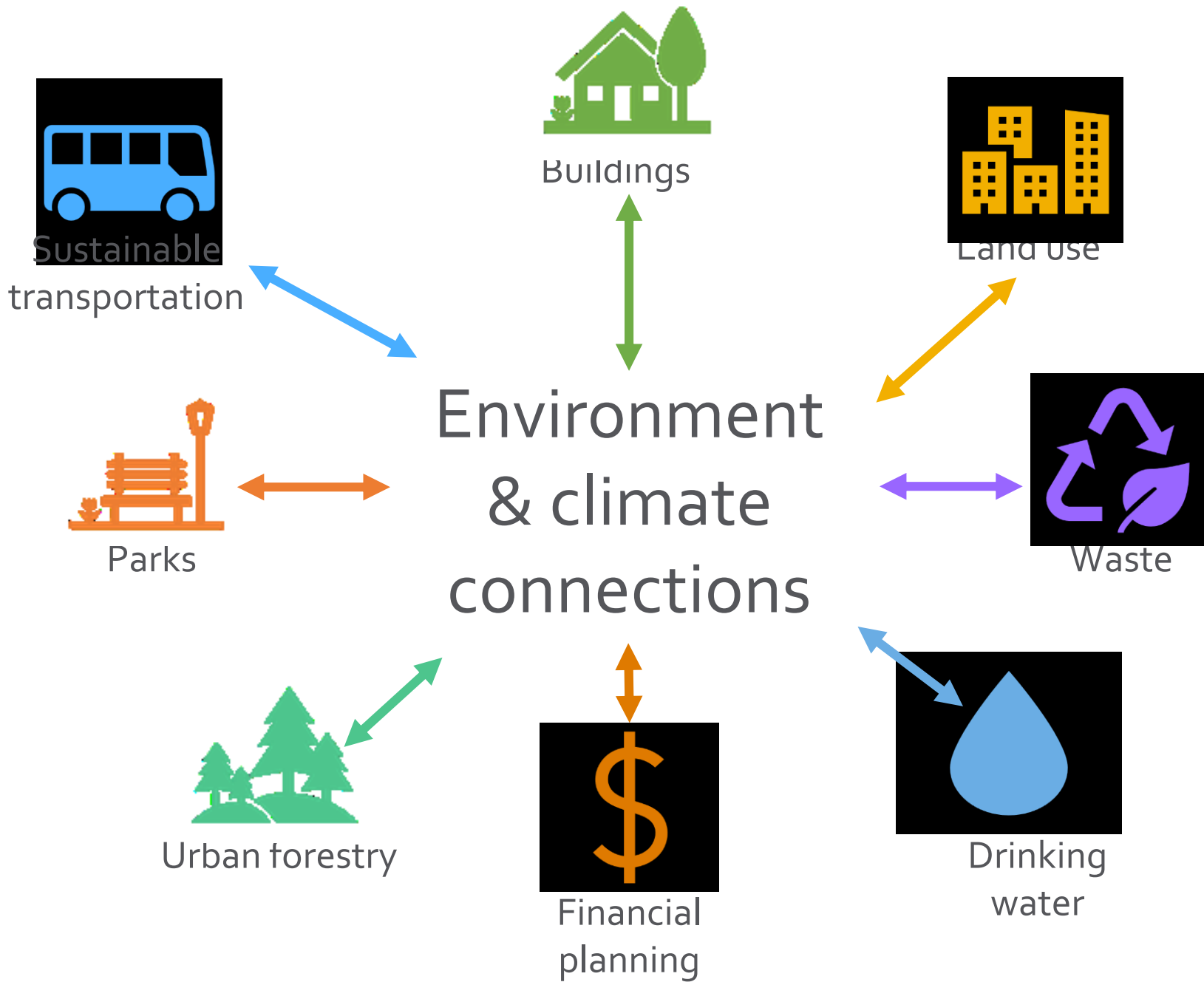




Update on Environmental Protection Council Priority

June 2020







Kelowna's natural environment

- ▶ 27 creeks
- ▶ 200 wetlands
- ▶ Ecosystems for fish and wildlife
- ▶ Habitat for rare and threatened plant and animal species
- ▶ 28% assessed as sensitive
- ▶ Critical migration corridor
- ▶ Good air quality

