



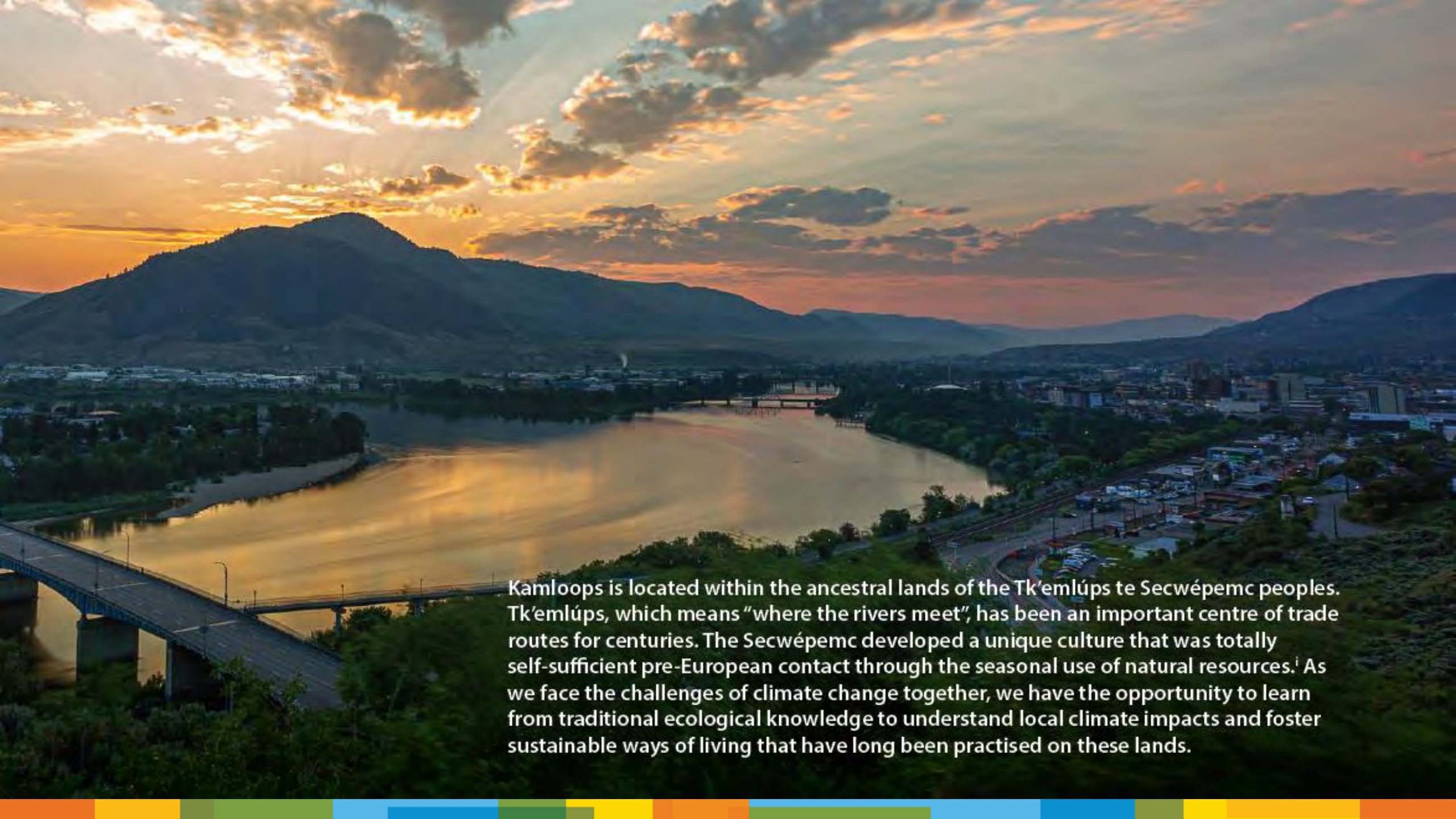
Draft Community Climate Action Plan

Kamloops Air Quality Roundtable

May 20, 2021



Canada's Tournament Capital



Kamloops is located within the ancestral lands of the Tk'emlúps te Secwépemc peoples. Tk'emlúps, which means "where the rivers meet", has been an important centre of trade routes for centuries. The Secwépemc developed a unique culture that was totally self-sufficient pre-European contact through the seasonal use of natural resources.ⁱ As we face the challenges of climate change together, we have the opportunity to learn from traditional ecological knowledge to understand local climate impacts and foster sustainable ways of living that have long been practised on these lands.

