



INFORMATION ONLY COUNCIL REPORT

To: Paul Gipps, CAO

Date: October 13, 2020

From: Stirling Scory, Planner II – Long Range

File No: P20-06

Subject: **Corporate Climate Action Update – CARIP Report 2019**

STRATEGIC AREA(S) OF FOCUS

Foster Safety and Well-Being – This term, Council will direct resources to support the following priority: Fostering a culture of environmental stewardship, including review of the climate action charter.

Invest In Infrastructure – We will invest in annual capital programs that maintain core assets, extend sidewalk and active transportation networks, improve roadways, provide parks and recreation opportunities, and support numerous other infrastructure needs.

BACKGROUND

In 2007, the Province announced plans to take actions in an effort to reduce the effects of anthropogenic caused climate change through the *B.C. Climate Action Charter* (the *Charter*); a non-binding, voluntary agreement between the Union of B.C. Municipalities and local governments. In 2008, the City of West Kelowna became a signatory of the *Charter*.

The *Charter* requires all signatories to complete an annual report detailing the initiatives taken to reduce their greenhouse gas (GHG) emissions with respect to corporate and community wide actions, and the total corporate emissions emitted. This report intends to provide an update to the Corporate Initiatives Climate Action Update for 2018, a report presented to Council in April, 2020.

Legislative Requirements

As a signatory to the *B.C. Climate Action Charter*, the City of West Kelowna has made the commitment to the following objectives:

- Become corporate carbon neutral by 2012;
- Measure and report, annually, the community's GHG emissions; and
- Create complete, compact, and a more energy efficient community.

Additionally, as part of the reporting requirements the City is required to:

- Measure and report, annually, the City's emissions (corporate and contracted);

- Report, annually to the Province, the steps taken to reduce GHG emissions (corporate and community initiatives), and the progress made to become carbon-neutral, with a commitment to achieve corporate carbon-neutrality by 2012; and
- Make public a summary of the GHG emissions and initiatives undertaken by the City.

These requirements are included through the completion of the annual Climate Action Revenue Incentive Program (CARIP). The CARIP is a conditional grant program that offers funding to qualified *Charter* signatories with the equivalent of 100 percent of the carbon taxes they pay directly for that year. The intent of the grant program is to support local governments in meeting their *Charter* commitments and in becoming more sustainable through the reduction of greenhouse gas emissions and sustainable community design and investment.

Policy Review

Official Community Plan Bylaw No. 0100

The City's Official Community Plan (OCP) contains policies specific to climate action and emissions management; however, these policies are divided between community wide initiatives and those specific to corporate initiatives. With respect to policies that regulate corporate emissions, in *Section 3.7.4* (Energy and Emissions), the following apply:

2. Support and maintain an active staff-based Climate Action Committee.
5. Incorporate greenhouse gas reduction evaluation and pricing criteria in both modelling and procurement for all municipal infrastructure, including infrastructure which relates to waste management.
6. Encourage the investigation and development of renewable energy supply options, such as city energy, ground source heat pumps, solar and heat recovery systems, particularly in the Boucherie/Westbank Centres, Corridors, and Industrial areas where opportunities might be present.

Discussion

As required by the *Charter*, the City has completed a CARIP report for 2019. For the purposes of reporting, emissions are measured in tonnes of carbon-dioxide equivalent (CO₂ e). This conversion is done to account for the differences in fuel and energy used.

In 2019, the City had a surplus of 2225 tonnes of CO₂ e. interestingly, between 2018 and 2019 there was a decrease of 129 CO₂ e. However, between 2014 and 2019 the City had a total net increase of 138 tonnes of CO₂ e. Year to year the City has typically had an increase in the total emissions, spread across the four identified sources (Fleets, General Facilities, Recreation Centre, and Infrastructure). A summary of the data is in Figure 1.

