

Report on the Draft Community Climate Action Plan

Committee of the Whole
April 20, 2021



Canada's Tournament Capital

DRAFT COMMUNITY CLIMATE ACTION PLAN

PURPOSE:

To present the draft Community Climate Action Plan (CCAP) to the Committee of the Whole and obtain feedback on the plan's goals, targets, and implementation actions.

COUNCIL STRATEGIC PLAN

Supports Council's strategic priorities and areas of focus regarding:

Livability

- **Healthy Community:** We foster an environment that supports and promotes healthy living through recreation, community, and social connection.
- **Housing:** We focus on improving diversity and access throughout the housing continuum.

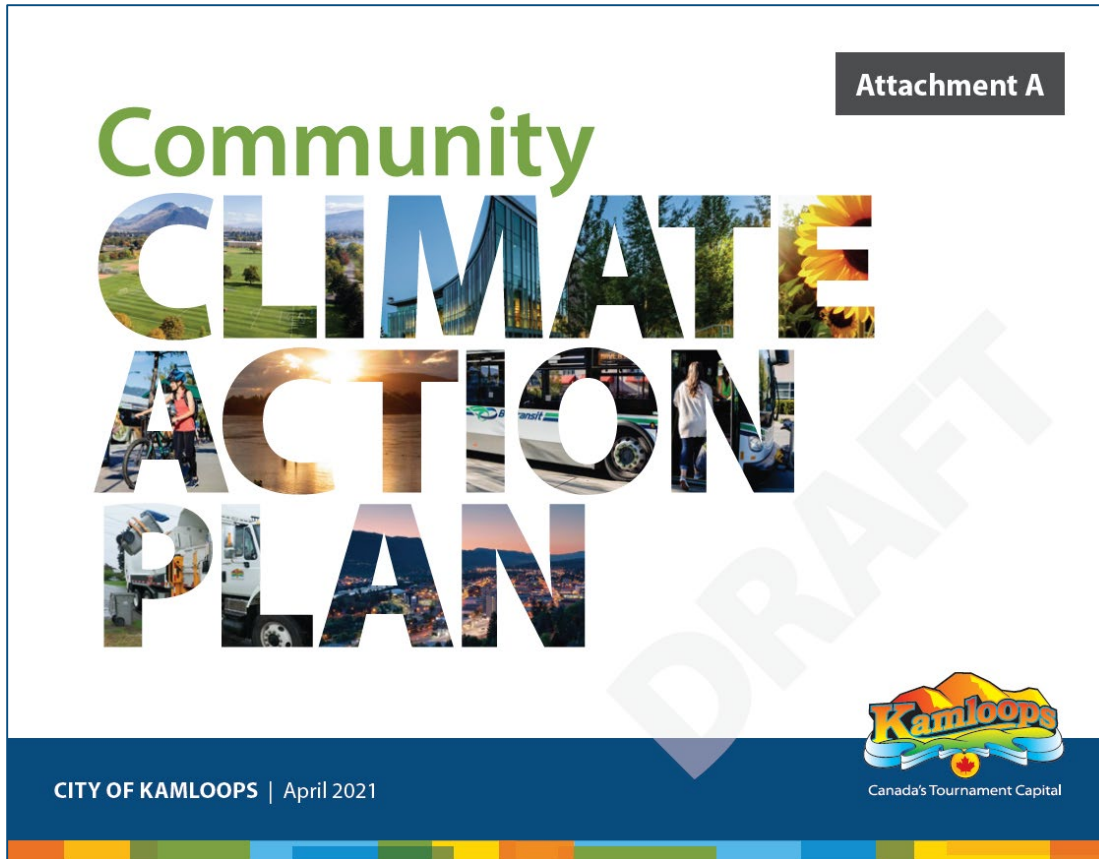
Vibrant Economy

- **Business Health:** We cultivate a positive business environment and maintain a framework that facilitates jobs, economic sustainability, and growth.
- **Economic Strength:** We support initiatives that increase our competitive advantage, cultivate growth, and support our residents.
- **Partnerships:** We continue to nurture partnerships with key agencies and organizations.

Environmental Leadership

- **Climate Action:** We enhance the City's resiliency and capacity for mitigating and adapting to the impacts of climate change.
- **Sustainability:** We implement strategies that reduce our impact on the environment.
- **Transportation:** We facilitate sustainable transportation options and create community connectivity.

PLAN OVERVIEW



- Climate Change: A Call to Action
- Objectives & Targets
- Current & Projected Emissions
- Kamloops' 8 Big Moves
- Equity & Climate Justice
- Implementing Climate Action
- Advocacy
- Measuring & Reporting Progress
- Appendix

CLIMATE CHANGE: A CALL TO ACTION

Limiting Global Warming to 1.5°C

- Impacts of climate change already being felt, and will intensify as global temperatures rise.
- IPCC's 2018 report on the impacts of global warming underscores the need to keep warming to 1.5°C to avoid most catastrophic impacts.
- The worst impacts are not inevitable.
- Society must work together to drastically reduce greenhouse gas (GHG) emissions and achieve net-zero emissions by 2050.



