards becoming carbon neutral");
2. measure and report on community GHG emissions profile; and
3. create complete, compact, energy efficient rural and urban communities.

As a Charter signatory, the City is eligible for the CARIP grant, provided a report on the City's plans and progress toward meeting climate action goals is made public by the June 1, 2016 deadline (see attached: *Climate Action Revenue Incentive Program (CARIP) Public Report for 2015*).

In addition to reporting publicly, Financial Services has completed a Carbon Tax Calculation Form and will submit to the province alongside the Public Report. The City is requesting a return of \$228,466, the total amount of carbon tax the City paid directly in 2015. The funds will be placed in the R011- Energy Management Rebate fund and will be used for capital or operational projects that help lower energy and greenhouse gas emissions.

Projects to be funded are reviewed and recommended by the City's Energy Management Committee. In 2015, the grant funded approximately \$10,000 for a boiler upgrade at Rutland Arena reducing natural gas usage by 996 GJoules and saving 50 tonnes of greenhouse gas emissions. In 2016, approximately \$100,000 will fund a heat recovery project, also at Rutland Arena, that will save 2,460 GJoules of Natural Gas and reduce greenhouse gas emissions by 122 tonnes. An additional \$27,000 will be used to fund a boiler upgrade at the City Yards Facility, estimated to save 890 GJoules per year and reduce GHG emissions by 44 tonnes per year. The CARIP grant also supports the Energy Specialist Position (done in partnership with Fortis BC).

### Corporate GHG Emissions

Corporately, the City tracks energy and emissions data from its corporate operations and this information is uploaded into the City's energy management systems. Sources for the corporations GHG emissions include:

- Civic buildings and facilities (i.e. H2O, Airport, Fire Halls, City Hall, RCMP, etc.)
- Outdoor lighting
- Water, Waste water and Solid Waste operations
- Vehicle fleet

Since 2007, the Corporations' total GHG emission have declined approximately five percent from 8,017 tonnes of CO<sub>2</sub> in 2007 to 7,600 tonnes CO<sub>2</sub> in 2015, as illustrated in Figure 1. It should be noted, that while this information is collected annually, the data is not corrected for temperature, so emissions can fluctuate significantly from year to year.

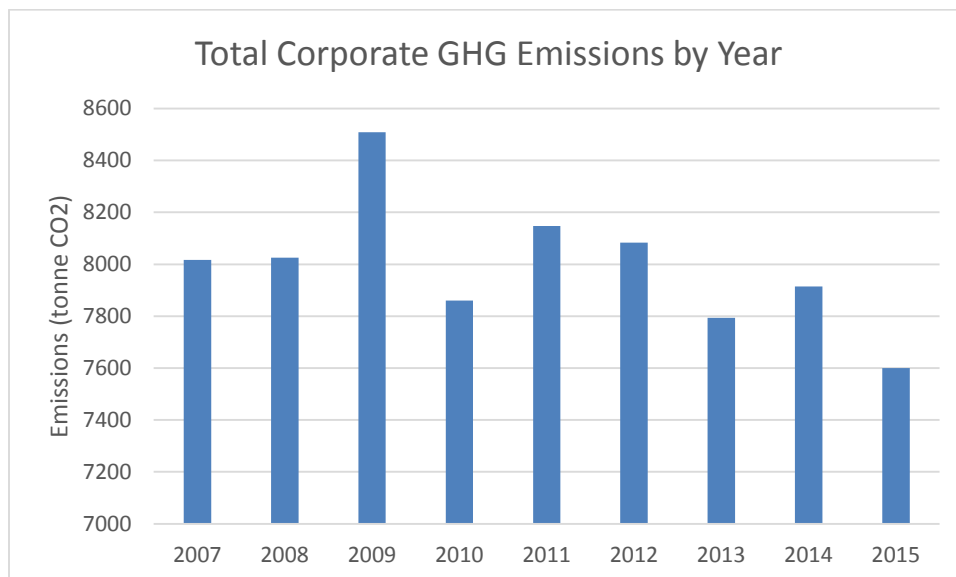


Figure 1: Corporate GHG Emissions by Year

The *Climate Action Revenue Incentive Program (CARIP) Public Report for 2015* reports Kelowna's corporate emissions at 6,085 tonne CO<sub>2</sub> equivalent. The number differs from above, as CARIP reporting requirements do not include emissions for airports, police or solid waste as these services are considered regional under the Climate Action Charter.

