

Climate Response Paper

Community Climate Action Plan

Committee of the Whole – July 14, 2020
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Canada's Tournament Capital

Outline

- Getting to Zero-Carbon
- Best Practices Policy Review
- Eight 'Big Move' Actions
 1. Low-Carbon Development
 2. Car-Light Community
 3. Zero-Emissions Transportation
 4. Zero-Carbon Homes and Buildings
 5. Zero Waste / Circular Economy
 6. Renewable Energy
 7. Zero-Carbon Civic Operations
 8. Healthy Urban Ecosystem
- Emissions Reduction Potential
- Next Steps
- Q & A



Getting to Zero-Carbon

Council Strategic Goal on Emissions Reductions (June 2019)

“...staff to outline actions through the CCAP development that are in line with global efforts to keep global warming within 1.5°C...”

→ Aligns with IPCC's *Special Report on Global Warming of 1.5°C* which emphasizes need to **achieve net zero-carbon emissions by 2050**:

- 40%-60% greenhouse gas (GHG) reductions by 2030
- 100% by 2050

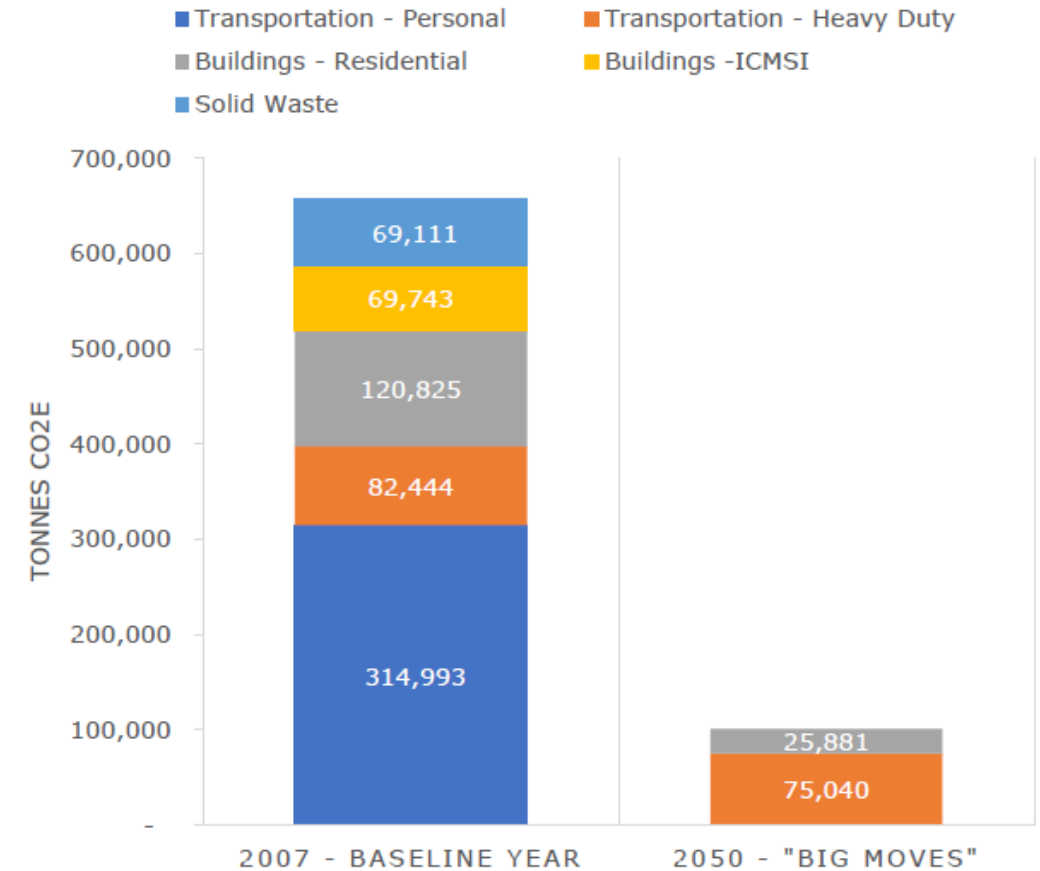


Figure 1- 2050 Big Moves emissions reductions compared to 2007 baseline by source

Best Practices Policy Review

Selection Criteria

- ✓ **GHG Reduction**
- ✓ **City Control**
- ✓ **Ease of Implementation**
- ✓ **Co-benefits**

Draft 'Big Moves' Actions

1. **Low-Carbon Development**
2. **Car-Light Community**
3. **Zero-Emissions Transportation**
4. **Zero-Carbon Homes & Buildings**
5. **Zero-Waste / Circular Economy**
6. **Renewable Energy**
7. **Zero-Carbon Civic Operations**
8. **Healthy Urban Ecosystem**

The eight Big Moves will reduce Kamloops' carbon emissions by intensifying and expanding on existing climate action work.



Low-Carbon Development

By 2050, 90% of residents can access their daily needs and efficient transit within an easy walk/roll.

