



City of Kamloops

Community Climate Action Plan: 2023 Implementation Report

Climate and Sustainability Division
September 2023



Canada's Tournament Capital

The City of Kamloops is located on Tk'emlúps te Secwépemc territory, situated within the unceded ancestral lands of the Secwépemc Nation. We honour and respect the people, the territory, and the land that houses our community.

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Executive Summary

City Council unanimously adopted the Community Climate Action Plan (CCAP) on June 29, 2021—the hottest day ever recorded in Kamloops (47.3°C). It is with this sense of urgency that the City, supported by community stakeholders, has set to work on implementation. This second annual CCAP Implementation Report includes a status update for each of the CCAP'S 48 short-term actions, an overview of climate resilience measures, a financial summary, and key priorities for the year ahead.

Highlights for each Big Move:



BIG MOVE 1: The North Shore Neighbourhood Plan was adopted in September 2022 and bylaws were adopted in January 2023 to support more complete, compact community development.



BIG MOVE 2: In June 2023, Kamloops implemented Interior BC's first Safer School Streets pilot program, while community participation in the spring 2023 GoByBike campaign increased 66% over 2022.



BIG MOVE 3: Council adopted zoning bylaw amendments that require new residential development to be constructed with at least one parking stall per dwelling unit being capable of powering a Level 2 EV charger (effective January 1, 2023).



BIG MOVE 4: Since March 2022, the City provided CleanBC rebate top-ups of \$350 to 49 eligible Kamloops households who made the switch from natural gas to low carbon heat pump technology for space heating and cooling.



BIG MOVE 5: Community-wide curbside residential organic waste collection has been launched, which will divert approximately 6,000 tonnes of organics from the landfill annually.



BIG MOVE 6: The City signed a memorandum of understanding with TRU and Creative Energy to support exploration of how the Tournament Capital Centre could be connected to TRU's planned low-carbon district energy system.



BIG MOVE 7: The City won the 2022 UBCM Community Excellence Awards' Sustainability category and received an Honorable Mention for the Community Energy Association's Climate & Energy Action Awards for the CCAP and the Climate Action Levy.



BIG MOVE 8: Researched green infrastructure options suitable for Kamloops' climate and topography, including assessing the successes and challenges of projects completed to date and outlining ways to further support its use.

Introduction

The Intergovernmental Panel on Climate Change has reinforced the urgent need for GHG emissions reductions, as even temporarily exceeding 1.5°C warming will result in additional severe impacts, including some that will be irreversible.¹ The CCAP, which was adopted on June 29, 2021, provides direction on reducing GHG emissions in Kamloops to align with efforts to limit global temperature rise to 1.5°C. It has targets for reducing community GHG emissions by 30% by 2030 and 80% by 2050 while increasing our resilience to the impacts of the climate crisis. The CCAP's eight strategic focus areas—called Big Moves—address community GHG emissions sources, primarily from transportation fuels (66%), energy use in buildings (29%), and waste (5%).



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

Taking the lead in shifting to zero-carbon facilities and fleets and applying a climate lens to planning and decision-making.



BIG MOVE 8:
Healthy Urban Ecosystem

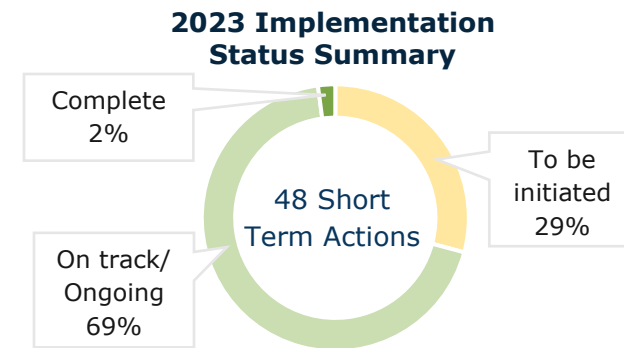
Preserving ecosystems and using green infrastructure to provide carbon sequestration and climate resilience.

The CCAP was developed through comprehensive community and stakeholder engagement and was informed by GHG emissions modeling and best practice research. The CCAP contains 8 Big Moves, 24 strategies, and 66 actions. The Big Moves Implementation

¹ Intergovernmental Panel on Climate Change (IPCC). (2022) "Climate Change 2022: Impacts, Adaptation and Vulnerability. Contribution of Working Group II to the Sixth Assessment Report of the IPCC", online: https://www.ipcc.ch/report/ar6/wg2/downloads/report/IPCC_AR6_WGII_SummaryForPolicymakers.pdf

Chart (pp. 73–81 of the CCAP) assigns each of the 66 actions with an initiation timeline—48 short (2021–24), 16 medium (2025–29), and 2 long (2030+). The purpose of this report is to summarize progress to date on short term actions, using the following categories:

Status Category	Description
To be initiated	These actions have either not been commenced or have had minimal progress.
On track	Finite action that has been initiated.
Ongoing	Ongoing action that has been initiated.
Complete	Finite action that has been completed.



Staff groups assigned as implementation leads provide a descriptive summary of progress to date, with **new information for 2023 being presented in magenta-coloured font in this report**. A graph is provided for each Big Move to show the percentage of short-term actions in each status category. Related statistics are included where readily available. A more comprehensive review with key performance indicators is scheduled for every five years, as per the reporting process outlined in the CCAP (p. 82). A financial summary outlines current and projected revenue and expenses and as well as grant funding awarded for climate mitigation and adaptation initiatives.

As the climate crisis affects people differently, with those least responsible for emissions often bearing the brunt of the impacts, an evaluation of opportunities and challenges for equity and climate justice is included for each Big Move. Staff seek to design, implement, and promote climate action measures that target the barriers faced by those most impacted by climate change (e.g. by promoting income-qualifying rebates for home energy retrofits).

The CCAP was developed with a focus on mitigation; however, a brief overview of climate resilience measures being undertaken is outlined, with more detailed information available in the City’s [2023 Local Government Climate Action Report](#).² Climate impacts and risks are already becoming increasingly complex and difficult to manage, as has been experienced in Kamloops. The Intergovernmental Panel on Climate Change outlines key systems transitions (e.g. in energy; land use, ecosystems; infrastructure; industry and society) needed to achieve the adaptation required for high levels of human, ecosystem, and planetary health as well as economic and social resilience while reducing emissions.³ It is within this challenging global context that local climate solutions are being developed and implemented in Kamloops.

² City of Kamloops. (2022) “Local Government Climate Action Program Report”, online: https://www.kamloops.ca/sites/default/files/2022-08/2022%20Local%20Government%20Climate%20Action%20Program%20Report_For%20Web.pdf

³ IPCC. (2022) “Climate Change 2022: Impacts, Adaptation and Vulnerability. Contribution of Working Group II to the Sixth Assessment Report of the IPCC”, online: https://www.ipcc.ch/report/ar6/wg2/downloads/report/IPCC_AR6_WGII_SummaryForPolicymakers.pdf

Implementation Progress

BIG MOVE 1: LOW-CARBON DEVELOPMENT

Strategy: 1A Ten-Minute City

Goal: 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.



ACTION	STATUS	PROGRESS TO DATE
<p>Identify priority areas to support infill projects that further increase housing density, mixed uses, and access to transit and active transportation infrastructure in existing neighbourhood centres.</p>	<p>On track</p>	<p>Densification in the Core sector is occurring at a more rapid pace than projected by the City's Official Community Plan (2018). The number of units permitted during KAMPLAN's first six years has already exceeded the 10-year target of having 20% of growth occur in the Core.</p> <p>As an initial step towards implementing the North Shore Neighbourhood Plan, which was adopted on September 27, 2022, Council adopted the following bylaws on January 31, 2023:</p> <ul style="list-style-type: none"> - Official Community Plan Amendment Bylaw No. 46-18, which brings into effect new North Shore Development Permit Area Guidelines and new land use designations for the North Shore. - Zoning Amendment Bylaw No. 55-21, which changed all of the existing RS1 and RT1 zones on the North Shore to RT1C (Two-Family Residential 1 - Compact) to allow for future infill opportunities. <p>Zoning Bylaw No. 55 (adopted in 2021) includes the following changes to support further mixed-use development:</p> <ul style="list-style-type: none"> - Allows multi-family in an expanded range of commercial areas - C5 (Shopping Centre) zoned properties, C7 (Neighbourhood Commercial) zoned properties. - Allows 6-10 storey mixed-use development in C5 (Shopping Centre) zones. - Introduced zoning allowing mixed-use development into Columbia Street West, Hugh Allan Drive, and Victoria Street East corridors.

<p>Increase incentives to promote infill development (e.g. revitalization tax exemptions and reduced development cost charges [DCCs]).</p>	<p>On track</p>	<p>The following incentives have been provided:</p> <ul style="list-style-type: none"> - Development Cost Charges Bylaw No. 48-100, adopted in 2017, reduced development cost charges for transportation in core areas to encourage more compact development - City Centre Revitalization Tax Exemption Bylaw 22-4-15 and North Shore Revitalization Tax Exemption Bylaw 22-4-16: provides reduced municipal property taxes for 10 years for both commercial and multi-family development in these core areas. - Hotel and Motel Redevelopment Revitalization Tax Exemption Bylaw No. 22-4-19 (adopted July 19, 2022): provides reduced municipal property taxes for 10 years when an existing hotel is redeveloped as multi-family residential or mixed-use development, which further supports complete, compact communities throughout the city. - North Shore Revitalization Tax Exemption Bylaw No. 22-4-20 (adopted January 2023), removes the tax exemption development checklist and updates the boundary map.
<p>Increase availability of affordable housing options that also contribute to higher density (e.g. density bonus for rental-only multi-family buildings).</p>	<p>On track</p>	<p>Housing affordability remains a challenge in Kamloops, with major factors including inflation, population increase and inventory. Development applications for social housing projects are expedited where possible.</p> <p>In July 2023, Council authorized staff to apply for \$15.6 million from the Housing Accelerator Fund, which is administered by the Canada Mortgage and Housing Corporation, to implement the following seven initiatives to incentivize housing supply over the next three years (2024-2026):</p> <ul style="list-style-type: none"> - Implement Zoning Bylaw and Official Community Plan changes to facilitate more missing middle housing options. - Enact further Zoning Bylaw changes to accelerate the implementation of the new North Shore Neighbourhood Plan. - Review land uses and densities allowed within nodes and corridors with frequent transit service and implement Zoning Bylaw changes to enable mixed-use, higher-density development. - Implement Zoning Bylaw changes for more flexibility within specified commercial and institutional zones to facilitate more multi-family and affordable housing. Identify any publicly owned land for potential redevelopment for affordable housing. - Create a Community Land Trust to facilitate below-market housing development.

- Streamline development approvals processes, including expanding the range of delegated authority approvals, implementing a digital applications submission and review process, and identifying a library of pre-approved plans.
- Implement a comprehensive infrastructure evaluation to accommodate growth. This initiative will identify infrastructure needs for servicing new urban development permitted through other Housing Accelerator Fund initiatives, along with funding strategies to meet those needs.

Together these initiatives are estimated to achieve a net increase of 390 dwelling units, which comprises of 520 additional missing middle and apartment dwellings and 130 fewer single-detached units.

In November 2021, City Council adopted Zoning Bylaw No. 55, which includes incentives to increase the availability of affordable housing options and contribute to higher density:

- Introduced density bonus provisions in the medium and high-density multi-family zones and mixed-use commercial zones (added floor area and/or units per hectare density) within 200 m of a mixed-use centre, where additional units are provided as market rental, affordable market rental, below market rental, or social housing units.
- Introduced lower parking requirements for “affordable market rental” and “below market rental” within 200 m of a mixed-use centre, as defined in the OCP.
- Further reduced parking rates for all multi-family, affordable market rental, and below market rental in the CBD (Downtown) zone or CNS (North Shore Commercial) zone.