In 2015, a variety of projects and programs helped reduce corporate greenhouse gas emissions including:

- Upgraded the boilers at Rutland Arena saving 50 tonnes of greenhouse gas emissions and 996 GJoules of natural gas annually.
- FortisBC constructed a conversion facility at Glenmore Landfill to enable landfill gas to be upgraded to pipeline natural gas quality. FortisBC and the City are partnering in this project through a Landfill Gas Purchase Agreement where the City will provide landfill gas to the conversion facility for use by FortisBC.
- Constructed a staff composter at Parkinson Recreation Centre.
- Hired an energy specialist in partnership with FortisBC.
- Continued programs to reduce emissions from City fleet including up to 20% biodiesel used, expansion of the GPS program and education of 38 staff on Smart Driving.

### Community GHG Emissions

Community emissions are tracked by the provincial government, who have committed to producing reports every 2 years, with current data available up to 2010. Data for 2012 is expected to be released later this fall. Between 2007 and 2010 there was a 2.4 per cent reduction in community greenhouse gas emissions.

In 2015, the City participated in a variety of initiatives consistent with the Official Community Plan's 33% community greenhouse gas reduction target including:

- Constructed 2,340 m of sidewalk, 2,060 m of bike lanes, 900 m of cycle tracks, and 620 m of shared-use paths.
- Completed Regional Strategic Transportation Plan Phase I, current situation and gaps and successfully applied for Gas Tax funding for Phase II.
- Developed Phase 1 of the Transit Prioritization Framework, a framework that uses multi-criteria analysis to evaluate and allocate transit service where it is more effective.
- Began Clean Air and Safe Routes 4 Schools programs at two elementary schools to increase active transportation to and from school.
- Initiated the Urban Centres Roadmap project which will emphasize key principles, targets and priorities to transform Kelowna's five urban centres over the coming years.
- Planted 8,000 ponderosa pine seedlings in City's natural parks to assist with trees that have been lost due to forest health issues such as pine beetle and drought. Also planted 200 large caliper trees in City parks and boulevards.
- Sold 500 large caliper trees to the public through the NeighbourWoods program
- As a partner in the Mission Creek Restoration Initiative, began implementation of stage 1 of the Mission Creek Restoration Initiative to realign a 500 metre section of dike on the south side of the creek to enhance habitat for fish and wildlife.

- Initiated Solid Waste Management Plan Update (note: this is a Regional Initiative and the City of Kelowna is represented on the Advisory Committee).
- Used Routeware program, which monitors curbside cart contents using cameras and RFID tags. The Regional Waste Reduction Office sent letters to 2,380 City of Kelowna residents to provide specific, targeted waste reduction.
- Implemented temporary water use restrictions in response to provincial drought. This resulted in approximately 20 per cent reduction in water consumption in August and September, 2015.
- Reduced 75 tonnes of particulate matter, 174 tonnes of carbon monoxide and 17 tonnes of volatile organic compounds through several Air Quality initiatives (Agricultural Chipping program, Woodstove Exchange, etc.)

### Summary

In 2016, a multitude of projects are planned that will have an impact on corporate and community greenhouse gas emissions. These are summarized in the attached *Climate Action Revenue Incentive Program (CARIP) Public Report for 2015*.

The City is moving forward and providing tools to help its citizens adopt a low carbon lifestyle. Projects that reduce community GHG emissions have benefits across multiple sectors, making Kelowna a stronger, healthier, more resilient community. Further, the City can be seen as a role model, as corporate emissions start to decline despite increases in infrastructure and fleet to serve a growing community.