- Emissions Sources & Targets
- Updated 8 Big Moves
- Economic Considerations, Equity & Climate Justice
- Implementation
- Your 2050 Vision

Community CLIMATE ACTION PLAN

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)



Concurrent to the City's CCAP process, Tk'emlúps te Secwépemc have also been developing a Community Energy Plan. This presents an opportunity to build upon partnerships, collaborate on climate action projects and initiatives, and share insights at Community to Community Forums that will help both communities to reduce emissions, mutually benefit from sustainable economic development, and adapt to climate change.

Engagement Highlights



48

participants at in-person and virtual engagement sessions



805

unique visitors to the Let's Talk Climate Action page



532

survey responses

89%

viewed climate change as a somewhat or very serious problem

924

comments contributed



Key Emissions Sources in Kamloops



Transportation:

gas and diesel fuelled vehicles*



Buildings:

natural gas space
and water heating*

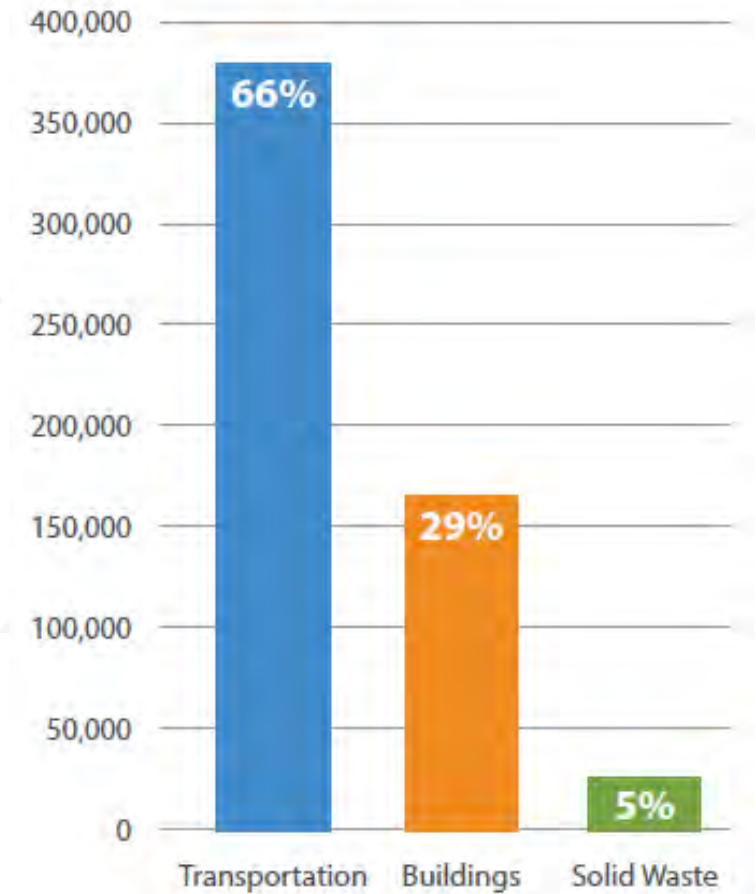


Solid Waste:

organic waste in landfill*

*primary sources

2017 Greenhouse Gas Emissions (tCO₂e) per Sector



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



Big Move Emissions Reductions

Each of the 24 strategies within the Big Moves has been modelled for its potential annual emissions reductions by 2050 under the following sectors:

- personal transportation
- medium- and heavy-duty transportation
- residential buildings
- institutional, commercial, and industrial (ICI) buildings
- solid waste

