Climate Emergency Action Plan
ANNUAL REPORT

2025 Dashboard

CITY OF VANCOUVER | CLIMATE EMERGENCY

CONTENTS

The City of Vancouver acknowledges that it is situated on the unceded traditional territories of the xʷməθkʷəy̓əm (Musqueam), Sḵwx̱wú7mesh (Squamish), and səlilwətaɬ (Tsleil-Waututh) Peoples.

Abbreviations

ACCS	Arts, Culture and Community Services
BM	Big Move
CCAS	Climate Change Adaptation Strategy
CEAP	Climate Emergency Action Plan
DBL	Development, Buildings and Licensing
ENG	Engineering Services
FH	Fraser Health Authority
FSC	Finance and Supply Chain Management
PB	Vancouver Board of Parks and Recreation
PDS	Planning, Urban Design and Sustainability
REFM	Real Estate and Facilities Management
SPSO	Strategy and Project Support Office
VCH	Vancouver Coastal Health Authority
VEMA	Vancouver Emergency Management Agency

INTRODUCTION

In 2020, the City of Vancouver adopted the Climate Emergency Action Plan (CEAP), with targets to cut carbon pollution in half by 2030, and to be carbon neutral before 2050. Included in that was a commitment to report annually on progress made.

The Outlook section is a qualitative assessment of how likely 2030 CEAP targets will be achieved, given current progress and pace of implementation. Upcoming Council decisions related to CEAP are listed. The Annual Report also includes the current-year Climate Budget, and the latest available indicators and progress updates towards CEAP targets.

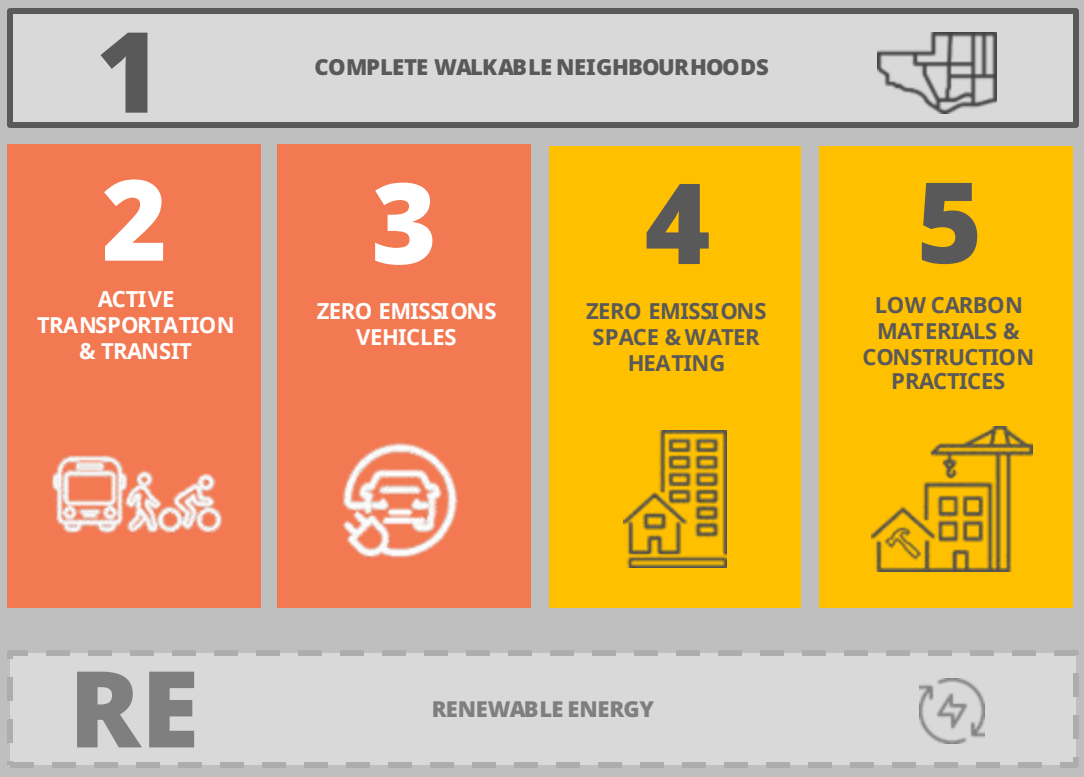
*Go to **vancouver.ca/climateemergency** for past Annual Reports, the full Climate Emergency Action Plan report to City Council (including the full list of CEAP actions, milestones and indicators, and the Investment Strategy and Financial Framework), and other documents.*

Big Moves

Reducing carbon pollution is a long-term and complex problem, requiring integrated solutions. CEAP is built around **five Big Moves**: bundles of interdependent actions that together achieve our outcomes.

Big Move 1 addresses land use. As a municipal government, it is our biggest lever for change and enables all the other Big Moves.
Big Moves 2 and **3** address how we move around the city
Big Moves 4 and **5** address how we use energy in our buildings and how we build them

Renewable Energy is *not* a Big Move but contains actions previously within Big Move 4 that improve access to renewable energy. This enables many of the other Big Moves.



UPDATED BIG MOVE STRUCTURE

Previously, a sixth Big Move addressed natural climate solutions that capture and sequester carbon. This overlapped substantially with the 2024 Climate Change Adaptation Strategy's nature-based adaptation and resilience actions, many with carbon-drawdown co-benefits. To reduce duplication, Big Move 6 has been removed from CEAP.

OUTLOOK

CURRENT LIKELIHOOD OF REACHING 2030 TARGETS

City staff have assessed the current likelihood of meeting each of the Big Move targets, assigning a qualitative rating of **likely, at-risk,** or **unlikely**.

