

Report to Council



Date: October 19, 2020
To: Council
From: City Manager
Subject: Resourcing Accelerated Climate Action
Department: Policy & Planning

Recommendation:

THAT Council receives, for information, the report from the Policy & Planning Department, dated October 19, 2020, with respect to Resourcing Accelerated Climate Action;

AND THAT Council directs staff to implement the recommended accelerated climate action for 2020 as outlined in Table 1 in the report, to submit an application to FCM's Community Efficiency Financing program to conduct a home energy retrofit financing program feasibility study;

AND THAT the 2020 Financial Plan be amended to include up to \$150,000 for the implementation of the 2020 recommended accelerated climate action to conduct a home energy retrofit financing program feasibility study with up to 20 per cent of the funds, to a maximum of \$30,000, from the Climate Action Reserve and the remaining funding (up to \$120,000) to come from the FCM Community Efficiency Financing grant, if successful.

AND FURTHER THAT Council endorse the recommended accelerated climate actions for 2021 as outlined in Table 2 in the report, subject to City budget and grant approvals.

Purpose:

To provide the resource implications of accelerating the Community Climate Action Plan as directed by Council at the Open PM Session on Monday, June 22, 2020 (R0480/20/06/22).

Background:

At the June 22, 2020 Open PM Council Session, staff reported on the initiatives related to Council's Environmental Protection Priority and climate action. The report highlighted actions that supported three of the four Environmental Protection priority result statements that are trending in the right direction: resiliency & adaptability; predictive modelling & forecasting; and emergency response & preparation. The report also highlighted examples of actions Council could take to accelerate implementation of the Community Climate Action Plan (CCAP) and/or align with the

Intergovernmental Panel on Climate Change's (IPCC's) targets to address the only result statement which is not trending in the desired direction: "greenhouse gas (GHG) emissions are decreasing". Following the discussion, Council directed staff to report back on the resources that would be required should Council choose to accelerate climate action.

Discussion:

To make significant progress on reducing GHG emissions, it is imperative that everyone – residents, businesses, industry, and government – take action. Local governments, however, are uniquely positioned to help the community shift towards a low carbon lifestyle and respond to the impacts of climate change. While the amount of influence a local government has varies depending on different sources of GHG emissions within their boundaries, there is an opportunity to strategically plan and build the community so GHG emissions decrease and the community is well-adapted to a changing climate. Fortunately, choosing to invest in climate action does not equate to a trade-off with other Council and community priorities. In fact, climate action is about delivering on the diverse goals and principles of *Imagine Kelowna* as illustrated in Figure 1.