Foundations for Climate Action

CLIMATE ACTION INITIATIVES

2007: Residential curbside recycling collection launched

2008: Tournament Capital Centre achieves LEED certification

2010: City joins BC Hydro's Energy Manager Program

2011: Installation of universal water meters complete

2016: 24 kW solar system installed on the West Highlands Community Centre

2016: Inaugural Green Living Expo

2017: Dufferin Wetlands Restoration Project complete

2018: City acquires first electric fleet vehicles

2018: Xget'tem'Trail multi-use path complete

2019: BC Energy Step Code implementation strategy adopted

2020: Major infrastructure and energy efficiency improvements at Canada Games Aquatic Centre

2021: Curbside organics collection pilot

2021: City has 11 electric fleet vehicles

2010: Sustainable Kamloops Plan

2012: Airshed Management Plan

2013: Corporate Energy and Emissions Management Plan

2013: Food and Urban Agriculture Plan

2013: Agricultural Area Plan

2016: Urban Forest Management Strategy

2018: Transportation Master Plan

2018: Official Community Plan

2020: Electric Vehicle and E-Bike Strategy

2020: Downtown Transportation Choices Strategy

2020: Transit Future Action Plan

SUPPORTING PLANS

Plan Development Timeline

The CCAP was developed through a community engagement process involving the public, key stakeholders, the CCAP Advisory Group, and City Council.

PHASE 1

UNDERSTANDING THE PRESENT

(October 2018– February 2019)

PHASE 2

EXPLORING THE FUTURE

(March 2019–March 2020)

PHASE 3

CHOOSING OUR FUTURE

(April–November 2020)

PHASE 4

PLANNING OUR FUTURE

(December 2020–June 2021)

TARGETS



BY 2024

undertake
all short-term
actions



BY 2030

reduce community
GHG emissions
by at least 30%
compared to 2007



BY 2050

reduce community
GHG emissions
by at least 80%
compared to 2007

Key Emissions Sources in Kamloops



Transportation:

gas and diesel fuelled vehicles*



Buildings:

natural gas space and water heating*

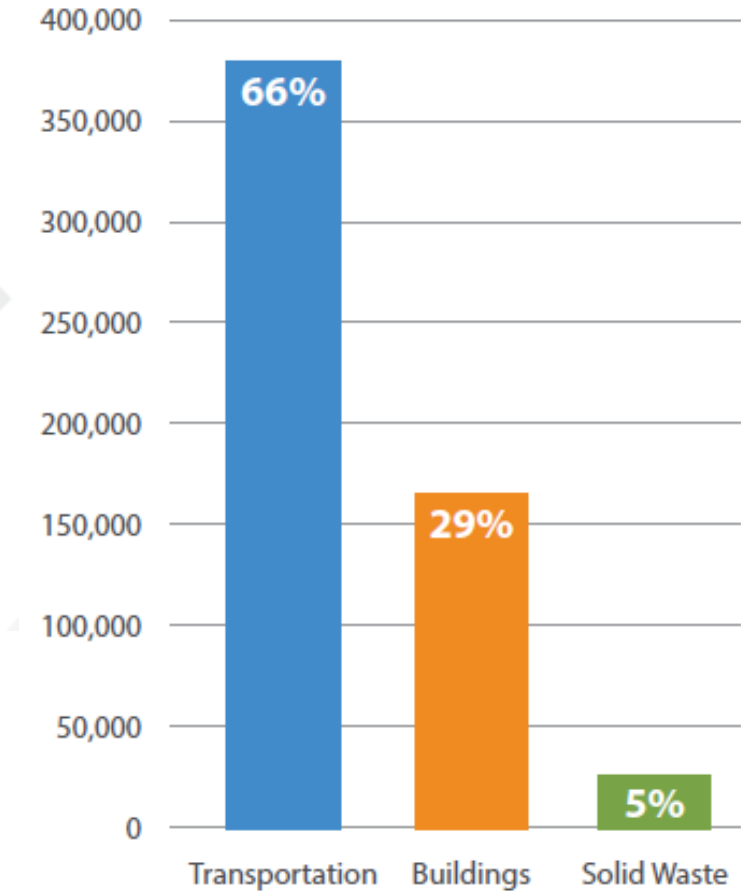


Solid Waste:

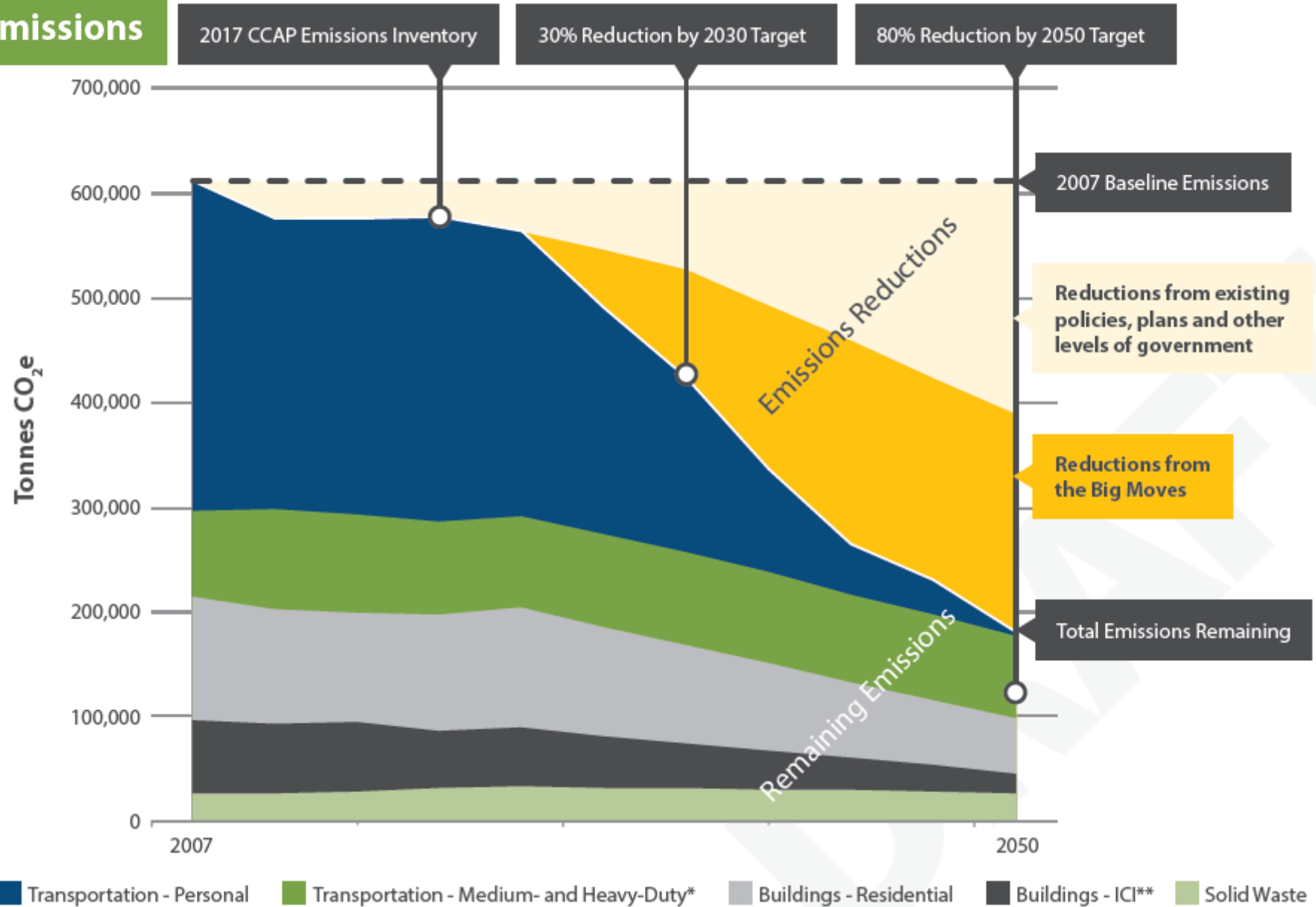
organic waste in landfill*

*primary sources

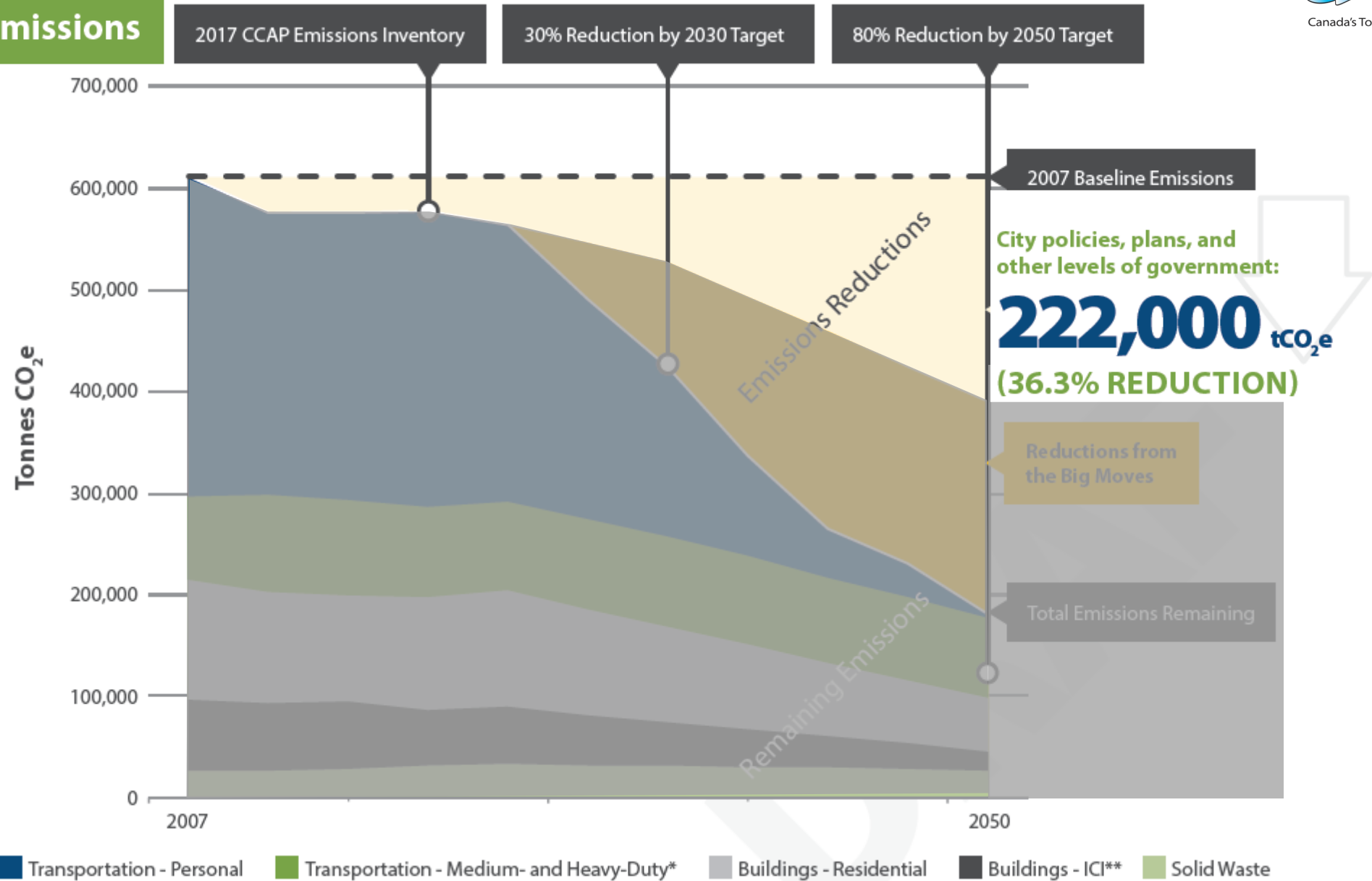
2017 Greenhouse Gas Emissions (tCO₂e) per Sector