Strategy: 1B Diverse Housing Solutions

Goal: To support additional housing opportunities on residential lots.

ACTION	STATUS	PROGRESS TO DATE
Encourage developers to build legal residential suites when constructing new homes in areas they are permitted.	Ongoing	<p>Zoning Bylaw No. 55: Expanded the range of areas where legal suites are permitted by changing zoning of former RS-2 (Single Family Residential-2) properties in Dallas, Juniper West, Dufferin, and Aberdeen to RS2S (Single-Family Residential 2 – Suite). Promoted the change via the City’s website, including a video and brochures. The number of building permits issued for secondary suites in recent years are:</p> <ul style="list-style-type: none"> - 2021: 54 secondary suites and 4 garden/carriage suites - 2022: 35 secondary suites and 3 garden/carriage suites - 2023 (up to August): 16 secondary suites and 3 garden/carriage suites <p>Work is underway to further promote the development of secondary suites, including exploring the development of pre-approved building plans.</p>
Promote ground-oriented housing such as townhouses, row houses, multi-plexes and small lot residential infill.	Ongoing	<p>In 2022, two rezoning applications reduced minimum lot size for subdivision, which allowed an additional five lots.</p> <p>In January 2023, a bylaw amendment implementing the 2022 North Shore Neighbourhood Plan changed the zoning of all existing residential lots on the North Shore to RT1C (Two-Family Residential 1 - Compact), which reduces the minimum lot size for subdivision, allows duplexes on lots that previously allowed only single-family development, and allows duplexes on small lots when access provided from a lane.</p> <p>2021 changes to Zoning Bylaw No. 55 that promote ground-oriented housing include:</p> <ul style="list-style-type: none"> - Row houses now permitted in multi-family zones (RM3: Multi-Family 3 – Medium Density, RM4: Multi-Family 4 – Medium-High Density, RM5: Multi-Family 5 – High Density). - New RT1C (Two Family Residential - Compact) provides reduced minimum lot size for single-family dwellings and duplexes in the McDonald Park, part of the West End, and East End neighbourhoods. - Reduced minimum lot size for subdivision in Westsyde neighbourhood.

		<p>Through the City and Thompson Rivers University’s (TRU’s) collaborative Researcher-in-Residence program, a literature review and an assessment of the more than 500 properties in medium-density zones (RM3–RM5) has been completed to quantify the 10 types of missing middle housing within Kamloops. The results confirm missing middle housing is significantly underrepresented. Survey and interview research is being undertaken to assess if housing modelled after missing middle parameters (access to green space, walkability, parking, etc.) would both serve residents more effectively and contribute to a solution for the housing crisis.</p>
<p><i>Future Action (Medium Term):</i></p> <ul style="list-style-type: none"> - Review secondary suite policy and consider guidelines for permitting a secondary suite and an accessory dwelling unit (e.g. carriage suite or garden suite) on a single-family lot in designated areas. 		

Strategy: 1C Green New Neighbourhoods

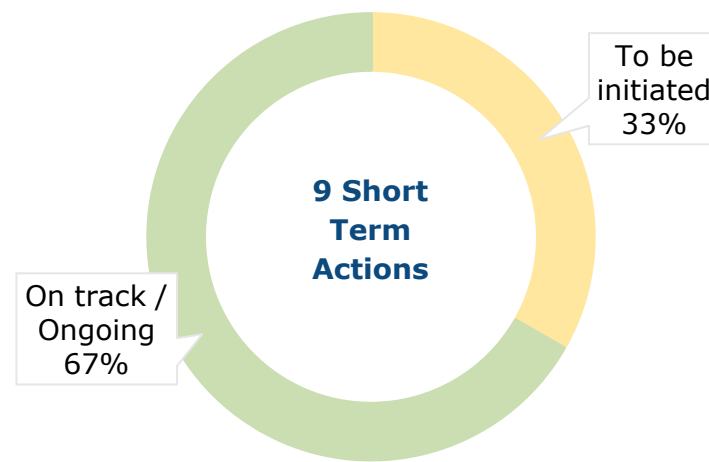
Goal: To require that all new buildings and neighbourhoods in suburban and rural greenfields meet higher sustainable development standards.

ACTION	STATUS	PROGRESS TO DATE
<p>Require developers to meet a higher BC Energy Step Code step than regulated and/or meet a specified GHG intensity.</p>	<p>On track</p>	<p>The City is monitoring the approaches of other municipalities, the Province’s Step Code timeline, and other CleanBC policy initiatives. Engagement with the Canadian Home Builders’ Association is ongoing regarding current Step Code implementation.</p> <p><i>The Local Government Act (Part 14, Div. 7, 488[1]) allows an official community plan to designate development permit areas for specified purposes, including establishing objectives to “promote energy conservation” and “promote the reduction of greenhouse gas emissions.” This option will be further explored in 2024.</i></p>
<p>Require developers to install one charging station (capable of Level 2 charging) for every two stalls of off-street parking in single-family</p>	<p>To be initiated in 2024</p>	<p><i>A city-wide EV charging infrastructure requirement for residential development came into effect on January 1, 2023. The additional requirement to install EV charging stations in single-family homes developed in suburban and rural greenfield areas will be considered in 2024.</i></p>

developments, in addition to any city-wide EV-ready policy.		
Evaluate DCCs based upon the location of growth (i.e. core vs peripheral areas) to address the costs of required service upgrades or extensions.	To be initiated in 2024	The City has adopted reduced DCCs for transportation in core areas to encourage more compact development. Additional research is needed to assess options that address the higher municipal servicing costs associated with peripheral developments and to identify areas with limits to servicing.
Explore regulatory options to limit new natural gas servicing in favour of all-electric power and/or on-site renewable energy.	To be initiated in 2024	Some developers have chosen to build electric-only developments. The performance of these will be monitored to assess the feasibility of making this a requirement. Renewable gas availability and pricing will be assessed to determine whether this is a viable backup or alternative low-carbon fuel source. The CleanBC Roadmap to 2030 states that after 2030, all new space and water heating equipment sold and installed in BC will be at least 100% efficient. This new requirement will encourage more people to install electric heat pumps while continuing to allow the use of electric resistance technologies. It will also allow hybrid electric heat pump gas systems and high-efficiency gas heat pumps.

Big Move 1: Summary of Implementation Progress

10 Actions: 9 short term, 1 medium term





Equity and Climate Justice Considerations

CHALLENGES	OPPORTUNITIES
<ul style="list-style-type: none">- Housing affordability provisions will be necessary to mitigate the impacts of gentrification on lower-income households. The City partners with community stakeholders and government agencies on housing affordability issues.- Affordable housing needs to be located near services and amenities.	<ul style="list-style-type: none">- Zoning Bylaw changes have the potential to increase the diversity of housing types in Kamloops. Small-lot residential infill can provide more affordable housing options within existing neighbourhoods.- Increasing access to daily needs has the potential to reduce inequities in the community by improving walkability for all.- Providing incentives for infill development is more equitable and reflective of service provision and infrastructure costs.- Households in higher-density areas spend, on average, 25% less on transportation due to better access to transit and active transportation infrastructure.


BIG MOVE 2: CAR-LIGHT COMMUNITY

Strategy: 2A Active Mobility

Goal: To enable the safe, secure, and efficient transport of people and goods using active transportation modes.



ACTION	STATUS	PROGRESS TO DATE
<p>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.</p>	<p>On track</p>	<p>The City has been actively working on developing its active transportation infrastructure, particularly the Kamloops North-South Bicycle Corridor. This corridor aims to create a continuous, 16 km active transportation route that connects South Kamloops to North Kamloops through Downtown.</p> <p>Currently, 5 of the 10 projects on the corridor have been completed, including the recently completed Westsyde multi-use pathway and the 6th Avenue separated bike lane, which is Kamloops' first fully separated, on-street, bidirectional bike lane. The City has secured a \$500,000 BC Active Transportation Infrastructure grant for the construction of the Highway 5A multi-use pathway, which is scheduled for construction in 2024.</p> <p>Beyond the North-South Bicycle Corridor, the City is also focused on completing other active transportation projects. The final 220 m long section of the Singh Street multi-use pathway will be finished in 2023, enhancing connectivity in the area. The 730 m Tranquille Road gateway multi-use pathway is also set to be completed in 2023. Further active transportation projects on Tranquille Road will form an important core east-west active transportation route through North Kamloops. A 780 m long buffered painted bike lane on Springhill Drive will also be completed in 2023. Overall, the City will complete 1.9 km of all ages and abilities active transportation facilities in 2023.</p> <p>In September 2022, City Council unanimously adopted the North Shore Neighbourhood Plan. This plan includes three key east-west connections in the North Shore. City staff have begun conceptual design on these routes. The City has initiated a process to update the active transportation sections of the City's Transportation Master Plan to identify key active transportation routes and ensure the successful build-out of a connected active transportation network.</p>
<p>Increase the availability of publicly accessible, secure, end-of-trip bike storage amenities in major</p>	<p>Ongoing</p>	<p>The City owns and maintains</p> <ul style="list-style-type: none"> - bike racks in various locations - three bike repair stations

<p>neighbourhood centres and other key destinations.</p>		<ul style="list-style-type: none"> - bike lockers at the North Shore and Lansdowne Transit Exchanges and the Tournament Capital Centre <p>Two highly visible bike ports are deployed each year that take up a car parking each space downtown or other high-use commercial areas to raise awareness about the important of safe storage space for bicycles</p> <p>In partnership with the Kamloops Cycling Coalition and with financial support from New Afton’s Community Investment Fund, the City established a bike valet service kit that offers portable bike racks, tents, and other supplies that event organizers can borrow to offer complimentary secure bike parking. Just like a coat check, bikes are tagged and owners receive a claim stub. Event personnel and volunteers watch over the parked bikes so that participants can enjoy the event worry free until they bring their stub back to claim their bike.</p> <p>Spurred by New Afton’s donation, the City, in partnership with Youth Climate Corps BC and with funding from BC Hydro, provided a bike valet service for the 2023 season of the Saturday Kamloops Farmers' Markets.</p> <p>In 2023, City staff completed an inventory of bike parking infrastructure in downtown Kamloops to identify potential areas for improvement. Based on the results of this inventory, an additional 40 city-style ring bike racks are being retrofitted to existing, decommissioned parking meter posts.</p>  <p>Bike racks are being installed at key City parks, including Riverside, Albert McGowan, Prince Charles, McArthur Island, and Westsyde Centennial.</p>
<p>Develop and implement an incentive program for E-bike/cargo bike purchases as per the Electric Vehicle (EV) and E-Bike Strategy.</p>	<p>On track</p>	<p>City staff attended a Thompson-Okanagan Climate Action Network meeting in Kelowna in January 2023 to discuss developing a regional, income-qualified E-bike incentive program modelled after the District of Saanich’s successful 2022 pilot program. Shortly after, the Province announced its intent to develop and administer a provincial-wide, income-qualified E-bike program. Given this, a staff letter was prepared on behalf of Thompson-Okanagan Climate Action Network member communities expressing support for the program and offering feedback on ways to ensure the program is accessible to all regions in the province, particularly rural and indigenous communities. City staff prepared some promotional material and a press release to ensure Kamloops residents were aware of the program launched June 1, 2023. The program was fully subscribed within a week, and staff are exploring opportunities to sustain a local program.</p>

Strategy: 2B Optimize Transit Service

Goal: To optimize transit service to support low-carbon development and land use goals

ACTION	STATUS	PROGRESS TO DATE
<p>Improve infrastructure and amenities (e.g. seating, pads, shelters, real-time bus arrival information) to encourage transit use.</p>	<p>On track</p>	<p>The Kamloops Transit System has 544 bus stops across the city, not including transit exchanges. Of these stops, only 5% (29) are covered by shelters, which is lower than the Canadian average of 21%.</p> <p>Through a funding partnership with BC Transit, 17 new transit shelters will be installed in Kamloops in 2023 and further 15 transit shelters will be installed in 2024. The City aims to obtain funding to install up to 80 new shelters and meet the national shelter coverage average by 2030. The new shelters, which feature perforated aluminium panel construction and solar lighting, will make transit a more comfortable transportation option for new and existing riders. Further, the City hopes to upgrade existing advertising company-owned shelters in 2023.</p> <p>The City complete a conceptual design for a new transit exchange in Valleyview, which will serve existing routes and planned expansions. This new exchange is scheduled to be constructed in 2025, pending Provincial expansion of transit funding.</p>
<p><i>Future Actions (Medium Term):</i></p> <ul style="list-style-type: none"> - Identify light rail transit rights-of-way to be reserved for future iterations of the transit network (i.e. the sequential development of future HOV lanes, to be replaced by bus only lanes and eventual light rail development). - Develop a Frequent Transit Strategy with BC Transit that explores options such as electric bus rapid transit to connect higher-density areas and key destinations. 		