Assessments consider external and internal factors, for example:

- *modelled effectiveness of current policies, given factors such as applicability, stringency, community and market readiness, etc.*
- *potential outcome changes from policy decisions by the City and other levels of government*
- *budgetary decisions and funding availability*
- *City/external partner pressures: staff resources and changes in scheduled implementation*

1 COMPLETE, WALKABLE NEIGHBOURHOODS

90% of people live within an easy walk/roll of their daily needs

UNLIKELY

Significant steps in Vancouver Plan implementation have been taken this year through advancing planning in Jericho Lands. Next steps include finalizing the Rupert Renfrew Station Area Plan (summer 2025), implementing villages and launching neighbourhood centres planning. Despite this work, achieving the 2030 target is unlikely, based on the historic and anticipated rates of development. Progress toward this target will impact the pace of progress toward the Big Move 2, active transportation and transit, target.

2 ACTIVE TRANSPORTATION & TRANSIT

Two-thirds of trips in Vancouver to be by active transportation and transit

UNLIKELY

Much of the work underway towards the targeted shift to active transportation and transit is outlined in the recently completed Active Mobility Plan and Council's direction on transit priority corridors and measures, as well as to reallocate more space from cars to other uses. These investments will be supported by the removal of parking minimums in new buildings. The main challenges in meeting this target are a lack of tools to disincentivize driving, along with securing the necessary investment to build out the sustainable transportation network. The financial challenges are amplified by external economic pressures.

3 ZERO EMISSIONS VEHICLES

50% of the km driven on Vancouver's roads to be by zero emissions vehicles

AT RISK

Early uptake of electric vehicles in Vancouver continues to be a success story, and the provincial government's decision to strengthen the Zero Emission Vehicle Act will help continue that trend. The impact of tariffs on the transition to EVs is still being assessed. Our work is increasingly focused on ensuring there is enough home, workplace and public charging so that residents have convenient, reliable access to EV charging. As part of the work ahead, staff will look to meet charging needs through a mix of private sector, BC Hydro and City investment, including more curbside charging and more charging in City-owned parking lots throughout the City.

Staff will also be restating the Big Move 3 target to align with the provincial government's Zero Emissions Vehicle Act for the 2026 reporting cycle. This update is not expected to change the ambition of Big Move 3 and will allow progress to be more easily tracked, as the tracking the current goal requires vehicle odometer readings, which remain unavailable.

4 ZERO EMISSIONS SPACE & WATER HEATING

Cut our carbon pollution from buildings in half, compared to what we had in 2007.

UNLIKELY

Significant wins over the past year include setting higher standards for new construction, establishing time of replacement regulations for water heating in detached homes, and launching energy and emissions reporting for large office, retail and multi-family buildings. These changes will help transition buildings in Vancouver away from fossil fuels, but not at a pace fast enough to reach our target. Further progress can be made by successfully implementing upcoming carbon pollution limits for large commercial and office buildings in 2026 and expanding to more buildings over time, introducing time of replacement heating equipment regulations in detached homes and expanding a voluntary retrofit program for muti family buildings. Improving supports and removing barriers and continued collaboration with BC Hydro are also key to making it easier and more affordable to switch to electric space and water heating in all types of buildings.

5 LOW CARBON MATERIALS & CONSTRUCTION PRACTICES

Reduce embodied emissions from new buildings and construction projects by 40% compared to 2018.

LIKELY

With mass timber construction incentives and embodied-carbon reporting rules now in place, remaining on track relies on the introduction of embodied carbon reduction requirements, initially for new large buildings, with expanded incentives to support industry leaders. Recommendations were originally expected in 2024 and have been delayed to later in 2025 to provide more time for industry to share knowledge regarding effective solutions and to address concerns raised. The City continues to see new developments demonstrating leadership through approaches such as reducing underground parking and optimizing structural designs, using low carbon materials like mass timber and lower-carbon concrete. Many low-/no-cost options exist today, and some of the solutions, like layout and structural design efficiency, can also reduce construction costs by using less material.

FUTURE CHANGES: QUANTITATIVE TARGETS

The intent of CEAP reporting is to provide a summarized overview of complex climate solutions. Indicators, data sources, and the way we report will continue to improve over the course of CEAP.

The next Annual Report will replace the qualitative likelihoods (i.e., red, yellow and green ratings) with quantitative forecasts for the Big Move targets based on current policies and progress to date.

The next Annual Report will also put more emphasis on indicators where the City has more control over the outcomes. For instance, the City has significant control over the growth of electric vehicle charging, through station installations on public property and supporting/requiring charging on private property. A quantitative target could be set around the *number of chargers available to residents across the city* to complement the Big Move target focused on the transition to EVs.

OUTLOOK

UPCOMING COUNCIL DECISIONS

Council will consider a number of staff recommendations in late 2025 and early 2026* related** to Climate Emergency actions.

* *Dates subject to change*
** *Council reports listed have the potential to advance the City's climate objectives; however, climate may not be their primary focus*

2025

Green Building incentives
BM4

Hydrogen option for lower business license fees *for gas station and parking lots*
BM3