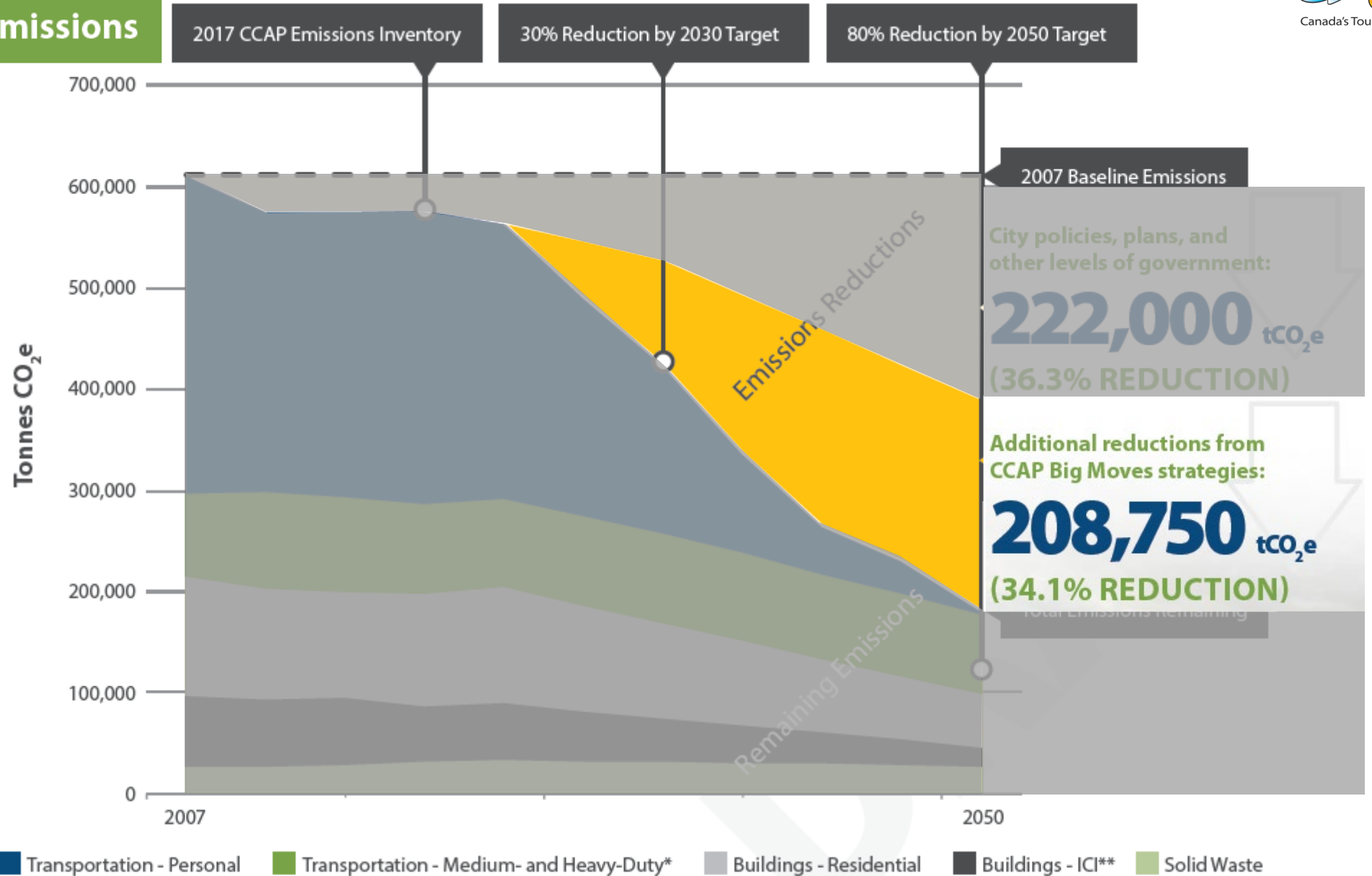
Projected Future Emissions



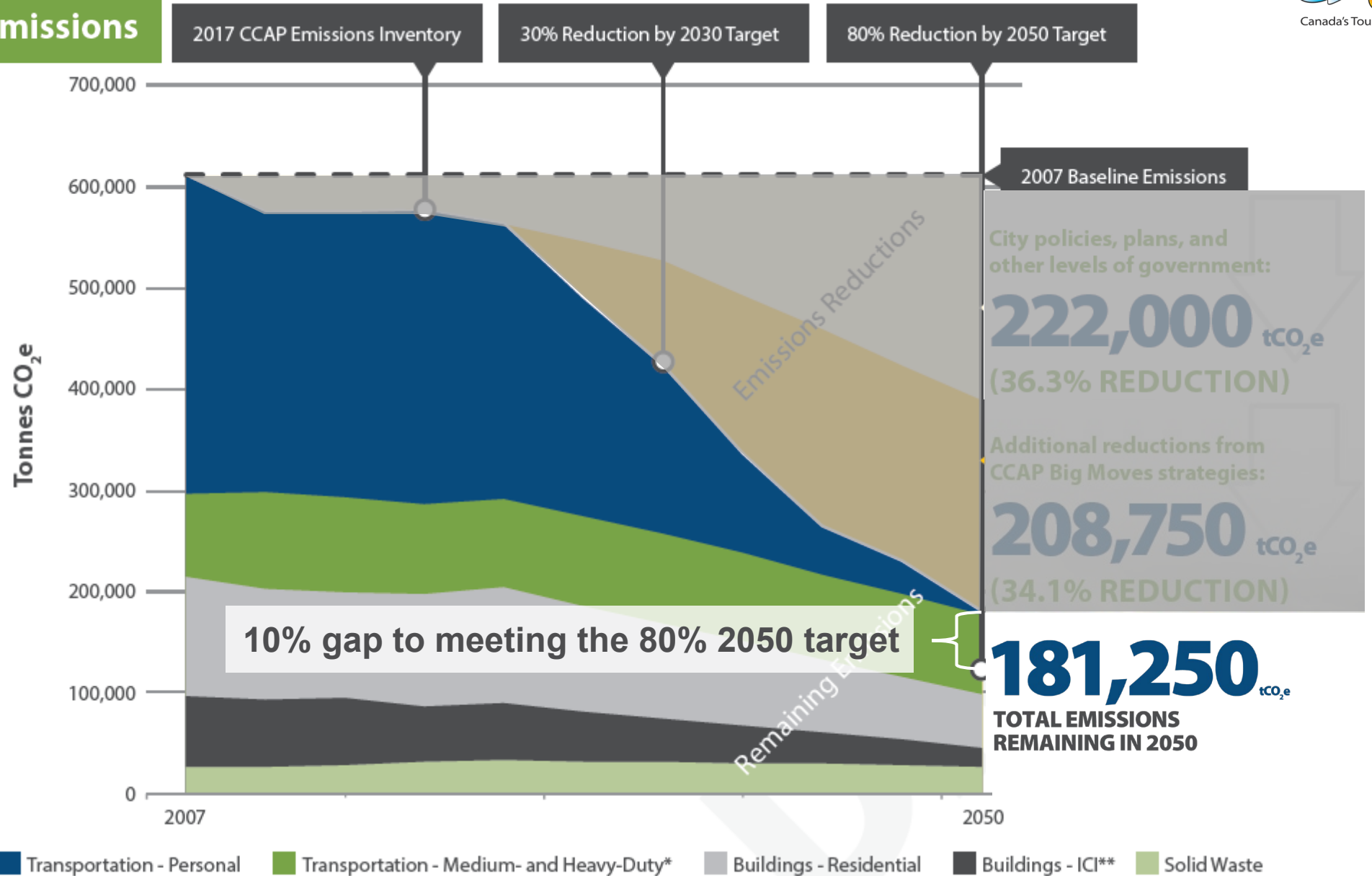
Projected Future Emissions



Projected Future Emissions



Projected Future Emissions



KAMLOOPS' 8 BIG MOVES

The Big Moves outline ambitious strategies that will have the biggest impact towards achieving our community's 80% emissions reduction by 2050 target.

Big Moves Co-Benefits



BIG MOVE 1: **Low-Carbon Development**

Promoting compact, mixed-use development supported by sustainable transportation options.



BIG MOVE 2: **Car-Light Community**

Facilitating the increased uptake of walking, cycling, carpooling, and transit.



BIG MOVE 3: **Zero-Emissions Transportation**

Supporting zero-emission vehicle use.



BIG MOVE 4: **Zero-Carbon Homes & Buildings**

Ensuring all buildings maximize energy efficiency and use low-carbon energy sources.



BIG MOVE 5: **Zero-Waste/Circular Economy**

Enhancing waste reduction, diversion, upcycling, and reuse.



BIG MOVE 6: **Renewable Energy**

Supporting localized renewable energy production and use.



BIG MOVE 7: **Municipal Climate Leadership**

Shifting to zero-carbon facilities and fleets with enhanced climate governance and communications.



BIG MOVE 8: **Healthy Urban Ecosystem**

Preserving ecosystems and using green infrastructure to provide carbon sequestration and climate resilience.



ENHANCED
LIVABILITY



GREEN ECONOMY
AND INNOVATION



IMPROVED
PUBLIC HEALTH



ECOSYSTEM
PRESERVATION



IMPROVED
AIR QUALITY



IMPROVED
WATER QUALITY



INCREASED CARBON
SEQUESTRATION



ENHANCED
RESILIENCE

TARGET

By 2050, 90% of residents can access their daily needs and efficient transit within a 10-minute walk or roll.