Strategy: 2C Shared Streets

Goal: To create street space that is accessible to all ages and abilities, enhances pedestrian safety and comfort, and prioritizes active transportation.

Future Action (Medium Term):

- Pursue opportunities to convert street space (temporarily at first) into areas that prioritize pedestrian-only or pedestrian-friendly areas with public amenities such as trees and gardens, seating, art installations, and bike parking and with vehicle access limited to local residents, businesses, and emergency vehicles.

Future Actions (Long Term):

- Identify suitable residential streets to implement reduced road width initiatives that contribute to traffic calming and convert space for community benefit (e.g. active transportation infrastructure, parks, community gardens, daycares, or affordable housing).
- Implement low-traffic neighbourhood projects that extend pedestrian zones to multiple urban blocks (with emergency vehicle access only).

Strategy: 2D Transportation Demand Management

Goal: To decrease trips by single-occupancy vehicles by facilitating the uptake of sustainable transportation options (i.e. transit, carpooling, car sharing, cycling, and walking) and reducing the need to travel.

ACTION	STATUS	PROGRESS TO DATE
Develop and promote TDM measures 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).	Ongoing	<p>The City undertakes several measures to promote sustainable transportation options for employers, including:</p> <ul style="list-style-type: none"> - Promoting spring and fall GoByBike BC campaigns. Participation numbers in the spring 2023 GoByBike campaign were up 66% compared to 2022. - Providing a Kamloops Bike Map, which details bike infrastructure community wide. - Promoting ProPASS, which is a photo ID bus pass purchased at work at a discounted rate through payroll deductions for a minimum of four months. - Sponsoring the Bike Sense online resource to help promote safer, more inclusive, and more accessible cycling in Kamloops.

In June 2023, Kamloops implemented Interior BC's first Safer School Streets pilot program. The two-week pilot program involved closing specific streets to most motor vehicle traffic during pickup and drop-off times to encourage students and staff to walk, bike, or roll to school. If successful, the pilot may be expanded to other schools in Kamloops.

The City hired a transportation engineer-in-training and a transportation technician in 2022 to support the development and implementation of further transportation demand management measures for employers. The City has been working with consultants to develop a detailed transportation demand management plan. This plan will be completed in 2023 and will be used to guide further transportation demand actions.

The City will learn from best practices from other municipalities and leading local employers, including TRU, which provide the following for employees: an e-bike purchase discount program, seasonal commuter parking permit to cyclists, secure bike parking and showers, a car share program, and the TRU Rideshare online app to find carpool partners.

In 2023, a survey was conducted to gather feedback on ways to making biking to work a more feasible and secure commuting option for Development, Engineering, and Sustainability Department employees. Based on the information received from the 39 respondents, new bike racks were installed in the Development, Engineering, and Sustainability Department lobby that will serve employees and visitors. Next steps are to repeat the survey with City Hall and Civic Operations employees.

Future Action (Medium Term):

- Strategically promote targeted neighbourhood transportation demand management programs to residents (e.g. to promote uptake of new active transportation infrastructure or increased transit service levels; to reduce localized congestion areas and avoid road widening).

Future Action (Medium and Long Term):

- Review Parking Management Plan measures to encourage the use of sustainable transportation options as active transportation infrastructure and transit service levels improve.

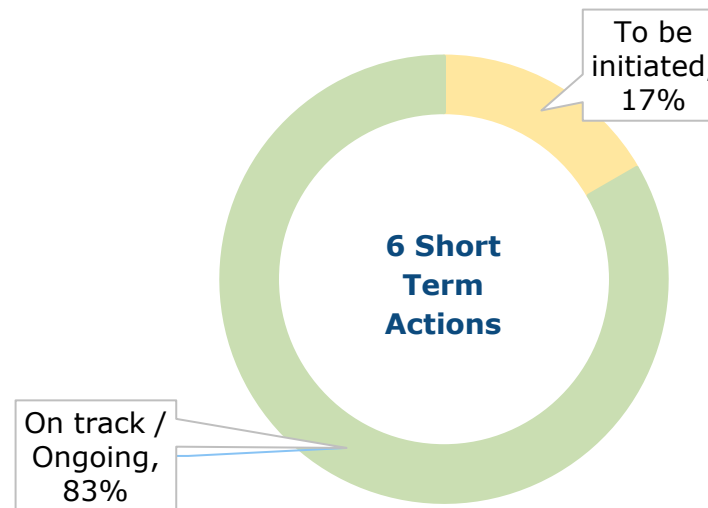
Strategy: 2E Kamloops Car Share

Goal: To reduce the number of privately-owned vehicles in the city through membership-based car sharing services.

ACTION	STATUS	PROGRESS TO DATE
Explore business models and car-share options; negotiate with an existing car-share company and/or put a call to market to solicit interest in operating in Kamloops; prioritize opportunities to integrate plug-in hybrid and EVs into car sharing fleets.	To be initiated in 2024	Some background research and stakeholder interviews were undertaken on car sharing models and the role of municipalities in supporting car sharing in BC. For example, other mid-sized cities (Nanaimo and Kelowna) have car sharing services, with the municipality utilizing the service for some of their pool vehicles. The rapid growth and densification of Kamloops' urban core may make car sharing more viable than previously thought. Next steps include identifying an established car share company that is willing to conduct a pilot project in partnership with the City to assess its feasibility in Kamloops.
<p><i>Future Action (Medium Term):</i></p> <ul style="list-style-type: none"> - Encourage the use of established car sharing services in new developments in higher density urban areas to reduce parking space requirements while meeting the mobility needs of residents. 		

Big Move 2: Summary of Implementation Progress

14 Actions: 6 short term, 6 medium term, 2 long term



Equity and Climate Justice Considerations



CHALLENGES	OPPORTUNITIES
<ul style="list-style-type: none">- While significant projects are underway for active transportation infrastructure, it will take time to complete the network.- Bike security has been cited as a significant concern through various engagement activities.- There is not currently a car sharing company active in Kamloops, and it is still unclear whether an established car company would see a positive business case to do business in Kamloops, given our population density.- Cost is a barrier to e-bike ownership.	<ul style="list-style-type: none">- Increasing access to active transportation infrastructure reduces reliance on private motorized vehicles and decreases household transportation costs.- Lower air pollution and increased physical activity due to using active modes of transportation.- Potential to provide income-qualifying incentives for e-bikes.- Transportation demand management measures offered by employers can open up employment options for people without access to a private vehicle.- Households could save thousands of dollars annually in car ownership and maintenance costs if a car sharing membership enables them to not own a car or decrease the number of vehicles they own.

BIG MOVE 3: ZERO-EMISSIONS TRANSPORTATION

Strategy: 3A Zero-Emissions Light-Duty Vehicles

Goal: To support the transition to zero-emissions transportation choices.



ACTION	STATUS	PROGRESS TO DATE
<p>Implement the City's EV and E-bike Strategy, prioritizing support for home, workplace and public EV charging infrastructure.</p>	<p>On track</p>	<p>EVs are still a fledgling market in Kamloops, with 519 EVs and 1,252 hybrid vehicles registered locally in 2022, which accounts for only 4% of local passenger vehicle registrations. However, the number of registered EVs in Kamloops has increased by more than 600% since 2017 while gas vehicle ownership has remained largely flat.</p> <p>The City supports education and outreach on EVs, including:</p> <ul style="list-style-type: none"> - Since 2017, Electric Avenue at Hot Nite has been hosted in the city. A section of a car show has been dedicated to showcasing EVs, allowing City staff and local EV owners to directly engage thousands of people about the benefits of EVs. - With funding from EmotiveBC, the City developed a second video promoting the benefits of EV ownership and featuring real-life Kamloops EV owners. - City staff developed a workshop, resources, and marketing materials to help strata corporations with the steps to make their buildings EV-ready. <p>Zoning Bylaw changes came into effect January 1, 2023, to ensure new residential developments can support EV charging at home, including for multi-family residential buildings. Now, one parking stall per dwelling unit must have a specified level of EV readiness at the time of construction, which future proofs new homes and enables a homeowner or property manager to install a Level 2 EV charger without having to undergo costly and complex retrofits or electrical system upgrades.</p>
<p><i>Future Action (Medium Term):</i> Encourage private sector investment in new EV charging infrastructure.</p>		

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

Goal: To support institutional, commercial and industrial fleets’ transition to zero-emissions vehicles and equipment.

ACTION	STATUS	PROGRESS TO DATE
Promote the use of renewable, low-carbon fuels in municipal or commercial fleets, where electrification options are not available or feasible.	To be initiated in 2024	Next steps include research on supply options for renewable, low-carbon fuels. The Province’s Renewable & Low Carbon Fuel Requirements Regulation, effective January 1, 2023, requires fuel suppliers to reduce the average carbon intensity of their fuels annually to achieve a 30% reduction by 2030.
<i>Future Action (Medium Term):</i> Implement EV and E-bike Strategy actions that encourage the electrification of commercial fleets.		

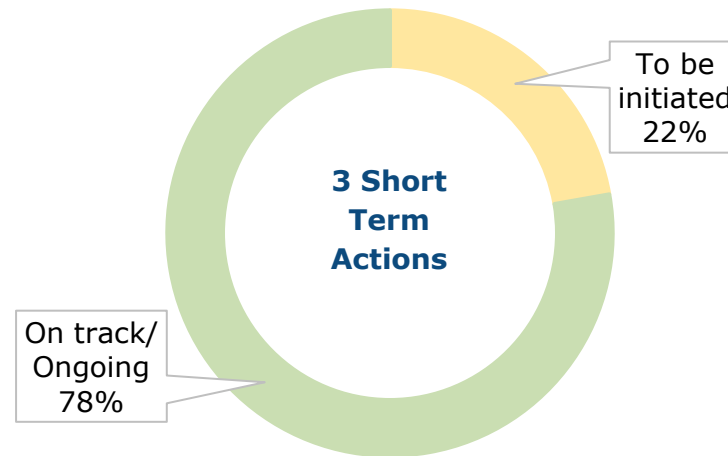
Strategy: 3C Low-Carbon Urban Freight Delivery

Goal: To encourage the shift to zero-emissions delivery vehicles within the urban core and neighbourhood town centres as the demand for home deliveries increases.

ACTION	STATUS	PROGRESS TO DATE
Identify low-carbon urban freight and last-mile delivery logistics opportunities as part of the proposed Truck Route Study to reduce traffic and encourage the adoption of smaller and cleaner delivery vehicles, including electric cargo vans and cargo bikes.	To be initiated in 2024	The scope and timeline of the Truck Route Study is being determined.
<i>Future Action (Medium Term):</i> Develop zero-emissions delivery zones in select commercial areas of the city and incentivize the use of smaller, cleaner vehicles (e.g. e-cargo bikes, electric delivery vans) for last-mile delivery.		