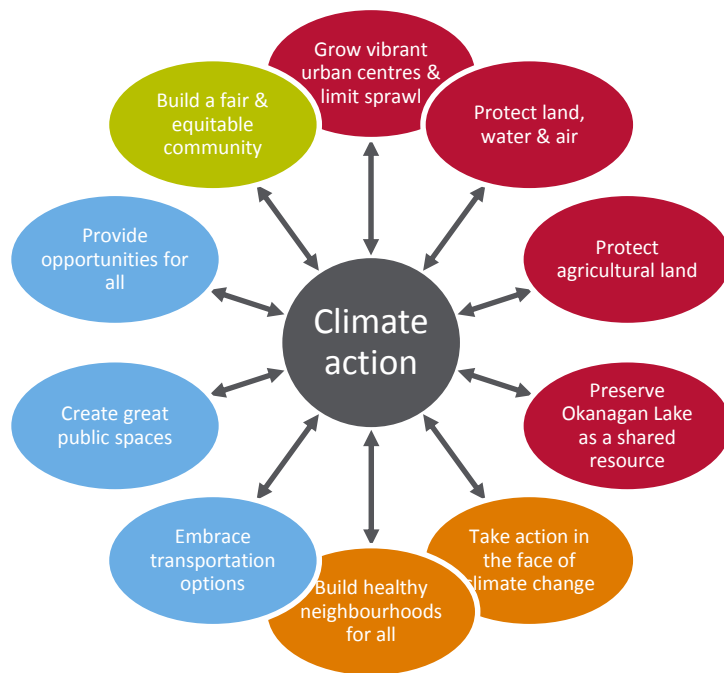








Figure 1: Delivering on Climate Action and Imagine Kelowna Goals

Recognizing community GHG emissions are not decreasing in Kelowna, accelerated action is needed to reverse the trend. As outlined in BC's "Climate Leader's Playbook," action, whether big or small, in the six following areas can put Kelowna on a path to achieve GHG emissions reductions:

1.  On Road Transportation
 - Reducing vehicle kilometres traveled by cars¹
 - Transitioning to zero emission vehicles
2.  Buildings
 - Transitioning towards net zero energy ready construction for all new buildings
 - Ensure a large portion of existing homes undergo deep energy retrofits annually
3.  Waste
 - Divert organic waste
 - Capture renewable natural gas from waste and biosolids²
4.  Complete communities
5.  Natural assets and green infrastructure
6.  Climate leadership in City operations

Corporate climate action and energy reduction initiatives, which represent approximately one per cent of the GHG emissions in Kelowna, have been funded in part through the annual Climate Action Revenue Incentive Program (CARIP) grant; however, no such fund has been established for community GHG reduction initiatives. Up to now accomplishments on the community side have been the result of:

- Existing capital plan projects (e.g. for active transportation, transit, and solid waste projects)
- Grants (e.g. FortisBC grants for Community Energy Specialist position and Disaster Mitigation and Adaptation Fund for climate adaptation projects)
- No or low-cost actions (e.g. bylaw updates)

Recommended Approach to Accelerate Climate Action:

As climate action to-date has not resulted in the GHG emissions reductions to put the community on the path to meet the CCAP or more ambitious IPCC targets, programming needs to be amplified relative to previous years. However, acting quickly and effectively to address the climate crisis is challenging and complex and there is no "silver bullet" solution. To accelerate GHG emissions reduction will require decisions to:

- Dedicate funds to implement actions identified in the CCAP and/or to model and identify actions that would align with more aggressive targets; and
- Support policy shifts that are necessary for long term success.

¹ Vehicle kilometers traveled can be reduced by shifting as many future trips as possible to sustainable alternatives such as biking walking or transit. VKT can also be reduced through eliminating trips through promotion of work from home and other virtual strategies and/or reducing the distance people need to drive by coordinating land use and transportation planning and limiting development in outlying, car depending areas.

² BC Municipal Climate Leadership Council and the Community Energy Association. The Climate Leaders Playbook. Solutions for a Zero Carbon Community by 2050. <https://bcclimateleaders.ca/playbook/the-facts/>

Appendix A, *Options to Accelerate Climate Action*, outlines actions in each of the six key areas the City could take over the next three years to accelerate reductions in GHG emissions. In general, these actions use the six “tools” local governments have at their disposal to influence GHG emissions reduction: policy & regulation; collaboration & partnerships; infrastructure; advocacy; incentives; and outreach & capacity building. This realistic, but progressive list, is what could be achieved with modest investment and was selected based on the following considerations:

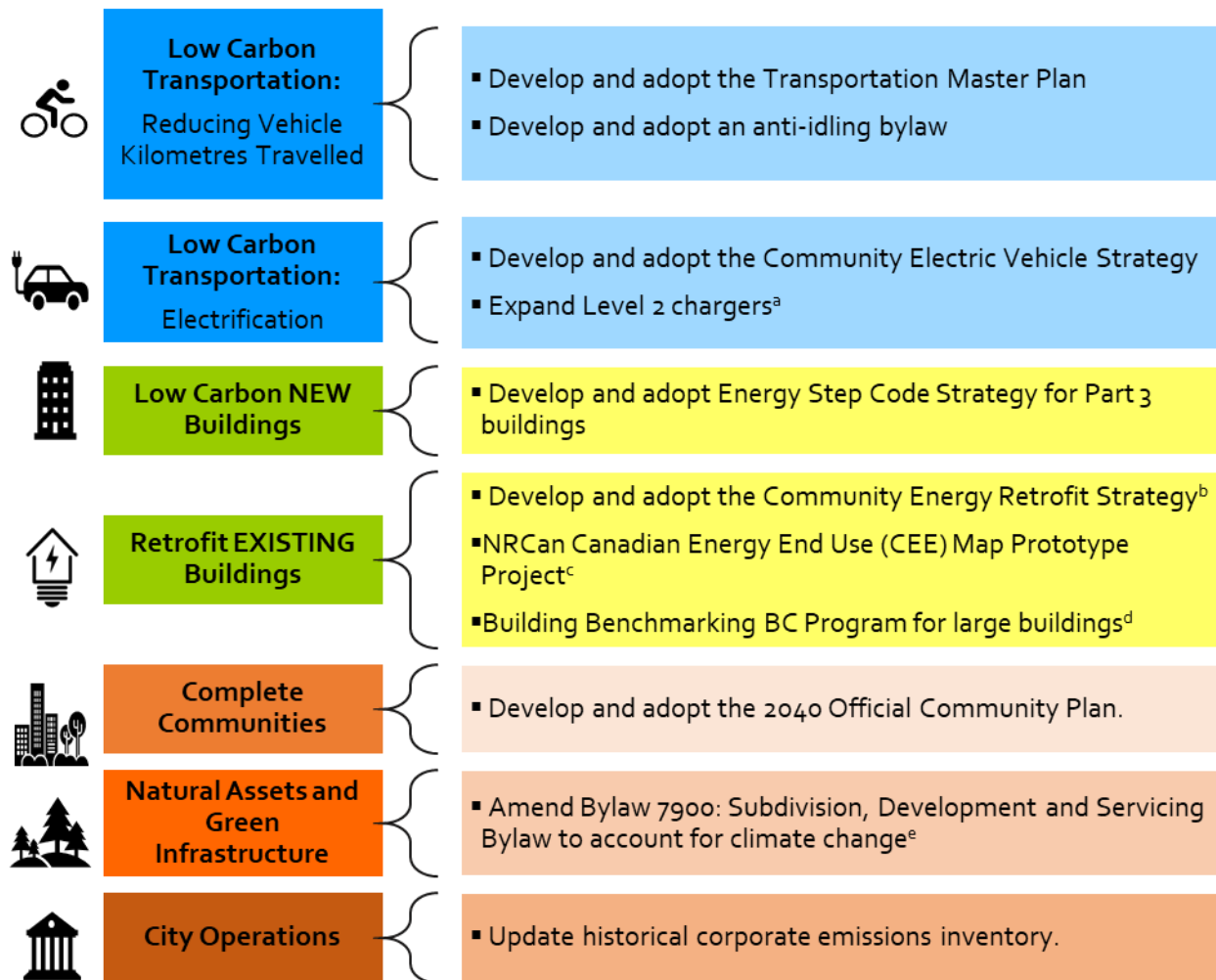
- Opportunities for grants or partnerships;
- Balancing limited resources;
- Optimizing resource efficiencies;
- Actions necessary for future work planning; and
- Actions that will help stimulate economic recovery from the COVID pandemic.

Recognizing that community climate action initiatives currently do not have a dedicated funding source at the City, additional support is needed to implement the recommended actions. Without an approved funding source, these recommended actions are financially constrained to be implemented and progress towards the 2023 GHG emissions reduction target will be slower. Recognizing the challenges of resourcing climate initiatives in a COVID world, it is recommended the actions are resourced by the following:

- Grants and partnerships (some already approved, others will be applied for);
- Existing budgets;
- Climate Action Reserve; and
- Operating and Capital budget requests.

