# Report to Council



**Date:** May 8, 2017

**File:** 1200-90

To: City Manager

From: Michelle Kam and Tracy Guidi, Sustainability Coordinators

**Subject:** Community Climate Action Plan Update

#### Recommendation:

THAT Council receives, for information, the report from the Sustainability Coordinators dated May 8, 2017, with respect to the Community Climate Action Plan Update.

## Purpose:

To inform Council on the status of community greenhouse gas emissions and to obtain Council's input on formulating a draft target for the Community Climate Action Plan (CCAP) update.

## Background:

On a global and national level, communities like Kelowna are taking on the challenge to formulate strategies to reduce GHG emissions and be a climate leader. Addressing climate action has multiple benefits for communities including helping protect citizens and infrastructure, while also leading to lower emissions, new economic activity, increased resilience and improved health and livability.<sup>1</sup>

In 2008, the Province of BC introduced the Local Government (Green Communities) Statutes Amendments Act, to provide local governments with some additional powers to make important changes in their communities.<sup>2</sup> As part of this legislation, the Province amended the Local Government Act to require municipalities to include in their Official Community Plans "targets for the reduction of greenhouse gas emissions in the area covered by the plan, and policies and actions of the local government proposed with respect to achieving those targets.<sup>3</sup>" Further, the Province also established

<sup>&</sup>lt;sup>1</sup> Province of British Columbia, Local Governments & Climate Action, http://www2.gov.bc.ca/gov/content/environment/climate-change/local-governments

<sup>&</sup>lt;sup>2</sup> Local Government (Green Communities) Statutes Amendment Act (Bill 2007), 2008. http://www.cscd.gov.bc.ca/LGD/intergov\_relations/green\_communities\_legislation.htm

<sup>&</sup>lt;sup>3</sup> BC Local Government Act, Part 14, Section 473 (3). <a href="http://www.bclaws.ca/civix/document/LOC/lc/statreg/--%20L%20--/">http://www.bclaws.ca/civix/document/LOC/lc/statreg/--%20L%20--/</a>/Local%20Government%20Act%20[RSBC%202015]%20c.%201/00\_Act/r15001\_14.xml

a Climate Action Charter, signed by 182 municipalities (including Kelowna) committing them to the goals of being carbon neutral and to create complete, compact, energy efficient communities.<sup>4</sup>

The City of Kelowna responded and included a target in the Official Community Plan that emulated the provincial target:

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.<sup>5</sup>

To achieve the target, Council endorsed a Community Climate Action Plan in 2012 which outlined a series of policies and actions to help achieve the target. While several of the 2012 Community Climate Action Plan recommended actions are in progress or have been implemented, it has been challenging to achieve significant reductions towards realizing the OCP target as illustrated in Figure 1 below. In 2010, emissions decreased by 3.6% compared to 2007 levels, and remained relatively unchanged in 2012 (a 3.5% decrease compared to the 2007 baseline), compared to the community growing by over nine per cent<sup>6</sup> during the same 5-year period. The 3.5% reduction between 2007 and 2012 can be attributed to a decrease in transportation and residential building emissions.

All three years of data show that on-road transportation contributes the most emissions, with 55% of emissions coming from this sector in 2012. Buildings (residential and commercial) account for 35% and waste accounts for 9%. Interestingly, despite a decline in GHG emissions between 2007 and 2012, the cost of energy to produce those emissions rose 18 per cent to \$352,259,340 during the same time period, demonstrating the impact to the community to fluctuations in energy prices.

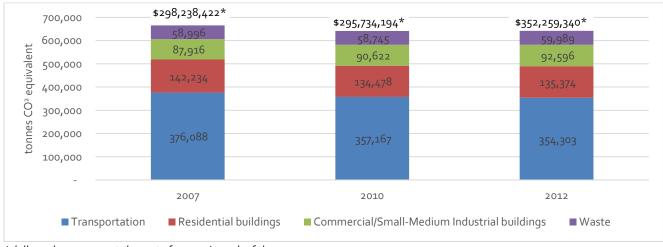


Figure 1: City of Kelowna Community GHG Emissions 2007-2012, split by sector<sup>7</sup>

<sup>\*</sup>dollar values represent the cost of energy in each of the years.

<sup>&</sup>lt;sup>4</sup> Ministry of Community, Sport & Cultural Development. BC Climate Action Charter, http://www.cscd.gov.bc.ca/lgd/greencommunities/climate\_action\_charter.htm

<sup>&</sup>lt;sup>5</sup> Kelowna 2030 – Official Community Plan, Chapter 6, Policy 6.2.1 GHG Reduction Target and Actions.