Big Move 3: Summary of Implementation Progress

6 Actions: 3 short term, 3 medium term



Equity and Climate Justice Considerations



CHALLENGES	OPPORTUNITIES
<ul style="list-style-type: none"> - The high cost of gas is increasing people’s transportation costs. However, there is a cost premium to purchase an EV over a comparable gas-powered vehicle and limited availability of used EVs. - Access to EV charging can be a barrier to ownership of EVs. 	<ul style="list-style-type: none"> - There will be some incremental costs to installing EV charging infrastructure at the time of development, but it will be significantly less costly and complex than retrofitting for EV charging infrastructure later. - More affordable EV options are anticipated, including a growing used EV market, making EV ownership more attainable to a greater sector of the population over time. - Given that operational costs and overall life cycle costs are generally lower for EVs than gasoline- or diesel-powered vehicles, efforts to reduce upfront costs and minimize the cost of retrofitting and/or installing EV charging at home, will benefit residents financially in the longer term.

BIG MOVE 4: ZERO-CARBON HOMES AND BUILDINGS

Strategy 4A: New Buildings - Community Wide

Goal: To support the transition to high-performance, energy-efficient, and zero-carbon homes and buildings



ACTION	STATUS	PROGRESS TO DATE
<p>Develop a strategy to implement the higher steps of the BC Energy Step Code in advance of the provincial schedule while allowing lower steps for developments using a low-carbon energy system and/or meeting a specified GHG intensity. Include provisions for new single-family homes with larger than average floor areas (e.g. $\geq 325 \text{ m}^2$) to exceed standard requirements.</p>	<p>On track</p>	<p>On June 15, 2021, City Council authorized Building Bylaw amendments to enable the implementation of the BC Energy Step Code. Effective January 1, 2022, all new residential developments in Kamloops must meet the energy performance requirements of the Energy Step Code as follows: Step 3 for Part 9 (standard) buildings and Step 2 for Part 3 (complex) buildings.</p> <p>Staff have initiated the development of an implementation strategy for the higher steps of the BC Energy Step Code and the new Zero Carbon Step Code. Next steps include conducting preliminary engagement with key internal and external stakeholders before engaging City Council for feedback and direction on next steps.</p>
<p>Develop municipal incentive programs that “top up” existing government and utility-based rebate programs for high-performance buildings and low-carbon energy systems, etc.</p>	<p>On track</p>	<p>To help prepare for the implementation of the Step Code, the City developed and administered the Step Code Incentive Program in consultation with the Canadian Home Builders’ Association Central Interior. The program resulted in 64 homes being voluntarily built to the Step 3 standard.</p> <p>Through CleanBC, the City offers a municipal \$350 top-up contribution for eligible Kamloops households that install a heat pump. Since March 2022, 49 households have switched from natural gas heating to an air-sourced heat pump, with more than \$17,000 of municipal top-up rebates being disbursed over that time.</p>
<p>Build local capacity in high-performance construction and low-carbon energy systems in partnership with the building industry and TRU.</p>	<p>On track</p>	<p>With BC Hydro funding support, the City commissioned E3 Eco Group to present to more than 100 builders and tradespeople at three tailgate lunch-and-learn sessions on active construction job sites in fall 2021, with a focus on preparing for the Step Code.</p> <p>With BC Hydro funding support and in partnership with the Canadian Home Builders’ Association Central Interior, the City sponsored trade students from</p>

		TRU and NorKam Secondary School to attend a presentation delivered by industry experts on high performance and net zero construction.
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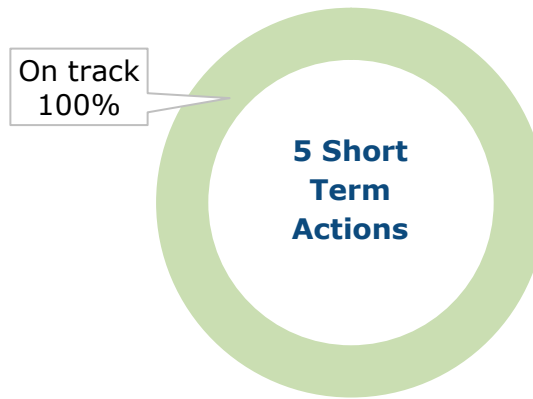
Strategy 4B: Existing Buildings - Community Wide

Goal: 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

ACTION	STATUS	PROGRESS TO DATE
Develop incentives, financing tools, and marketing campaigns to encourage and promote residential and ICI building retrofits.	On track	The Renovate Smart Kamloops program aims to help residents include energy efficiency improvements into home renovation plans and inform them of available incentives. The program includes free offerings—home energy performance workshops, one-on-one home energy consultations, home energy kits, and online resources highlighting Kamloops-specific rebate incentives.
Partner with education and capacity-building organizations (e.g. TRU and the Canadian Home Builders’ Association [CHBA] Central Interior) to provide industry training on low-carbon energy systems, such as heat pump technology and installation, and develop local case studies and demonstration projects.	On track	<p>In 2022, surveys, interviews, and focus groups with local HVAC industry (i.e. suppliers and contractors/installers) were undertaken to identify capacity-building needs, supported by an internship funded by Career Launcher. Resources were developed, distributed to local industry, and posted on Kamloops.ca/HeatPumps to highlight training courses and free-to-access training guides as well as information on the Home Performance Contractors Network.</p> <p>In summer 2022, a University of British Columbia Sustainability Scholar, funded by BC Hydro, compiled case studies of five local residential heat pump installations to better understand the barriers and benefits of heat pump use.</p> <p>With BC Hydro funding support and in partnership with the Canadian Home Builders’ Association Central Interior, the City is supporting the delivery of industry capacity-building and training to begin addressing the capacity-building opportunities identified/reaffirmed through the research activities described above.</p>

Big Move 4: Summary of Implementation Progress

5 Actions: 5 short term



Equity and Climate Justice Considerations



CHALLENGES	OPPORTUNITIES
<ul style="list-style-type: none"> - A key barrier to retrofitting homes and buildings is the long payback periods typical of more substantial energy efficiency improvements. - Constraints on tenants to make efficiency improvements. - Reducing the GHG emissions intensity of new construction could result in cost premiums of between 2.85% and 3.24%. - Large-scale retrofit activity will create local green employment opportunities and generate substantial economic activity; however, efforts must be made to ensure distribution of these benefits (i.e. job training programs). 	<ul style="list-style-type: none"> - Current and emerging provincial and federal rebates, loans, and income-qualifying programs make home retrofits more financially accessible/feasible. - The federal Greener Homes Grant offers up to a \$5,000 rebate for eligible home energy retrofits. The Greener Homes Loan provides 10-year, interest-free loans of \$5,000 to \$40,000. - CleanBC's Better Homes BC and Go Electric BC programs offer extensive rebates for low-carbon electrification and efficiency improvements. - Home energy kits offer low-/no-cost, small-scale measures for homeowners and renters alike. - Energy-efficiency retrofits can decrease energy bills and lead to healthier, more climate-resilient homes with better ventilation and thermal comfort levels.

BIG MOVE 5: ZERO-WASTE/CIRCULAR ECONOMY

Strategy: 5A Local Organics Collection and Processing

Goal: To reduce and capture all kitchen and yard waste for beneficial end use



ACTION	STATUS	PROGRESS TO DATE
<p>Implement a residential organics collection program, establishing a curbside service before expanding to include multi-family buildings.</p>	<p>Complete</p>	<p>The City's Curbside Residential Organic Waste Collection Program launched in August 2023 after a successful pilot program. The program includes the collection of food scraps, soiled paper and small amounts of yard waste from approximately 27,000 single- and multi-family households on curbside collection routes. Based on data gathered during the pilot program, the City expects to divert approximately 6000 tonnes of organics from landfill annually and is estimated to reduce community greenhouse gas emissions by nearly 9,500 tonnes per year.</p>
<p>Deliver food waste reduction campaigns and support food recovery programs that redistribute food to people in need.</p>	<p>Ongoing</p>	<p>The City maintains a web page with food waste facts and reduction tips. Through the BYO campaign, residents are encouraged to bring their own containers for leftovers. The City supports food waste diversion from large community events. In 2023, 15,681 kg of organic waste from Kamloops Daybreak Rotary Ribfest was diverted for composting, representing an impressive 87% waste diversion rate.</p> <p>Community organizations continue to show leadership on food recovery and distribution:</p> <ul style="list-style-type: none"> - The Kamloops Food Bank distributed 937,934 pounds of perishable and 456,431 pounds of non-perishable recovered food in 2022. - The Kamloops Food Policy Council's Gleaning Abundance Program coordinates volunteers to harvest fruit that would otherwise go to waste. In 2022, nearly 17,000 pounds of fruits and vegetables were put out for donation thanks to the 199 volunteers who spent 480 hours of picking.
<p><i>Future Actions (Medium Term):</i></p> <ul style="list-style-type: none"> - Support the Thompson-Nicola Regional District's implementation of an organics disposal ban (e.g. by requiring collection of commercial organics). - Evaluate landfill gas capture rates and potential uses post implementation of organics collection. 		

Strategy: 5B Waste Reduction and Diversion

Goal: To reduce waste and prioritize the diversion of methane-generating materials (i.e. cardboard and paper, yard, wood waste) from entering the landfill.

ACTION	STATUS	PROGRESS TO DATE
<p>Develop a City Waste Reduction Strategy with measurable targets for each waste stream (e.g. construction and demolition, yard waste, plastics, paper/cardboard, and metals).</p>	<p>To be initiated in 2024</p>	<p>Research is being undertaken on best practice plans from other jurisdictions. The scope and timeline will also be informed by waste composition studies to substantiate priorities and emerging legislation from other levels of government (i.e. federal bans, changes to provincial extended producer responsibility programs, etc.), including the Province of BC’s Single-Use and Plastic Waste Prevention Regulation, which will cover shopping bags; disposable food service accessories; oxo-degradable plastics; and food service packaging made of polystyrene foam, PVC, PVDC, compostable, or biodegradable plastics. It is expected to come into effect December 2023.</p>
<p>Support the Thompson-Nicola Regional District’s implementation of a landfill disposal ban on recyclable materials, (e.g. require all cardboard to be recycled).</p>	<p>Ongoing</p>	<p>The TNRD’s Mandatory Recyclable Materials Bylaw No. 2743 was introduced in 2021 and was phased in during 2022 at all solid waste disposal facilities in the TNRD, including Kamloops. As of September 2022, fines may be issued for loads containing more than the 10% of the allowable threshold of recycling cardboard. The City has supported this bylaw’s implementation by informing multi-family and commercial solid waste collection customers of the bylaw and providing advice on getting cardboard collection. The City also inspects garbage bins prior to collection and will notify customers of the requirement to recycle cardboard if it is found in bins.</p>

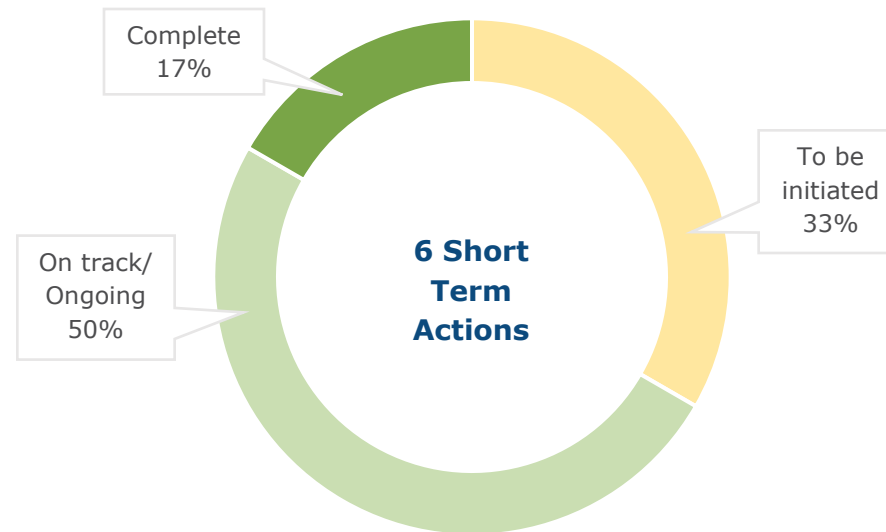
Strategy: 5C Circular Economy and Innovation

Goal: To reduce the use of non-renewable resources, promote materials reuse, and support regenerative business models.

