

Report to Council



Date: June 1, 2020
To: Council
From: City Manager
Subject: Climate Action Revenue Incentive Program Public Report for 2019
Department: Policy & Planning and Building Services

Recommendation:

THAT Council receives, for information, the report from Policy & Planning and Building Services, dated June 1, 2020, with respect to the Climate Action Revenue Incentive Program Public Report;

AND THAT the 2020 Financial Plan be amended to increase both the revenue and the associated contribution to the Energy Management Rebate Reserve budget by \$354,090 as a result of the Climate Action Revenue Incentive Program grant.

Purpose:

To report on climate progress made in 2019 to meet the City's climate action goal to fulfill the public reporting requirement for the provincial Climate Action Revenue Incentive Program grant.

Background:

As part of the provincial Climate Action Revenue Incentive Program (CARIP) reporting requirements, local governments must report on what has been achieved to mitigate climate change (i.e. reduce greenhouse gas emissions (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.¹ 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);

¹ Province of BC, 2020. Climate Action Revenue Incentive Program.

<https://www2.gov.bc.ca/gov/content/governments/local-governments/grants-transfers/climate-action-revenue-incentive-program-carip>

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 2019*).

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 \$354,090; the total amount of carbon tax the City paid directly in 2019. 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 and in the past have funded endeavors like the LED streetlight retrofit program.

Reporting requirements have changed from previous years. This year reporting focuses only on local government initiatives that reduce GHG emissions from the past year and no longer includes plans for the upcoming year.

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 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

Corporate emissions for 2019 are 7,931 tonnes CO₂ equivalent. On the surface this number appears to be a significant increase from last year, however, recent changes in utilities billing revealed that some of the City's electricity and natural gas accounts were not included in the usage reports provided by Fortis, resulting in corporate emissions being under reported. Over the coming months staff will reconcile the historical data so that a historical trend can be established to see how the City is progressing on its goal to reduce corporate GHG emissions by 12 per cent below 2007 levels by 2022 as identified in the *Corporate Energy and GHG Emissions Plan (2018)*.

2019 Corporate GHG Emission Reduction Highlights

A variety of actions were implemented in 2019 to reduce corporate GHG emissions from buildings, fleet, solid waste, water, and wastewater. Highlights include:

- Upgraded to LED lighting for the ice sheets at Rutland Arena, Memorial Arena and Prospera Place. Further, some LED upgrades were done in all facilities as part of the end of life replacement program.
- Replaced and optimized pump systems at Wastewater Treatment Facility.
- Upgraded City Hall boilers from low efficiency to high efficiency.
- Studied the energy efficiency at H₂O.
- Updated the 10-Year Capital Plan which sets the direction for infrastructure investment and includes infrastructure to renew existing assets and to accommodate growth.

- Purchased 3 electric fleet vehicles and initiated an internal staff Electric Vehicle Committee (representing five different departments) that will update Council and Senior Leadership on EV policy and initiatives (both corporate and community).
- Reduced irrigation water use in city parks by approximately 38 million liters annually through a combination of initiatives including: technical adjustments, new installation guidelines, new operational recommendations, and upgrades to the water flow sensing cables and systems to better detect leaks for irrigation.

2019 Community GHG Emission Reduction Highlights

Kelowna's Community Climate Action Plan identifies actions that the City can lead to help the community reduce community GHG emissions by four per cent compared to 2007 levels by 2023. While emissions vary from year to year, it is concerning that the emissions increased 5.9 per cent in 2017 when compared to the 2007 baseline (the most recent year that data is available). This makes the City's actions even more essential to help support the community to transition to lower emissions. Local governments can influence emission reductions through land-use planning, transportation options, building requirements and waste services. Highlights of some of the actions implemented in 2019 that will help reduce community emissions include:

- Council endorsed the Growth Strategy for the 2040 OCP Update which will support the creation of compact, complete and energy efficient communities.
- Council endorsed the implementation of the Energy Step Code for Part 9 residential buildings in the Spring of 2019 with the requirement of Step 1 commencing December 1, 2019. Step 3 will be required June 1, 2021.
- Partnered with FortisBC and Okanagan Regional Library to offer the *See the Heat* thermal imaging camera program for residents to learn about the energy efficiency of their home.
- Completed LiDAR analysis to show that community wide Kelowna's tree canopy coverage was 23%, surpassing the 20% target established in the 2030 OCP. More work needs to be done however, as the study showed downtown and urban areas were only at 12.4%.
- Expanded the active transportation network by 2.7 km through protected bike lane projects, including those on Sutherland and Ethel Avenues.
- Installed four Level 3 DC fast chargers (two at Kelowna International Airport, one at the Okanagan Heritage Museum and one at Rutland Centennial Park) in partnership with FortisBC and Natural Resources Canada (NRCan).
- Implemented an irrigation controller and rain sensor rebate program to encourage water conservation by the public.
- Negotiated 6,762 m² of riparian restoration through the development process.
- Hosted several reuse and reduce events including two trunk sales, two repair café's and a backyard composter subsidy program.