CO-BENEFITS



Enhanced
Livability



Improved
Air Quality



Ecosystem
Preservation



BIG MOVE 1

LOW-CARBON DEVELOPMENT



BIG MOVE 1:

LOW-CARBON DEVELOPMENT



STRATEGY	GOAL	PRIORITY	↓GHG BY 2050
1A - Ten-Minute City	To support the integration of daily needs amenities in existing neighbourhood centres and, wherever possible, to concentrate housing near existing and proposed transit, cycling, and walking networks.	Very High	17,400 tCO ₂ e (High)
1B - Diverse Housing Solutions	To support additional housing opportunities on residential lots.	Medium	2,500 tCO ₂ e (Moderate)
1C - Green New Neighbourhoods	To require that all new buildings and neighbourhoods in suburban and rural greenfields meet higher sustainable development standards.	High	5,450 tCO ₂ e (High)

TARGET

By 2050, 50% of trips in Kamloops are to be by active transportation and transit.

CO-BENEFITS



Improved
Public Health



Enhanced
Livability



Improved
Air Quality

2



BIG MOVE 2

CAR-LIGHT COMMUNITY



BIG MOVE 2:

CAR-LIGHT COMMUNITY



STRATEGY	GOAL	PRIORITY	↓GHG BY 2050
2A - Active Mobility	To enable the safe, secure, and efficient transport of people and goods using active transportation modes.	High	5,000 tCO₂e (Moderate)
2B - Optimize Transit and School Bus Service	To optimize transit and school bus service to support low-carbon development and land use goals.	Medium	2,000 tCO₂e (Moderate)
2C - Shared Streets	To create street space that is accessible to all ages and abilities, enhances pedestrian safety and comfort, and prioritizes active transportation.	Low	1,000 tCO₂e (Moderate)
2D - Transportation Demand Management	To decrease trips by single-occupancy vehicles by facilitating the uptake of sustainable transportation options and reducing the need to travel.	Medium	2,500 tCO₂e (Moderate)
2E - Kamloops Car Share	To reduce the number of privately-owned vehicles in the city through membership-based car sharing services.	Medium	1,000 tCO₂e (Moderate)

TARGET

By 2050, 85% of kilometres driven by Kamloops-registered passenger vehicles will be by zero-emissions vehicles.

CO-BENEFITS



Improved
Air Quality



Improved
Public Health



Green Economy
and Innovation



BIG MOVE 3

ZERO-EMISSIONS TRANSPORTATION

BIG MOVE 3:

ZERO-EMISSIONS TRANSPORTATION



STRATEGY	GOAL	PRIORITY	↓GHG BY 2050
3A - Zero-Emissions Light-Duty Vehicles	To support the transition to zero-emissions transportation choices.	Medium	5,000 tCO₂e (Moderate)
3B - Zero-Emissions Medium- and Heavy-Duty Vehicles	To support institutional, commercial and industrial fleets' transition to zero-emissions vehicles and equipment.	Medium	20,000 tCO₂e (Very High)
3C - Low-Carbon Urban Freight Delivery	To encourage the shift to zero-emissions delivery vehicles within the urban core and neighbourhood town centres as the demand for home deliveries increases.	Low	3,500 tCO₂e (Moderate)

TARGET

All new homes and buildings in the community will be net-zero energy ready by 2030 and zero carbon by 2040. Retrofitting 2% of existing dwelling units per year to achieve, on average, 50% GHG emissions reductions per unit.

CO-BENEFITS



BIG MOVE 4

ZERO-CARBON HOMES & BUILDINGS



BIG MOVE 4:

ZERO-CARBON HOMES & BUILDINGS



STRATEGY	GOAL	PRIORITY	↓GHG BY 2050
4A - New Buildings - Community-Wide	To support the transition to high-performance, energy-efficient, and zero-carbon homes and buildings.	Very High	13,500 tCO₂e (High)
4B - Existing Buildings - Community-Wide	To support rapid and large-scale retrofits to existing homes and buildings that result in energy efficiency improvements and switching to low-carbon energy sources.	High	81,800 tCO₂e (Very High)

TARGET

To reduce waste sent to the landfill by 50% by 2028 and by 90% by 2050.

CO-BENEFITS



Ecosystem
Preservation



Green Economy
and Innovation



Improved
Public Health



BIG MOVE 5

ZERO-WASTE/ CIRCULAR ECONOMY



ZERO-WASTE/ CIRCULAR ECONOMY



STRATEGY	GOAL	PRIORITY	↓GHG BY 2050
5A - Local Organics Collection and Processing	To reduce and capture all kitchen and yard waste for beneficial end use.	High	6,100 tCO ₂ e (Moderate)
5B - Waste Reduction and Diversion	To reduce waste and prioritize the diversion of methane-generating materials (i.e. cardboard and paper, yard, wood waste) from entering the landfill.	Very High	20,500 tCO ₂ e (Very High)
5C - Circular Economy Research and Innovation	To reduce the use of non-renewable resources, promote materials reuse, and support regenerative business models.	Medium	Enabling

TARGET

To increase the generation and use of local, low-carbon, renewable energy sources.

CO-BENEFITS



Green Economy
and Innovation



Ecosystem
Preservation



Enhanced
Resilience



BIG MOVE 6

RENEWABLE ENERGY

BIG MOVE 6:

RENEWABLE ENERGY



STRATEGY	GOAL	PRIORITY	↓GHG BY 2050
6A - Residential and Neighbourhood Scale Energy	To support the development of low-carbon, renewable energy systems at building and neighbourhood scales.	High	10,000 tCO₂e (High)
6B - Renewable Energy Innovation	To position Kamloops as a clean energy research, technology, and manufacturing hub to support BC's low-carbon transition.	Medium	3,500 tCO₂e (Moderate)

TARGET

The City of Kamloops will reduce carbon emissions from municipal operations by 40% by 2030 and 100% by 2050.

