# City of Vancouver **Diagonal and Actionated Actionated**

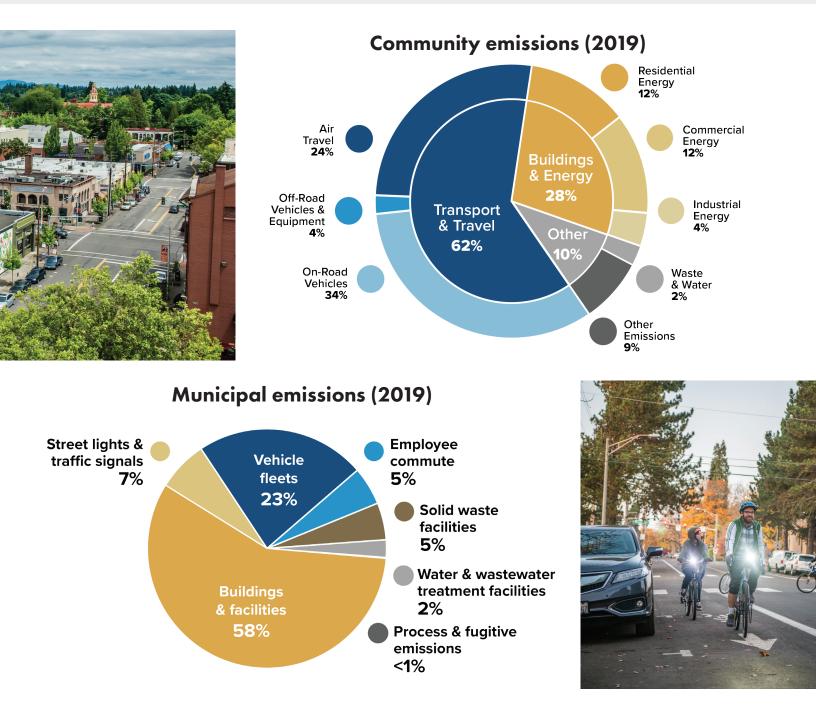


## Progress Report October 2023

# The CAF in Action

The City of Vancouver adopted its first Climate Action Framework (CAF) in December 2022, a blueprint to rapidly reduce greenhouse gas emissions and build resiliency to climate change impacts for all residents. In the first 10 months of action, the City has taken on significant efforts to reduce the carbon footprint of government operations, added staff capacity to shepherd a just community transition, and initiated the development of new programs to support community resilience and leadership. Staff are laying the foundation for transformative climate action throughout Vancouver with new studies, community engagement, and policy development to shape upcoming investments while capitalizing on lowhanging fruit opportunities wherever possible.

The following progress report highlights major climate initiatives underway by the City to meet our target of an 80% reduction in municipal greenhouse gas (GHG) emissions by 2025 and community-wide carbon neutrality by 2040.



# Equity & Green Economy

#### Strategies

- 1. Enhance resilience of overburdened communities
- 2. Build a more community-driven, circular economy
- 3. Support growth of the green technology workforce

## Approach

A just transition requires that our work be guided by those who are disproportionately impacted by climate change while ensuring that all community members benefit from climate investments and the growth of the green economy. Early work in this sector aims to enhance the safety of Vancouver's most vulnerable residents and build capacity for community leadership.

## Key Efforts



#### Youth climate leadership program

The City will support emerging leaders from marginalized backgrounds to engage in climate action and community advocacy through a new program for high school-aged youth. Launching in Fall 2024, participants will be exposed to placebased climate change issues, City government resources and public policy processes, and collaborative problem solving.



## Improving resiliency at emergency response centers

With a \$100,000 grant from Department of Commerce, the City is conducting feasibility studies to install solar power with backup battery storage at emergency response centers distributed geographically across Vancouver, including Firstenburg Community Center, Marshall Community Center, and key police precincts in underserved areas.

#### Enhanced heat safety capabilities

Staff will engage with community organizations, shelter and resource providers, and regional emergency managers to identify and coordinate culturally responsive and inclusive strategies to enhance the resilience of vulnerable community members during increasingly dangerous and disruptive extreme heat and other climate change-induced events.