Policy Options

Ten-Minute City (1A)

- Plan most new developments in existing neighbourhoods
- Concentrate, where possible, housing in areas well-served by transit, cycling, and walking networks

Green New Neighbourhoods (1B)

- Higher sustainability development standards for new subdivisions (e.g., higher Step Code level, clean energy, etc.)
- Protect and restore healthy ecosystems

Urban Containment (1C)

- Create a boundary to prevent sprawl and contain most new development

Car-Light Community

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

Policy Options

Low-Emission Super-Blocks (2A)

- Downtown super-block pilot to convert streets to prioritize walking/cycling, greenspace and public gathering

Low Emissions Zones (2B)

- Prioritize low-emissions vehicles in certain areas of the city

Active Mobility (2C)

- More cycling and walking networks for all ages/abilities

E-Bikes & Cargo Bikes (2D)

- Incentives, secure parking/charging, micro-hubs for freight delivery



Zero-Emissions Transport

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



Policy Options

Enhanced EV Strategy for Light Duty Vehicles (3A)

- Advocate for stronger zero-emission vehicle (ZEV) mandates (Prov/Fed) – also for Med/Heavy Duty
- Develop public charging network & require EV-ready development
- Develop Zero Emissions Zones and ZEV-priority parking
- Encourage EV car-share, taxi and ride hailing

EV Strategy for Medium-Heavy Duty Vehicles (3B)

- Support ZEV transit and school buses
- Explore fees for transit, loading, and parking discounted for ZEVs
- Investigate and pilot 'vehicle-to-grid' charging

Zero-Carbon Homes & Buildings

By 2030, all new and replacement heating and hot water systems to be zero-emissions.

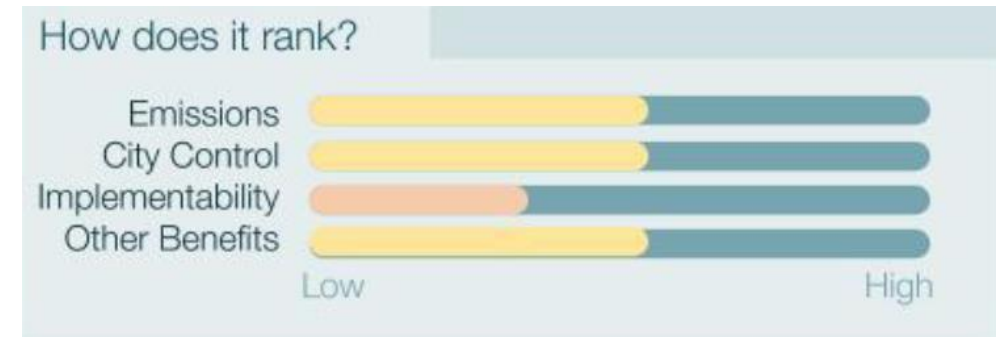
Policy Options

New Buildings (4A)

- Set targets for zero-carbon new buildings, encourage low-carbon new buildings with existing tools (e.g. Step Code)
- Advocate for stronger zero-carbon buildings regulations
- Incentives for energy efficient and low-carbon buildings

Existing Buildings (4B)

- Retrofit program for existing buildings focusing on health, climate resilience and GHG reduction



Zero Waste / Circular Economy

Kamloops to be a zero-waste community by 2040.

Policy Options

Zero Waste Research and Innovation Centre (5A)

- Support zero-waste research and businesses for materials reuse, products as a service, upcycling, and more

Local Organics Collection and Processing (5B)

- Capture all organic waste for beneficial end use
- Investigate producing biofuel for city use (e.g. municipal fleet)

Waste Diversion (5C)

- Requirements for waste diversion and materials reuse from construction and demolition sites
- Integrate waste systems with local energy production



Renewable Energy



Policy Options

Neighbourhood Scale Energy (6A)

- Explore community and neighbourhood scale renewable energy systems and storage for long-term energy security and flexibility
- Support research and development with academia, energy companies, business, institutions, and community

Green Industrial Park (6B)

- Position Kamloops as a research, technology, and manufacturing hub for BC's low-carbon transition
- Explore flexible grid options for resilient and efficient systems that cost-effectively handle increased loads from electric vehicles and buildings

Zero-Carbon Civic Operations

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

Policy Options

Zero-Carbon Civic Operations (7A)

- Corporate energy review, set targets ahead of community
- Strategically phase out fossil fuels in buildings and fleets
- Support staff climate action (e.g., employee EV charging)

Finance and Implementation (7B)

- Incorporate “climate lens” in all City department work plans, and capital/operating budgets
- Establish internal carbon price
- Continue to measure, monitor, and publicly report progress

Communications and Engagement (7C)

- Creative communication, marketing and engagement plan



Healthy Urban Ecosystem

Increase Kamloops' urban forest canopy to 20% by 2030 and 30% by 2050 to increase our forests' carbon storage capacity and support biodiversity.