Very High

20,000 tCO₂e
and above

Moderate

1,000–9,999
tCO₂e

High

10,000–19,999
tCO₂e

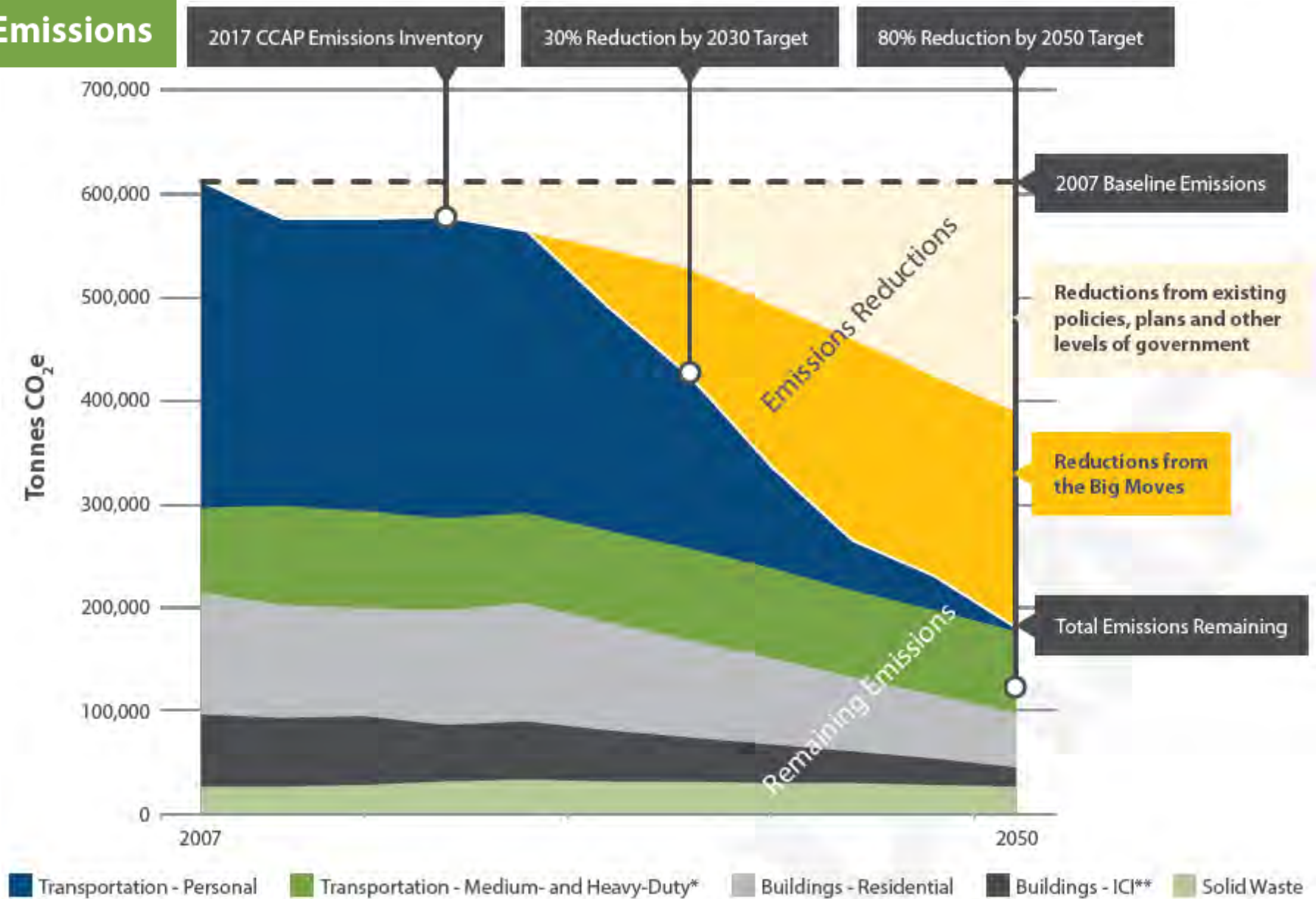
Enabling

strategies that have not been modelled but are necessary to enable emissions reductions in other areas