## Next Steps

Staff will update the City of Vancouver Natural Hazard Mitigation Plan chapter in early 2024 to ensure climate risks are adequately addressed. Staff will also explore options for improved access to community garden resources and opportunities to collaborate with community-driven Green Schoolyards initiatives.



## Other Efforts

- Green workforce development through new urban forestry paid job training for young adults
- City's first public **Climate** e-newsletter launched

#### Challenges

Additional staffing and budget needed to implement and expand program priorities in Climate Action Framework

# Buildings & Energy

#### Strategies

- 1. Increase use and storage of renewable energy while reducing consumption.
- 2. Decarbonize homes, businesses, and other buildings.

## Approach

Early efforts in this sector have focused on shifting to renewable power and aggressively cutting the carbon footprint from government buildings, the largest source of municipal emissions. By leading the buildings and energy transition at City facilities, staff will be better positioned to serve as a resource to building owners citywide as they work towards compliance with WA Clean Building Standards. Staff have also begun the development of Vancouver's first Green Building Policy—a policy that will lay the foundation for future sustainable development community-wide.

#### **Key Efforts**



#### Municipal building assessments

Expert assessments of City facilities are underway to identify energy efficiency improvement projects and opportunities to swap gas-powered systems for lower-emission electric systems. Consultants will also review facilities for compliance with WA Clean Building Standards.

#### Switching to renewable energy sources

In September, the City purchased a 10-kW share (the maximum amount allowed) of Clark PUD's new Community Solar East project.

#### **Comprehensive Green Building Policy**

A consultant team has been hired to support development of the City's first comprehensive Green Building Policy, which will guide the construction of sustainable buildings that support our climate goals. Stakeholders will be engaged in a collaborative policy development process, with regular updates to Council throughout the process.

#### Next Steps

Integrating CAF Actions into all future facility capital projects: General Services created a tool to evaluate all City facility capital projects in development for compliance with other actions from the CAF, ensuring that factors like tree canopy and energy efficiency upgrades are integrated.



#### **Other Efforts**

- New solar array to reduce on-site electrical usage by 80% at Pearson Airport with \$237K WSDOT Sustainable Aviation Grant
- Municipal studies to determine siting and installation of solar energy generation and EV charging infrastructure across City-owned facilities

#### Challenges

Additional long-term staff capacity with engineering and electrical expertise will be needed to implement recommendations from the municipal Building Assessments project and to maintain new HVAC, solar, and EV systems.

# Transportation & Land Use

#### Strategies

- 1. Create neighborhoods that support clean modes of transportation.
- 2. Shift driving trips to clean, active modes of transportation.
- 3. Decarbonize and electrify vehicles.

## Approach

Transportation is Vancouver's largest source of emissions. Making headway in this sector requires transformative changes in Vancouver's transportation systems and the very form of the neighborhoods those systems connect. Foundational planning efforts underway will lay the groundwork for communities where residents can meet their daily needs with a 15-minute walk, roll or transit trip. The City has also cut municipal transportation emissions through early adoption of low-emission fuels and by prioritizing the purchase of hybrid and electric vehicles as gas vehicles are retired.

## Key Efforts



#### Transportation System Plan update

The Transportation System Plan (TSP) sets climate-friendly transportation policies and programs into motion. The TSP contains more than 300 projects that advance climate goals and performance metrics to help us measure our climate progress.



#### Comprehensive Plan update

The Comp Plan implements the City's land use policies and is the single greatest mechanism for determining how people will travel and build for decades to come. Climate is integrated into the plan framework, and staff are analyzing growth scenarios for their effectiveness in increasing travel options and reducing vehicle miles traveled.



#### **Complete Streets**

The City has initiated 10 Complete Streets projects, encouraging shifts to green modes of transportation by addressing safety issues and improving the traveling experience for people on foot, using transit, bicycling, and using mobility devices (as well as driving) along key routes in Vancouver.