<sup>&</sup>lt;sup>6</sup> Population increase is approximated based on information provided in the 2006, 2011 and 2016 Canadian Census.

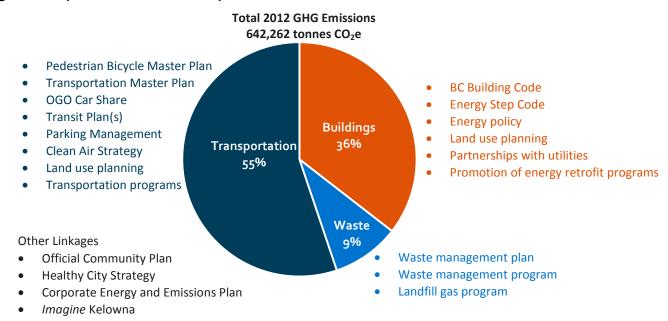
<sup>&</sup>lt;sup>7</sup> The Province provides Community Energy and Emission Inventories (CEEI) for local government to track progress. The 2012 data release failed to include transportation emissions outside of the lower mainland due to challenges in the data. Staff have worked with a consultant to estimate the on-road transportation sector using at the pump gas sales.

An update to the existing Community Climate Action Plan is timely in 2017 due to the following reasons:

- 1. In 2017, the Province provided updated greenhouse gas emissions data which included new data for 2012 (see Figure 1);
- 2. An updated GHG target is required for the OCP update which goes to 2040;
- 3. To harness planning initiatives such as the Pedestrian & Bicycle Master Plan, Healthy City Strategy and Imagine Kelowna and strategically align the goals with the Community Climate Action Plan;
- 4. To develop new actions and partnerships that will work towards reducing community greenhouse gas emissions while creating a healthy, vibrant, resilient and sustainable community;
- 5. To take advantage of new Federal and Provincial momentum on the issue of climate change, and for Kelowna to be able to take full advantage of new and forthcoming Federal funding for green infrastructure and other initiatives.

The Community Climate Action Plan (CCAP) update will set out strategic directions and actions to mitigate Kelowna's contribution to climate change (Appendix A outlines the differences between a climate mitigation and adaptation plan). The update will address three key areas in the community: transportation, buildings and solid waste as well as examine reduction opportunities in planning, senior government and new technologies. Figure 2 (below) shows the community greenhouse gas emissions in Kelowna and demonstrates the linkages to various City plans, strategies and operations that have an inherent link to the Community Climate Action Plan.

Figure 2: City of Kelowna Community GHG Emissions and Climate Connections



Deliverables of the CCAP Update will include:

- Projecting out the greenhouse gas (GHG) business as usual forecast
- Establishing a new GHG target(s)
- Presenting the economic / business case to the community
- Investigating opportunities for reduction measures and prioritizing specific actions for the City of Kelowna
- Identifying policies, bylaws and programs that could be considered
- Identifying partnership opportunities with key stakeholders
- Engaging the community including key stakeholders, businesses and residents

The Community Climate Action Plan update will be developed in consultation with staff and key stakeholders according to the following timeline:

Activity	Anticipated Date
Council, staff and key stakeholder engagement	March —June 2017
Draft targets, policies and actions	Summer, 2017
Council Workshop	Fall, 2017
Public engagement	Fall, 2017
Final Report	Early 2018

Identifying a new greenhouse gas reduction target that spans the life of the next OCP (to 2040) is one core component of the Community Climate Action Plan Update. Each local government determines greenhouse gas emissions targets based on their community's unique characteristics. Targets are powerful motivating forces to influence action and should be informed by science, best practices, community input and Provincial precedents. Part of determining a new target for the CCAP update will be to decide whether to adopt an aspirational target, or consider a more pragmatic target. Informed by the actions of a plan, a pragmatic target is generally a conservative estimate of what can be achieved, while an aspirational target is more visionary and a goal the community can work towards achieving in partnership with key stakeholders and out community, much like the current target.

Research has shown that 21 countries have witnessed positive economic growth since 2000 while simultaneously reducing GHG emissions. When looking at municipalities around the province, many communities (including Lake Country, Peachland and West Kelowna) have emulated the provincial targets of 33 per cent reduction below 2007 levels by 2020 and 80 per cent reduction by 2050, the latter of which is the target identified in the RDCO's Regional Growth Strategy. Reviewing those communities that differed from the Province, there are a variety of approaches used including per capita targets, targets for one or multiple sectors (i.e. buildings, transportation, waste), or a combination of per capita and absolute reductions.

