

Climate & Environment Framework: Overview, Update, and Next Steps

January 16, 2023

Agenda

- ▶ Background
- ▶ Climate & Environment Framework
- ▶ Status Update
- ▶ Next Steps

Why do we care?



Greenhouse Gas Emissions



A Changing Climate

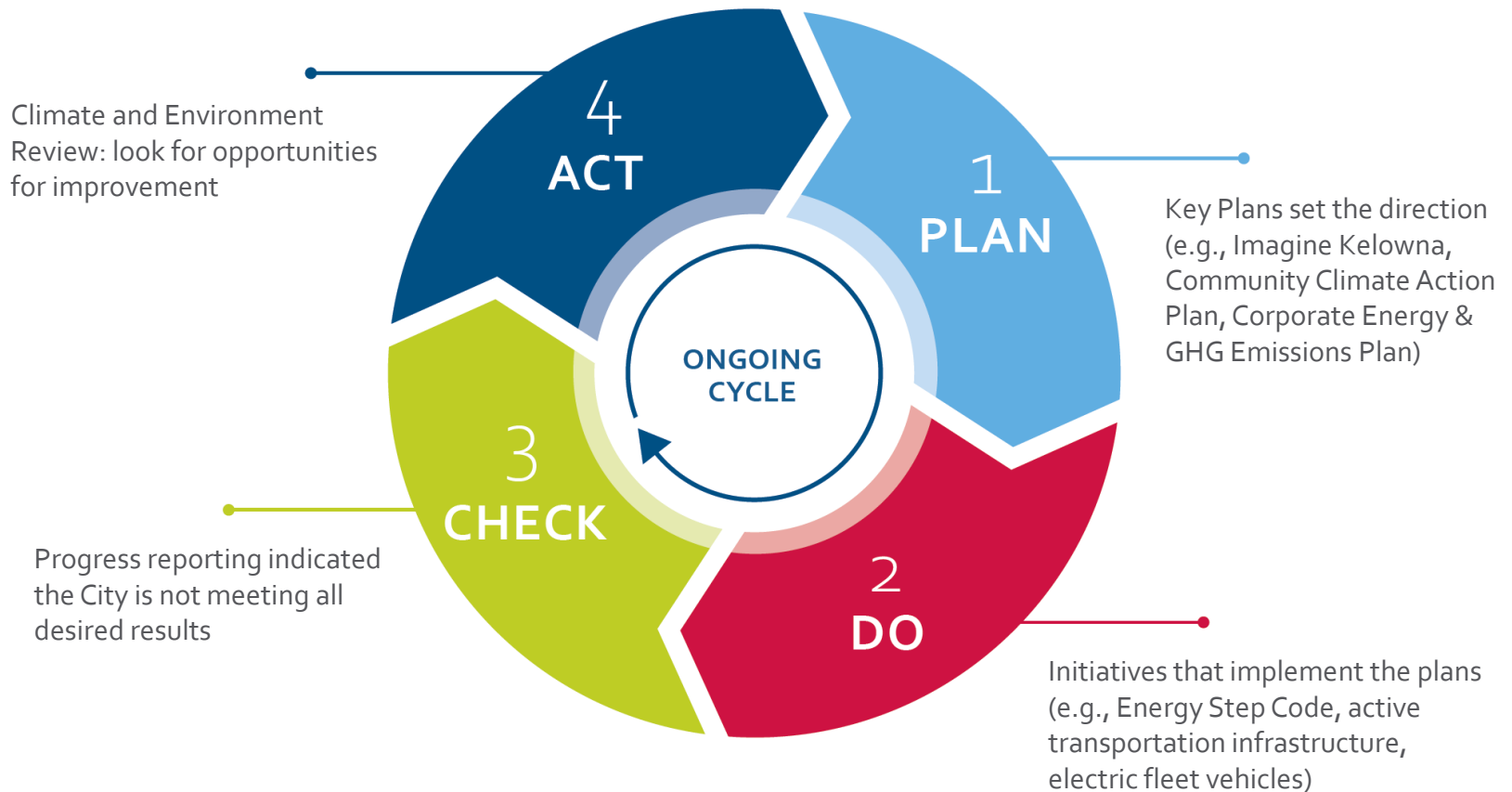


Impacts on Natural Areas



Waste

The City's Recent Approach



Climate and Environment Review: Process

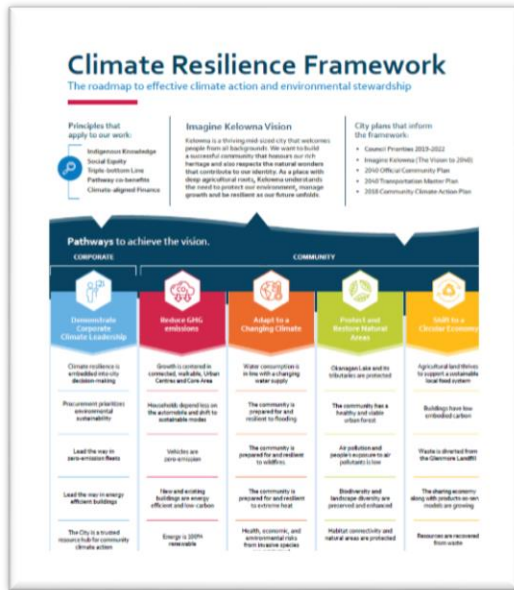




Framework

The roadmap to effective climate action and environmental stewardship

Framework



“Kelowna is a thriving mid-sized city that welcomes people from all backgrounds. We want to build a successful community that honours our rich heritage and also respects the natural wonders that contribute to our identity. As a place with deep agricultural roots, Kelowna understands the need to protect our environment, manage growth and be resilient as our future unfolds.”

Demonstrate Corporate Climate Leadership

Reduce community GHG emissions

Adapt to a Changing Climate

Protect Natural Areas

Shift to a Circular Economy

Pathways



Demonstrate Corporate Climate Leadership

- ▶ Climate Lens
- ▶ Sustainable Procurement
- ▶ Zero-emission Fleet
- ▶ Low-Emission Buildings
- ▶ Community Climate Resources



Reduce community GHG emissions

- ▶ Walkable, Connected City
- ▶ Alternative Transportation
- ▶ Zero-Emission Vehicles
- ▶ Low-Emission Buildings