#### Next Steps

Community engagement to inform the development of the Comprehensive Plan will be ongoing throughout 2024. Departments will also continue to integrate cleaner alternative fuels for municipal vehicles and acquire hybrid and electric vehicles.



#### **Other Efforts**

- Safe Routes to School programming to make it easier for children to walk and bike to school safely
- 17 new electric and hybridelectric vehicles introduced into municipal fleet
- All City-owned diesel fleet equipment converted to renewable R99 fuel, reducing diesel emissions by up to 75%

#### Challenges

- Transitioning low-density, auto-oriented land use patterns to walkable 15-minute neighborhoods will take many years
- Disruptions in procuring electric fleet vehicles tied to external market forces and manufacturer delays

# Natural Systems & Water Resources

## Strategies

- 1. Increase carbon storage in trees, vegetation, and soil
- 2. Improve ecosystem resilience
- 3. Conserve water resources

## Approach

Healthy natural systems help us adapt to and mitigate climate change impacts by sequestering carbon, building resilience to extreme events, using water more efficiently, and providing essential ecosystem services that our communities depend on. Climate actions in this sector require a shift in how we design and manage landscapes from our backyards to City parks. Leading by example, the City has increased tree planting, expanded landscapes with native and drought-tolerant species, and improved soil health throughout municipal properties to sequester carbon and demonstrate new, climate-friendly models of landscape care.

## Key Efforts



#### Accelerating Tree Canopy Goals

The City is doubling its tree planting capacity. In addition to increased funding in the City's 2023-24 budget, the department was awarded a \$300,000 USDA Forest Service grant to develop a new Urban Forestry Workforce Development Program and invest in underserved communities. In 2024-25, the City will train at least 4 new skilled workers and plant 4,000 urban trees.



#### Native & Climate-Resilient Plantings

In the past year, 2,476 native plants, trees, and habitat features were installed in demonstration pilots at local parks and another 12K in urban greenways and shoreline habitat areas like Burnt Bridge Creek. Naturespaces and Greenways programs are key outreach strategies to promote climate-resilient landscapes, soil health, and water quality benefits.



#### Carbon Sequestration on Public Lands

Increased use of mulch and compost has improved the carbon sequestration potential of soils and reduced the use of synthetic fertilizers in municipal landscaping and urban forestry projects. Multiple departments are testing models for transitioning highmaintenance turf landscapes.

## Next Steps

The department will identify additional opportunities to convert park landscapes and deepen community engagement in natural climate solutions. Staff will also initiate a Natural Systems internal workgroup to share best practices and strategies for transitioning and managing naturalized landscapes between Parks, Forestry, and Operations.



## Other Efforts

- More than 5,500 contacts to educate and engage community members on climate-resilient landscapes
- Strengthening Critical Areas Ordinance to incorporate best available science for environmentally sensitive areas
- Continued high-quality maintenance of street trees with 95% survival rate of newly planted trees

#### Challenges

- Access to staging areas for materials and affordable native plant stock
- Training and capacity to design, retrofit, and manage naturalized landscapes
- Community buy-in to reduce turf and design parks with more natural areas
- Additional staffing and budget to implement and expand program priorities in Climate Action Framework

# Solid Waste & Wastewater

#### **Strategies**

- 1. Require recycling and organic material management
- 2. Zero out emissions from wastewater operations

## Approach

Shifting our community mindset in this sector from waste management to resource recovery helps achieve multiple climate goals, including reducing potent greenhouse gas emissions, generating renewable energy, and relieving pressure on precious natural resources. The City has completed planning phase 1 of 3 for the Wastewater Solids Renewal Program and adopted a Compost Procurement Ordinance that prioritizes the use of finished compost from locally diverted organic matter (e.g. yard debris, food scraps, etc.) in City operations and projects. Further actions in this sector rest on largescale infrastructure upgrades, and foundational planning is underway to achieve our climate priorities.

## **Key Efforts**





#### Wastewater Solids Renewal Program

The City is evaluating a shift in wastewater management that could produce beneficial end products and renewable energy while reducing carbon emissions. The project team has developed a decision framework to evaluate wastewater treatment alternatives and is preparing to collect community input to inform this generational investment.