CO-BENEFITS



Improved
Air Quality



Green Economy
and Innovation



Enhanced
Livability



BIG MOVE 7

MUNICIPAL CLIMATE LEADERSHIP



BIG MOVE 7:

MUNICIPAL CLIMATE LEADERSHIP

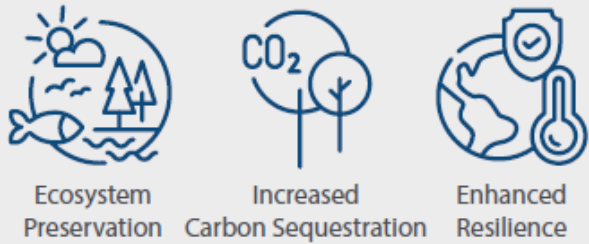


STRATEGY	GOAL	PRIORITY	↓GHG BY 2050
7A - Zero-Carbon Civic Operations	To decarbonize municipal operations by improving the efficiency of civic facilities, fleet, and infrastructure and transitioning to low-carbon energy sources.	Very High	8,000 tCO₂e (Moderate)
7B - Climate Governance	To incorporate climate action decision-making tools and policies to ensure all City department work plans and capital and operating budgets are aligned with the corporate emissions reductions targets.	High	Enabling
7C - Communicating Climate Action	To engage residents on the actions they can take to address climate change and reduce emissions at home, at school and in the workplace.	High	Enabling

TARGET

To enhance and restore urban ecosystem health to improve carbon storage capacity and resilience to climate change.

CO-BENEFITS



BIG MOVE 8

HEALTHY URBAN ECOSYSTEM



BIG MOVE 8:

HEALTHY URBAN ECOSYSTEM



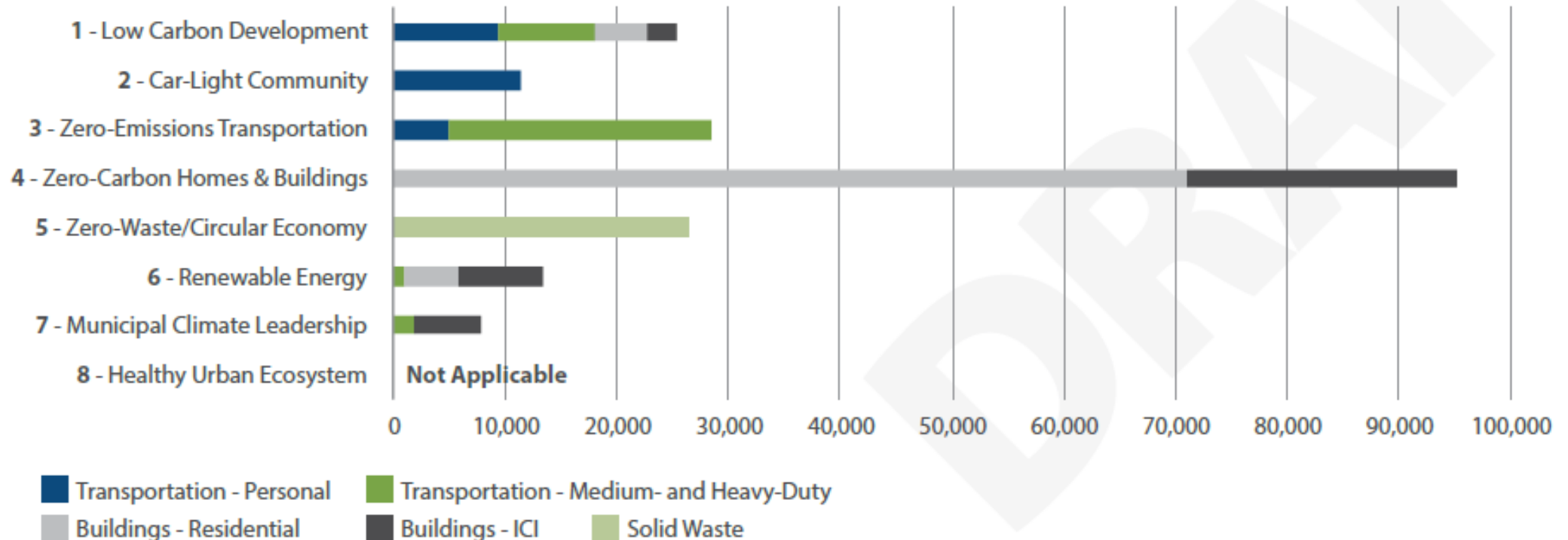
STRATEGY	GOAL	PRIORITY	↓GHG BY 2050
8A - Urban Ecosystems for Climate Resilience	To enhance our urban ecosystem’s carbon storage capacity while supporting biodiversity and resilience to climate change.	High	Supporting
8B - Protect and Heal Nature	To protect, enhance, and restore ecosystem health.	Medium	Supporting
8C - Green Infrastructure	To utilize green infrastructure techniques to enhance green space; stormwater management; and air, soil, and water quality.	Low	Supporting

Big Moves Emissions Reductions Summary

COMBINED, THE BIG MOVES
COULD DECREASE EMISSIONS BY

208,750 tCO₂e
BY 2050

PROJECTED ANNUAL EMISSIONS REDUCTIONS BY 2050, PER BIG MOVE (tCO₂e)



IMPLEMENTING CLIMATE ACTION

Contributions from all levels of government, local private, public and social sectors, citizens and community groups will be necessary to achieve the CCAP’s goals.