Policy Options

Urban Forests for Climate Cooling (8A)

- Monitor tree protection regulations on private and public land
- Expand urban tree canopy targets to include private land
- Develop native plant standards for private and public land
- Ensure access to public greenspace with trees and shade

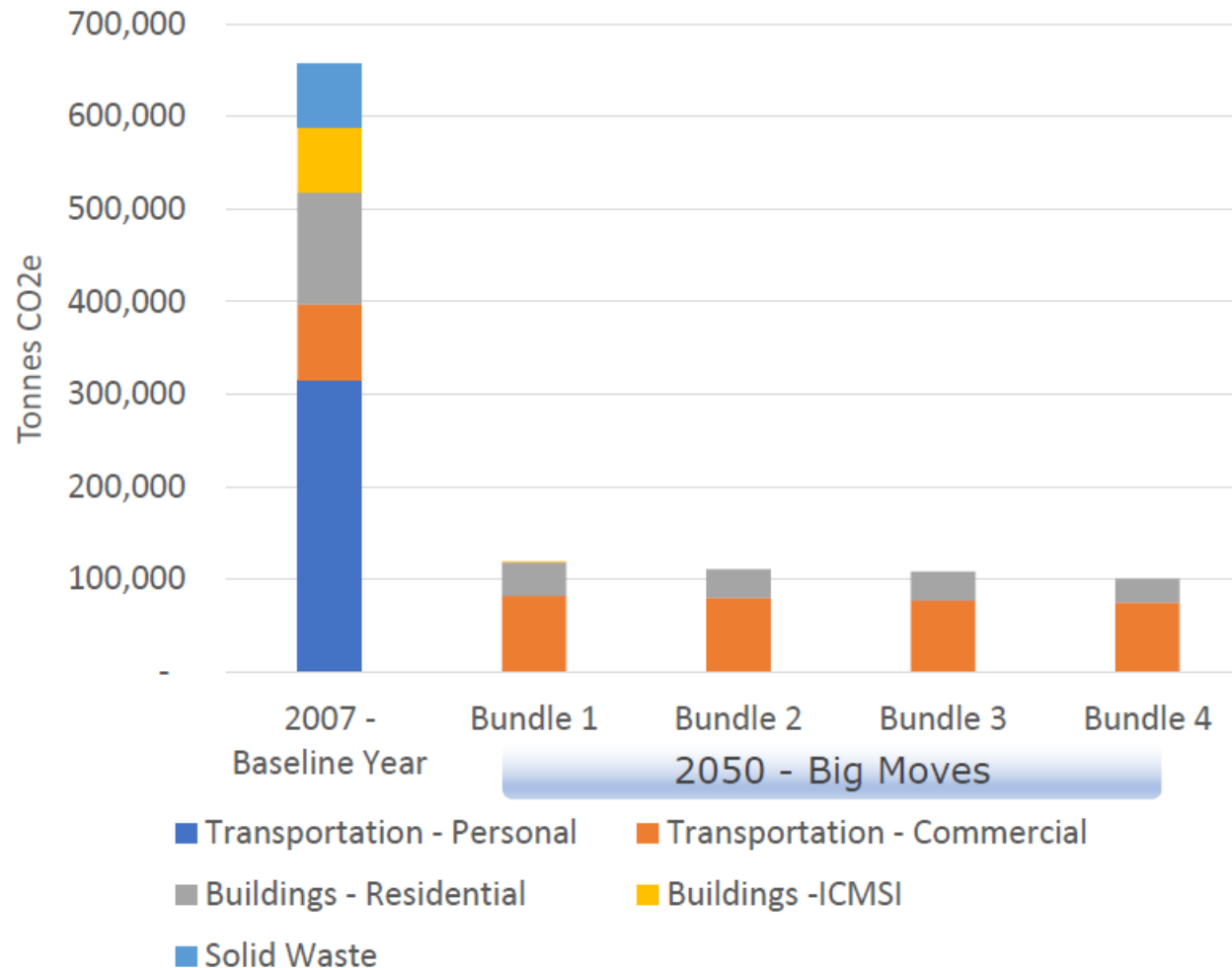
Protect and Heal Nature (8B)

- Develop local carbon offsetting program linked with biodiversity
- Develop city/regional biodiversity corridors and ecosystem strategy

Green Infrastructure (8C)

- Integrate green technologies and natural vegetation (e.g., rain-gardens) with infrastructure upgrades on public land

'Big Moves' Emissions Reductions



GHG Reductions

The CCAP 'Big Moves' have the potential to reduce emissions by 82% to 85% by 2050 (over 2007).

- Reductions of 538,000 to 556,000 tCO₂e
- 'Big Moves' grouped into 4 unique bundles
- No single bundle of strategies can achieve full carbon neutrality by 2050
- Eliminating remaining ~100,000 tCO₂e requires future efforts from governments and industry, as well as technological innovation

Next Steps

- Incorporate the Committee of the Whole's feedback in a revised Climate Response Paper and integrate its policies and actions into the draft CCAP
- Conduct community and stakeholder engagement this fall
 - virtual and in-person engagement activities
 - establish a CCAP Advisory Group
- Complete in-depth analysis of economic impact, co-benefits, GHG reductions, and implementation timeline
- Report back to Council for consideration/adoption
 - spring 2021

RECOMMENDATION:

That the Committee of the Whole provide input on the draft policy options in the Climate Response Paper.



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Thank you!

Stay Connected



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