Low-rise, mid-rise & tower district schedule & pre-zoning
BM1+2

Embodied carbon reduction requirement in VBBL & incentives
BM5

Climate Budget
ALL

2026

Detached home space heating regulations *at time-of-replacement*
BM4

Villages
BM1+2

Official Development Plan
BM1

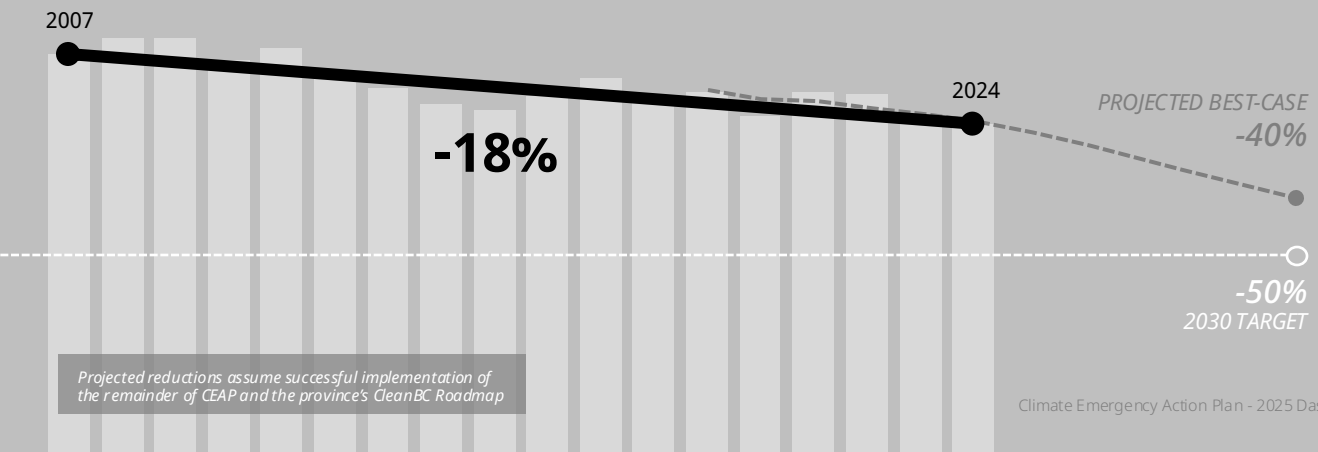
Vision Zero Report
BM2

Vancouver's Carbon Pollution in 2024

Vancouver's emissions continue to trend downward from our baseline year, even as our population and economy grows. Continued reliance on fossil fuels make emissions sensitive to yearly fluctuations in activity: for instance, higher heating demand during a colder winter will typically result in higher building emissions. Annual volatility and overall emissions will decrease over the long term as the community transitions to zero emission buildings/vehicles and active modes of transport, decoupling resident activity and fossil-fuel-generated emissions.

FUTURE CHANGES TO PROJECTIONS

The next Annual Report will replace the single, best-case projection shown here with a range of projected overall carbon reductions. This range will better reflect the inherent uncertainty of policy decisions and outcomes, as well as factors outside the City's control.



2025 CLIMATE BUDGET

In December 2024, the City published the 2025 Climate Budget, defining which investments in the overall City budget are deemed Climate Priority items, and consolidating information on these investments and outcomes into one annual report.

The City's 2025 Capital and Operating Budgets include **$38.4M** in Climate Priority (CEAP-related) capital investments to advance implementation across Big Moves 2-5 as shown below. **$28.0M** in operating expenses in 2025 comprise predominantly staffing costs across departments working on climate initiatives related to CEAP, the Climate Change Adaptation Strategy (CCAS), or both.

The 2024 Climate Budget estimated **$215M** in capital investment would be needed over 2024-26 to implement CEAP at the levels needed to achieve our target outcomes. This is broadly in line with other Canadian cities that have developed similar estimates. An estimated $118M of this funding was identified in the City's 2023-26 Capital Plan.

Opportunities to reduce the funding gap include prioritizing regulatory/advocacy tools, optimizing project delivery at a lower cost, advocating for funding from senior government and partners, and continuing to include CEAP investment needs in upcoming financial planning processes.

The previous year's (2024) Climate Budget included a list of unfunded immediate-priority CEAP and CCAS projects. This informed the Capital Mid-Term Update in 2024, which addressed many of these (e.g., active transportation and transit-related projects). Other projects were also successfully funded through external grant funding or through budget reallocation. No unfunded short-term projects have been identified for 2025, as staff focus on existing program delivery.

Staff will prepare a 2027-30 CEAP investment needs estimate to inform 2027-30 Capital Plan development.

External Funding

City staff actively look for opportunities to advocate for and leverage funding from senior government and partners to enable CEAP projects. External funding programs are often cost-shared, so staff submit high-priority projects that best meet funding program requirements. Applications allow the City to either accelerate work underway, or undertake projects only made possible by significant available external funding. The following funding applications are currently in progress as of Q1 2025:

- Safety and Accessibility Upgrades for Arbutus Greenway $18.4M
- Hastings Community Centre Energy Retrofit $2.4M
- Champlain Heights Community Centre Energy Retrofit $2.4M
- Electric Fire Pumper Trucks $4.7M
- Renfrew Public Library Energy Retrofit $1.5M
- Public EV Chargers at Collingwood Park and Eburne Park $0.2M

CLIMATE EMERGENCY ACTION PLAN 2025 CAPITAL INVESTMENTS

2025 Multi-Year Capital Budget (Annual Budget): "Climate Priority" Initiatives

Goal Area	Service Areas	Capital Plan Program/Project	2025 Budget Allocation, $M
BM2 Active Transportation + Transit	• Active transportation corridors & complete streets • Traffic signals • Transportation safety & accessibility • Transit integration & reliability	2023-26 Active Transportation	$17.1
		2023-26 Transit Improvements	$7.1
		2023-26 New Signals	$3.0
		2023-26 School Program	$0.8
BM3 Zero Emission Vehicles	• Vehicles & equipment	2023-26 Electrification of Fleet – Parks	$1.3
		2023-26 Electrification of Fleet – Sanitation	$0.7
		2023-26 Electrification of Fleet – Street	$1.0
		2023-26 Electrification of Fleet – VFRS	$0.1
		2023-26 Electrification of Fleet – VPD	$1.8
	• Zero emission vehicles	2023-26 Off-Street Electrical Vehicle Charging Infrastructure: Non-City Buildings	$1.8
		2023-26 Public-Realm EV charging	$1.1
BM4 Zero Emission Space + Water Heating	• Green buildings	2023-26 Energy Retrofits: Non-City Buildings	$2.5
	• Generation	NEU - New Renewable Energy Generation Planning	$0.1
TOTAL, $M			**$38.4**

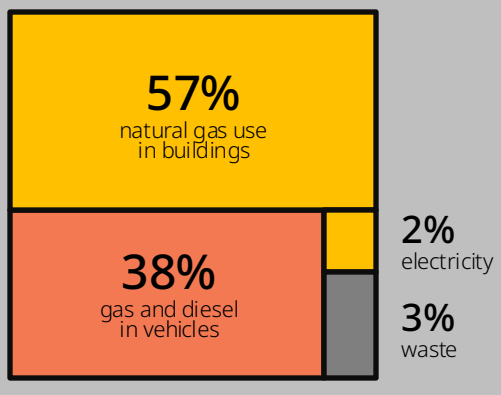
HEADLINE INDICATORS

CEAP headline indicators summarize the collective high-level impact of our actions on overall carbon pollution.

