

Report to Council



Date: May 27, 2019
File: 0710-70
To: City Manager
From: Tracy Guidi, Sustainability Coordinator and
Brydan Tollefson, Energy Program Manager
Subject: 2018 Climate Action Revenue Incentive Program Report

Recommendation:

THAT Council receives, for information, the report from the Sustainability Coordinator and Energy Program Manager, dated May 27, 2019, with respect to the 2018 Climate Action Revenue Incentive Program Public Report;

AND THAT the 2019 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 2018 and the plans for 2019 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 Intergovernmental Panel on Climate Change's (IPCC) special report released last fall, 'Global Warming of 1.5°C', stresses the urgency for rapid, far-reaching and unprecedented changes in all aspects of society by 2030 to limit global warming to 1.5°C, and avoiding catastrophic impacts associated with warming beyond that.¹ To compound matters, the recent Canada's Changing Climate report shows that Canada is experiencing warming at twice the rate of the rest of the world which will increase the severity of heatwaves and drought.²

¹ IPCC, October 8, 2018. IPCC Press Release: Summary for Policymakers of IPCC Special Report on Global Warming of 1.5°C approved by governments. https://www.ipcc.ch/site/assets/uploads/2018/11/pr_181008_P48_spm_en.pdf

² Environment and Climate Change Canada, April 2019. Canada's Changing Climate Report.

https://www.nrcan.gc.ca/sites/www.nrcan.gc.ca/files/energy/Climate-change/pdf/CCCR_FULLREPORT-EN-FINAL.pdf

As part of the provincial Climate Action Revenue Incentive Program (CARIP) reporting requirements, local governments must report on what has been achieved in the previous year and what is being planned to mitigate climate change (i.e. reduce greenhouse gas (GHG) emissions) and to adapt to climate change (i.e. prepare for changes in climate). 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, address climate impacts, and move forward on achieving their Charter goals.³ The City of Kelowna signed the Charter in 2007, committing to take action and develop strategies to achieve the following three goals:

1. Being carbon neutral in corporate operations (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 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 2018*).

In addition to reporting publicly, Financial Services completed the required Carbon Tax Calculation Form and it will be submitted alongside the Public Report. The City is requesting a return of \$248,760.21; the total amount of carbon tax the City paid directly in 2018. The funds will be placed in the Ro11 – Energy Management Rebate Reserve and will be used for 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 was primarily used to support the LED street light retrofit program.

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 Wastewater Treatment
- Vehicle Fleet

The CARIP Public Report for 2018 reports Kelowna’s corporate CARIP emissions at 6,021 tonnes CO₂ equivalent. CARIP emissions declined from last year’s high (which was due in part to an unusually cold, snowy winter), and returned to similar emission levels seen since 2013.

In 2018, a variety of projects and programs reducing corporate GHG emissions were implemented including:

- Council endorsed an updated Corporate Energy and GHG Emissions Plan to reduce GHG emissions 12 per cent below 2007 levels by 2022;

³ Province of BC, 2019. Climate Action Revenue Incentive Program (CARIP) Program Guide for 2018 Claims. https://www2.gov.bc.ca/assets/gov/british-columbians-our-governments/local-governments/planning-land-use/carip_program_guide_2018_claims.pdf

- Completed the LED street light replacement project which converted 10,600 street lights, result in 4,500 GWh/year of reduced electricity use;
- Achieved Level 1 certification of the Airport Carbon Accreditation Program
- Performed energy audits of the Wastewater Treatment Facility and the Water Treatment Facility that identified energy and GHG reduction measures for the next three to five years.
- Planted 300 street trees;
- Purchased 2 battery electric cars and one electric utility vehicle; and
- Revamped the vehicle oil change schedules to reduce oil use.

Community GHG Emissions

While several significant strategies are under development that will reduce emissions over the long term, the majority of actions taken in 2018 to reduce community emissions were related to transportation, our communities largest source of GHGs.

Actions to reduce emissions in 2018 included:

- Council endorsed Our Kelowna as We Take Action: Kelowna's Community Climate Action Plan and Healthy Housing Strategy;
- Expanded the active transportation network by 5.7 km of buffered bike lanes, 12.5 km of multi-use path, 0.8 km of sidewalk and 3.0 km of bike lanes;
- Piloted a dockless bikeshare in partnership with a private company which saw 33,000 trips in the first three months;
- Implemented 'NextRide' automatic vehicle locator (AVL) system for Transit system wide with a real-time mobile schedule app in partnership with BC Transit;
- Continued work on the Official Community Plan, Transportation Master Plan, Regional Transportation Plan, Capri-Landmark Urban Centre Plan and Energy Step Code;
- Fully commissioned the FortisBC Biogas plant, diverting 48 per cent of the landfill gas captured to beneficial re-use;
- Acquired or purchased approximately 15.6 ha for park and natural greenspace protection;
- Landscaped 10,946 m² to restore and enhance riparian areas through the City's development process;
- Sold 500 trees through Neighbourwoods;
- Sold 300 composters and hosted two repair cafes and two trunk sales as ways to divert waste from the landfill; and
- Introduced a new Qualified Water Efficient Landscape (QWEL) certification program that trains professionals on efficient irrigation practices and climate appropriate landscape materials;

2018 also had a number of projects that address climate change impacts including:

- Completed Mill Creek Flood Mitigation to increase channel capacity for flood flows;
- Updated the Community Wildfire Protection Plan; and
- Completed risk and vulnerability assessments of waterfront parks.