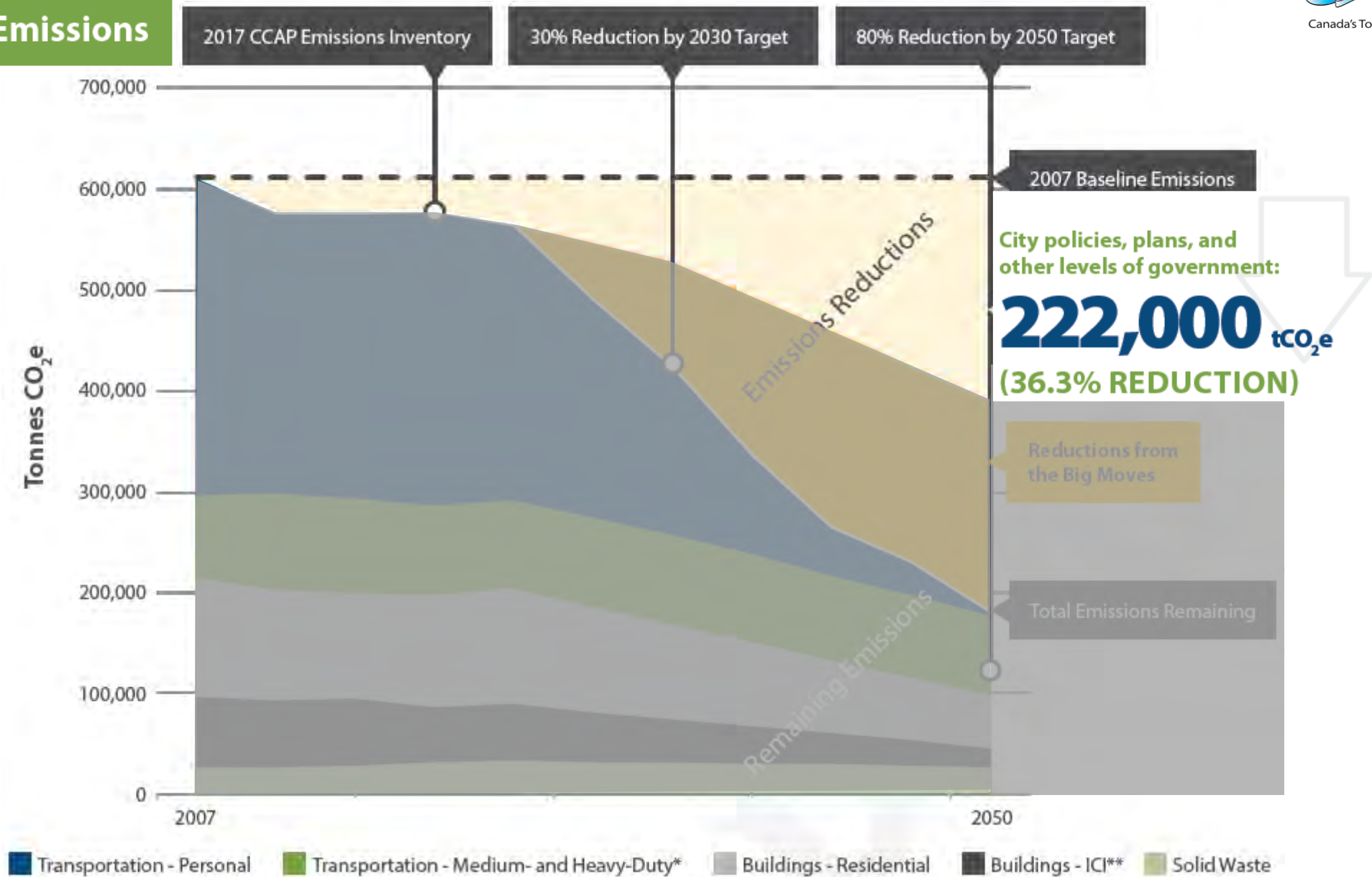
Supporting

strategies with modest emissions reductions that have not been modelled

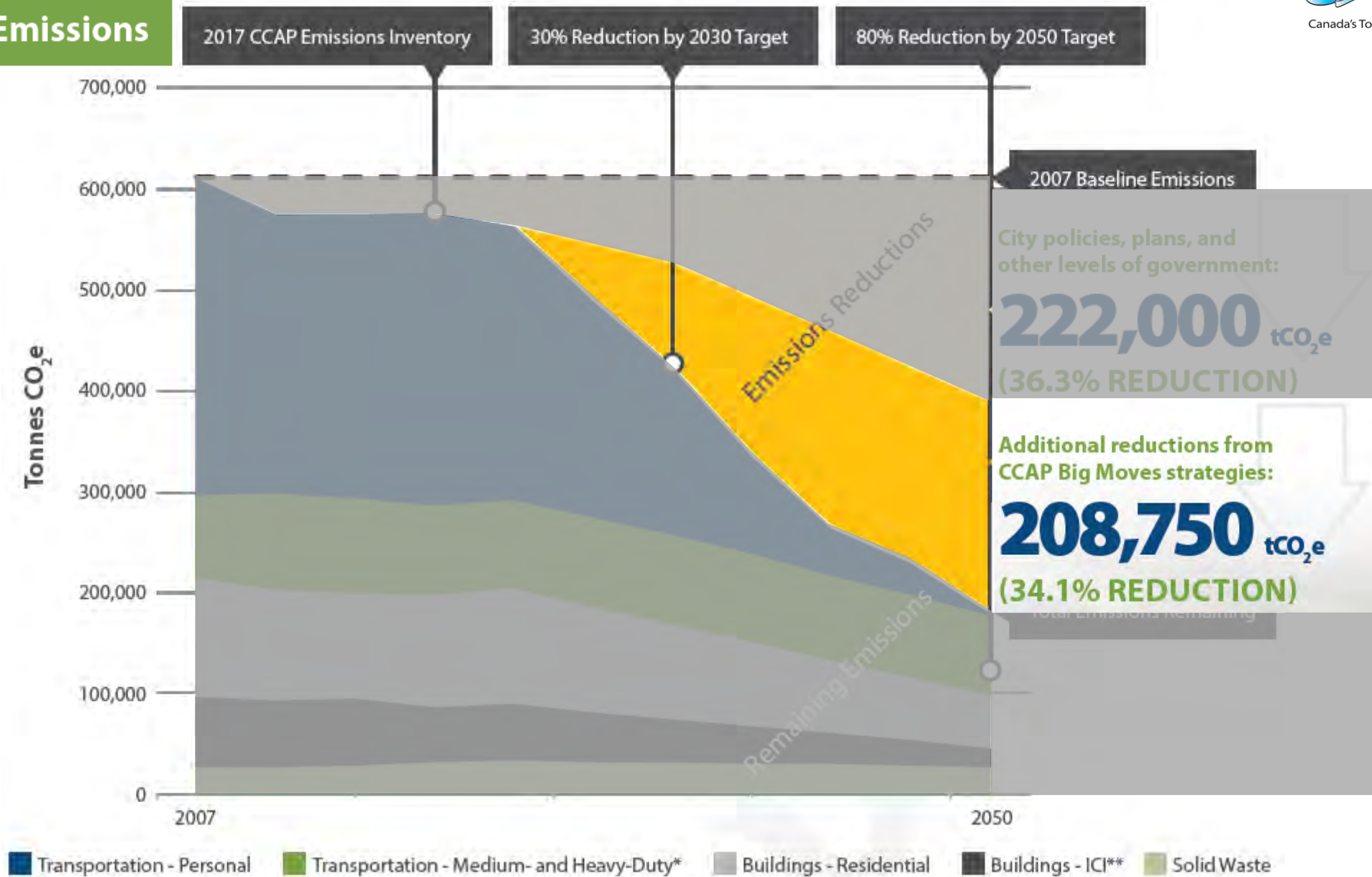
Projected Future Emissions



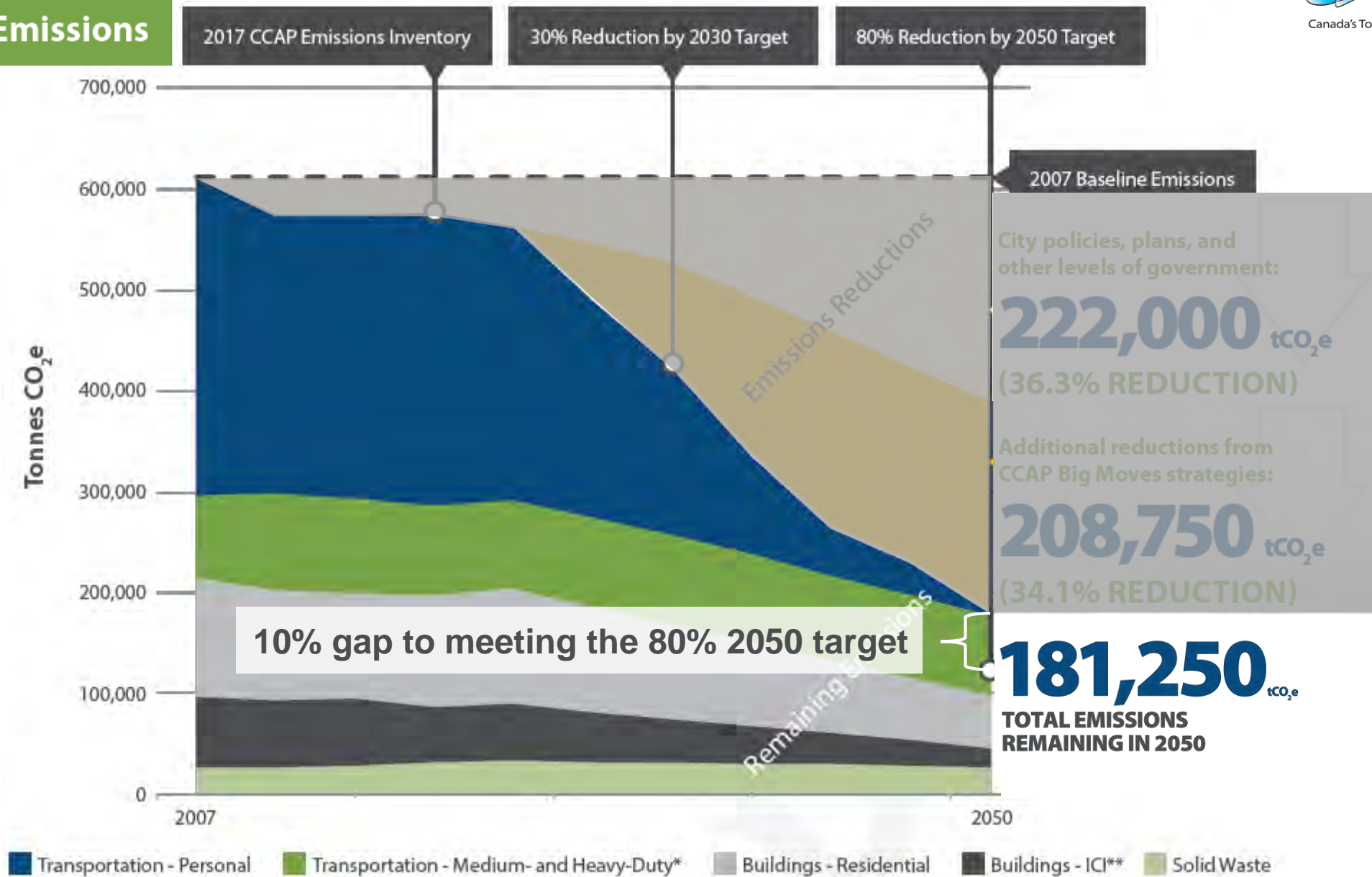
Projected Future Emissions



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



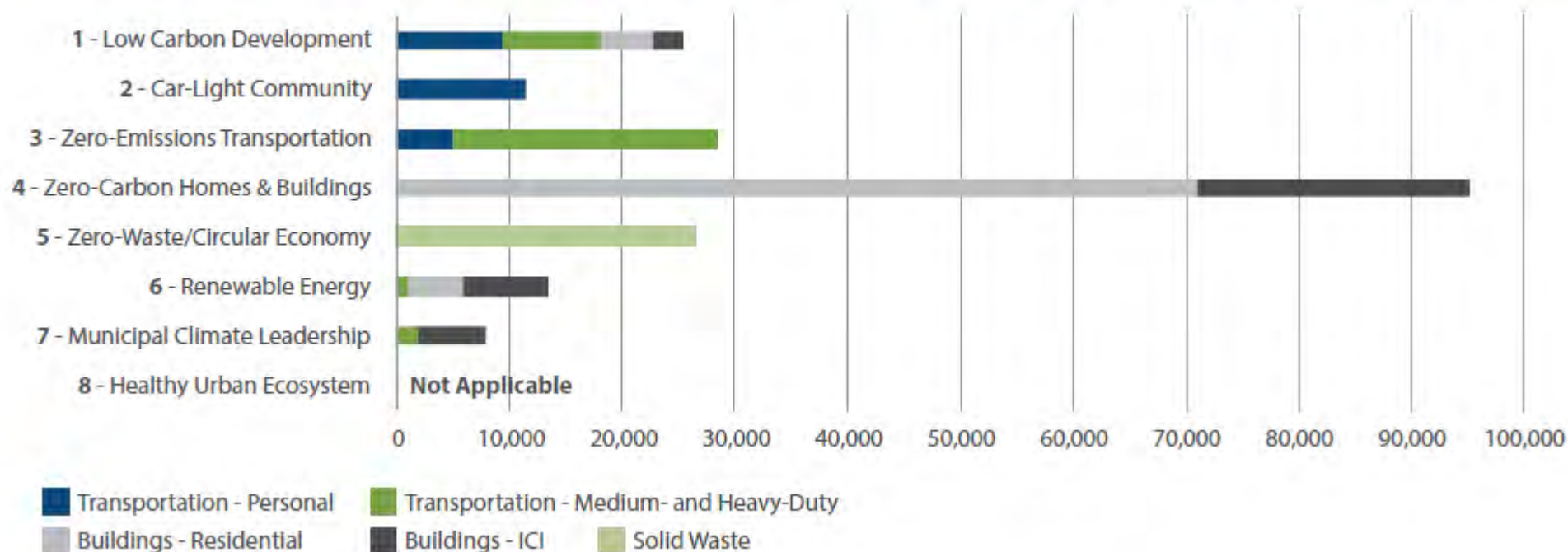
ENHANCED
RESILIENCE

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)



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

1

BIG MOVE 1

LOW-CARBON DEVELOPMENT

BIG MOVE 1:

LOW-CARBON DEVELOPMENT

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



↓17,400
tCO₂e
(High)

1A - Ten-Minute City



1B - Diverse Housing Solutions



2,500
tCO₂e
(Moderate)