Headline		Baseline		2023		2024		Target		Notes
Community										
Carbon pollution[1] (total)	tCO_2e	2,859,000	2007	**2,390,000**	**-17%**	**2,360,000**	**-18%**	-50%	2030	Slight decrease in emissions year-over-year due to the introduction of 1% renewable natural gas in supply to all Vancouver customers, as well as lower vehicle fuel sales (due in part to growth in electric vehicles) and BC Hydro's continuous improvement in clean energy delivery.
Carbon pollution[1] (stationary)	tCO_2e	1,610,000	2007	**1,415,000**	**-12%**	**1,400,000**	**-13%**	-50%	2030	
Carbon pollution[1] (transportation)	tCO_2e	1,033.000	2007	**905,000**	**-12%**	**890,000**	**-14%**	-50%	2030	
Corporate (City operations)										
Carbon pollution[2] (total)	tCO_2e	545,000	2008	**140,000**	**-74%**	**145,000**	**-73%**	-60%	2030	Slight increase in landfill gas generated; capture-system efficiency remained level.
Carbon pollution[2] (stationary)	tCO_2e	26,500	2008	**19,250**	**-27%**	**19,500**	**-27%**	-50%	2030	Slight increase in fleet emissions due to increased activity of heavy-duty vehicles.
Carbon pollution[2] (fleet vehicles)	tCO_2e	20,000	2008	**7,500**	**-62%**	**8,500**	**-57%**	-50%	2030	

Vancouver's Carbon Pollution in 2024

Carbon pollution from burning natural gas to heat buildings and hot water remains the largest portion of our emissions. Fossil fuels use in vehicles contribute the second-biggest share of our emissions. Electricity is low-carbon in British Columbia, so all the electricity use in buildings and in electric vehicles makes up only a small portion. Emissions from landfilled, decomposing waste also make up just a small portion, as the Vancouver Landfill has a capture system in place that diverts this gas for other uses, such as renewable natural gas.



GPC Basic, Scopes 1 and 2 + Scope 3 Waste.
Due to rounding, percentages may not add up to exactly 100%.

PROGRESS INDICATORS

These indicators summarize City progress on CEAP actions. These more immediate outcomes contribute to our ultimate goals of long-term carbon reduction.

Indicator		Baseline		Current		Target		Notes
Big Moves 1-3								
AAA bikeways[3]	km	82	2017	**108**	2024	Increase		The Granville Connector (opening summer 2025) will alone add approximately 1.5km to the 336km active transportation network.
Bus-lane network	bus-lane kilometre*hours[4]	418	2019	**556**	2024	Increase		Increased capacity on bus routes 23 & 25, added new bus lanes on 49th between Oak & Cambie, and extended bus lanes on Granville St at 16th Ave.
Public EV chargers deployed (Fast Charge and Level 2, cumulative)[5]	#	78	2016	**123**	2024	Increase		24 public chargers were updated in 2024.
Public perception: access to daily needs	% residents	-		**74%**	2024	Increase		Nearly three-quarters of surveyed residents indicated they can walk to many of the services and amenities they need.
Public perception: access to home/near-home EV charging	% residents	-		**31%**	2024	Increase		Availability/awareness of local charging appears to be on the rise (31% in 2024).
Sustainable mode share[6]	trips	48%	2017	**52%**	2024	67%	2030	Declined post-COVID but has rebounded to 2018 levels (52%).
Vehicle kilometres travelled (VKT)	km/resident	5,950	2007	**3,708**	2024	Decrease		
Zero emission vehicles (ZEVs)	% resident registered vehicles	0.3%	2016	**6.1%**	2023	Increase		22,232 of 365,875 registered passenger/ commercial vehicles in Vancouver in 2023 (most recent data from ICBC).
Big Moves 4-5								
Renewable energy generation at the False Creek Neighbourhood Energy Utility (NEU)	%	56%	2018	**69%**	2024	Increase[7]		7,000 tCO_2e reduced in 2024, per *2025 NEU Customer Rates* report to Council.
Carbon pollution intensity (community, new buildings)	$kgCO_2e/m^2$	20.7	2007	**3.9**	2024	0	2030	Requirements for new buildings approved in 2024 will apply in 2025.
Floor area impacted by carbon pollution regulations (community, existing buildings)	m^2	Pending data		**Pending data**		Increase		See *Future Changes* below: staff are developing new indicators to measure policy reach and supports for existing-building decarbonization.
Installed capacity of new renewably powered building systems (community, existing buildings)	kW	Pending data		**Pending data**		Increase		
Renewable energy consumed (community, all buildings)[8]	%	36%	2007	**42%**	2024	55%	2030	1% renewable natural gas introduced into supply to all Vancouver customers starting July 2024.
Tall mass timber buildings approved (community, cumulative)[9]	#	1	2020	**10**	2024	Increase		
Embodied carbon intensity (community, new buildings)	embodied $kgCO_2e/m^2$	Pending data		**Pending data**		*-40%*	2030	Staff are exploring and reviewing modelling data to enable measurement.

FUTURE CHANGES: INDICATORS

Indicators, data sources, and the way we report will continue to improve over the course of CEAP. Some indicators listed above, especially those which no data is available, will be replaced. This is to ensure continued accountability and transparency around the City's actions and outcomes related to carbon reduction. Staff also continue to explore equity indicators to help ensure the City advances climate action in ways that address existing inequities and do not inadvertently cause further harm to disproportionately impacted communities.