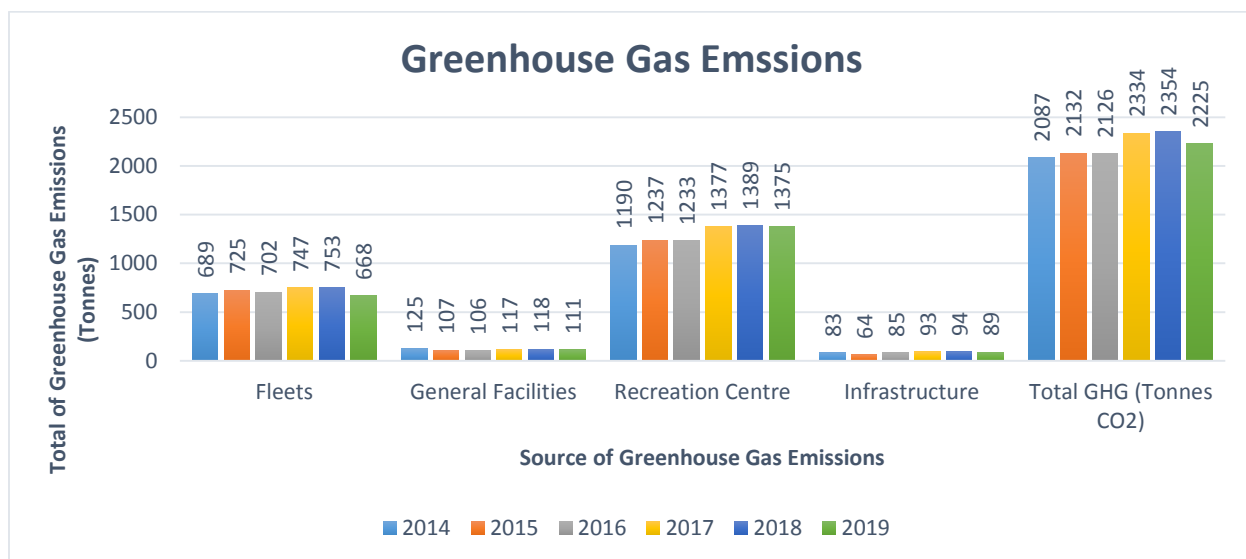


Figure 1 - Greenhouse Gas Emissions

The source for the decline in the City's emissions may be attributed to several factors, one of which is the switch from diesel to liquid natural gas (LNG) for the vehicles used to collect solid waste in West Kelowna. Another factor is the use and demand of services and amenities. Year to year the use of infrastructure and public amenities can vary, so too does the maintenance required to operate and maintain our infrastructure and public facilities. These variations can result in an overall increase or decrease in the amount of fuel and energy consumed each year. However, generally as a community grows it should be expected that there will be increased demand for additional services and public facilities, which will result in a net increase in emissions. Where possible, emissions may be reduced through adaptation, as evidenced by the change from diesel to LNG. Figure 2 below shows a comparison of contracted and corporate services.

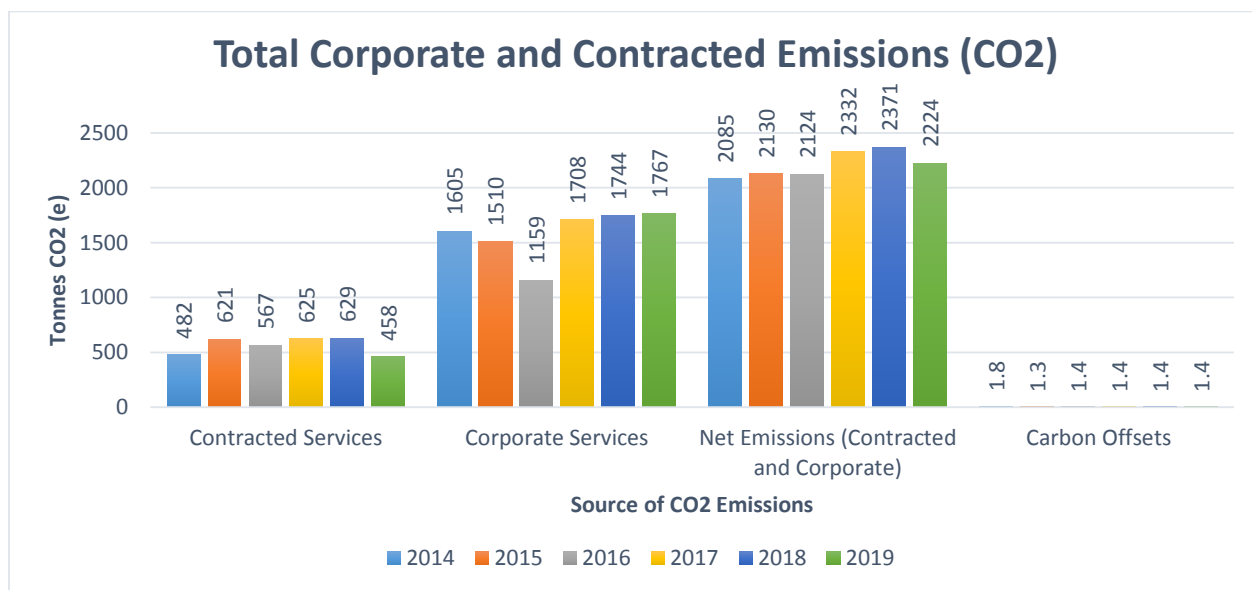


Figure 2 - Total Corporate and Contracted Emissions (CO2 e)