- ▶ Renewable Energy



Adapt to a Changing Climate

- ▶ Water Conservation
- ▶ Flooding
- ▶ Wildfires
- ▶ Extreme Heat
- ▶ Invasive Species



Protect Natural Areas

- ▶ Okanagan Lake
- ▶ Urban Forest
- ▶ Air Quality
- ▶ Biodiversity
- ▶ Healthy Ecosystems



Shift to a Circular Economy

- ▶ Local Agriculture
- ▶ Embodied Carbon
- ▶ Waste Reduction and Diversion
- ▶ Resource Recovery from Waste
- ▶ Sharing Economy

Principles

- Recognize the value of local **syilx Indigenous Knowledge**
- Consider **Social Equity** in decision-making and implementation
- Prioritize initiatives with **“multiple-bottom-line”** benefits
- Prioritize initiatives with **co-benefits between Pathways**
- Balance **short-term savings with costs of inaction**



Source: Shaw et al. (2021). A Low Carbon Resilience Decision Tool for Local Government



Status Update



Corporate Climate Leadership

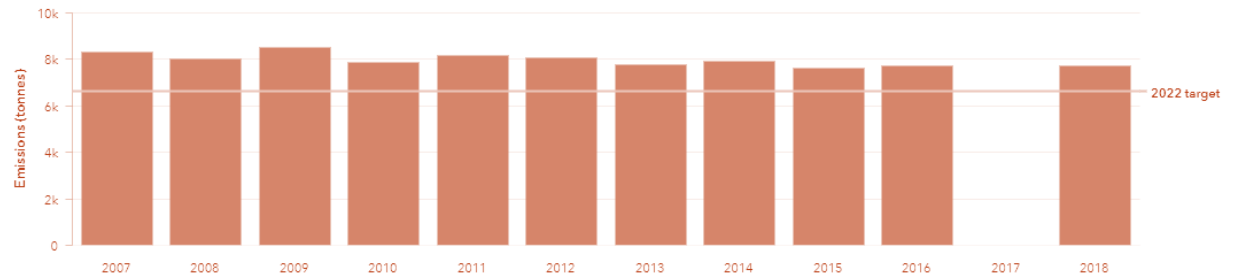
Target:

12% decrease in corporate GHG emissions relative to 2007 levels by 2022.

Progress:

Data to be finalized through the *Strategic Energy Management Plan (SEMP)*

Corporate GHG Emissions



Data: City of Kelowna, reliable data not available for 2017



Corporate Climate Leadership

2022 - Progress

- Began development of new SEMP
- Implementing the *Green Fleet Strategy*.
- Successful Zero-Emission Vehicle Infrastructure Program (ZEVIP) grant application for corporate EV chargers.