ACTION	STATUS	PROGRESS TO DATE
<p>Support circular economy initiatives that keep products and materials in use, such as repair hubs, and upcycling and resource recovery social enterprises that generate added value out of salvaged materials.</p>	<p>Ongoing</p>	<p>The City promotes repair and reuse at kamloops.ca/WasteReduction. The forthcoming Waste Reduction Strategy will include an evaluation of potential reuse/resource recovery job opportunities.</p> <p>The City partners with Diabetes Canada to collect textiles in donation bins throughout the City. In 2022, the City diverted 10,000 lbs of textiles to reuse markets through bins at eight civic properties. The City supports circular economy initiatives in the community, including by supporting and promoting Repair Café events, which have been hosted by community volunteers, where residents can bring broken items to be repaired at no cost or by donation.</p>
<p>Facilitate discussions with local industries and stakeholders to determine whether waste or by-products of one industry can be productively utilized by another industry.</p>	<p>To be initiated in 2024</p>	<p>Larger, woody yard waste takes longer to compost, which ultimately requires a higher energy input. Therefore, large dimensional yard waste (e.g. tree trunks and stumps) received under the City’s yard waste diversion program is ground up and sold as hog fuel to Kruger inc. for its pulp mill, providing a revenue source to support the yard waste composting program.</p> <p>Through a five-year agreement, treated effluent is used for forest fire suppression, which reduces the use of potable water. In addition, treated effluent is also used as the non-potable water supply for the City’s yard waste composting operations. The City is aware of other large-scale projects utilizing waste products in the Kamloops area. For example:</p> <ul style="list-style-type: none"> - Arrow Transportation’s wood processing division and Rivercity Fibre Ltd. chip and transport forestry slash piles that would be otherwise burned for use in generating biomass electricity at the Kamloops pulp mill (Kruger). - Progressive Planet Products Inc. has developed PozGlass™ SCM, a low-carbon cement additive using post-consumer glass. <p>Next steps could include further study and connections between key stakeholders, such as TRU, the Chamber of Commerce, and local industry, to determine which waste materials are being generated locally and potential uses for them.</p>

Big Move 5: Summary of Implementation Progress

8 Actions: 6 short term, 2 medium term



Equity and Climate Justice Considerations

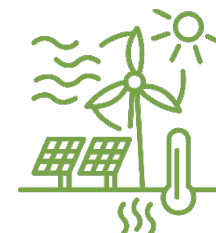


CHALLENGES	OPPORTUNITIES
<ul style="list-style-type: none"> - Access to curbside residential organic waste collection will occur in phases, starting with single-family residential dwellings before expanding to multi-family buildings. 	<ul style="list-style-type: none"> - Organics collection rates have been set to minimize financial impacts on residents (\$12/year increase on current utility rates). - It is estimated that edible food waste costs the average Canadian household \$1,100 per year. Therefore, education campaigns on meal planning, food processing, and food storage can save residents money. - Developing circular economy initiatives, such as local repair, reuse, and upcycling business opportunities, can help support the local economy and create green jobs for people with a variety of skills and abilities.

BIG MOVE 6: RENEWABLE ENERGY

Strategy: 6A Residential and Neighbourhood Scale Energy

Goal: To support the development of low-carbon, renewable energy systems at building and neighbourhood scales.



ACTION	STATUS	PROGRESS TO DATE
Promote opportunities for on-site renewable energy generation at building scale (e.g. solar PV/thermal systems and geexchange).	To be initiated in 2024	<p>City staff are exploring priority areas for further research to determine where renewable energy could have the largest impact in displacing fossil fuel use (e.g. heating swimming pools typically heated by natural gas) and/or offsetting the cost of increased electricity use (e.g. by those transitioning to EVs and/or heat pumps for space/water heating).</p> <p>In 2022, The City of Kamloops signed a memorandum of understanding with TRU and Creative Energy to explore the possibility of connecting the city to a new, low-carbon district energy system that could be scaled to serve community buildings, such as the Canada Games Aquatic Centre and Tournament Capital Centre.</p>
Explore incentives, bulk purchase programs and financing models (e.g. PACE) to support the adoption of renewable energy technologies.	On track	<p>The City promotes incentives for renewable energy (currently the federal Greener Homes Grant and Greener Homes Loan programs) via the Renovate Smart program and Kamloops.ca/RenovateSmart.</p> <p>City staff are monitoring programs and financing mechanisms being used to promote renewable energy in other BC and Canadian municipalities as well the provincial regulatory context (i.e. the Province does not currently permit PACE financing but is actively investigating related opportunities).</p>
<p><i>Future Actions (Medium Term):</i></p> <ul style="list-style-type: none"> - Support not-for-profit or cooperative renewable energy initiatives (e.g. a community solar garden). - Explore opportunities for incorporating low-carbon energy distribution at neighbourhood scale (e.g. district energy system). 		

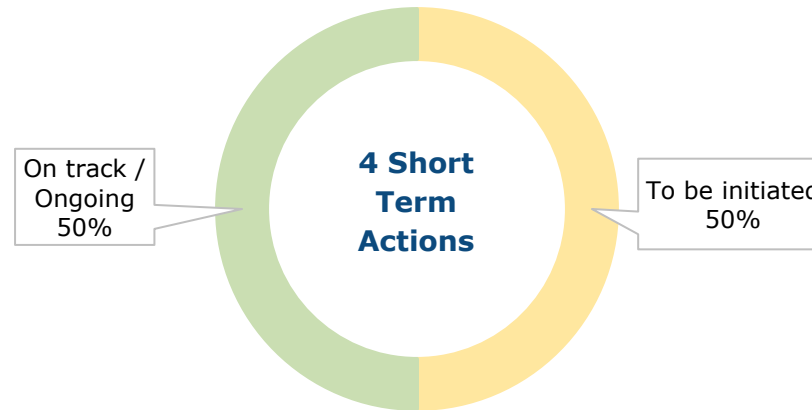
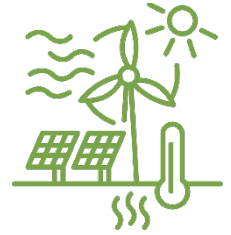
Strategy: 6B Renewable Energy Innovation

Goal: To position Kamloops as a clean energy research, technology, and manufacturing hub to support BC’s low-carbon transition.

ACTION	STATUS	PROGRESS TO DATE
Investigate waste-to-energy opportunities, including the potential for developing biofuels from organic waste or other available feedstock.	Ongoing	<p>The City intends to re-evaluate the potential end use options for all organic waste streams in 2024 once the community-wide collection service has been established and the approximate amount of curbside residential organic material being collected is better understood.</p> <p>The City is monitoring changes to the Province’s Organic Matter Recycling Regulation of BC (OMRR) for permissible beneficial uses as well as learning from best practices in other local governments.</p>
Support research, start-ups and technology innovation (e.g. flexible smart grid technology and electric vehicle [EV] battery reuse/recycling).	To be initiated in 2024	Next steps include research on existing renewable energy innovation in Kamloops and identifying gaps, opportunities, and potential markets. Key stakeholders could include Kamloops Innovation Centre, Kamloops Chamber of Commerce, and Venture Kamloops.

Big Move 6: Summary of Implementation Progress

6 Actions: 4 short term, 2 medium term



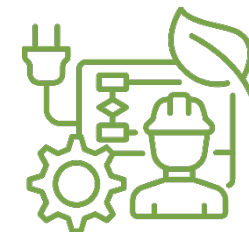
Equity and Climate Justice Considerations



CHALLENGES	OPPORTUNITIES
<ul style="list-style-type: none"> - The upfront cost of installing a solar system is a barrier, even if life cycle costs and energy savings are favourable. - Cost of energy from major utilities is a key driver of the economic feasibility of local solar generation. Electricity rates in BC are currently among the lowest in North America, which makes the economics of solar generation challenging. 	<ul style="list-style-type: none"> - The federal Greener Homes Grant offers up to \$5,000 rebate for solar installations. The Greener Homes Loan provides 10-year, interest-free loans of \$5,000 to \$40,000. - Incentives, bulk purchasing, and financing programs will reduce economic barriers to purchasing renewable energy technologies. - Supporting local industry capacity in the clean energy sector will create new green jobs and economic activity and provide potential opportunities for workers transitioning from fossil fuel and extractive industries. - Supporting community renewable energy projects, such as solar panels on social housing units, would help to reduce energy bills and generate local employment

BIG MOVE 7: MUNICIPAL CLIMATE LEADERSHIP

To demonstrate municipal climate leadership, Big Move 7 of the CCAP commits the City's operations to more ambitious GHG reduction targets than the community (40% by 2030 and 100% by 2050).



2022 Corporate Greenhouse Gas Emissions Update

In 2022, corporate GHG emissions associated with the directly delivery of municipal services (i.e. fuel used by City fleet vehicles and energy used to heat and cool municipal buildings) were **8,159 tonnes of carbon dioxide equivalent (tCO₂e)⁴**. While this represents an 10% decrease over 2007 baseline emissions (Graph 1), the BC electricity emissions intensity factors for 2021 and 2022⁵ were substantially lower than in previous years, which accounts for much of the City's corporate emissions decrease (Table 1).