1C - Green New Neighbourhoods



5,450
tCO₂e
(Moderate)

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

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



1,000
tCO₂e
(Moderate)

2A - Active Mobility

5,000
tCO₂e
(Moderate)



2B - Optimize Transit and School Bus Service



5,000
tCO₂e
(Moderate)

2C - Shared Streets

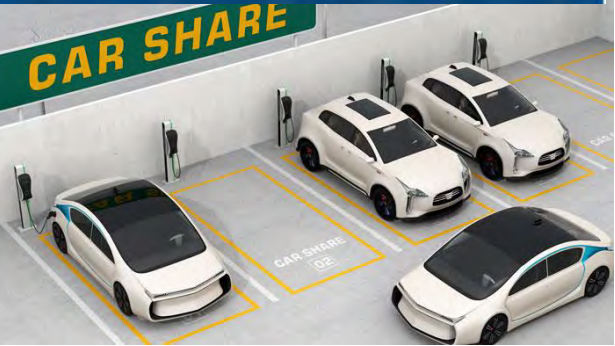


2D - Transportation Demand Management



2,500
tCO₂e
(Moderate)

2E - Kamloops Car Share



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

3

BIG MOVE 3

ZERO-EMISSIONS TRANSPORTATION

ZERO-EMISSIONS TRANSPORTATION

Supporting zero-
emission vehicle use



3A - Zero-Emissions Light-Duty Vehicles



5,000
tCO₂e
(Moderate)

