Report to Council



Date:	May 28, 2018
File:	0710-70
То:	City Manager
From:	Tracy Guidi, Sustainability Coordinator and Brydan Tollefson, Energy Program Manager
Subject:	2017 Climate Action Revenue Incentive Program

Recommendation:

THAT Council receives, for information, the report from the Sustainability Coordinator and Energy Program Manager, dated May 28, 2018, with respect to the 2017 Climate Action Revenue Incentive Program public report;

AND THAT the 2018 Financial Plan be amended to increase both the revenue and the associated contribution to the Energy Management Rebate reserve budget as a result of the Climate Action Revenue Incentive Program grant.

Purpose:

To report on the climate progress made in 2017 and the plans for 2018 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 2017*).

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 \$285,408.79; the total amount of carbon tax the City paid directly in 2017. 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 2018, the fund will be used to support the LED street light retrofit project.

CARIP Corporate GHG Emissions Reporting

The City tracks energy and emissions data from its corporate operations and this information is uploaded into the City's energy management system. Sources for the CARIP GHG emissions reporting include:

- Civic buildings and facilities (i.e. H2O, Fire Halls, City Hall, etc.)
- Outdoor lighting
- Water and Waste Water Treatment
- Vehicle fleet

The CARIP Public Report for 2017 reports Kelowna's corporate CARIP emissions at 6,526 tonnes CO2 equivalent. This is an increase in emissions compared to last year, a result of an unusually cold winter. This caused an increase to natural gas usage for heating civic buildings and facilities as well as an increase in fuel usage for snow removal.

In 2017, a variety of projects and programs reducing corporate greenhouse gas emissions were implemented including:

- Completion of the Kelowna Police Services Building, designed to be 30% more energy efficient than the minimum requirement (ASHRAE 90.1 2010) with an estimated savings of 156,604 kWh/year and 4,216 GJ/year.
- Upgrade to the air compressor at the Wastewater Treatment Facility to save 186,150 kWh/year;
- A draft of the Corporate Energy and GHG Emissions Plan update;
- FortisBC commissioned the landfill gas system in March, 2017 which operated on and off for six months, however due to operational issues, shut down in late December, 2017. It is anticipated the system will be operational again by mid-2018;
- Planted 5,000 native ponderosa pine seedlings in Kelowna's natural parks and 200 large caliper trees on City property;
- Added 3 hybrid vehicles and 2 electric assist trikes to the City's fleet; and
- Completion of the planning and design phase of the LED street light project, which is now currently underway, with approximately 4,000 LED lights installed.

Community GHG Emissions

Community emissions are tracked by the provincial government who are 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 despite the community growing over nine per cent¹ over the same period. Data gathered as part of the update to the Community Climate Action Plan indicates that emissions are rising, as gasoline and diesel sales in Kelowna have been on the rise over the past few years.

While several significant strategies are under development that will reduce emissions over the long term, the majority of actions taken in 2017 to reduce community greenhouse gas emissions were related to transportation. Efforts in this sector are necessary as 55% of Kelowna's community emissions result from vehicles.

Actions to reduce emissions in 2017 included:

- Initiated work on a variety of broad planning actions including the Community Climate Action Plan, Kelowna Transportation Master Plan, the Healthy Housing Strategy and the Capri-Landmark Urban Centre Plan;
- Expanded the active transportation network by 1.48 km of sidewalk, 0.7 km of cycle track / shared paths and 3 km of bike lanes to buffered bike lanes;
- Improved transit service through increasing Saturday service on two major routes, installing 6 new transit shelters, 21 benches and doing accessibility improvements at 10 bus stops.
- Registered 1,100 residents region-wide for carpool.ca;
- Expanded partnership with OGO Car Share to include additional City fleet for a total of 8 fleet vehicles in the car share;
- Developed the first stationless or dockless bike share pilot to be deployed in a city in Canada (launch Spring 2018);
- Received a grant from FortisBC to hire a Community Energy Specialist to consider opportunities to phase in the provincial Energy Step Code, develop a community energy retrofit strategy and well as finding ways to encourage residents and businesses to save energy;
- Permanently protected 101,660m² of riparian areas via a no disturb covenant or park dedication through the City's development process. An additional 14,748m² of riparian area restored via landscaping through development process;
- Acquired 20.4 ha of parkland;
- Sold 500 trees to residents for use on private property as part of the NeighbourWoods campaign;
- Waste reduction campaigns to reduce solid waste and encourage reuse including composter sale (457 units sold), 2 repair cafes, 2 trunk sales and a pilot bulky item collection program;
- Partnered with Okanagan Basin Water Board to sell rain barrels during the composter sale; and
- Through air quality initiatives (agricultural chipping program, woodstove exchange program, etc.) avoided 18 tonnes of CO₂ equivalent from entering the atmosphere.

New to this year's report is the inclusion of climate adaptation actions; those actions that prepare the community for the impacts of climate change. 2018 includes a variety of actions that begin to address climate change impacts including updates to standards in Bylaw 7900: Subdivision and Servicing Bylaw to address storms and stormwater, and stream capacity analysis to attenuate higher flows. The City is

¹ City of Kelowna, Draft Community Climate Action Plan, 2018.

also working with Okanagan Basin Water Board on flood mapping and potential impacts to Okanagan Lake water quality as a result of changing climate parameters.

Summary

In 2018, 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. The City is moving forward and providing tools to help its citizens adopt a low carbon lifestyle. Projects that reduce corporate and community GHG emissions have benefits across multiple sectors, making Kelowna a stronger, healthier, more resilient community.

Internal Circulation:

Divisional Director, Community Planning and Strategic Investment **Divisional Director, Infrastructure** Infrastructure Operations Department Manager Integrated Transportation Department Manager **Community Planning Department Manager** Infrastructure Engineering Manager Utility Planning Manager Parks Services Manager Utility Planning Manager Accounting Operations Manager **Grants & Special Projects Manager** Fleet Services Manager Solid Waste Supervisor **Transportation Engineer Planning & Development Environmental Coordinator 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 2017 must be made public and submitted to the Province by June 1, 2018. Further, Financial Services will concurrently submit the 2017 CARIP Carbon Tax Calculation Form to the Province, requesting \$285,408.79 for the 2017 reporting year.

Note: local governments that do not submit a CARIP Public Report to the Province by the deadline of June 1, 2018 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 2018 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.

Submitted by:

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Approved for inclusion:

Danielle Noble-Brandt, Policy & Planning Dept. Manager