Graph 1: 2021 Corporate GHG emissions (tCO₂e) for 2020-2022 Compared to 2007 Baseline and 2030 and 2050 Targets

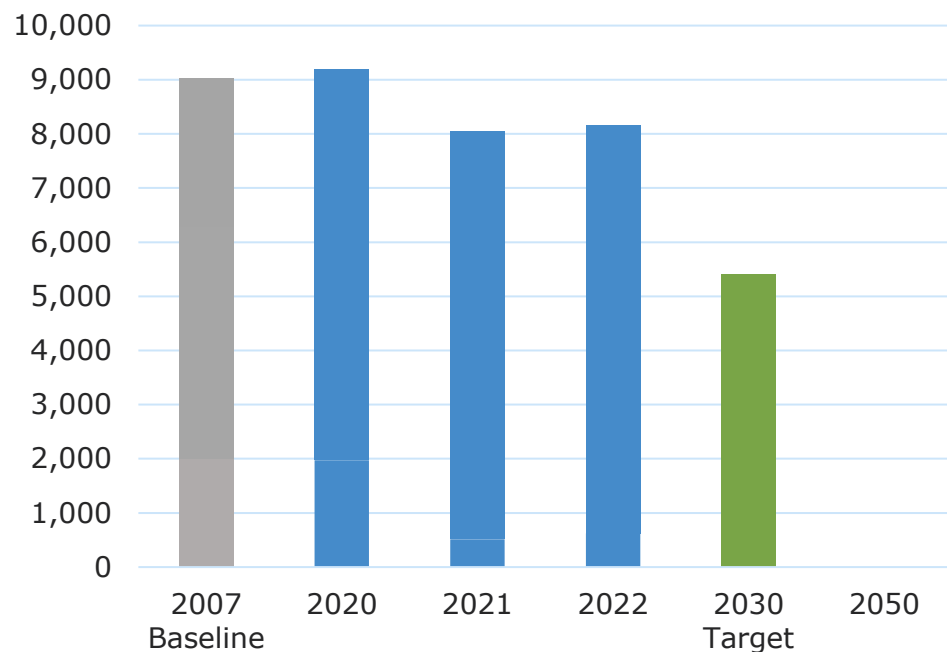


Table 1: Corporate Electricity Consumption and B.C.'s Grid Electricity GHG Emissions Intensity Factors (tCO₂e/GWh) for 2020-2022

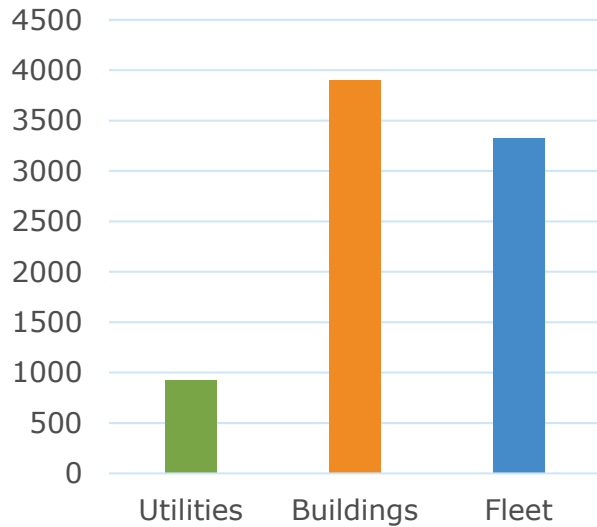
Year	Municipal Electricity Use (kWh)	Electricity Emissions Factor (tCO ₂ e/GWh)
2020	49,134,592	40.1
2021	53,237,204	9.7
2022	53,921,434	11.5

⁴ This includes emissions from vehicles used to deliver recycling services, which are not counted in the LGCAP emissions inventory.

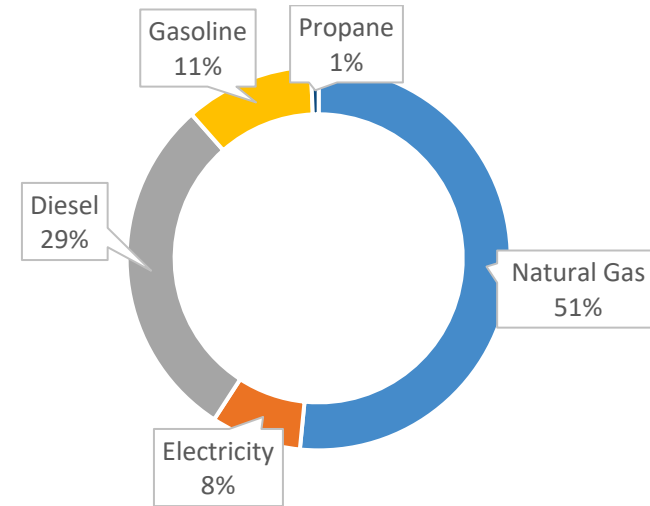
⁵ Government of British Columbia. (2022) "Electricity emission intensity factors for grid-connected entities", online: <https://www2.gov.bc.ca/gov/content/environment/climate-change/industry/reporting/quantify/electricity>

In terms of corporate GHG emissions by end use (Graph 2), energy use in buildings accounted for 48% of GHG emissions followed by emissions from fleet vehicle fuels (41%). Utilities, primarily energy use for water distribution and pumping, accounted for 11% of corporate GHG emissions.

Graph 2: 2022 Corporate GHG Emissions by End Use (tCO₂e)



Graph 3: 2022 Corporate GHG Emissions by Fuel Type



When looking at the composition of GHG emissions by fuel type (Graph 3), natural gas accounted for 51% of emissions as it is a predominant fuel for space and water heating and has a substantially higher carbon footprint than electricity. Fleet fuels were the next highest proportion as the City operates a variety of fossil fuel powered vehicles to deliver core services.

Strategy: 7A Zero-Carbon Civic Operations

Goal: To decarbonize municipal operations by improving the efficiency of civic facilities, fleet, and infrastructure and transitioning to low-carbon energy sources.

ACTION	STATUS	PROGRESS TO DATE
<p>Develop and implement corporate energy and emissions policies and strategies to increase energy efficiency and phase out fossil fuel use in new and existing civic buildings and infrastructure.</p>	<p>On track</p>	<p>Decarbonization measures for the highest GHG-emitting civic buildings have been identified via preliminary engineering assessments undertaken at 15 sites, including low-carbon electrification audits for 8 sites. More detailed energy studies, continuous optimization recommissioning projects, and low-carbon electrification opportunities are being prioritized for these sites with funding support from BC Hydro and CleanBC.</p> <p>The City received a \$750,000 grant in April 2023 to support the development of a facilities strategic plan. Once developed, this plan will be used to guide decisions regarding capital planning, long-term financial planning, and maintenance planning using other strategic plans, such as KAMPLAN: City of Kamloops Official Community Plan, the Recreation Master Plan, and the Community Climate Action Plan, to align building assets with community growth and other strategic initiatives.</p> <p>In 2022, an energy management assessment was completed, and a strategic energy management plan was submitted to BC Hydro outlining priority projects for the following three years.</p> <p>The City is also participating in the Building Benchmarking BC project to publicly disclose the energy use intensity of multiple civic facilities online.</p>
<p>Develop and implement a Green Fleet Strategy that reduces overall vehicle use, prioritizes the use of zero-emissions fleet vehicles and/or renewable transportation fuels, and includes provisions for reducing emissions from tools and equipment.</p>	<p>To be initiated in 2024</p>	<p>Staff are refining the scope of a study to analyze fleet telematics data, undertake a fleet right-sizing review, and identify opportunities for electrification and low-carbon vehicle replacement alternatives.</p> <p>The City has been prioritizing the purchase of hybrid and electric vehicles and currently has:</p> <ul style="list-style-type: none"> - 14 electric and 11 plug-in-hybrid light-duty vehicles - 5 medium-duty EVS (i.e. ice resurfer, lawn mower, utility task vehicle) - 6 hydraulic hybrid garbage trucks

<p>Develop programs and end-of-trip amenities to encourage employees to use transit, low-carbon, and active transportation modes for commuting and work-related travel.</p>	<p>Ongoing</p>	<p>The City offers the following programs to encourage sustainable commuting and work-related travel:</p> <ul style="list-style-type: none"> - Work from Home and Modified Scheduling programs reduce the need for commuting by decreasing the number of days employees with these agreements are traveling to the workplace. - Microsoft Teams software is on all City computers, enabling easy use of video calling and virtual meetings, which have continued beyond the period of pandemic restrictions. - Electric and hybrid fleet vehicles for work-related travel. - Promote spring and fall GoByBike BC campaigns. - Promote ProPASS, which is a photo ID bus pass purchased at work at a discounted rate through payroll deductions for a minimum of four months. <p>A staff transportation survey was completed in 2021 to identify barriers and benefits to cycling among staff. Recommendations to increase the uptake of cycling by staff included providing an employee bicycle purchase program, secure bike parking, end of trip facilities, and other incentives.</p>
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Strategy: 7B Climate Governance

Goal: 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.

ACTION	STATUS	PROGRESS TO DATE
<p>Embed climate action considerations into the supplemental budget request process, and where possible identify related metrics (i.e. key performance indicators).</p>	<p>On track</p>	<p>A section on environmental stewardship was added to the supplemental budget template in 2021.</p> <p>City Council established a Climate Action Levy of 0.35% to civic taxation beginning in 2022, which will generate \$24 million in its first 10 years and grow to an annual investment of \$4.44 million thereafter. The funds will be used to implement the municipal- and community-based climate action initiatives prioritized in the CCAP.</p> <p>The City won the 2022 UBCM Community Excellence Awards' Sustainability category and received an honorable mention for the Community Energy</p>

		Association's Climate & Energy Action Awards for the CCAP and the Climate Action Levy.
Establish a carbon budget framework, internal carbon price, and/or other tools that apply a climate lens to budget planning and decision making and support accountability for meeting corporate emissions reduction targets.	On track	The City of Kamloops is developing climate governance policies to ensure accountability for meeting GHG reduction targets. Research undertaken in collaboration with TRU in 2021 has identified options, including internal carbon pricing policies that include the cost of carbon in life cycle cost analyses. Buildings energy and climate guidelines are being piloted to provide guidance for evaluating and implementing energy-efficient and lower-carbon options in new buildings and retrofit projects.
Review and update the Sustainable Procurement Policy.	On track	<p>In consultation with the Procurement team, the sustainability questions used for request for proposals and request for quotes were updated and draft Climate Impact Assessment - Purchasing Guidelines were provided to aid staff in making informed decisions with respect to a project, program, or procurement's climate impact.</p> <p>An industry scan has been undertaken to identify best practice policies. The policy update will be completed in 2024.</p>

Strategy: 7C Communicating Climate Action

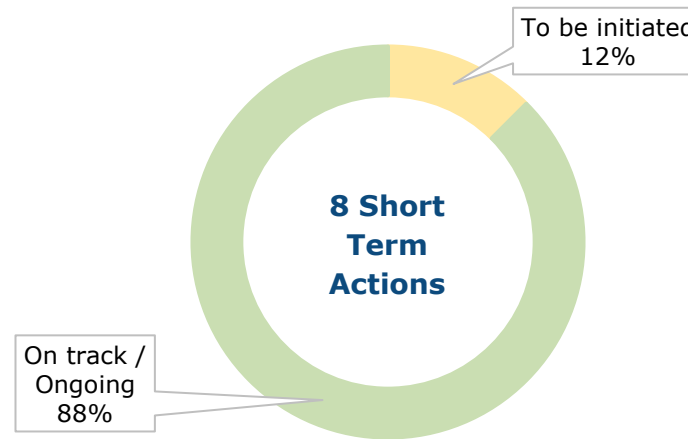
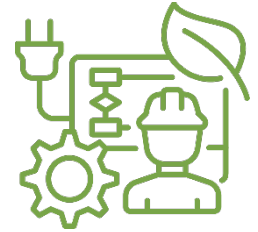
Goal: To engage residents on the actions they can take to address climate change and reduce emissions at home, at school and in the workplace.