In addition to calculating the amount of CO₂e, the CARIP report requires that a calculation be done for the total energy consumed, which is represented in gigajoules (GJ). A GJ is a measure of energy that is capable of representing the various sources of fuel and electricity used to provide corporate and contracted services. For reference, one GJ is equivalent to approximately 25 – 30 liters of diesel or gasoline, or the amount of electricity that is required to operate a house for approximately 10 days. Diesel, gasoline, and liquid natural gas burn at different rates, and therefore vary in efficiency. This can explain why the reduction in diesel and the increase in LNG resulted in a net decrease in CO₂e, because it is a relatively ‘cleaner’ source of energy when compared to traditional fuels. The adoption of ‘cleaner’ fuel sources may continue to decrease the City’s corporate emissions; however, this will be dependent largely on the type of fuel, and the rate of growth in the community. Figure 3 below shows an overview of the amount of energy used, and Figure 4 shows total energy spending.

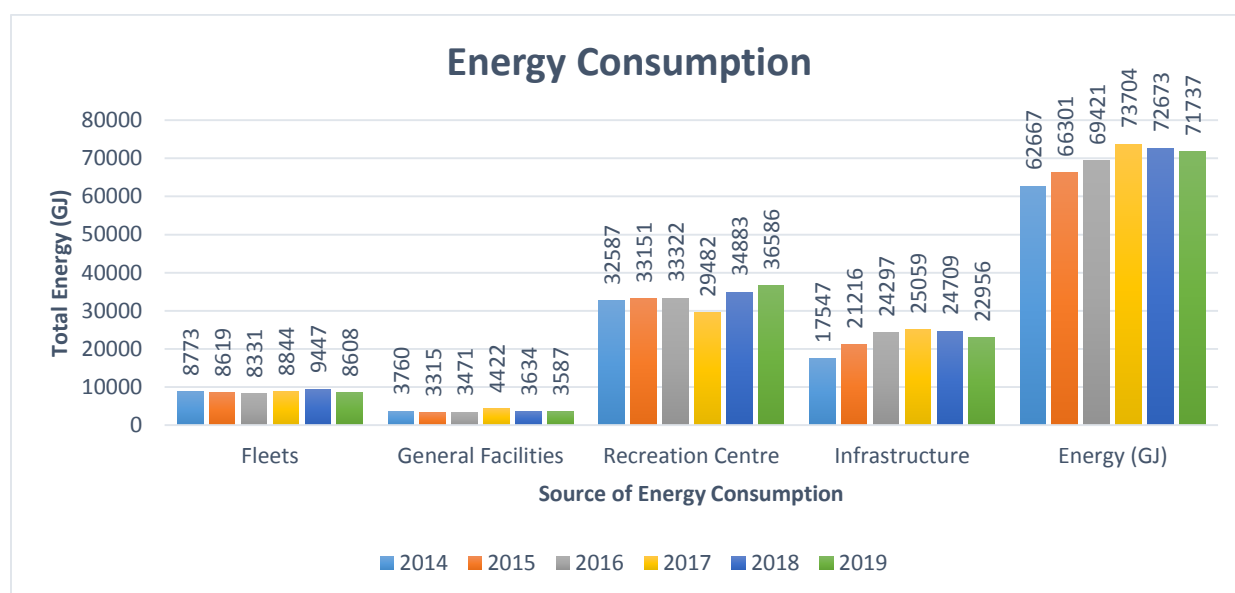


Figure 3 - Energy Consumption

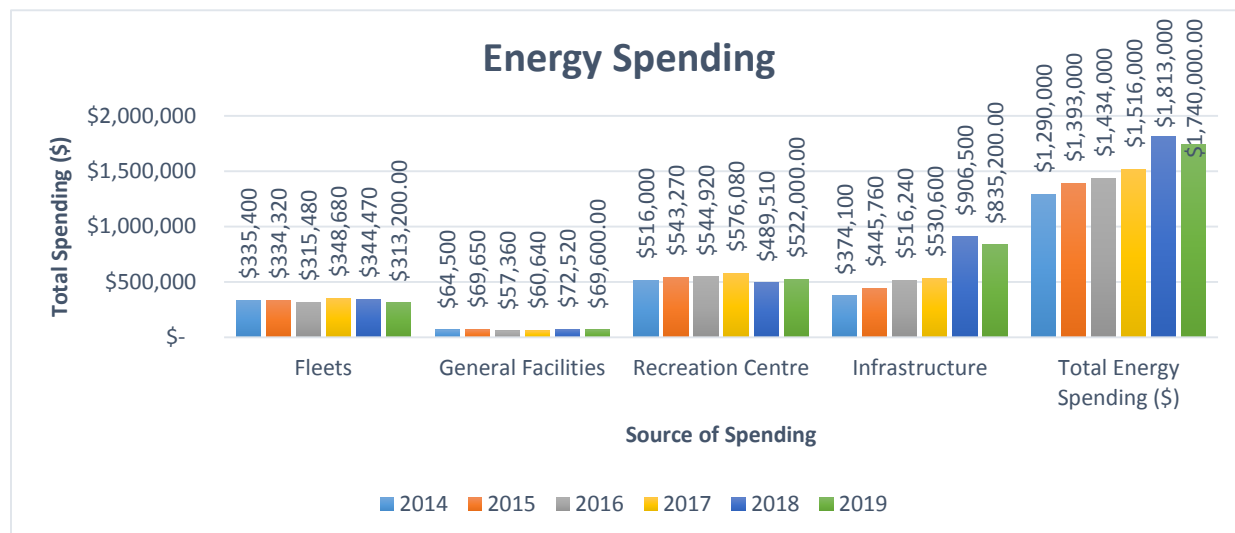


Figure 4 - Total Energy Spending

Conclusion

To meet the objectives of the *Charter* will require a focused commitment, clear actions, and obtainable objectives in order to measure progress moving forward. As a community we will need to identify what best practices best suit our community in meeting the *Charter's* commitments. The joint Provincial-Union of British Columbia Municipalities Committee recognizes 4 levels of actions with respect to meeting the objectives of the *Charter*. The City was self-observed to have completed the necessary actions and taken initiatives to be awarded: Level 3 – Accelerating Progress on Charter Commitments, where Level 4 is to have satisfied the needs to meet corporate carbon emissions neutrality. Additional information on the initiatives undertaken by the City may be found in Attachment 1 – CARIP Public Report 2019.

Climate Action Plan

To continue to progress towards our *Charter* commitment in the future, Council may consider adopting a climate action plan, to establish short and long-term objectives for the future, and an investment strategy that may make these actions a reality. Climate Action Plans intend to address climate related challenges specific to a community which typically covers a range of areas, including integrated infrastructure design, land use planning, community and urban design, and community planning. Traditionally, climate action plans have been created with the intent of providing recommendations and a future vision for the entire community, and while useful, may miss the specific objectives the City must meet with respect to the *Charter*. Therefore, Council may consider doing two separate climate action plans:

- 1) A corporate climate action plan which could focus specifically on meeting the *Charter's* objectives with respect to the City's corporate emissions, and
- 2) A community climate action plan which would meet the community wide objectives with respect to climate change adaptation.

By separating the plans Council may have more success in clearly identifying potential projects and objectives for the future, and in measuring their progress towards their completion for both the City's objectives, and of the community's. The added benefit of separating the plans is that Council may directly control corporate decisions with respect to budget and spending, whereas a community wide plan will require the input from the community through the consultation process.

Collaboration and Partnership

Council may also consider opportunities for partnership and collaboration with Peachland, Kelowna, and Westbank First Nation through resource, skill, and data sharing. The collection of resources could be used to inform future land use decisions, community investment, and collaboration opportunities with respect to climate planning and adaptation. Council may consider investment in a district energy station as a potential project for partnership.

Carbon Offsets

Council may also consider carbon offsets, as a way to temporarily reduce emissions until a formalized plan may be established. Purchasing carbon offsets remains a popular choice amongst City's and businesses as a way of reducing their carbon footprint; however, it will not address the root cause: the release of GHG emissions. Furthermore, as a municipality grows, there will need to be a greater investment to offset the increase in emissions.

FINANCIAL IMPLICATIONS

Currently the completion of the annual CARIP report falls within core work. If Council were to consider doing a climate action plan, it may require existing staff resources be adjusted and priorities changed to accommodate the completion of the project, i.e. the Official Community Plan Update. Alternatively, Council may consider budgeting for an additional staff and/or contract position capable of completing this work and other work as required to satisfy the Council Priorities.

REVIEWED BY

Brent Magnan, Planning Manager

Mark Koch, Director of Development Services

APPROVED FOR THE AGENDA BY

Paul Gipps, CAO

PowerPoint: Yes ☒ No ☐

Attachments:

Attachment 1 – CARIP Public Report 2019