An implementation chart is provided with assigned priority levels for each strategy based on:

- greenhouse gas reductions
- ease of implementation
- municipal authority
- city and stakeholder costs

BIG MOVES IMPLEMENTATION CHART

BIG MOVE 1:
LOW-CARBON DEVELOPMENT



BIG MOVE STRATEGY	Annual Emissions Reductions by 2050	Implementation Priority	IMPLEMENTATION ACTIONS	Lead	Support Dept. or Agency	Actions Initiation Time Line		
						Short (2021–24)	Medium (2025–29)	Long (2030+)
1A - Ten-Minute City	17,400	Very High	Identify priority areas to support infill projects that further increase housing density, mixed uses, and active transportation infrastructure in existing neighbourhood centres.	DES		✓		
			Increase residential density along the proposed frequent transit network in core areas (e.g. by reviewing zoning in areas with existing access to daily needs and transit and increasing transit service levels in line with infill development).	DES	BCT	✓		
			Identify additional residential areas for medium-to-high-density development, including assessing where small-scale commercial amenities may be appropriate to service the needs of surrounding neighbourhood residents.	DES		✓		
			Increase availability of affordable market housing options that also contribute to higher density (e.g. density bonus for rental-only multi-family buildings and rezoning for multi-family affordable housing).	DES	CPS	✓		
1B - Diverse Housing Solutions	2,500	Medium	Identify urban-designated areas where new single-family and semi-detached homes must meet legal "secondary-suite-ready" requirements.	DES		✓		
			Promote small lot residential infill (e.g. by expanding the small lot single family zone, which allows for duplex creation where there is rear lane access).	DES		✓		
			Create guidelines and designate areas for permitting both a secondary suite and an accessory dwelling unit (e.g. carriage suite or garden suite) on a single-family lot.	DES	KFR		✓	

ADVOCACY Advocacy to other levels of government, utility companies, and key stakeholders will be required to boost emissions reductions in areas that the City has limited jurisdiction over.

Economic Considerations

- Implementing the CCAP will require investments by the City, residents, businesses, institutions, and developers, many of which will also boost the local economy.
- Economic considerations are included for all Big Move strategies, with high-level cost estimates only for the most current day approximations.
- A preliminary five-year budget for implementing the CCAP is provided as Attachment “C” in the report.
- Business cases will be prepared for specific actions at time of implementation, using the most up-to-date costs, resource requirements, available grants, and identified funding sources.

The cost from the impacts of uncontrolled climate change has been estimated to equate to at least 5% of global GDP, yet studies consistently show it would cost less to make the deep emission cuts needed to avoid the worst impacts.

CCAP – Financial Plan (2022-2026)

BM	CCAP Priority	Action	Budget Type		Budget Year				
			Operating	Capital	2022	2023	2024	2025	2026*
EXISTING FUNDED PROGRAMS:									
2A	High	Build out a connected active transportation network by 2030, starting with completing connections along north-south and east-west corridors, followed by filling in any gaps to ensure key feeder connections to core routes.		✓	2,400,000	2,400,000	2,400,000	2,400,000	TBD
2B	Medium	Improve infrastructure and amenities (e.g. seating, pads, shelters, real-time bus arrival information) to encourage transit use.		✓	100,000	100,000	100,000	100,000	TBD
2D	Medium	Develop and promote TDM programs for employers city-wide, including facilitating the use of sustainable transportation options and reducing the need for travel (i.e. through virtual meetings, flexible work hours, and work-from-home options).	✓		50,000	50,000	50,000	50,000	TBD
PROPOSED UNFUNDED PROGRAMS (i.e. new requests or additional to existing budget):									
2A	High	Build out a connected active transportation network by 2030, starting with completing connections along north-south and east-west corridors, followed by filling in any gaps to ensure key feeder connections to core routes.		✓	1,000,000	1,000,000	1,000,000	1,000,000	1,000,000

EQUITY & CLIMATE JUSTICE



- Those already disadvantaged by poverty and inequality contribute less to emissions, but are more vulnerable to climate change impacts.
- Actions in the CCAP provide both opportunities and challenges for enhancing equity.
- City social plans will guide the implementation of actions to reduce GHGs in a way that is fair and just.

MEASURING & REPORTING PROGRESS

Annually

A CCAP progress report will be prepared and presented to Council outlining progress on actions, successes and challenges, new actions, and annual and total investment.

Every 5 Years

A more comprehensive review will be conducted and reported, including a community emissions inventory, calculation of key performance indicators, full review of actions to assess GHG reduction targets, etc.

Ongoing

Timelines can be updated as part of the CCAP's reporting cycle to reflect changes to funding, staffing levels, or emerging community issues or opportunities that may have impacts on the implementation plan.

NEXT STEPS

- Obtain the COTW's input and make revisions where necessary.
- Present the draft plan to the public and stakeholders, including the CCAP Advisory Group, for review and feedback in late April and early May 2021 and make revisions where necessary.
- Present final CCAP to Council for adoption in June 2021.

DRAFT COMMUNITY CLIMATE ACTION PLAN

RECOMMENDATION:

That the Committee of the Whole direct staff to:

- a) engage with the public and stakeholders on the draft Community Climate Action Plan
- b) bring the Community Climate Action Plan to Council for final review and adoption