#### Organic Waste Diversion Planning

Expanding organics management in Vancouver requires interjurisdictional policy change and coordination. The department is actively engaging County-led planning efforts and our transfer station contract that underpin City climate priorities to ensure a strong foundation for citywide composting and organics diversion and other emissions reductions in our solid waste collection and transfer system.



#### **Next Steps**

The City will evaluate wastewater treatment alternatives based on core service values that include climate, environmental health, and equity. Community engagement will shape how wastewater solutions are prioritized. Departments will also work with the County to align solid waste management plans and contracts with the City's climate goals.



#### **Other Efforts**

Continued **community** education and resource programs to improve citywide waste diversion, including free RecycleU classes, Neighborhood Cleanup events and mini-grants, and yard debris coupons

#### Challenges

- Regional organic waste infrastructure limitations; funding for capital improvements
- Success in organics management tied to outside agencies
- City Green Teams, Facilities and janitorial services support to expand waste diversion at City buildings
- Additional staffing and budget needed to implement new programs in Climate Action Framework

# City Governance

## Strategies

1. Mainstream sustainability at the City, including staff capacity.

### Approach

Climate action begins with leadership, and the City aims to be a climate leader for the Vancouver community. The early work of this sector has focused on embedding sustainability into everything that we do, from the plans and projects that we deliver for the community to the supplies and equipment that we use to get the job done. Departments have also added critical staff positions so that their teams have the capacity to deliver on all the new work and ambitious strategies outlined in the CAF.

## Key Efforts



#### Adding critical staff capacity

The 2023-24 biennium budget included five new permanent FTE and one Limited Term position across departments to support the implementation of more than 80 actions listed in the CAF, including an Associate Climate Program Coordinator in the City Manager's Office—the City's first full-time position dedicated entirely to advancing climate action.



#### **Green Procurement Policy**

Phase I of the City's new Green Procurement Policy will be introduced in 2023 and will focus on guidance for common workplace purchases such as office equipment and supplies, food for meetings and events, and cleaning products. Upcoming phases will cover contracted services and large equipment purchases.



#### **Two-Cycle Equipment Transition**

Two-cycle engines, typically found in leaf blowers, chainsaws, and other landscaping equipment, are known to be particularly inefficient and polluting. Staff will pilot new electric equipment in 2024 as well as consider approaches to help small businesses transition to cleaner tools that can still get the job done.

#### Next Steps

Staff will begin work on updating the City's Greenhouse Gas Emissions Inventory in early 2024. Staff will also begin coordination efforts to establish "Green Teams" to support City staff in leading sustainability initiatives in their departments or buildings.



## Other Efforts

- Reducing employee vehicle trips through efforts like the Commute Trip Reduction
  Program, expanded incentives for walking or cycling to work, and offering an electric mobility demo day for employees to test ride e-bikes and scooters
- The Climate Priority Declaration was adopted by Council in June 2022

#### Challenges

Additional staffing needs across City departments to implement and expand program priorities in the Climate Action Framework.



# Looking Ahead

Our society spent many generations building the systems currently in place for transportation, designing cities, constructing and operating buildings, providing power to our cities, managing our natural resources and disposing of our waste. Transitioning all of these systems to carbon-neutral operations that serve all residents equitably will take time, but the City of Vancouver is building the foundations for these transitions today. In the next two years, the City will complete and adopt landmark plans that will ensure we build, travel, and grow in the direction of our climate goals. The City will also continue to advance its early work to improve community resilience so that those most vulnerable to the impacts of climate change have protection and the resources they need to adapt.

Recognizing that reaching our climate goals will require diligent oversight and continuous improvement, the City is committed to conducting regular updates to our GHG Inventory and revising our CAF strategies accordingly. Staff will also meet regularly with Council to provide progress updates on key climate-focused efforts. The timeline below shows the anticipated schedule of the upcoming 2024 GHG inventory update, some key climate-focused efforts, and checkpoints with Council planned through the end of 2025.

# Major Climate Efforts Coming in 2024