MILESTONES

These milestones summarize our progress on prioritized City implementation of CEAP in 2024-2025.

Milestone	Due Date	Responsible	Progress
Big Move 1 - Complete, Walkable Communities	*90% of people live within an easy walk/roll of their daily needs.*		
Seek Council approval for the Rupert/Renfrew Station Area Plan.	2025 Q3	PDS	Underway
Adopt the low-rise, mid-rise and tower district schedules and pre-zoning for Broadway, Cambie and Rupert Renfrew.	2025 Q4	PDS	Underway
Complete villages planning program induding engagement, draft plan and areas of pre-zoning.	2026 Q2	PDS	Underway
Develop scope of work for Neighbourhood Centres planning project.	2026 Q1	PDS	Underway
Complete Jericho Lands Official Development Plan.	2025 Q2	PDS	Complete
Big Move 2 – Active Transportation & Transit	Two-thirds of trips in Vancouver to be by active transportation and transit by 2030.		
Continue to work with Province to advance UBCx subway extension.	Ongoing	ENG	Underway
Continue to advance walking and cycling infrastructure identified in Active Mobility Plan.	Ongoing	ENG	Underway
Continue to implement bus speed and reliability improvements, specifically along Council's priority corridors of Granville, Kingsway, Hastings, 49th, Marine, Broadway, King Edward, West 4th, and Downtown to the Ironworkers Memorial Bridge (Powell, Cordova, etc.)	Ongoing	ENG	Underway
Big Move 3 – Zero Emissions Vehicles	50% of the km driven on Vancouver's roads to be by zero emissions vehicles by 2030.		
Continue to expand the public charging network through CoV investment and enabling increased BC Hydro investment.	Ongoing	ENG	Underway
Launch phase 2 to advance retrofits for EV charging in multi-unit rental buildings in coordination with building energy retrofits.	2025 Q3	PDS	Underway
Expand public curbside charging program.	2025 Q4	PDS	Underway
Implement and monitor gas station and parking lot regulations compliance.	Ongoing	PDS	Underway

MILESTONES

These milestones summarize our progress on prioritized City implementation of CEAP in 2024-2025.

Milestone	Due Date		Responsible	Progress
Big Move 4 – Zero Emissions Space & Water Heating	*By 2030, cut our carbon pollution from buildings in half, compared to what we had in 2007.*			
Research, consult on and brief Council on highest equipment efficiency requirements for detached home heating systems at time of replacement.	2025	Q4	PDS	Underway
Provide owners, homebuilders and contractors with supports to facilitate successful compliance with hot water highest efficiency equipment standards.	2027	Q1	PDS	Underway
Research and initiate engagement on a hotel retrofit support program to launch in 2026.	2025	Q4	PDS	Underway
Launch and initiate communications of Multi-Family Resilient Upgrade Program.	2025	Q2	PDS	Underway
Expand energy and carbon reporting for large commercial and multi-family buildings.	2026	Q2	PDS	Underway
Big Move 5 – Low Carbon Materials & Construction Practices	*By 2030, reduce embodied emissions from new buildings and construction projects by 40% compared to 2018.*			
Add initial embodied carbon reduction requirements in VBBL.	2025	Q4	PDS	Underway
Explore incentives to indude low embodied carbon construction.	2025	Q4	PDS	Underway
Establish an embodied carbon baseline.	2025	Q4	PDS	Underway
Renewable Energy				
Accelerate electrification related to implementation of BM3+4 through the City's collaboration with BC Hydro	Ongoing		PDS	Underway
Take next steps on the NEU decarbonization roadmap: 1) complete detailed feasibility assessment of identified energy sources and 2) develop an enhanced green heat rate aligned with 2025 VBBL GHGi requirements.	2026	Q4	ENG	Underway
Financial Framework, Equity and Indicators				
Report to Council with the 2026-30 Climate Plan: Complete research, engagement and technical analysis necessary to develop a new complete neighbourhoods and zero emission vernicles 2030 targets and new action(s) to meet the BM1-5 targets.	2025	Q4	PDS	On Hold
Engage with each of the Local Nations to determine their areas of interest for collaboration and to discuss funding support from the City for their climate work.	Ongoing		PDS, FSC	Underway
Report to Council with a CEAP Annual Report, including targets and indicators for actions/outcomes, and recommendations for City-Controlled Targets.	2025	Q3	PDS	Underway
Report to Council with a Climate Budget Annual Report to inform CoV prioritization and investment decisions (e.g., 2027-30 Capital Plan).	2025	Q4	PDS	Underway

Endnotes

1 *Community carbon pollution figures are rounded to nearest 1,000 tCO_2e, using the Global Protocol for Cities (GPC) Basic protocol. Comprises Scope 1 and 2 "Stationary", Scope 1 "Transportation", and Scope 3 "Waste" greenhouse gas emissions. Reported decrease in community-wide carbon pollution may be greater than the declines achieved in transportation and buildings individually, because the community-wide number also includes the carbon pollution from waste disposal and treatment.*

2 *Corporate carbon pollution figures are rounded to nearest 250 tCO_2e, using the Global Protocol for Cities (GPC) Basic protocol. Comprises Scope 1 and 2 "Stationary" energy use—including heating in City-owned buildings and process heat (e.g., the Southeast False Creek Neighbourhood Energy Utility, the City's asphalt plant), Scope 1 "Transportation" (fleet vehicle activity), and Scope 1, 2, and 3 "Waste" greenhouse gas emissions from the Vancouver Landfill.*

3 *Total includes greenway segments with cycling infrastructure that substantially meet the city's All Ages and Abilities (AAA) guideline.*

4 *A kilometre*hour of bus lane measures the length multiplied by the hours of operation during a weekday*