3B - Zero-Emissions Medium- and Heavy-Duty Vehicles



20,000
tCO₂e
(Very High)

3C - Low-Carbon Urban Freight Delivery



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



Green Economy
and Innovation



Enhanced
Resilience



Improved
Public Health

4

BIG MOVE 4

ZERO-CARBON HOMES & BUILDINGS

BIG MOVE 4:

ZERO-CARBON HOMES & BUILDINGS

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



4A - New Homes and Buildings - Community-Wide



13,500
tCO₂e
(High)

4B - Existing Homes and Buildings - Community-Wide



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

5

BIG MOVE 5

ZERO-WASTE/ CIRCULAR ECONOMY

ZERO-WASTE/ CIRCULAR ECONOMY

Enhancing waste reduction,
diversion, upcycling, and reuse.

5



5A - Local Organics Collection and Processing



6,100
tCO₂e
(Moderate)

5B - Waste Reduction and Diversion

Show us
how you
B.Y.O.
#BYOKamloops



20,500
tCO₂e
(Very High)

5C - Circular Economy Research and Innovation

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

Supporting localized renewable energy production and use.



6A - Residential and Neighbourhood Scale Energy



10,000
tCO₂e
(High)

6B - Renewable Energy Innovation

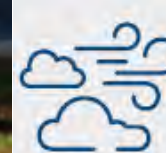


3,500
tCO₂e
(Moderate)

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

7

BIG MOVE 7

MUNICIPAL CLIMATE LEADERSHIP

BIG MOVE 7:

MUNICIPAL CLIMATE LEADERSHIP

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



7A - Zero-Carbon Civic Operations

8,000
tCO_{2e}
(Moderate)



