Report to Council



Date: May 29, 2017

File: 0710-70

To: City Manager

From: Tracy Guidi, Sustainability Coordinator and

Brydan Tollefson, Energy Program Manager

Subject: 2016 Climate Action Revenue Incentive Program Report

Recommendation:

THAT Council receives, for information, the report from the Sustainability Coordinator and Energy Program Manager, dated May 29, 2017, with respect to the 2016 Climate Action Revenue Incentive Program report.

Purpose:

To report on the progress made in 2016 and the plans for 2017 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 local governments who have signed the BC Climate Action Charter equivalent to 100 per cent of the carbon taxes they pay directly. This funding supports local governments in their efforts to reduce greenhouse gas (GHG) emissions and to 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 deadline (see attached: Climate Action Revenue Incentive Program (CARIP) Public Report for 2016).

In addition to reporting publicly, Financial Services has completed the required Carbon Tax Calculation Form and will submit it to the Province alongside the Public Report. The City is requesting a return of \$227,613.47, the total amount of carbon tax the City paid directly in 2015. The funds will be placed in the Ro11 – 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 2017, the fund will be used to support the LED street light retrofit project, which upon completion is estimated to save 3.5 Giga Watts of electricity each year.

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 emissions have declined approximately seven per cent from 8,317 tonnes of CO2 in 2007 to 7,748 tonnes CO2 in 2016 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.

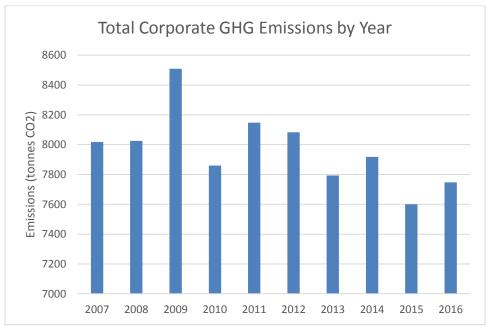


Figure 1: Corporate GHG Emissions by Year

The CARIP Public Report for 2016 reports Kelowna's corporate emissions at 6,022 tonnes CO2 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 2016, a variety of projects and programs helped reduce corporate greenhouse gas emissions including:

- Rutland arena heat recovery project 2460 GJ/year savings (122 tonnes of CO2e reduced);
- City Yards boiler upgrade 890 GJ/year savings (44 tonnes of GHG reduced);
- Capital News Center LED lighting upgrade 686,103 kWh/year savings;
- Waste Water Treatment Facility exterior lighting upgrade 72,165 kWh/year savings;
- Purchased 10 hybrid and 1 electric vehicle(s);
- Partnered with Ogo Car Share Co-op with city fleet vehicles;
- Successful trials of landfill gas collection by FortisBC;
- Planted 5000 ponderosa seedlings and 200 large caliper trees;
- Updated the tree inventory system 25,000 trees on public lands in the inventory; and
- 2,450 m of leachate recirculation pipe added at the landfill.

Community GHG Emissions

Community emissions are tracked by the provincial government, who have committed to producing reports every 2 years, with the current data available up to 2012. Data for 2012 shows a 3.5 per cent absolute reduction between 2007 and 2012 compared to the community growing by over nine per cent during the same period.

In 2016, the City participated in a variety of initiatives consistent with the Official Community Plan's 33 per cent community greenhouse gas reduction target that include:

- Completed the Urban Centres Roadmap to provide performance targets for future urban centre planning related to land use, sustainable transportation, parks and open space;
- Initiated the Imagine Kelowna community engagement process to develop a long term strategic community vision for Kelowna;
- Expanded the active transportation network by 1,350m of sidewalk, 4 km of shared paths, cycle tracks and bike lanes;
- Completed 16 bus stop upgrades;
- Partnered with FortisBC to install 2 EV charging stations;
- Completed a Pedestrian and Bicycle Master Plan;
- Initiated the Regional Strategic Transportation Plan;
- Updated the Solid Waste Management Plan;
- Partnered with FortisBC to inform businesses on energy efficiency programs and rebates;
- Sold 500 large trees through the Neighbourwoods program a residential planting initiative to encourage citizens to help grow and preserve Kelowna's urban forest;
- Sold 299 composting units to Kelowna residents;
- Hosted 4 reuse events (trunk sales and a Repair Café);
- Achieved sign-off on guiding principles for Value Planning of a Kelowna Integrated Water Supply Plan; and
- Through agricultural chipping program and woodstove exchanges, reduced GHG emissions by 51 tonnes.

¹ Population increase is approximate based on information provided in the 2006, 2011 and 2016 Canadian Census.

Summary

In 2017, a multitude of projects are planned that will have an impact on corporate and community greenhouse gas emissions. These are summarized in the attached CARIP Public Report for 2016.

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 Strategic Investment Divisional Director, Infrastructure Infrastructure Operations Department Manager Integrated Transportation Department Manager Infrastructure Engineering Manager Transit and Programs Manager Parks Services Manager Fleet Services Manager Utility Planning Manager Integrated Water Project Manager Payroll and Internal Controls Manager Landfill Supervisor Waste Water Treatment Supervisor Transportation Planner Communications Advisor Planner Specialist **Design Technician**

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 2016 must be made public and submitted to the Province by June 1, 2017. Further, Financial Services will concurrently submit the 2016 CARIP Carbon Tax Calculation Form to the Province, requesting \$227,613.47 for the 2016 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 eliqible 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 2017 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 2016 will be posted on the City's Climate Action webpage.

Alternate Recommendation:

Considerations not applicable to this report:
Legal/Statutory Authority:
Legal/Statutory Procedural Requirements:
Personnel Implications:

Submitted by:		
T. Guidi, Sustainability Coordinator		Brydan Tollefson, Energy Program Manager
Approved for inclusion:	DNB	

Attach: Climate Action Revenue Incentive Program (CARIP) Public Report for 2016