5 *This number comprises all DC Fast Charge and Level 2 public charging infrastructure ever deployed by the City. Some of these stations have since passed over to private operators.*

6 *This is the percentage of Vancouver-resident trips made by walking, cycling, or transit.*

7 *Target to be confirmed following detailed feasibility analysis.*

8 *Includes "% clean energy" reported annually by BC Hydro and the City-run NEU, and 1% designated renewable natural gas (RNG) content in natural gas supply to Vancouver community buildings (as of July 1, 2024) . Will be revised with voluntary renewable natural gas uptake and (private) renewable district energy as data becomes available.*

9 *This is the cumulative number of tall (7+ storeys) mass timber that have received development permit approval.*

For more information, go to ***vancouver.ca/climateemergency***

CITY OF VANCOUVER | CLIMATE EMERGENCY

Published July 2025

Front cover photo: iStock

Climate Change Adaptation Strategy **ANNUAL REPORT**

2025 Dashboard

CITY OF VANCOUVER | CLIMATE ADAPTATION

CONTENTS

The City of Vancouver acknowledges that it is situated on the unceded traditional territories of the xʷməθkʷəy̓əm (Musqueam), Sḵwx̱wú7mesh (Sḵwx̱wú7mesh), and səlilwətaɬ (Tsleil-Waututh) Peoples.

Abbreviations

ACCS	Arts, Culture and Community Services
BM	Big Move
CCAS	Climate Change Adaptation Strategy
CEAP	Climate Emergency Action Plan
DBL	Development, Buildings and Licensing
ENG	Engineering Services
FH	Fraser Health Authority
FSC	Finance and Supply Chain Management
PB	Vancouver Board of Parks and Recreation
PDS	Planning, Urban Design and Sustainability
REFM	Real Estate and Facilities Management
SPSO	Strategy and Project Support Office
VCH	Vancouver Coastal Health Authority
VEMA	Vancouver Emergency Management Agency

INTRODUCTION

In 2024, the City of Vancouver adopted the refreshed Climate Change Adaptation Strategy (CCAS), addressing five climate change-related hazards faced by Vancouver now and in the future. Included in that was a commitment to report annually on progress made.

The Outlook section lists upcoming decisions for Council related to CCAS. The Annual Report also includes the current-year Climate Budget for CCAS actions, and the latest available indicators and progress updates towards CCAS objectives.

*Go to **vancouver.ca/climateadaptation** for past Annual Reports, the full Climate Change Adaptation Strategy report to City Council (including the full list of CCAS actions and indicators, and the Financial Framework), and other documents.*

Climate Hazards

Climate adaptation requires a complex, risk-based approach to planning.

CCAS is built around the **five main climate-related hazards** facing Vancouver, plus enabling actions.

- As year-round temperatures increase, warmer summers will see **more extreme heat days and heatwaves.**
- **Poor air quality** from wildfire smoke and ground-level ozone (primarily from human sources) is harmful to human health.
- **Drought** can be caused by combinations of insufficient snow accumulation, chronic hot and dry weather, and low or delayed rainfall.
- More **extreme rainfall** events can overwhelm the capacity of drainage systems, resulting in major disruptions, damage to property and infrastructure, and risk to people.
- **Sea level rise** will exacerbate coastal flooding of low-lying areas. With 1 meter of sea level rise projected by 2100, almost 13km^2 of City lands will be in the floodplain, meaning new risks and impacts to parklands, infrastructure, buildings, and residences.

OUTLOOK

UPCOMING COUNCIL DECISIONS

Council will consider a number of staff recommendations in late 2025 and throughout 2026* related** to Climate Change Adaptation actions.

** Dates subject to change*
*** Council reports listed have the potential to advance the City's climate objectives; however, climate may not be their primary focus*

2025

Protection of Trees Bylaw
Extreme Heat & Extreme Rainfall

2026

Ecological Network Vision & Hazardous Lands *chapter in Vancouver Official Development Plan*
All

Groundwater Strategy
Drought & Extreme Rainfall

Healthy Waters Plan *phase 3*
Drought & Extreme Rainfall

Coastal Flood Management Policy
Sea Level Rise & Extreme Rainfall

2025 CLIMATE BUDGET

In December 2024, the City published the 2025 Climate Budget, defining which investments in the overall City budget are deemed Climate Priority items, and consolidating information on these investments and outcomes into one annual report.

The City's 2025 Capital and Operating Budgets include **$13.2M** in Climate Priority (CCAS-related) capital investments to advance implementation across climate hazards as shown below. **$28.0M** in operating expenses in 2025 comprise predominantly of staffing costs across departments working on climate initiatives related to CCAS, the Climate Emergency Action Plan (CEAP), or both.

The 2024 CCAS Refresh identified an estimated **$74M** capital investment need over 2024-26 to implement CCAS actions to improve adaptive capacity and resilience in Vancouver. As of 2024, these are 97% funded through investment allocations identified in the 2023-26 Capital Plan.

An additional **$20M** was approved in the four-year 2023-26 Capital Plan for Emerging Climate Adaptation Priority projects, to support new projects that significantly reduce risk and enhance resilience. Examples in 2024 included flood protection planning in False Creek; street-tree planting; nature-based flood mitigation in Still Creek, and a tidal terrace pilot at Cooper's Park.

Opportunities to reduce the funding gap include prioritizing regulatory/advocacy tools, optimizing project delivery at a lower cost, advocating for funding from senior government and partners, and continuing to include CCAS investment needs in upcoming financial planning processes.

The previous year's (2024) Climate Budget included a list of unfunded immediate-priority CCAS and CEAP projects. This informed the Capital Mid-Term Update in 2024, which addressed many of these (e.g., extreme and air-quality resiliency upgrades in civic and social infrastructure facilities). Other projects were also successfully funded through external grant funding or through budget reallocation. No unfunded short-term projects have been identified for 2025, as staff focus on existing program delivery.