Assessing progress on environmental protection

- ▶ Clean water
- ▶ Clean air
- ▶ Clean energy
- ▶ Habitat protection
- ▶ Biodiversity
- ▶ Waste reduction
- ▶ Climate mitigation
- ▶ Climate adaptation



Assessing progress on environmental protection

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Assessing progress on environmental protection

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Council Priority Environmental protection	
Resiliency & adaptability to climate change ✓	Greenhouse gas emissions are decreasing ✗
Predictive modelling & forecasting ✓	Emergency response & preparation ✓

Council
Priority:
Environmental
Protection

Resiliency & adaptability
to climate change



Greenhouse gas
emissions are decreasing



Predictive modelling &
forecasting



Emergency response &
preparation



Climate projections



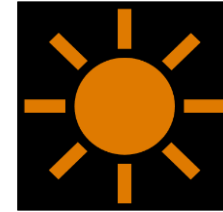
Warmer
temperatures



Drier
summers



Longer
growing
season



Warmer
winters



More
precipitation



Shifting
Seasons



Adaptation, modeling, response progress

- ▶ Fuel modification
- ▶ Flood models
- ▶ Irrigation water consumption predictor
- ▶ Improvements to stream capacity
- ▶ Changes to development standards

City of **Kelowna**

Adaptation options

- a. Climate adaptation plan – actions to live with the effects of global warming
- b. Climate resiliency plan – mitigation and adaptation to become resilient to climate change