Once Council's direction regarding a greenhouse gas emissions target is given, staff will be working with our consultant, the Community Energy Association<sup>9</sup>, to research other municipal best practices and leadership opportunities, develop an economic case for climate action including how to leverage community interest, as well as engage key stakeholders to build partnerships for climate actions.

<sup>&</sup>lt;sup>8</sup> Ministry of Community Development, 2008. Frequently Asked Questions, Local Government (Green Communities) Statutes Amendment Act, <a href="http://www.cscd.gov.bc.ca/LGD/intergov\_relations/library/Bill27\_Green\_Communities\_FAQs.pdf">http://www.cscd.gov.bc.ca/LGD/intergov\_relations/library/Bill27\_Green\_Communities\_FAQs.pdf</a>

<sup>&</sup>lt;sup>9</sup> Community Energy Association has an established reputation for climate planning including more than 20 years of experience in supporting BC local governments with climate action and energy planning as well as supporting over 100 communities in the last few years.

There is a compelling case for climate action, as local governments are positioned to help ensure success of international climate strategies (i.e. the Paris Agreement) by making policy a reality. Up to half of Canada's greenhouse gas emissions are under the direct or indirect control or influence of municipal governments. Designing policy, projects and actions at the community level reflect local circumstances allowing for effective action. The implementation of the CCAP Update will take community commitment to ensure that Kelowna can achieve its goals and target. The benefits, however, go well beyond reducing emissions, where quantitatively communities benefit from savings from energy efficiency and reduced operation and maintenance, and qualitatively benefit from a healthy, active and inclusive community.

Within the challenge of addressing climate change, there is an opportunity – to position Kelowna towards a sustainable future, to demonstrate leadership, and to improve collaboration with other community partners in a shared pursuit of local and global sustainability goals.

#### Internal Circulation:

Divisional Director, Community Planning and Strategic Investments
Divisional Director, Infrastructure
Integrated Transportation Department Manager
Transportation Engineering Manager
Transit and Programs Manager
Transportation Planner
Infrastructure Engineering Manager
Public Works Manager
Community Planning Department Manager
Suburban and Rural Planning Manager
Urban Forestry Supervisor
Energy Programs Manager
Community Planning Manager
Environmental Technician II
Communications Advisor

### Legal/Statutory Authority:

Section 473(3) of the Local Government Act states "an official community plan must include targets for the reduction of greenhouse gas emissions in the area covered by the plan, and policies and actions of the local government proposed with respect to achieving those targets."

# **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 community greenhouse gas emissions by 33% (from 2007 levels) by 2020.

<sup>&</sup>lt;sup>10</sup> FCM Partners for Climate Protection, About Climate Change: <a href="http://www.fcm.ca/home/programs/partners-for-climate-protection/about-climate-change.htm">http://www.fcm.ca/home/programs/partners-for-climate-protection/about-climate-change.htm</a>

<sup>11</sup> BC Climate Action Toolkit, Business Case for Climate Action. https://www.toolkit.bc.ca/business-case-climate-action

The City of Kelowna's efforts will be focused on creating more mixed use neighborhoods (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 City of Kelowna also has a Corporate Energy and Emissions Plan that focusses on corporate greenhouse gas emissions. It should be noted that Building Services also plans to update the City's Corporate Energy and Emissions Plan later this year, focusing on opportunities to reduce energy and emissions in City facilities and fleet, while positioning the City as a leader in climate mitigation in the community.

- Corporate Greenhouse Gas Emissions include the GHG emissions from the City of Kelowna's corporate fleet and buildings (ie: City Hall). Corporate GHG emissions are estimated to be approximately 1% of the total emissions for Kelowna.
- Community Greenhouse Gas Emissions refer to the GHG emissions from Kelowna's residents and businesses and include transportation, buildings and waste. Community GHG emissions are estimated to make up 99% of the total emissions for Kelowna.

#### Financial/Budgetary Considerations:

The City successfully applied for a FortisBC Strategic Community Energy Planning grant. The grant will contribute \$22,425 towards the \$44,850 project total. The funding is time sensitive as a final report for the grant funding is due by the end of March 2018. The remaining funds will be covered through existing budgets.

# **Communications Comments:**

Engagement for the Community Climate Action Plan update will be limited to key stakeholders in spring 2017, and the public will be consulted in fall 2017.

Submitted by:	
M. Kam, Sustainability Coordinator	T. Guidi, Sustainability Coordinator
Approved for inclusion:	Danielle Noble-Brandt, Dept. Manager of Policy & Planning

Attachment: Appendix A - Understanding Climate

CC:

Communications Advisor

Divisional Director, Community Planning and Strategic Investments
Divisional Director, Infrastructure
Integrated Transportation Department Manager
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