7B - Climate Governance



Enabling

7C - Communicating Climate Action



Enabling

TARGET

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

CO-BENEFITS



Ecosystem
Preservation



Increased
Carbon Sequestration



Enhanced
Resilience

8

BIG MOVE 8

HEALTHY URBAN ECOSYSTEM

HEALTHY URBAN ECOSYSTEM

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



8A - Urban Ecosystems for Climate Resilience



8B - Protect and Heal Nature



8C - Green Infrastructure



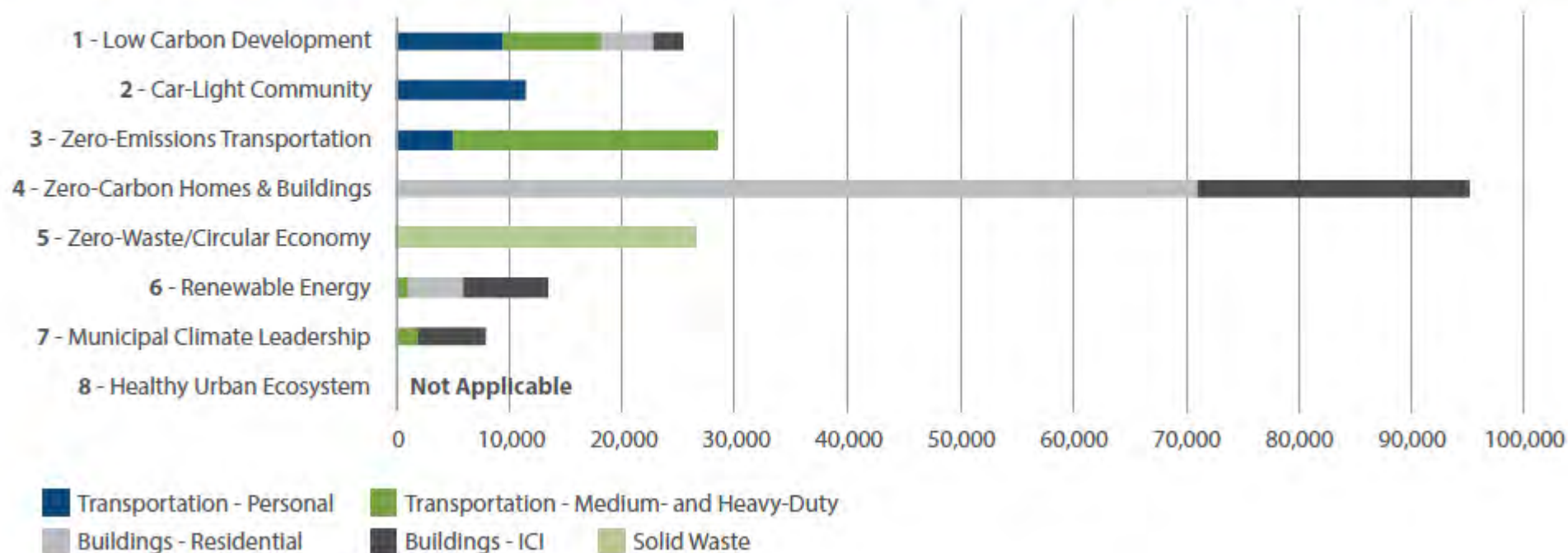
Supporting

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KAMLOOPS' 8 BIG MOVES

Q&A

Big Moves Co-Benefits



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ENHANCED LIVABILITY



GREEN ECONOMY AND INNOVATION



IMPROVED PUBLIC HEALTH



ECOSYSTEM PRESERVATION



IMPROVED AIR QUALITY



IMPROVED WATER QUALITY



INCREASED CARBON SEQUESTRATION



ENHANCED RESILIENCE

Economic Considerations

- Invest now to reduce emissions, or pay more later to deal with climate change impacts.
- Investments to reduce emissions boost the local economy and create opportunities for green jobs and innovation.
- Economic considerations are included for all Big Move strategies, with some high-level cost estimates.
- Business cases will be prepared for specific actions at the time of implementation.



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.

IMPLEMENTING CLIMATE ACTION

The implementation chart has 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 to other levels of government, utility companies, and key stakeholders will also be necessary.

MEASURING & REPORTING PROGRESS

Annually

CCAP progress report:

- progress on actions
- successes and challenges
- new actions
- annual and total investment

Every 5 Years

Comprehensive review:

- community emissions inventory
- calculation of key performance indicators
- update on GHG reduction targets

Ongoing

Timeline updates to reflect:

- changes to funding, staffing levels, government regulations or emerging community issues
- new technologies and other opportunities



Thank you!