Council
Priority:
Environmental
Protection

Resiliency & adaptability
to climate change



Greenhouse gas
emissions are decreasing



Predictive modelling &
forecasting



Emergency response &
preparation



**Council Priority
Environmental protection**

Greenhouse gas
emissions are decreasing

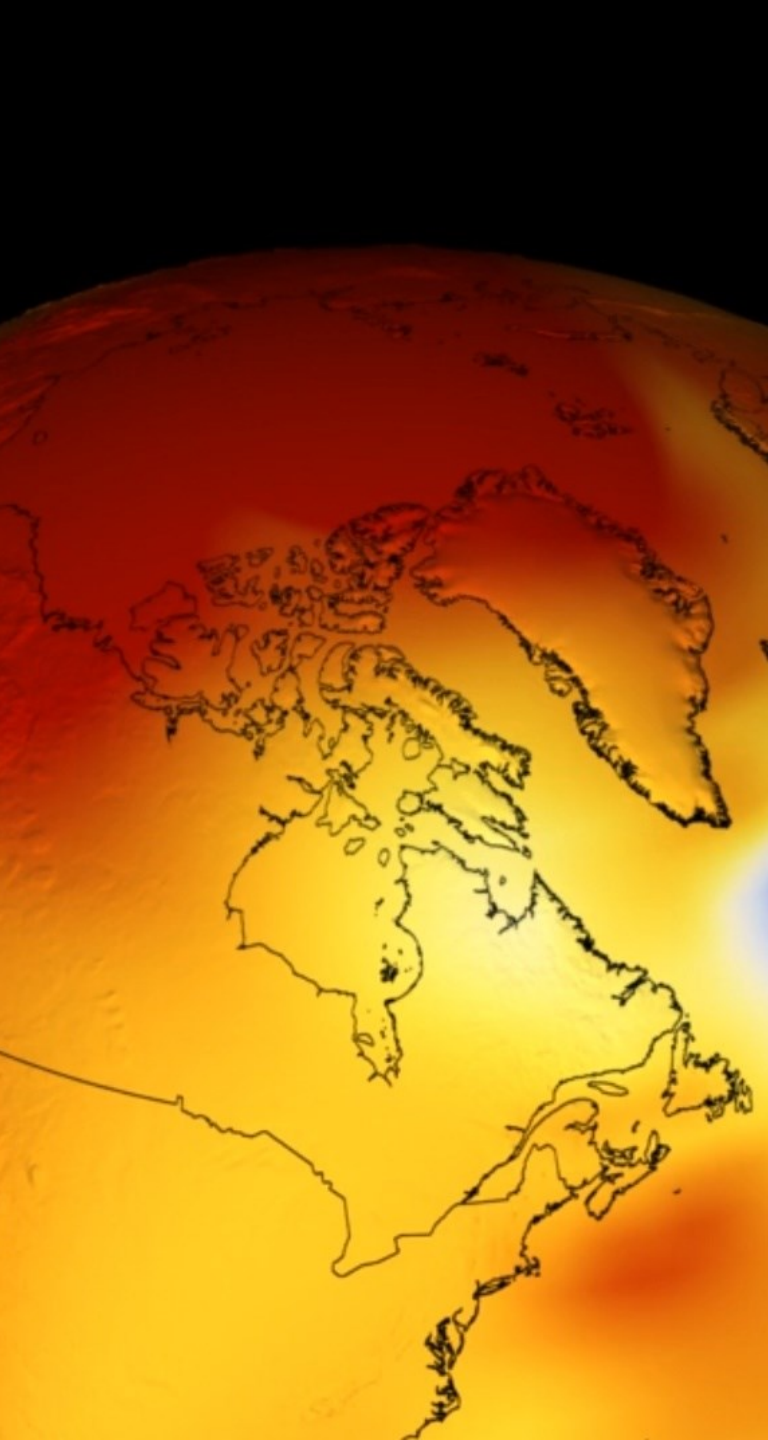


1. Corporate GHG emissions
2. Community GHG emissions

Corporate GHG Emissions

- ▶ Account for approx. 1% of community GHG emissions
- ▶ Historical corporate GHG emissions data being reconciled to establish performance trend