Resourcing Accelerated Climate Action in 2020 and 2021

Numerous actions/projects are already in progress and when complete will support the reduction of GHG emissions.



^a an application was submitted to NRCan for \$150,000 to expand the network, using the \$135,000 already approved in existing budget as matching funds

^b a grant from FortisBC for \$22,500 was received to support engagement on this project

^c this project is valued at \$800,000 in grants and in-kind resources from NRCan


^d received approval to participate in this pilot program free of charge, valued at \$10,000

^e a \$12,000 grant was received from the Pacific Institute for Climate Solutions to hire a climate adaptation intern work on this project

Figure 2: Actions and Projections already in progress that will contribute to GHG emissions reduction

As 2020 winds down, progress continues to be made on the projects outlined above. Support, however, is needed for one new project: Home Energy Retrofit Financing Program Feasibility Study to build off the CEE Map Prototype Project, as outlined in Appendix B. While this project would not begin until 2021, matching funds need to be secured to apply for a grant from Federation of Canadian Municipalities (FCM) Community Efficiency Financing (CEF) program.

Table 1: Recommended Accelerated Climate Actions for 2020








| | Action | Budget Required | Potential Budget Source | Grant / partnership contribution |
|-----------------------------------------------------------------------------------|-------------------------------------------------------------------------------|-----------------|-------------------------|----------------------------------|
|  | Residential: GMF CEF Home Energy Retrofit Financing Program Feasibility Study | up to \$30,000 | Climate Action Reserve | up to \$120,000 |

Outlined in the table below is a summary of the action areas and associated investment that the City could take to accelerate climate action progress in 2021 to help deliver on Council’s Environmental Protection priority to ensure greenhouse gas emissions are decreasing (a complete list of the recommended actions for 2021 are provided in Appendix C). Understanding the financial constraints created by the COVID pandemic, the recommended actions are based on maximizing limited budgets through grants, and/or actions that could be achieved without investing in additional staff resources. Further, many of the actions identified are crucial not only to reducing GHG emissions but in order to deliver on multiple City priorities, projects or plans.

2021 includes a recommendation to model accelerated climate action. As the current Community Climate Action Plan outlines actions only until 2023, modelling and identifying new actions is essential to develop a future course of action. As the CCAP was developed prior to the release of both the IPCC recommendations and the release of the provincial CleanBC plan, it does not align with these more ambitious targets. This presents an opportunity to develop and model actions for a more aggressive GHG reduction target while at the same time incorporating a resiliency lens to address the changes in climate that Kelowna is already beginning to experience (hotter drier summers; warmer winters; increased precipitation in all seasons except summer and a shifting of the seasons).³ To maximize efficiencies, it is recommended that once modelling has been completed, a prioritized list and corresponding action and business plan be reported to Council to determine accelerated actions that can be implemented over the following three years.

³ 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

Table 2: Recommended Areas to Accelerate Climate Action for 2021

| Action Area | Policy change required | Budget Required | Grant / partnership contribution | Alignment with other City projects, priorities or Council priorities |
|------------------------------------------------------------------------------------------------------------------------------|------------------------|-----------------------|----------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|  Modelling and new actions | No | \$70,000 | - | <ul style="list-style-type: none"> o Needed to identify accelerated actions beyond 2021 |
|  Low carbon transportation: reducing VKT | Yes | \$170,000 | - | <ul style="list-style-type: none"> o Implements early, high priority Transportation Master Plan recommendations o Council priority: Connecting high density areas o Council priority: More trips by transit, carpooling, cycling & walking o Council priority: more opportunities to learn about transportation |
|  Low carbon transportation: electrification | Yes | \$80,000 | \$120,000 | <ul style="list-style-type: none"> o Council priority: emerging technologies make it easier to get around |
|  Low carbon new buildings | Yes | \$20,000 ^a | - | <ul style="list-style-type: none"> o Reduces operational costs as outlined in the Healthy Housing Strategy |
|  Energy retrofit existing buildings | No | \$40,000 | \$40,000 | <ul style="list-style-type: none"> o Reduces operational costs as outlined in the Healthy Housing Strategy |
|  Waste and RNG | No | \$400,000 | - | <ul style="list-style-type: none"> o Addresses biosolids from WWTF o Council priority: Economic resiliency o Extends the life of assets o Supports Area Based Water Management Planning |
|  City operations | Yes | - | - | <ul style="list-style-type: none"> o Implements the Corporate Energy and Emissions Plan |
| Totals | | \$780,000 | \$160,000 | |