Staff will prepare a 2027-30 CCAS investment needs estimate to inform 2027-30 Capital Plan development.

External Funding

City staff actively look for opportunities to advocate for and leverage funding from senior government and partners to enable CCAS projects. External funding programs are often cost-shared, so staff submit high-priority projects that best meet funding program requirements. Applications allow the City to either accelerate work underway, or undertake projects only made possible by significant available external funding. The following funding applications were successful as of Q1 2025:

- Cooling and air filtration upgrades at Killarney Seniors Centre $0.7M
- Street Network Risk Assessment and Portable Air Conditioners for Residents in Non-Market Housing $0.3M
- AI-enhanced Flood Modelling, Mapping, and Prediction in Vancouver $0.4M
- Reducing Extreme Heat Risk in Existing Multifamily Buildings Project $0.2M
- Nanaimo Street Green Infrastructure Rehabilitation and Upgrades $0.6M
- Slope Risk Assessment and Mapping and Coastal Adaptation and Flood Management Policy $0.3M

In addition, the following funding applications are currently in progress as of Q1 2025:

- Increasing Vancouver's Street Tree Canopy $5.0M
- Forest Succession Planting in Local Parks to Enhance Vancouver's Ecological Network and Increase Tree Canopy Equity $1.6M

CLIMATE CHANGE ADAPTATION STRATEGY 2025 CAPITAL INVESTMENTS

2024 Multi-Year Capital Budget (Annual Budget): "Climate Priority" Initiatives

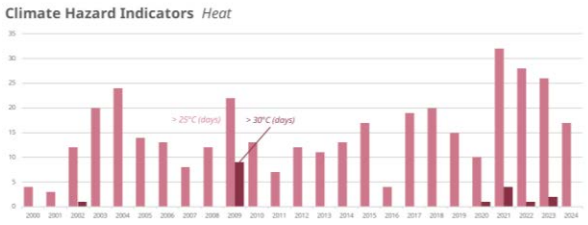
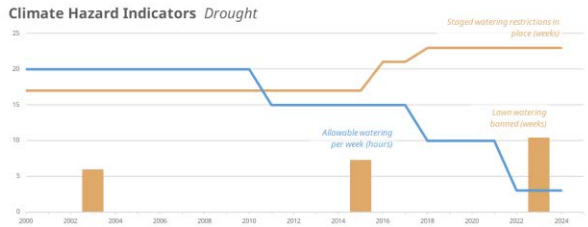
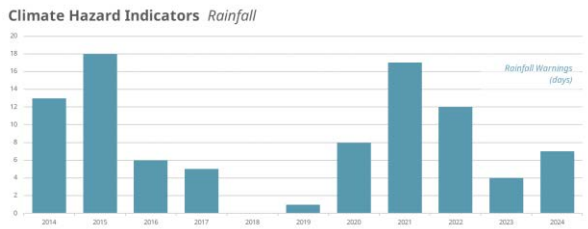
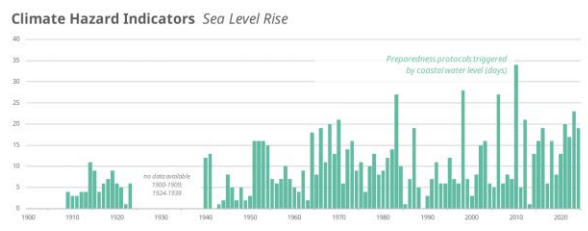
Goal Area	Service Areas	Capital Plan Program/Project	2025 Budget Allocation, $M
Extreme Heat, Air Quality	• Urban Forest • Climate Change Adaptation • Core Network	2023-26 Park Trees – New	$0.5
		2023-26 Street Trees – Replacement	$1.3
		2023-26 Tree Pits	$1.1
		2023-26 Cap Maintenance – Fire & Rescue	$0.3
Drought	• Resilience	Advanced Meter Infrastructure Reading Technology	$1.5
Extreme Rainfall	• Core Network	2023-26 Green Rainwater Infrastructure (GRI) Asset Renewal	$0.3
		2023-26 GRI Planning and Design	$2.9
		2023-26 GRI Utility Upgrades	$5.3
TOTAL, $M			**$13.2**

FUTURE CHANGES: "COST OF DOING NOTHING"

City staff are working with ICLEI Canada to estimate local cost implications of inaction on climate change adaptation, using ICLEI's "Cost of Doing Nothing" toolbox for municipal governments. This can also help us understand the distribution of those costs across different sectors and society, which will enable more equity-centred decisions on climate adaptation in the future.

CLIMATE HAZARD INDICATORS

CCAS hazard indicators summarize the increase in local climate impacts on Vancouver over time.

Hazard	Indicator		2024	Notes	Historical Trend
Extreme Heat	Heat Warnings[1]	days	3	One heat warning was issued in 2024, totaling 3 days. 2024 was the warmest year on record globally and was the first calendar year with a global mean temperature of more than 1.5°C above the 1850-1900 average.	
	Temperature[2] > 25°C	days	11		
	Temperature[2] > 30°C	days	0		
Air Quality	Air Quality Advisories[3]	days	3	BC experienced another active wildfire season in 2024, with more than twice the 10-year average area burned. Wildfire smoke covered much of the province for long periods, while the Lower Fraser Valley was largely unaffected, mainly due to its coastal location and prevailing winds. The region experienced elevated levels of ground-level ozone (smog) for only a few days during the summer of 2024.	
Drought	Staged watering restrictions in place[4]	weeks	23	In 2024, watering restrictions were in place from May 1 to Oct 15.	
	Allowable watering[4]	hours per week	3	Allowable watering hours per week has decreased from 20 in the 2000s, to 3 in 2024.	
	Lawn watering banned[4]	weeks	0	Stage 2 water restrictions, including a lawn watering ban, were not required due to favorable weather conditions and stable water reservoir levels.	
Extreme Rainfall	Rainfall Warnings[5]	days	7	A strong atmospheric river on October 18-20, 2024 resulted in significant rainfall in Vancouver. The intensity and duration resulted in combined sewer overflows at all 28 outfalls, and 400 Van311 reports of surface flooding on the street network. All pump stations remained operational, drinking water quality was maintained, and green rainwater infrastructure performed very well with three locations measured as treating more than double the design standard.	
Sea Level Rise	Coastal water level triggered preparedness protocols[6]	days	19	On December 17 and 18, 2024, Vancouver experienced a combination of significant rainfall, seasonally high tide, storm surge, and strong winds creating moderate to large waves affecting western portions of Stanley Park. This event led to the safety closure of the seawall gates between Prospect Point and Third Beach, and erosive wave damage to the seawall in that area which required repairs.	
All Hazards	Climate-related costs to the City (estimated)	$	tbd	City staff are working to characterize and track costs related specifically to damage and recovery from climate-related events	