2023 - Planned

- Finalize the SEMP
- Develop a Corporate Green Building Policy
- Begin the development of a Climate Lens Decision Making Tool
- Continued decarbonization of the City's fleet and installation of EV charging

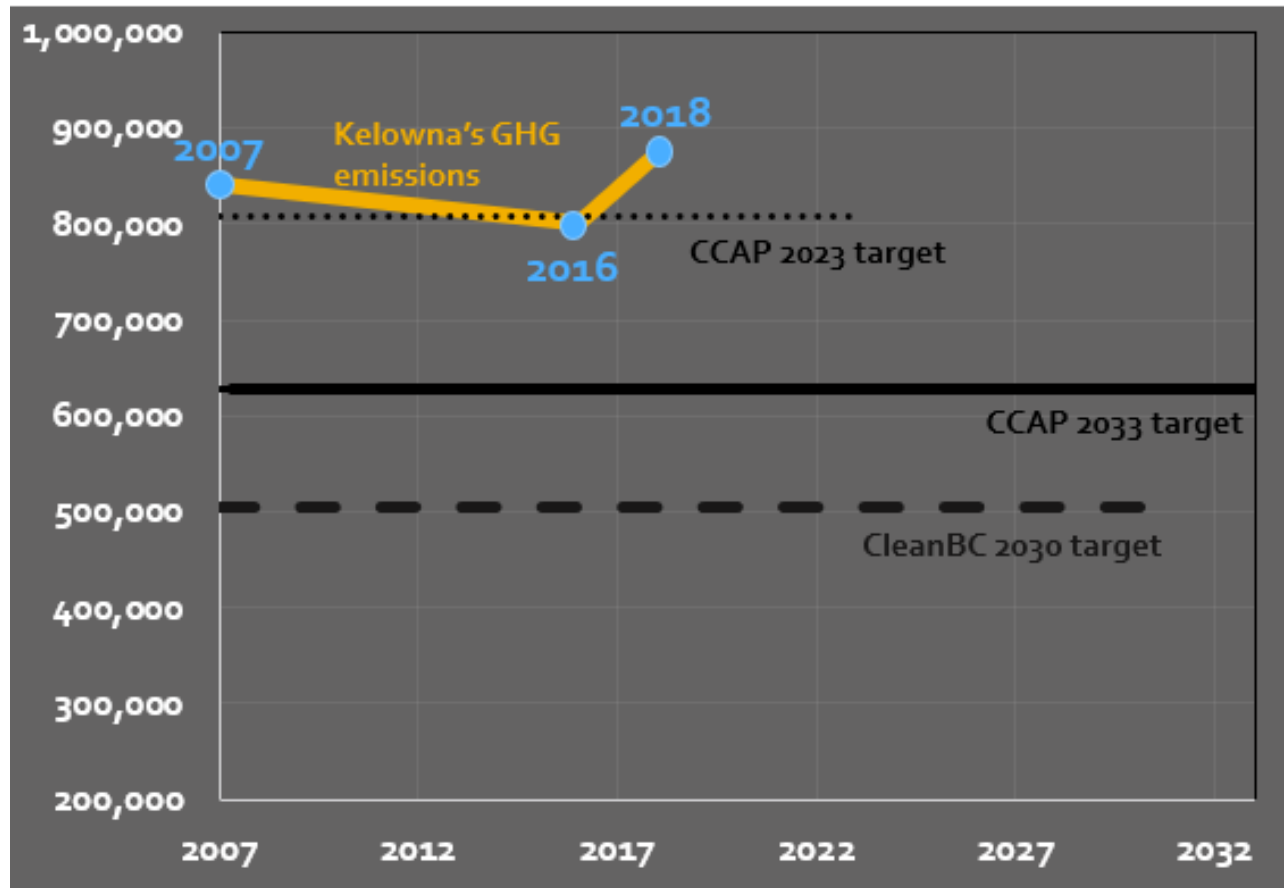


Community GHG Emissions

Target:
4% decrease by
2023 relative to
2007 levels

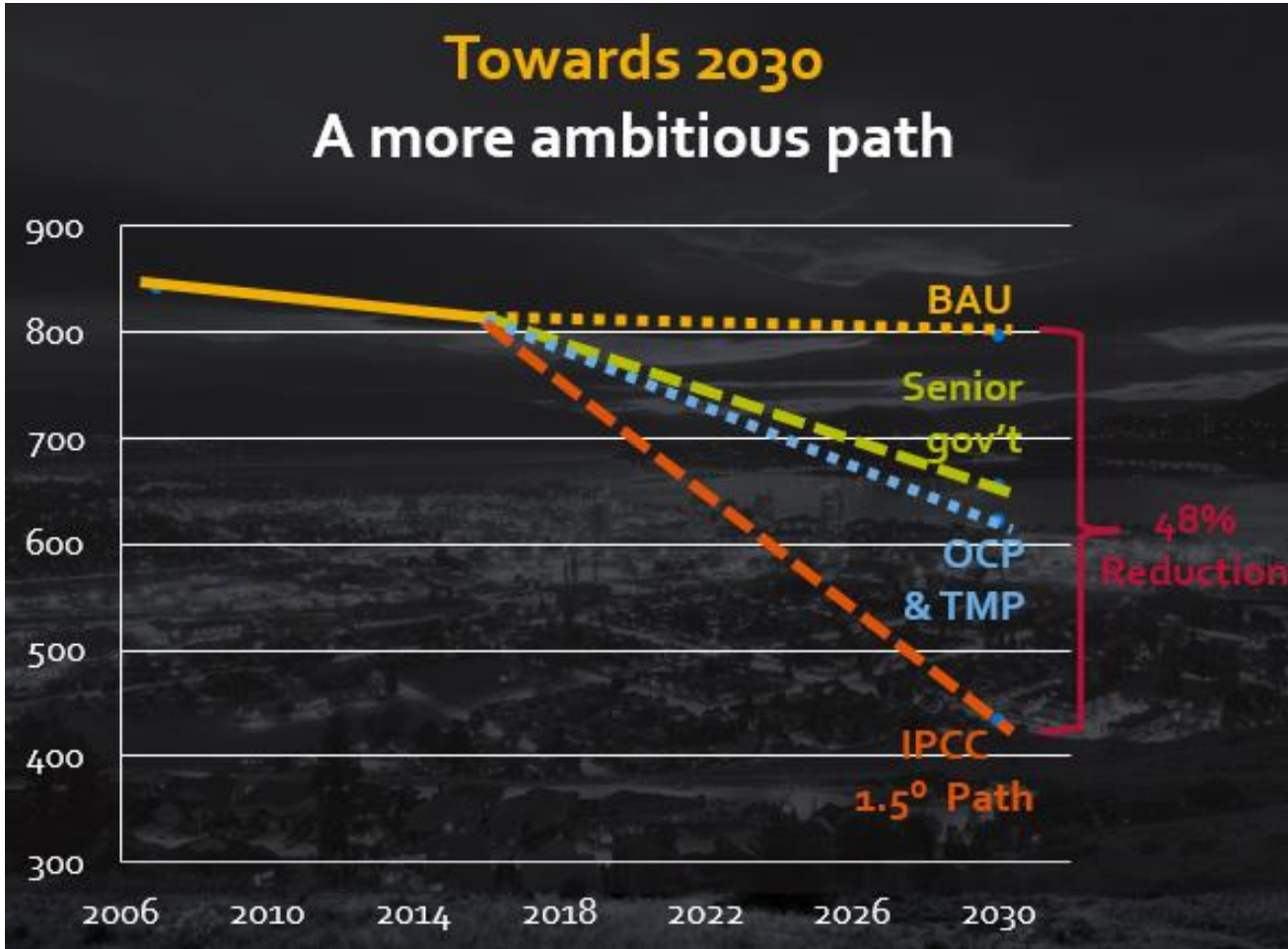
Progress:
2018 - 3.7%
increase

*17% decrease
per capita





Community GHG Emissions



City of Kelowna



Community GHG Emissions

2022 - Progress

- Began development of new *Climate Resilient Kelowna Strategy*
- Addition of five Level 2 and eight Level 1 public EV charging stations
- 25 municipal top-ups distributed in 2022 for fuel switching to air source heat pumps
- Implementation of the 2040 TMP
- Adopted Anti-Idling Bylaw

2023 – Key Initiatives

- Complete *Climate Resilient Kelowna Strategy*
- Develop and implement a pilot Home Energy Concierge Program for existing homes
- Enhance programs to incentive heat pump adoption
- Continue the installation of public EV charging stations
- Continue initiatives to increase EV charging in multi-unit residential