2019 Actions to Prepare and Adapt to Climate Change

A joint report commissioned and released earlier this year by the regional districts in the Okanagan, *Climate Projections for the Okanagan Region*, models the changes that the Okanagan climate will experience over the coming decades. Significant changes are projected with hotter, drier summers; warmer winters; increased precipitation in all seasons except summer; and a shifting of the seasons as

spring-like conditions will start earlier in the year and fall-like conditions will last later in the year.² While the City does not yet have a Climate Adaptation Plan to provide comprehensive direction to prepare for changes in climate, several departments have worked on a number of projects over the past year that will help prepare and make the community more resilient including:

- Amended Subdivision, Development and Servicing Bylaw 7900 to incorporate climate change into the standard. Stormwater quantities now include a rainfall intensity increase of 15% in the calculations.
- Implemented fuel modification and wildfire management at Knox Mountain Park (this is an ongoing multi-year project).
- Removed 600 trees to increase Mill Creek channel capacity between Lake Avenue and Sexsmith Road. 900 replacement trees, that were more appropriate species for the area, were planted in better locations to contribute to the riparian function and GHG emissions reduction.
- Initiated Area Based Water Management Plan in conjunction with local, regional, and provincial agencies to take a holistic view of water supply and connectivity in the Okanagan Valley. The Plan addresses water, source water protection, wastewater, stormwater, natural asset management, and environmental flow needs.

Conclusion:

The best available science stresses the urgency to cut global emissions in half over the next decade to avoid climate change's most damaging impacts.³ In order to make significant progress on the targets, it is imperative that everyone - residents, businesses, industry, and senior levels of government – do their part. At the community level, local governments have the front-line responsibility to impact climate change and adaptation. They are on the front lines of flooding, wildfires, and storms; responsible for infrastructure; provide first responder services; educate and prepare residents; and influence more than half of GHG emissions emitted.⁴ The benefits of acting on climate change are, however, far reaching and extend beyond reducing emissions. Improved health and air quality, greater community resilience, economic development, and reduced costs⁵ are just a few of positive community impacts climate solutions can have.

Internal Circulation:

Divisional Director, Planning & Development Services

Divisional Director, Financial Services

Accounting Operations Manager

Building Services Manager

Financial Planning Manager

² RDCO, RDNO, RDOS, Pinna Sustainability, February 2020. Climate Projections for the Okanagan Region.

https://www.regionaldistrict.com/media/279459/OK_Climate_Projections_Report_Final.pdf

³ 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

⁴ Don Lidstone, QC and Ian Moore, September 25, 2019. "Declaring a Climate Emergency – Legal Issues" for Planning Institute of BC Climate Emergency Webinar.

⁵ City of Vancouver, April 16, 2019. Climate Emergency Response Administrative Report.

<https://council.vancouver.ca/20190424/documents/cfsc1.pdf>

Fleet Services Manager
Grants & Special Projects Manager
Infrastructure Engineering Manager
Infrastructure Operations Department Manager
Landfill & Compost Operations Manager
Strategic Transportation Planning Manager
Utility Planning Manager
Utility Services Manager
Budget Supervisor
Urban Forestry Supervisor
Water Quality & Customer Care Supervisor
Financial Analyst
Park and Landscape Planner
Environmental Coordinator

Considerations applicable to this report:

Existing Policy:

OCP Objective 6.2: 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.

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 2019 (attached) must be made public and submitted to the Province by June 1, 2019. Further, the 2019 CARIP Carbon Tax Calculation Form will be submitted to the Province, requesting \$354,090. (Note: local governments that do not complete, submit and make public their 2019 CARIP Climate Action Public Report by the deadline of June 1, 2020, 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 2020 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:

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B. Tollefson, Energy Program Manager

Approved for inclusion:



Danielle Noble-Brandt, Policy & Planning Dept. Manager