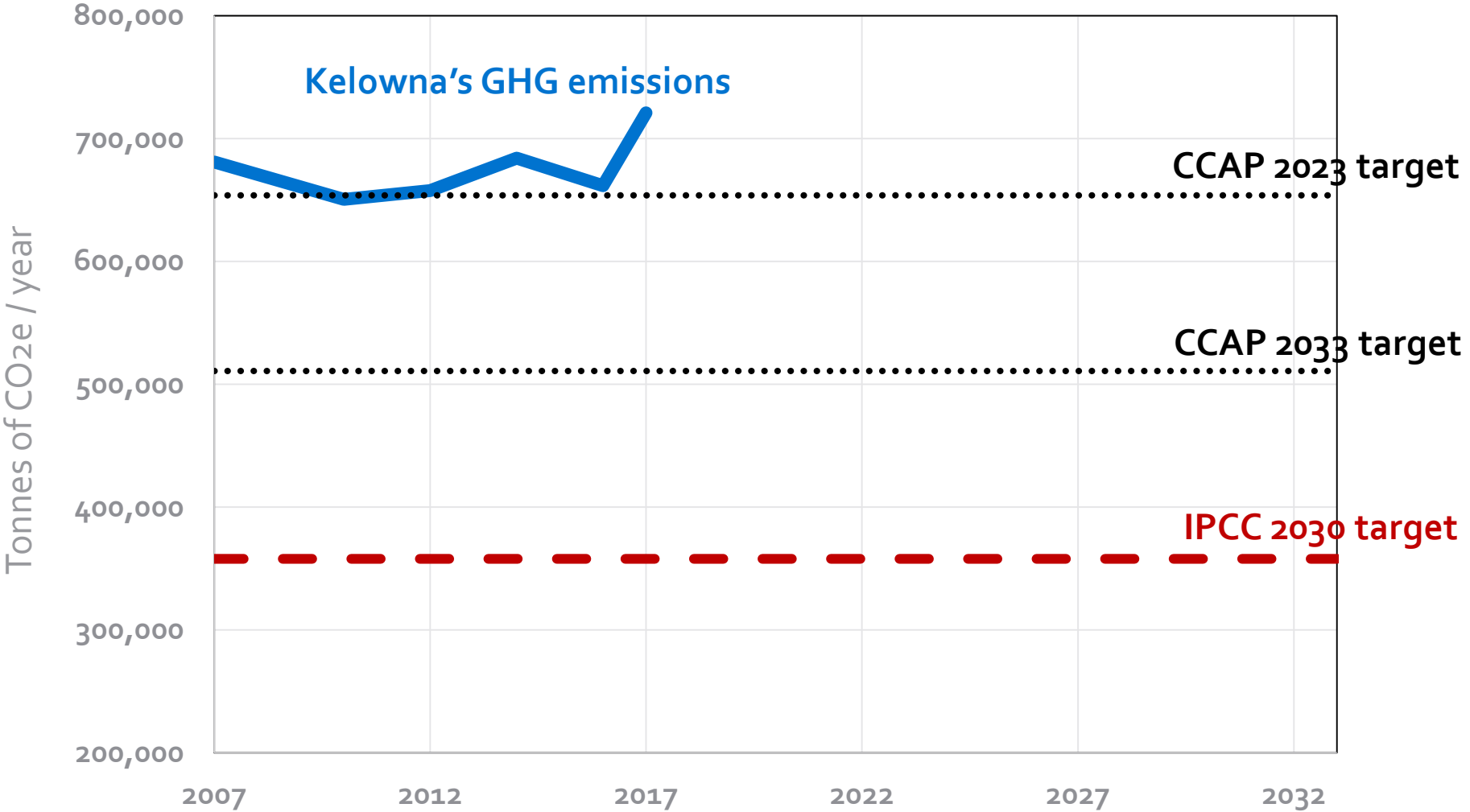




Global Emissions

- ▶ Reduce GHG emissions by 45% by 2030
- ▶ Limit warming to 1.5 degrees
- ▶ Unprecedented change needed for land use, transportation and buildings
- ▶ Local governments investigate how to accelerate GHG reduction or determining actions to align with IPCC