ACTION	STATUS	PROGRESS TO DATE
Develop and deliver campaigns that educate about climate change and how residents and businesses can reduce GHG emissions, including partnerships with the arts community (e.g. theatre, film and art exhibits on climate action).	Ongoing	<p>The City undertook several campaigns and outreach activities, including:</p> <ul style="list-style-type: none"> - Sustainability Newsletter emailed quarterly to 1,768 subscribers - 346 people were engaged directly on home energy efficiency measures at the spring 2023 Home Show April 15-16 - Renovate Smart Workshops, which had 40 people registered between January and June 2023 to learn about home energy efficiency - Initiatives to promote electric vehicles (see Big Move 3) - CCAP presentations to dozens of community organizations

		<p>In 2023, the City piloted the Community Climate Action Grant program to leverage local community initiatives that advance implementation of the Big Moves, and \$20,000 was earmarked to support grants valued up to \$2,000 each. Applications were received for 17 projects, with a total funding request of \$31,650. Council approved funding for 13 projects, denied funding for 2 projects, and applications for 2 projects were withdrawn.</p>
<p>Partner with education providers to deliver campaigns on climate action that foster a culture of sustainability amongst youth (e.g. supporting curriculum development with School District 73).</p>	<p>Ongoing</p>	<p>The following outreach has been undertaken with school-aged children and youth:</p> <ul style="list-style-type: none"> - Youth artwork from the 2021 Big Moves Art Project was featured in the CCAP. Following this, in 2022, the City’s Sustainability Educator presented on the CCAP’s 8 Big Moves in classrooms to enrich students’ understanding of the CCAP, and 89 students were tasked with portraying their perspective on the plan’s goals via art and personal reflections. - The City’s Sustainability Educator delivered climate change presentations to 295 students in the 2022/23 school year. - The ECOSmart team engaged 835 students via presentations at schools in June 2022 and partnered with summer camps to engage 471 youth and 66 camp leaders over the summer 2022. <p>The following partnerships have been developed with TRU:</p> <ul style="list-style-type: none"> - Research for Climate Solutions online symposium in 2022 with over 90 attendees to promote the CCAP Big Moves and connect City staff with TRU faculty, students, and sustainability and research office staff - CCAP presentations to TRU classes and groups - Supported TRU Sustainability to promote the Big Moves by highlighting related actions being undertaken on campus

Big Move 7: Summary of Implementation Progress

8 Actions: 8 short term



Equity and Climate Justice Considerations



CHALLENGES	OPPORTUNITIES
<ul style="list-style-type: none"> - It has been challenging to offer accessible communications during the pandemic when many events were hosted online. - Educational initiatives from the City aim to reduce economic barriers to participation (e.g. hosting free, family-friendly events in locations accessible by transit and presenting directly to community organizations and businesses upon request whenever feasible). 	<ul style="list-style-type: none"> - Integrating carbon reduction considerations into budgeting and purchasing processes will help to account for the wider societal costs of carbon pollution. - Reducing municipal carbon emissions mitigates future costs incurred from increasing provincial and federal carbon taxes. - Consideration of climate resilience measures in new construction and retrofits will reduce the impacts of climate change on community facilities. - The City can continue and expand upon initiatives that make community events more accessible, such as free transit days, bike parking valet services, etc.

BIG MOVE 8: HEALTHY URBAN ECOSYSTEM

Strategy: 8A Urban Ecosystems for Climate Resilience

Goal: To enhance our urban ecosystem’s carbon storage capacity while supporting biodiversity and resilience to climate change.



ACTION	STATUS	PROGRESS TO DATE
<p>Provide public education to encourage landscaping and gardening using native species, plants that attract pollinators, integrated pest management, and Firesmart landscaping practices in wildland/urban interface areas.</p>	<p>Ongoing</p>	<p>The City undertakes several initiatives to promote beneficial use of yard spaces, including:</p> <ul style="list-style-type: none"> - demonstration pollinator, xeriscape, and FireSmart gardens - healthy lawn maintenance and lawn alternatives promotion (e.g. urban meadows to attracts pollinators) - integrated pest management guidelines - various online and printed resources - Tree Coupon program <p>Recent campaigns or projects include:</p> <ul style="list-style-type: none"> - An Urban Tree Tour map to highlight significant trees in Kamloops and their benefits. - Between Sept 2022 and August 2023, 91 free FireSmart assessments were completed for single family residences, 5 for apartments, 1 healthcare facility, and 24 multi-family strata complexes. - 10 FireSmart Information sessions were held (in person and online), with a total of 248 attendees. - A grade 6/7 class from Pacific Way Elementary School created a pollinator garden in West Highlands Park. <p>Community organizations and businesses are also taking the lead. Examples include:</p> <ul style="list-style-type: none"> - The Kamloops Naturalists Club is developing a “Grow Wild” app and mapping tool to encourage biodiversity in Kamloops’ yards and have also created demonstration gardens. The Kamloops Naturalists Club supported the City with including components from the Grow Wild tool in the Climate Friendly Homes Program that was launched in 2023.

		<ul style="list-style-type: none"> - The Kamloops Food Policy Council demonstrate ecological gardening practices at the Butler Urban Farm, which is open to the public. - Some local landscaping supply companies highlight FireSmart plants.
<p><i>Future Actions (Medium Term):</i></p> <ul style="list-style-type: none"> - Set a new target of 30% by 2050 while continue current progress to increasing the city’s tree canopy cover to 20% by 2036. - Integrate broader local ecosystems (e.g. grasslands) and climate change adaptation considerations into an update of the Urban Forest Management Strategy, which currently focuses on trees. 		

Strategy: 8B Protect and Heal Nature

Goal: To protect, enhance, and restore ecosystem health.

ACTION	STATUS	PROGRESS TO DATE
Undertake ecosystem restoration projects on City-owned land (e.g. wetland restoration and creation of wildlife habitat using native plants).	Ongoing	Recent projects include restoration of the Dufferin wetlands and a native plant garden around the pond at West Highlands Park. Planned projects include upgrading ponds to re-establish native plants at McArthur Island Park to improve the habitat for western painted turtles.
Encourage investments in local biodiversity conservation projects that also support carbon sequestration (i.e. grasslands conservation and native tree plantings).	Ongoing	<p>Many of the projects funded by the City’s inaugural Community Climate Action Grant program were focused on enhancing biodiversity and ecosystem services at locations throughout the city.</p> <p>The City is supporting the Aberdeen Neighbourhood Association, which plans to raise funds to purchase and plant native trees alongside the creek at West Highlands Park.</p> <p>The City is on the Thompson Okanagan Priority Area Mapping Project Advisory Committee for the Okanagan Collaborative Conservation Program and the Thompson-Nicola Conservation Collaborative’s project, which will link conservation planning and Indigenous knowledge with climate change modelling to support sustainable land use decision making and increase carbon sequestration. Research and mapping tools will be used to identify soil carbon</p>

		storage, ecological connectivity, culturally important species, bioclimatic zones, and more.
Support regenerative agricultural practices that increase soil carbon storage (e.g. through education and partnering on pilot projects on City-owned land).	To be initiated in 2023	The Kamloops Food Policy Council undertook a Farm Hub Feasibility Study in collaboration with the City, which explored how a farm at the Tournament Capital Ranch could support sustainable and regenerative land use practices to increase our region's food system resilience. The study included a two-step engagement process of the community, an in-depth business plan review, an education/extension and social programming model, and recommendations for future steps and plans.

Strategy: 8C Green Infrastructure

Goal: To utilize green infrastructure techniques to enhance green space; stormwater management; and air, soil, and water quality.

ACTION	STATUS	PROGRESS TO DATE
Undertake new green infrastructure pilot projects to trial emerging techniques (e.g. more cost-effective ways of ensuring adequate soil volumes for optimal plant growth), and integrate successful measures into infrastructure and development projects on public lands.	On track	<p>The Tranquille Road Active Transportation Corridor (see Big Move 2) will use bioswales to separate the multi-use pathway from the sidewalk and include tree planting. These measures will help to absorb water and reduce the urban heat island effect.</p> <p>Construction of the Summit Drive multi-use path from Notre Dame Drive to Whiteshield Crescent South is complete. The trees that were planted as part of this project used approved engineered structural soil to promote tree growth under a hard surface. The effectiveness of the soil will be assessed after one or two growing seasons. Structural soil is a mixture of angular crushed stone, soil, and soil stabilizer.</p> <p>Supported by the Pacific Institute for Climate Solutions Internship program, research on green infrastructure was undertaken in fall 2022. This included a review of best practices, interviews with City staff in diverse areas to review current practices, and a focus group with local landscape architects. Resident surveys and site assessments were undertaken to evaluate the effectiveness of green infrastructure measures implemented on four streets within Kamloops. Recommendations for green infrastructure were compiled.</p>

		<p>The design of the Batchelor Drive multi-use path from Westsyde Road to Grasslands Boulevard will include trees with structural soil similar to the Summit Drive multi-use path but will also include swales in the brick separation strip to direct drainage into the tree wells.</p> <p>Clapperton Road reconstruction will include a rock pit to supplement the existing piped storm system. The rock pit will be added upstream of a storm pump station, which has known capacity issues.</p>
Update street standards to incorporate requirements for street trees, native vegetation, sufficient soil volumes, and other green infrastructure to promote long-term plant health, urban cooling, and rain water retention.	To be initiated in 2024	The Design Criteria Manual is being reviewed. This has various components, with the focus currently on water. Once this phase is complete, other components related to this action i.e. the roads section, will be reviewed.
Update City's Landscape Guidelines to ensure that landscaping developed on private property and City right of ways (e.g. boulevards) use green infrastructure technologies, support the City's tree canopy goals, and use sufficient soil volumes and native vegetation where appropriate.	To be initiated in 2024	The scope of the Landscape Guidelines review and update process is being determined.

Big Move 8: Summary of Implementation Progress

9 Actions: 7 short term, 2 medium term





Equity and Climate Justice Considerations



CHALLENGES	OPPORTUNITIES
<ul style="list-style-type: none">- The distribution of trees in Kamloops in relation to socio-economic factors requires further study. Trees, green roofs, and vegetation can help reduce urban heat island effects by shading building surfaces, deflecting radiation from the sun, and releasing moisture into the atmosphere; therefore, it is important to assess whether these benefits are being equitably distributed.	<ul style="list-style-type: none">- Enhancing resilience to climate change can reduce the potential financial and health impacts of extreme weather events.- Green infrastructure can decrease the cost of damage to property and infrastructure from climate change impacts (i.e. when its use decreases potential flood damage from extreme precipitation events).

ADVOCACY

The following were identified in the CCAP as emissions reductions actions that the City has limited jurisdiction over. Therefore, the City will need to advocate to the Province and other levels of government, utility companies, and key stakeholders, where appropriate. Climate action sharing meetings have been established with Tk'emlúps te Secwépemc, staff are involved in regional climate action networks to exchange best and emerging practices, the City participates in consultation processes with the provincial and federal governments, and members of City Council participate in local government climate action networks.

CCAP Advocacy Actions per Emissions Sector	Related work by City staff
 <p>TRANSPORTATION</p> <ul style="list-style-type: none"> – Strengthen zero-emission vehicle mandates for light-, medium-, and heavy-duty vehicles and to maintain targeted electric vehicle incentive programs. – Support BC Transit’s Low-Carbon Fleet Program and the Ministry of Education’s transition to electric school buses. – Create regulations regarding the use of micro-mobility devices (e.g. E-scooters and electric hoverboards). 	<ul style="list-style-type: none"> - Participation in the Local Government EV Peer Network, where best practices, regulations and incentives are regularly discussed. - Continued relationship with BC Transit and School District No. 73 and regular meetings with cycling advocacy groups, including the recently established Kamloops Cycling Coalition. - Monitoring the active transportation electric kick scooter pilot project underway in several BC municipalities. - Requested data from the Province that would support the creation of complete, compact communities (as part of the Local Government Climate Action Program survey).
 <p>BUILDINGS</p> <ul style="list-style-type: none"> – Strengthen low-carbon building regulations for new buildings (e.g. introducing greenhouse gas intensity limits, embodied carbon emissions limits, and mandatory energy labelling/benchmarking). – Enhance access to building energy use data to inform community retrofit program design, incentives, and marketing. – Strengthen retrofit policies, programs, and incentives, including longer-term commitments to sustain consumer awareness and demand. – Promote and incentivize local renewable energy generation. 	<ul style="list-style-type: none"> - Participation in several networks where best practices are shared between local governments, including the Local Government Step Code, Retrofit, and Embodied Emissions Peer Networks. Staff are monitoring other municipal and provincial regulations regarding embodied carbon, as well as industry product regulations. - Requested improved access to Technical Safety BC data regarding installations of space and water heating equipment, including collecting data on heat pump and EV charger installations. - Requested information from BC Assessment regarding the prevalence of swimming pools (in order to determine potential impact of heating requirements).



WASTE

- Implement measures to reduce single-use items and plastics use, including federal and provincial legislation banning certain items.
- Advance circular economy research and innovation.

