

Report to Council



Date: November 25, 2019
To: Council
From: City Manager
Subject: Community Climate Action Plan Progress Report
Department: Policy & Planning

Recommendation:

THAT Council receives, for information, the report from Policy & Planning dated November 25, 2019, with respect to progress on the Community Climate Action Plan.

Purpose:

To provide Council with an update on the progress of the actions identified in the Community Climate Action Plan as well as an update on the emission reductions achieved since 2007.

Background:

Last year, Council endorsed Our Kelowna as We Take Action: Kelowna's Community Climate Action Plan (CCAP). The CCAP focuses on actions the City can lead to help the community reduce its GHG footprint as local governments can influence emission reductions through land use planning, transportation options, building requirements and waste services. Over the short-term, the CCAP defines a path to slow emissions growth – to reduce emissions by four per cent below 2007 levels by 2023. The CCAP also identifies a mid-target of 25% below 2007 levels by 2033 and a long-term target of 80% below 2007 levels by 2050. Beyond 2023, however, more work will need to be done to identify actions to achieve the 2033 and 2050 target. 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. The City's actions are essential to support a transition to lower emissions, but it will ultimately be a shift in the community's behavior and regulation at the senior government level that is necessary to achieve the targets.

In the Plan a commitment was made to report on progress biannually, however, due to the heightened profile of climate change, staff felt it was imperative to provide Council an earlier update. The Plan's actions are divided into two separate categories. The first are actions that can be undertaken with existing staff and financial resources and the second category are actions that require additional resources to achieve. In the year since the CCAP was endorsed by Council, significant progress has been made on the Plan's actions as outlined in the table below and Attachment A. Of the 47 actions,

nearly sixty-eight per cent of the actions are in progress, ongoing or complete. This does not include the three ambitious actions that were recommended in the Plan which have not been started: to invest more in alternative transportation; to investigate transportation pricing strategies and to adopt all levels of Energy Step Code early. While the number of actions that are under way is an accomplishment, many of the Plan's actions, such as community and transportation planning, will be slow to realize GHG reductions in the short term, but these actions are critical for success in creating a low carbon community.

Table 1. Status summary of Community Climate Action Plan Progress

	Actions with existing resources				Actions with additional resources			
	Ongoing / Complete	In progress	Not started	Total actions	Ongoing / Complete	In progress	Not started	Total actions
Ongoing	11	2	0	13	0	0	2	2
Years 0 - 2 (2018 – 2020)	5	9	5	19	0	3	2	5
Years 3 - 5 (2021 – 2023)	0	0	2	2	0	2	4	6
Total	16	11	7	34	0	5	8	13

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Some of the Plan's implementation successes have included:

- Energy Step Code Implementation Strategy endorsed for Part 9 buildings (Step 1 comes into effect December 1, 2019);
- Ongoing implementation of the capital projects and policy related actions from the *Pedestrian and Bicycle Master Plan*;
- Ongoing coordination of transportation and land use planning through the development of the 2040 Official Community Plan and Transportation Master Plan;
- Received FortisBC grant for a 2-year Community Energy Specialist position that has initiated work on several of the CCAP's actions including a Community Retrofit Strategy and an Electric Vehicle Strategy; and
- Received grant funding for several climate mitigation and adaptation projects including a federal/provincial/FortisBC grant to expand the electric vehicle charging network with four DC Fast Charge stations; a FortisBC grant to support a *See the Heat* thermal imaging program for residents; and a federal Disaster Mitigation Adaptation Fund grant for a Mill Creek Off-Stream Storage Projects and Channel Conveyance grant.

The Community Climate Action Plan includes seven indicators to monitor success. Only two of the seven indicators are available currently:

- *Number of actions initiated or completed:*
Despite only completing the first year of the Plan, 68 per cent of the Plan's actions have been initiated or completed exceeding the 60 per cent target established for the end of year 2.
- *Community greenhouse gas emission reduction:* At the time the CCAP was authored, emissions data was only available until 2012. The Province has recently released community emissions data up to 2017 for buildings and waste. This, supplemented with transportation emissions estimated from annual fuel sales, provides an estimate on how Kelowna is progressing on reducing community GHG emissions as shown in the Table 2.

Variation in emissions are noted from year to year, which can in part be due to weather factors (e.g. cold years will use more natural gas or electricity for heating). The concerning trend, however, is the community is losing ground and has not been able to achieve the same degree of absolute emission reduction that was achieved in 2010. Progression on absolute emission reductions is paramount to limiting the extent and impacts of climate change. Even when examining per capita emissions, the community appears to have stagnated and is not progressing in achieving individual reductions (except for 2016). Looking forward, while 2018 emissions are not yet available (they are expected in the fall 2020), it is encouraging to note that fuel sales in the community have declined by approximately three per cent over 2017.