Kelowna's community GHG emissions



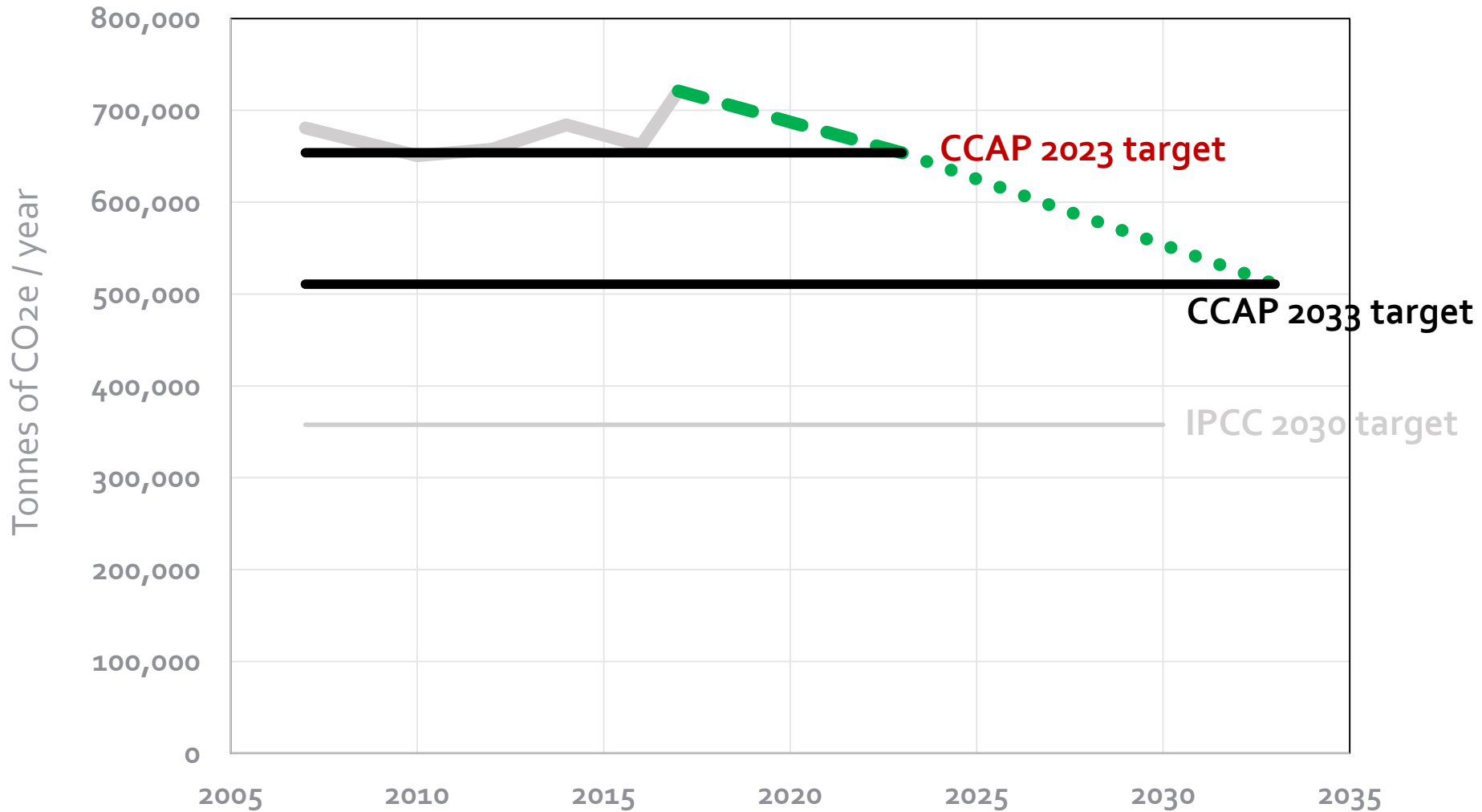
CCAP progress

	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	11	3	19	0	4	1	5
Years 3 - 5 (2021 - 2023)	0	1	1	2	0	3	3	6
Total	16	14	4	34	0	7	6	13

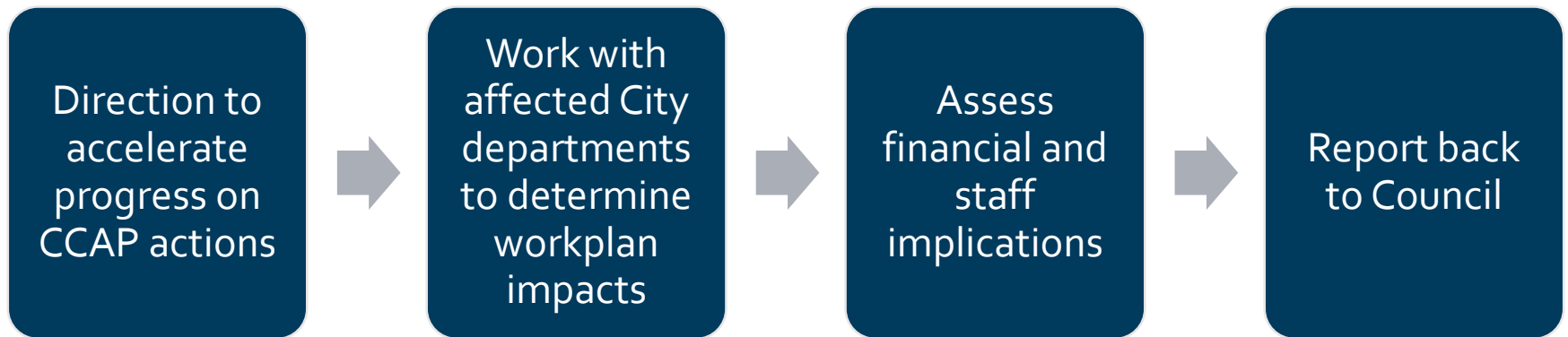


GHG Emissions Reduction Options

Option: Accelerate Progress on CCAP



Option: Accelerate Progress on CCAP



Example: Accelerate Progress for Transportation

What we are doing	Develop an Electric Vehicle Strategy (CCAP Action T6)
Accelerate progress	Accelerate implementation of the EV Strategy once complete