It is recommended:

- \$570,000 to be considered through 2021 Preliminary Budget process
- \$260,000 be considered from the Climate Reserve

^a Opportunities for partnerships will be investigated to reduce this cost

Conclusion:

Despite the many challenges and competing priorities, taking action to reduce GHG emissions and create a low carbon future is an urgent matter that Council has recognized as a priority.

Accelerating climate action to ensure GHG emissions are decreasing requires ongoing efforts that are backed by staff and financial resources. There is a large global movement to “build back better” from the COVID pandemic in a way that addresses the climate crisis,⁴ and while local governments cannot solve the climate crisis on their own, their role is crucial to direct and influence change in the community.

Choosing to accelerate climate action in Kelowna will provide benefits that reach far beyond lowering GHG emissions. These include creating healthier and more livable communities for people of all ages

⁴ BBC, June 24, 2020. Has the pandemic helped individuals and leaders get any closer to tackling the environmental crisis? <https://www.bbc.com/future/article/20200624-has-covid-19-brought-us-closer-to-stopping-climate-change>

and abilities; greater community resilience; and reduced costs.⁵ Further, some of the actions will stimulate economic recovery from the COVID pandemic. While climate action requires an injection of resources to make a meaningful impact, it is an investment that will contribute to the community's well-being and long-term sustainability.

There is no single solution that will solve the crisis. All actions, big and small, will be needed to begin the transition to a thriving, low carbon community. The transition will take time and be challenging, but the actions provide "win-win" solutions that will also help achieve Imagine Kelowna and improve quality of life, all while contributing to a climate-safe future.

Internal Circulation:

Divisional Director, Planning & Development Services
Divisional Director of Financial Services
Development Services Director
Development Planning Department Manager
Strategic Transportation Planning Manager
Community Planning & Development Manager
Energy Program Manager
Utilities Planning Manager
Long Range Policy Planning Acting Manager
Financial Planning Manager
Urban Forestry Supervisor
Transportation Planner
Urban Forestry Technician

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.

⁵ BC Municipal Climate Leadership Council and the Community Energy Association. The Climate Leaders Playbook. The Facts. <https://bcclimateleaders.ca/playbook/the-facts/>

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.

Kelowna's Community Climate Action Plan

Financial/Budgetary Considerations:

Funding is required to implement the 2020 recommended community climate action initiatives outlined in Table 1 above. Staff are recommending that up to \$30,000 of funding come from the newly established Climate Action Reserve as the City's portion of these projects with the remaining funding to come from various grants and existing budgets.

Budget requests for some of the 2021 actions (as outlined in Table 2) and beyond will be submitted as part of the capital and operating budget requests included in the 2021 Preliminary Budget Volume. The Climate Reserve will be considered as a budget source for the remaining 2021 actions.

Submitted by:

T. Guidi, Sustainability Coordinator
C. Ray, Community Energy Specialist

Approved for inclusion:



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

Attachments

Appendix A: Options to Accelerate Climate Action
Appendix B: Home Energy Retrofit Financing Program Feasibility Study
Appendix C: Recommended Accelerated Climate Actions for 2021

cc:

Divisional Director, Planning & Development Services

Divisional Director of Financial Services

Development Services Director

Development Planning Department Manager

Strategic Transportation Planning Manager

Community Planning & Development Manager

Energy Program Manager

Utilities Planning Manager

Long Range Policy Planning Acting Manager

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