#### **Internal Circulation:**

Divisional Director, Community Planning and Real Estate  
 Divisional Director, Civic Operations  
 Divisional Director, Infrastructure  
 Manager, Financial Accounting  
 Manager, Regional Planning  
 Manager, Regional Programs  
 Manager, Parks Services  
 Manager, Grants and Partnerships  
 Manager, Utility Services  
 Manager, Transportation & Mobility  
 Manager, Building Services  
 Manager, Fleet Services  
 Manager, Suburban and Rural Planning  
 Supervisor, Urban Forestry  
 Planner Specialist  
 Parking Operations Coordinator  
 Environmental Coordinator  
 Environmental Technician II  
 Environmental Technician II  
 Traffic Technician  
 Communications Advisor

## **Existing Policy:**

OCP Policy 6.2.1 - GHG Reduction Target and Actions. The City of Kelowna will, in partnership with: senior governments; local residents and businesses; NGOs; external agencies; and utility providers, work towards reducing community greenhouse gas emissions by 33% (from 2007 levels) by 2020.

The City of Kelowna's efforts will be focused on creating more mixed-use neighbourhoods (as identified on the OCP Future Land Use map) and on ensuring that residents can conveniently and safely travel by bus or by foot, bicycle and other forms of active transportation to get to major community destinations while ensuring the efficient movement of goods and services.

The City will support the reduced use of fossil fuels in buildings by encouraging renewable energy supplies, district energy systems and energy efficient technologies in new and existing buildings. By working with senior government partners, regulated utilities and others, the City will lead through example and strive to meet the BC Climate Action Charter targets for the reduction of GHG emissions from municipal infrastructure.

The Multiple Bottom Line framework pursuant to Council Policy 352: Sustainable Municipal Infrastructure targets climate change initiatives (mitigation and adaptation) including the reduction of GHG emissions. The corporation's goal is to reduce GHG emissions 22% below 2007 levels by 2017.

## **Financial/Budgetary Considerations:**

To be eligible for the Climate Action Revenue Incentive Program (CARIP) grant, a copy of the *Climate Action Revenue Incentive Program (CARIP) Public Report for 2015* must be made public and submitted to the Province by June 1, 2016. Further, Financial Services will concurrently submit the 2015 CARIP Carbon Tax Calculation Form to the Province, requesting \$228,466 for the 2015 reporting year.

Note: local governments that do not submit a CARIP Public Report to the Province by the deadline of June 1, 2016 will not be eligible for their CARIP Grant.

The annual CARIP grant will be placed in the Carbon Energy reserve and will be used for projects that will reduce corporate energy and GHG emissions. This reserve will also fund operational expenses, like software licenses, for data collection and reporting. Projects for 2016 will be reviewed by the Energy Management Committee and prioritized based on their business case which will include consideration for environmental and economic benefit.

## **External Agency/Public Comments:**

As the Regional Waste Reduction Office provides waste reduction for the entire region, Cynthia Coates, Waste Reduction Facilitator, Regional District of Central Okanagan, provided a synopsis of waste reduction projects and programs for the CARIP report.

## **Communications Comments:**

A link to the Climate Action Revenue Incentive Program (CARIP) Public Report for 2015 will be posted on the City's Climate Action webpage at <http://www.kelowna.ca/CM/page2507.aspx>.

Considerations not applicable to this report:

Legal/Statutory Authority:

Legal/Statutory Procedural Requirements:

Personnel Implications:

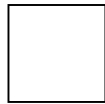
Alternate Recommendation:

Submitted by:

T. Guidi, Sustainability Coordinator

B. Tollefson, Energy Specialist

Approved for inclusion:



JM

cc:

Divisional Director, Community Planning and Real Estate

Divisional Director, Civic Operations

Divisional Director, Infrastructure

Manager, Financial Accounting

Manager, Regional Planning

Manager, Regional Programs

Manager, Parks Services

Manager, Grants and Partnerships

Manager, Utility Services

Manager, Transportation & Mobility

Manager, Building Services

Manager, Fleet Services

Manager, Suburban and Rural Planning

Supervisor, Urban Forestry

Planner Specialist

Parking Operations Coordinator

Environmental Coordinator

Environmental Technician II

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Traffic Technician

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