Example: Accelerate Progress in Buildings

What we are doing

Developing a Community Energy Retrofit Strategy (CCAP Action B4)

Accelerate progress

Investigate financing models and provide municipal incentives to support city-wide deep energy retrofits (CCAP Action B10)

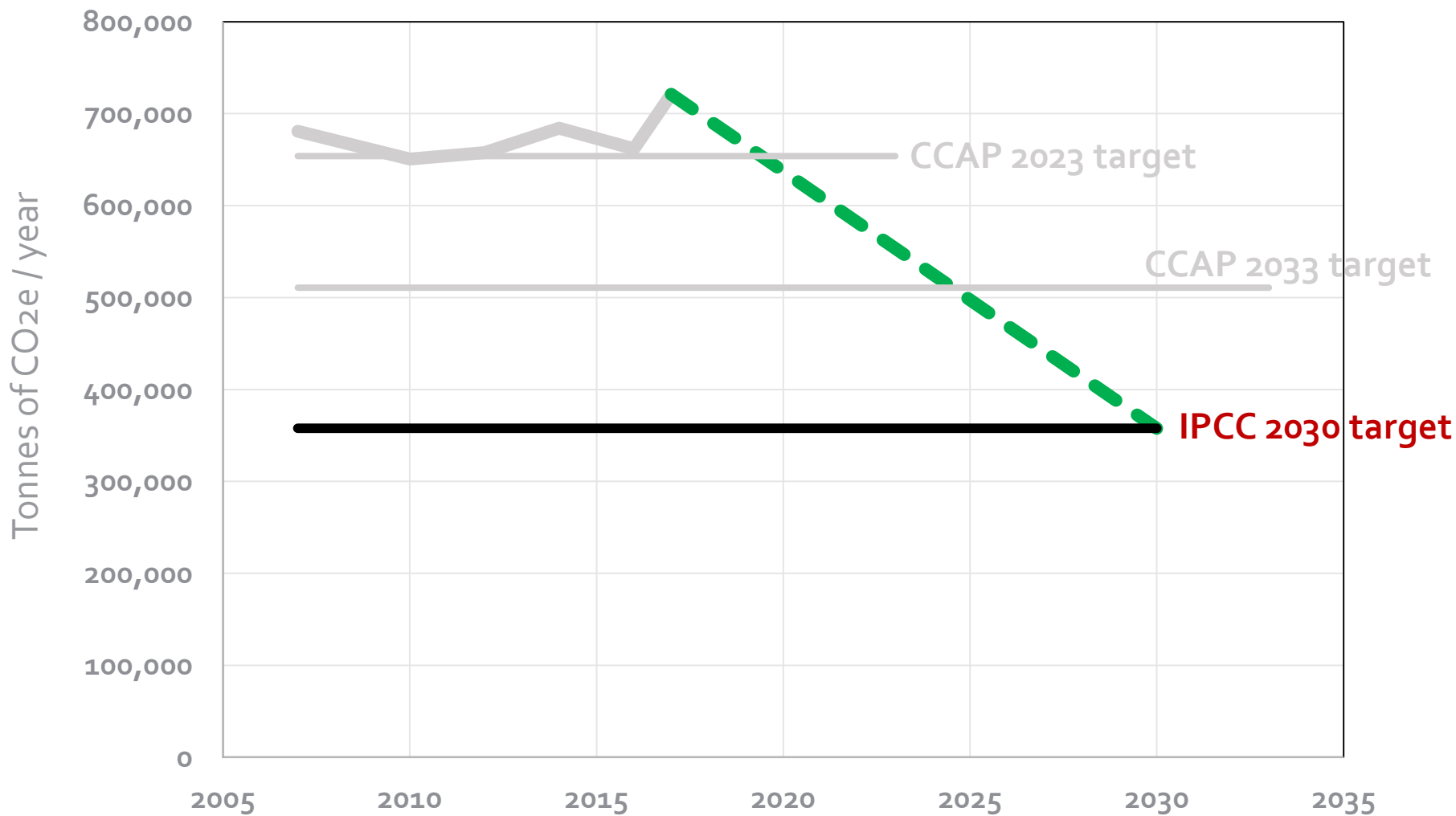


Example: Accelerate Progress for Planning

What we are doing	Develop 2040 OCP in conjunction with TMP (CCAP Action LU4)
Accelerate progress	Accelerate implementation of the OCP (once complete)



Option: Align with IPCC targets



Option: Align with IPCC targets

Agree to align with the IPCC recommendations to limit global warming to 1.5 °C by 2030

May include a Council Declaration of a Climate Emergency

Council may direct staff to determine what policy alignment would look like (normally with either added staff and/or financial commitments)



Revise community and corporate GHG emissions reduction targets

Most local governments have adopted the revised target of reducing community and corporate GHG emissions by 45-50% below 2007 levels by 2030

May also include a longer-term commitment to be net-zero (i.e., carbon neutral) by 2050.



Develop an action plan to achieve the revised GHG emissions reduction targets