Table 2: Kelowna's annual community greenhouse gas emissions

Year	On Road Transportation Emissions (tonnes CO _{2e})	Buildings Emissions (tonnes CO _{2e})	Waste Emissions (tonnes CO _{2e})	Total Emissions (tonnes CO _{2e})	% change compared to 2007	% per capita change from 2007
2007	376,088	255,609	49,270	680,967		
2010	357,167	242,285	49,233	648,685	-4.7%	-9.8%
2012	354,303	251,813	50,510	656,626	-3.6%	-11.9%
2014	366,059	257,939	60,164	684,162	0.5%	-10.2%
2016	370,199	241,514	49,995	661,708	-2.8%	-16.8%
2017	385,102	287,143	48,792	721,037	5.9%	-10.9%

Discussion:

Last October, the Intergovernmental Panel on Climate Change (IPCC) published a special report warning of the urgency to limit global warming to 1.5°C by 2030 to reduce the risks of extreme weather, rising sea levels and other impacts to millions of people. This will require “rapid and far-reaching” transitions in land, energy, industry, buildings, transport, and cities to reduce global net human-caused emissions of carbon dioxide (CO₂) by about 45 percent from 2010 levels by 2030, reaching ‘net zero’

around 2050.¹ In addition, earlier this month, more than 11,000 scientist signatories from around the world, declared clearly and unequivocally that the planet is facing a climate emergency, linked closely to excessive consumption of the world's most affluent countries.²

In response to the science, there has been a recent surge of concern for our world's climate: youth are striking to encourage political action; grassroots citizen movements are demanding change; and some governments are declaring climate emergencies.³ A group of youth are even taking the federal government to court claiming the government's failure to take actions consistent with the scientific evidence violates their rights to life, liberty and security under the Canadian Charter of Rights and Freedoms.⁴

Despite the dedication to implementing the CCAP's actions, progress on the City's community greenhouse gas reduction target is questionable due to the erratic year over year changes in emissions. Further, the CCAP's targets are far below what the IPCC recommends to limit global warming to 1.5°C. To align with IPCC targets, the City would have to vastly accelerate its targets, nearly doubling the CCAP's mid-term target from 25 per cent below 2007 levels by 2033 to reducing GHG's by 48% below 2007 levels by 2030.

Understanding the resource implications of developing a more ambitious target is the first step to understand what and how much action is needed to align with the global IPCC targets. This would involve determining the financial and staff resources required to update the CCAP and would include conversations with consultants to understand the extent of modelling, action identification and public engagement required in order to update the short, mid and long-term targets.

Conclusion:

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.⁵ To effectively fight climate change, carbon pollution needs to be rapidly reduced, reaching net zero by mid-century. 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 costs⁶ are just a few of positive community impacts climate solutions can have.

¹ Intergovernmental Panel on Climate Change (IPCC), October 8, 2018. Summary for Policymakers of IPCC Special Report on Global Warming of 1.5°C approved by governments.
<https://www.ipcc.ch/2018/10/08/summary-for-policymakers-of-ipcc-special-report-on-global-warming-of-1-5c-approved-by-governments/>

² BioScience, November 5, 2019. World Scientists' Warning of a Climate Emergency.
<https://academic.oup.com/bioscience/advance-article/doi/10.1093/biosci/bizo88/5610806#165912541>

³ BioScience, November 5, 2019. World Scientists' Warning of a Climate Emergency.
<https://academic.oup.com/bioscience/advance-article/doi/10.1093/biosci/bizo88/5610806#165912541>

⁴ Times Colonist, November 3, 2019. Youth-group lawsuit draws attention to climate crisis.
<https://www.timescolonist.com/opinion/op-ed/david-suzuki-youth-group-lawsuit-draws-attention-to-climate-crisis-1.23995766>

⁵ Don Lidstone, QC and Ian Moore, September 25, 2019. "Declaring a Climate Emergency – Legal Issues" for Planning Institute of BC Climate Emergency Webinar.

⁶ City of Vancouver, April 16, 2019. Climate Emergency Response Administrative Report.
<https://council.vancouver.ca/20190424/documents/cfsc1.pdf>

Considerations applicable to this report:

Existing Policy:

OCP

- Objective 6.2 Improve energy efficiency and reduce community greenhouse gas emissions.
- Policy 6.2.1 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; and
 - 80% below 2007 levels by 2050.

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

The 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.

Imagine Kelowna

- Goal: Take action and be resilient in the face of climate change.

Council Priorities

- Community and corporate greenhouse gas emissions are decreasing
- Neighbourhoods and city infrastructure are resilient and adaptable to climate change

Financial/Budgetary Considerations:

At Council's direction, staff will report back on the resource (both financial and staff) implications to develop a more ambitious community GHG reduction target.

Submitted by:

T. Guidi, Sustainability Coordinator

Approved for inclusion:



Danielle Noble-Brandt, Dept. Manager, Policy & Planning

cc:

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