Adapt to a Changing Climate

No established KPIs yet

2022 - Progress

- Continued development of new *Climate Resilient Kelowna Strategy*
- Completed new *Community Wildfire Resilience Plan*
- Launched FireSmart Community Chipping Pilot Program
- Mill Creek Flood Protection Project

2023 – Key Initiatives

- Complete *Climate Resilient Kelowna Strategy*
- Continue FireSmart Community Chipping Program
- Implement the *Community Wildfire Resilience Plan*
- Continue Mill Creek Flood Protection Project
- Explore resilient roof space policy options



Protect and Restore Natural Areas

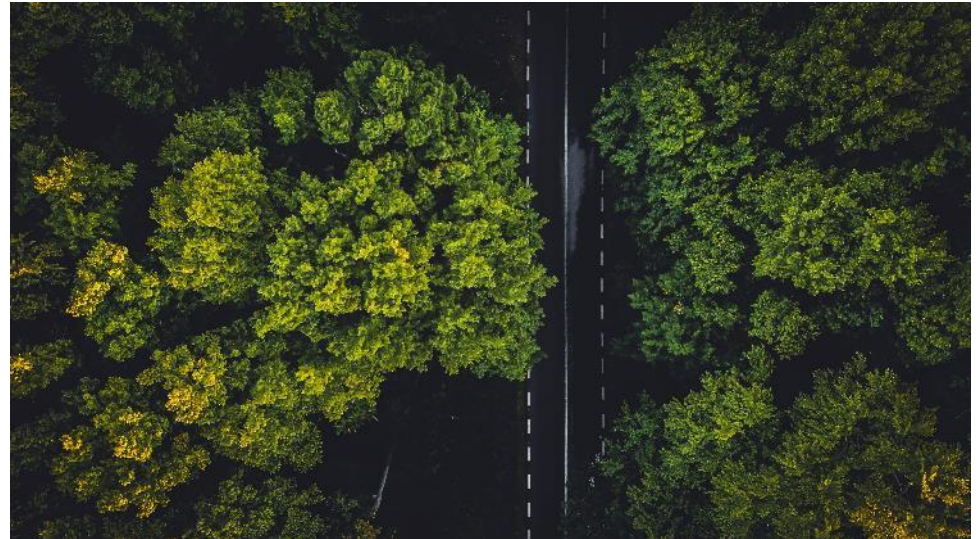
OCP Tree Canopy Targets:

- 12% - Urban Centres
- 20% - Core Areas
- 25% - Remainder of City

These targets are being reviewed through the *Sustainable Urban Forestry Strategy*

Progress:

Current canopy coverage is being calculated through the *Sustainable Urban Forestry Strategy*





Protect and Restore Natural Areas

2022 - Progress

- Began development of new Sustainable *Urban Forestry Strategy*
- Collaborating with RDCO to complete an updated Sensitive Ecosystem Inventory (SEI)
- Continued implementation of NeighbourWoods Program

2023 – Key Initiatives

- Complete *Sustainable Urban Forestry Strategy*
- Continue NeighbourWoods Program
- LiDAR assessment and analysis for key environmental indicators
- Initiate development of the Landscape Standards Bylaw



Shift to a Circular Economy

RDCO Waste Diversion

Target:

Average municipal solid waste disposal rate of 600 kilograms per capita by 2022

Progress:

639 kilograms per capita in 2020 (2021 and 2022 data expected in 2023)

Note: RDCO has a waste diversion target of 50 per cent by 2022. Metric is not calculated/tracked.





Shift to a Circular Economy

2022 - Progress

- Joined the Canadian Circular Cities and Regions Initiative (CCRI) Peer-to-Peer Network
- Initiated a Construction & Demolition Debris Study in partnership with the RDCO
- Hired a two-year term Agricultural Planner in Development Planning

2023 – Key Initiatives

- Determine 'circular' opportunities through the CCRI Program
- Complete Construction & Demolition Debris Study
- Complete deconstruction of City-owned homes

Next Steps

- ▶ Develop or update KPIs for each pathway
- ▶ Implement Quick Starts from Climate and Environment Review (and other project planned for 2023)
- ▶ Finalize key plans:
 - ▶ *Climate Resilient Kelowna Strategy*
 - ▶ *Sustainable Urban Forestry Strategy*
 - ▶ *Strategic Energy Management Plan*
- ▶ Set governance structure related to new Climate Action & Environmental Stewardship Manager position



Questions?