Typically results in a revised Climate Action Plan or an entirely new plan (e.g., Climate Resiliency Plan).

Typically involves added resources (either staff and/or financial commitments) to implement the plan

Example policies to align with IPCC



By 2030, over half of the kilometres driven on Kelowna's roads will be by zero emissions vehicles.



Increase bicycle ridership and micro electric mobility to reach 10% of all trips taken by 2030, with further increases to 2050.



Each year, 10% of existing residential buildings will receive deep energy retrofits.

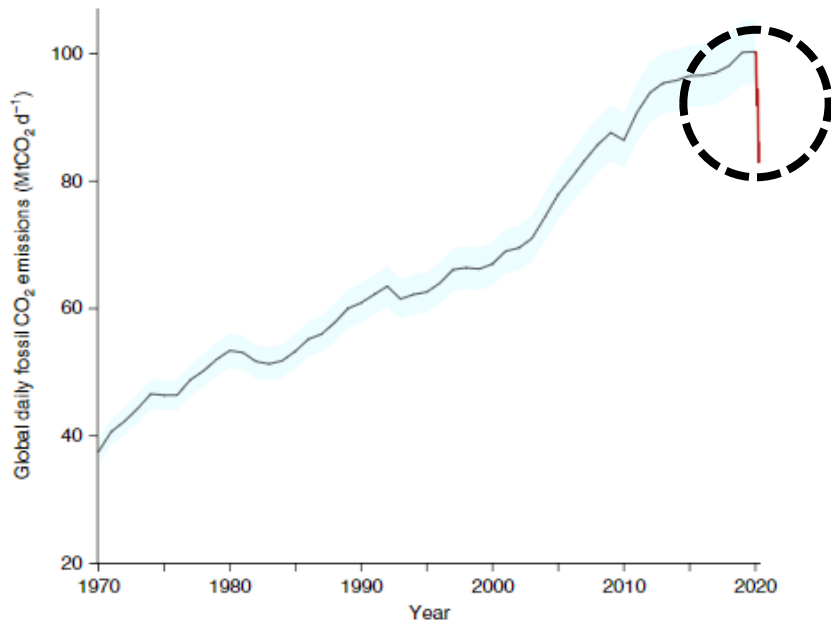


All new buildings will meet the top performance level of the BC Energy Step Code by 2025, with incentives for new buildings to install low-carbon energy systems.



By 2025, all new and replacement heating and hot water systems will be zero emissions.

GHG Emissions During COVID-19



- Government policies during COVID-19 restrictions **reduced transportation and changed consumption patterns**
 - Daily CO₂ emissions decreased by **17%** at the peak of restrictions in April
 - 2020 annual CO₂ emissions reduction expected between **4-7%**



Questions?

For more information, visit kelowna.ca.