- Participation in engagement processes for federal and provincial waste management policies, such as webinars, Q&A sessions, and submissions on proposed legislation for single-use plastics, single-use items, and expansion of extended producer responsibility programs (provincial).
- A City staff person is on the Recycling Council of BC Board of Directors, which provides further opportunities to engage on policy.

Climate Adaptation and Resilience



Kamloops is facing a multitude of climate change impacts. Recent extreme weather events experienced in BC have been made more likely by the effects of human-induced climate change.^{6,7,8} In June 2021, a record-setting heat wave (47.3°C) that caused multiple fatalities in Kamloops⁹ was followed by a devastating wildfire season that saw some neighbourhoods evacuated and/or on evacuation alert. In 2017 and 2018, Kamloops was also enveloped in wildfire smoke for much of the summer. In winter 2021, atmospheric rivers disrupted transportation and supply chains and saw Kamloops accommodate flood evacuees from nearby Merritt while extreme cold temperatures were also experienced. These impacts are taking a physical and mental health toll on our community while local agricultural production and ecosystems are under stress (e.g. pine beetle outbreak, salmon population decline), which is affecting local livelihoods and food security.

The CCAP is primarily focused on GHG mitigation with some actions that also contribute to resilience, such as through increasing tree canopy cover, utilizing green infrastructure, encouraging regenerative agriculture, supporting renewable energy projects, and promoting better-insulated homes with heat pumps that offer both heating and cooling. More dedicated research, programs, tools, and resources are needed to identify needs and gaps to build adaptation and resilience among our community.

As indicated in the 2023 Local Government Climate Action Program report, the City intends to undertake a climate risk and vulnerability assessment, once more direction is available from the Province. Current adaptation work includes flood mitigation measures, FireSmart programming and fuel reduction activities, encouraging residents to use the Voyent Alert! emergency app, and heat response measures. Notable projects completed in 2022 include the Riverside Park Flood Protection Project and the McArthur Island Dike Upgrade Project. City staff prepared and implemented a heat alert response protocol for heat warning and extreme heat events in alignment with the Province's Heat Alert Response System, which was developed based on recommendations that emerged after the 2021 extreme heat event. In 2023, an extreme heat response plan is being developed.

Staff have identified the following needs to increase capacity to adapt to climate impacts and build community resilience, including increased funding, more partnerships and collaboration across levels of government, and political support and direction.

⁶ World Weather Attribution. (July 7, 2021) "Western North American extreme heat virtually impossible without human-caused climate change", online: <https://www.worldweatherattribution.org/western-north-american-extreme-heat-virtually-impossible-without-human-caused-climate-change/>

⁷ Kirchmeier-Young, M.C., Gillett, N.P., Zwiers, F.W., Cannon, A.J., & Anslow, F.S. (2019). "Attribution of the influence of human-induced climate change on an extreme fire season". *Earth's Future*, 7, 2–10, online: <https://agupubs.onlinelibrary.wiley.com/doi/epdf/10.1029/2018EF001050>

⁸ Gillett, N.P., Cannon, A.J., Malinina, E., Schnorbus, M., Anslow, F., Sun, Q., Kirchmeier-Young, M., Zwiers, F., Seiler, C., Zhang, X., Flato, G., Wan, H., Li, G., Castellán, A. (2022) "Human influence on the 2021 British Columbia floods". *Weather and Climate Extremes*, 36, online: <https://www.sciencedirect.com/science/article/pii/S2212094722000287>

⁹ CFJC. (June 7, 2022) "Seventeen of B.C. heat dome deaths in Kamloops; committee formed to address heat issues for seniors", online: <https://cfjctoday.com/2022/06/07/seventeen-of-b-c-heat-dome-deaths-in-kamloops-committee-formed-to-address-heat-issues-for-seniors/>

Financial Summary

Achieving the CCAP’s targets requires partnerships, innovations, and investments. In fact, some priority actions in the CCAP will require considerable funding to implement. The City has adopted a CCAP funding strategy, which consists of two primary revenue sources and reserves—the Climate Action Fund Reserve and the Climate Action Levy Reserve.

Climate Action Fund Reserve

The City’s Climate Action Fund Reserve consists of revenue generated through the Province’s Local Government Climate Action Program (and formerly the Climate Action Revenue Incentive Program), which provides funding for climate action initiatives. See Tables 2 and 3 below for 2022 Climate Action Fund Reserve actual expenses and revenue, and projected amounts for 2023.

Table 2: Expense and Revenue Actuals for the Climate Action Fund Reserve (2022 fiscal year)

Opening Balance: January 1, 2022		\$994,384	
Expense	Recurring	Amount (\$)	Details
Energy Management Information System	Y	(32,600)	To monitor, analyze, and report corporate energy consumption and GHG emissions
Wood Stove Exchange Program (2022)	Y	(13,940)	City's match contribution to incentivize residents to replace eligible wood stoves and fireplaces with cleaner burning and/or lower carbon alternatives
Energy Step Code Incentive Program	N	(24,000)	Municipal rebate for constructing Step Code compliant homes prior to the Energy Step Code becoming a mandatory requirement effective Jan. 1, 2022
Home Energy Retrofit Program	Y	(4,550)	Municipal upgrade offers for residents participating in CleanBC's Better Homes Rebate Program
Consulting Services	N	(19,375)	Corporate building decarbonization planning and EV-ready bylaw development
Community Energy Specialist salary	Y	(12,600)	City's 20% contribution to FortisBC's 80% funding
Expense Subtotal		(107,065)	
Revenue		Amount (\$)	Details
2022 Climate Action Revenue Incentive Program Contribution		325,082	For reporting on 2021 corporate GHG emissions and climate actions
Revenue Subtotal		325,082	
Balance: December 31, 2022		<u>1,212,400</u>	

Table 3: Commitments and Projected Revenue for the Climate Action Fund Reserve (2022 fiscal year)

Opening Balance: January 1, 2023		1,212,400	
Commitment	Recurring	Amount (\$)	Details
Energy Management Information System	Y	(32,600)	To monitor, analyze, and report corporate energy consumption and GHG emissions
Wood Stove Exchange Program (2023)	Y	(25,000)	City's matching funds contribution to incentivize residents to replace eligible wood stoves and fireplaces with cleaner burning and/or lower carbon alternatives
Home Energy Retrofit Rebate Program	Y	(27,500)	Municipal upgrade offers for residents participating in CleanBC's Better Homes Rebate program
EV Charger Rebate Program	Y	(37,500)	Municipal upgrade offers for residents participating in CleanBC's Go Electric EV Charger Rebate program
Climate Friendly Homes Program & Bike Valet service	N	(50,000)	City's cash contribution (BC Hydro = \$75k contribution) to deliver community outreach focussed on improving home energy efficiency, reducing GHG emissions and increasing climate resiliency, and provide Bike Valet service personnel at select community events.
Public Electric Vehicle Charging Stations	N	(253,000)	Install 20 public access Level 2 EV chargers. Potential offset of \$100k from Natural Resources Canada's Zero Emission Vehicle Infrastructure Program grant.
Community Bike Storage Amenities	Y	(75,000)	To increase the availability of publicly accessible, secure, end-of-trip bike storage amenities in major neighbourhood centres and other key destinations
Community Climate Action Grant (pilot)	TBD	(20,000)	Funding for community projects and initiatives that address priorities identified in the Community Climate Action Plan
Community Energy Specialist salary	Y	(12,600)	City's 20% contribution to FortisBC's 80% funding
Projected Expenses Subtotal		(533,200)	
Projected Revenue		Amount (\$)	Details
2023 Local Government Climate Action Program Contribution		325,082	For reporting on 2022 corporate GHG emissions and current climate actions.
Projected Revenue Subtotal		325,082	
Projected Balance: December 31, 2023		<u>1,004,283</u>	

The City received Climate Action Revenue Incentive Program funding annually from 2009 until the program ended in 2021. In 2022, the Province of BC committed three years of funding for the Local Government Climate Action Program. The Climate Action Fund Reserve has been used to support numerous City initiatives that align with the goals and objectives of the Sustainable Kamloops Plan and the CCAP, which demonstrate the potential to reduce community or corporate GHG emissions.

Climate Action Levy Reserve

City Council has established a Climate Action Levy, which increases the municipal taxation rate by 0.35% per year starting in 2022 and extending for a 10-year period. Over this time, the Climate Action Levy is expected to generate \$24 million and then, starting in 2031, it will generate \$4.4 million/year. In the 2023-2027 Financial Plan, City Council authorized using \$750,000 (2023) and \$1,000,000 (2024 onwards) of the Climate Action Levy to help accelerate the delivery of cycling infrastructure to the community over a 10-year period rather than the original 20-year planning horizon targets envisioned in the 2018 Transportation Master Plan.

Grant Funding

The City’s Grants and Awards Specialist identifies and monitors grant funding opportunities, including those intended to support climate action-related initiatives as outlined in Table 4.

Table 4: Grant Funding Received for Climate Mitigation and Adaptation Projects (2022)

Project	Grant Name	Funding Organization	Amount (\$)
Heat Pump Capacity-Building Research	ImpACT Internship	Federal - Career Launcher	\$10,000
Green Infrastructure Research	Pacific Institute for Climate Solutions	Pacific Institute for Climate Solutions	\$12,000
Extreme Heat Risk Mapping, Assessment, and Planning	Extreme Heat Risk Mapping, Assessment, and Planning Stream	Community Emergency Preparedness Fund	\$30,000
Hwy 5A Bike Lane	BC Active Transportation Infrastructure Grants	Ministry of Municipal Affairs	\$500,000
Tranquille Sanitary Sewer Ph 3	Green Infrastructure-Environmental Quality	Federal - Investing in Canada Infrastructure Program (ICIP)/	\$12,661,704
Wood Stove Exchange Program	Community Wood Smoke Reduction Program	Province of BC	\$23,000
Electric Avenue	Emotive Community Outreach Incentive	Province of BC	\$8,000
Total			\$13,244,704

Conclusion

With over two-thirds (67%) of short-term actions initiated by the second year of implementation, the City still needs to initiate the remaining third (16 actions) to meet the first target of the CCAP: to initiate all short-term actions by 2024. This target is crucial for setting the foundation for the transitions (i.e. shifts in the consumption of energy, using different technologies and sources) needed to meet the GHG emissions reductions target of 30% by 2030. Background research and scoping is being undertaken for most of the remaining short-term actions that have not yet been initiated.

Notably, since the CCAP's adoption, reliable funding sources have been identified and put into place, including the Climate Action Levy, which secures revenue from taxation to ensure the prioritization of CCAP actions. Furthermore, the Government of BC introduced a new Local Government Climate Action Program, which provides additional funding of \$325,082 annually for three years (2022-2024).

In the year ahead, key priorities include:

- performing targeted follow-ups with key stakeholders on actions not yet initiated
- establishing a network of publicly accessible, Level 2 EV charging stations at civic facilities/amenities
- continuing strategic planning around municipal fleet and buildings decarbonization as well as development of climate governance measures that increase accountability for GHG reductions
- positioning the City to leverage the financing and funding programs being offered
- providing training for staff on equitable approaches to climate mitigation and adaptation
- continuing to foster partnerships and collaborate on initiatives with external stakeholders
- facilitating community and industry capacity-building (e.g. heat pumps, EV-ready homes, BC Energy Step Code)

City staff, supported by community stakeholders and all levels of government, have made a strong start on implementing the CCAP during a time when the impacts of the climate crisis are being acutely felt globally, regionally, and locally. While more dedicated work is needed to address climate change adaptation and resilience, the CCAP provides a clear pathway for reducing GHG emissions from municipal operations and the community more broadly. This report provides a snapshot of progress to date and will be updated on an annual basis.