Summary

In 2019, a multitude of projects are planned that will have an impact on corporate and community GHG emissions. Projects are also planned to prepare for and adapt to a changing climate. These are summarized in the attached *Climate Action Revenue Incentive Program (CARIP) Public Report for 2018*. Projects include:

- Research and provide recommendations for effective adaptation policies for the Official Community Plan Update;
- Develop a community energy retrofit strategy;
- Install energy efficiency upgrades at the Waste Water Treatment Facility as recommended in the 2018 energy audit;
- Expand the active transportation network with 1.6 km of new sidewalk, 6.0 km of bike lanes, 11.7 km of buffered bike lanes and 2.6 km of cycle tracks;
- Invest in 1,800 new transit service hours;
- Initiate the Mill Creek Major Off-Stream Storage and Channel Conveyance project to reduce storm peak flow; and
- Create a Southeast Landscape Level Wildfire Fuel Break.

The best available science stresses the urgency to cut global emissions in half over the next 11 years in order to avoid climate change's most damaging impacts.⁴ It is people that have to do the heavy lifting to take action and demonstrate commitment to increase energy efficiency and curb GHG emissions. The actions taken in 2018 and the planned actions for 2019 as outlined in the *Climate Action Revenue Incentive Program (CARIP) Public Report for 2018* help make incremental progress on our climate action goals.

Existing Policy:

OCP Objective: Improve energy efficiency and reduce community greenhouse gas emissions

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 absolute community greenhouse gas emissions by:

- 4% below 2007 levels by 2023;
- 25% below 2007 levels by 2033;
- 80% below 2007 levels by 2050.

The City of Kelowna's efforts will be focused on creating a dynamic community that embraces sustainable transportation options, energy efficient buildings and vibrant urban centres.

City will support the reduced use of fossil fuels in buildings by encouraging renewable energy supplies, and energy efficient technologies in new and existing buildings.

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.

OCP Policy 7.1.3 Greenhouse Gas Reduction Criteria. Incorporate greenhouse gas reduction criteria in infrastructure projects for evaluation / modeling and procurement.

⁴ IPCC, October 8, 2018. Intergovernmental Panel on Climate Change Press Release: Summary for Policy Makers of IPCC Special Report on Global Warming of 1.5°C approved by governments.
https://www.ipcc.ch/site/assets/uploads/2018/11/pr_181008_P48_spm_en.pdf

OCP Policy 7.19.2 Energy Reduction Priorities. In working to reduce greenhouse gas emissions, place a primary focus on reducing demand, then prioritize further efforts in the following sequence: re-using waste heat, using renewable heat, and then finally on using renewable energy.

Financial/Budgetary Considerations:

To be eligible for the CARIP grant, a copy of the CARIP Public Report for 2018 must be made public and submitted to the Province by June 1, 2019. Further, the 2018 CARIP Carbon Tax Calculation Form will be submitted to the Province, requesting \$248,760.21. (Note: local governments that do not complete, submit and make public their 2018 CARIP Climate Action Public Report by the deadline of June 1, 2019, may not be eligible for the grant.⁵)

The annual CARIP grant will be placed in the Energy Management Rebate Reserve and will be used for projects that will reduce corporate energy and GHG emissions. Projects for 2019 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, staff from their offices, provided a synopsis of waste reduction projects and programs for the CARIP report.

Communications Comments:

A link to the CARIP Public Report for 2018 will be posted on the City's Climate Action webpage.

Submitted by:

T. Guidi, Sustainability Coordinator

B. Tollefson, Energy Program Manager

Approved for inclusion:



Danielle Noble-Brandt, Policy and Planning Dept. Manager

cc:

Divisional Director, Community Planning & Development

Divisional Director, Financial Services

Infrastructure Operations Department Manager

Building Services Manager

Transit and Programs Manager

Utility Planning Manager

Grants & Special Projects Manager

⁵ Province of BC, 2019. Climate Action Revenue Incentive Program (CARIP) Program Guide for 2018 Claims. https://www2.gov.bc.ca/assets/gov/british-columbians-our-governments/local-governments/planning-land-use/carip_program_guide_2018_claims.pdf

Parking Services Manager
Fleet Services Manager
Wastewater Manager
Water Quality & Customer Care Supervisor
Urban Forestry Supervisor
Solid Waste Supervisor
Financial Analyst
OCP Project Planner
Park and Landscape Planner
Transportation Engineer Planning & Development
Planner Specialist
Environmental Coordinator