PROGRESS INDICATORS

These indicators summarize City progress on CCAS actions adapting and improving resilience to climate hazards.

Indicator		2024	Target		Notes
Extreme Heat					
Cool Kits distributed (cumulative)	#	**4,700**	6,500	2025	
Households retrofitted in rental/non-profit residential buildings (cumulative)	#	**36**	40	2025	Project underway and on track
Tree canopy cover (vs. total Vancouver land area)	%	**25%** *2022*[7]	30%	2050	~2,900 hectares of tree cover across the city's total area of 11,500 hectares
Tree pits installed, trees planted (cumulative)	#	**36**	40-80	2025	2025 target of 50 additional tree pits and trees focusing on Grandview-Woodland, Kensington-Cedar Cottage and Mount Pleasant neighbourhoods.
Air Quality					
DIY Air Cleaner units distributed (cumulative)	#	**500**	800	2025	
Drought					
Single-family residences with water meters installed (cumulative)	%	**17%**	20.5%	2026	12,400 properties metered as of November 2024
Residential water meters (Advanced Metering Infrastructure conversions, cumulative)	#	**3,000**	22,000	2026	Project is in testing phase; installs for conversion in 2025-26; on track for completion
Extreme Rainfall					
City right-of-way area managed by new green rainwater infrastructure (cumulative)	hectares	**1.7**	23	2026	Reconstruction of West King Edward, St. George and Blenheim Streets included several green infrastructure assets in 2024
Enabling Actions					
External funding secured	$	**$2.5M**	*n/a*	*n/a*	See *Climate Budget* section for breakdown

FUTURE CHANGES: INDICATORS

The effectiveness of climate adaptation actions depends on a range of complex variables influenced by geography, socio-economic factors, and ecological systems, making target setting inherently more intricate. Staff continue to work on defining quantitative targets or indicators that focus on where the City has ability to directly influence outcomes, given the fact the City does not have control over *all* the complex factors influencing adaptation outcomes. Examples include deployment of building cooling retrofits, green rainwater infrastructure, etc.

Indicators, data sources, and the way we report will continue to improve over the course of CCAS to ensure continued accountability and transparency. For instance, additional Progress Indicators may be introduced as the workplan for implementation evolves. Staff also continue to explore equity indicators to help ensure the City advances climate action in ways that address existing inequities and do not inadvertently cause further harm to disproportionately impacted communities.

MILESTONES

These milestones summarize our progress on prioritized City implementation of CCAS actions.

Milestone	Due Date	Responsible	Progress
Extreme Heat			
Improving Access to Cooling in Public Spaces			
Launch extreme heat transportation pilot for seniors and people with disabilities in 2024.	2025	VEMA, ACCS	Not Started
Pursue upgrades in two community-use facilities and one civic-operations facility with mechanical cooling by 2025 and continue to develop design plans for future cooling upgrade projects while seeking external funding to accelerate cooling retrofits for additional sites.	2025	PB, REFM	Underway
Supporting Indoor Cooling and Thermal Safety at Home			
Expand on 2022 and 2023 Cool Kit project in partnership with community-based organizations and Vancouver Coastal Health, delivering 3,000 kits.	2025	VEMA	Underway
Initiate work to scope, resource, and determine legal, technical, and economic feasibility for reducing indoor temperatures in existing multi-family residential buildings.	2025	PDS	Underway
Develop and launch a multi-family heat pump incentive and owner support program with BC Hydro, Province of BC and Zero Emission Innovation Centre in 2024.	2025	PDS	Complete
Complete two existing building retrofit programs: the Rental Apartment Retrofit Accelerator (RARA) and Non-Profit Resilient Retrofit Grant (NRRG). These programs will seek participating buildings from the rental and non-profit sector to complete retrofits that reduce emissions and improve resilience	2027	PDS	Underway
Complete a study on cooling measures in existing multi-family buildings, in partnership with Metro Vancouver and the City of North Vancouver. The findings will inform direction on short, medium and long-term strategies to reduce heat-related morbidity in existing multi-family buildings.	2025	PDS	Complete
Implement requirements for mandatory cooling in new multi-family residential buildings in Vancouver Building By-law effective 2025 and explore for 1-3 story residential buildings.	2024	PDS	Complete
Advocate to Province to reduce barriers to installing cooling measures outlined in the Strata Property Act and Residential Tenancy Act.	tbd	PDS, VCH, FH	Underway
Complete analyses and report out on findings from multi-year Measuring Indoor Temperature Initiative in partnership with Vancouver Coastal Health and BC Centre for Disease Control.	2025	PDS	Complete
Stewarding the Urban Forest and Green Space to Support Outdoor Cooling			
Continue to advance tree planting on public land to support efforts to increase the urban forest canopy to 30% by 2050, with a focus on below average canopy neighbourhoods.	2050	PB	Underway
Install 20-40 new tree pits (and planted trees) in low canopy areas per year, including appropriate soil volume improvements.	2025	ENG, PB	Underway
Assess the resilience of specific climate-adapted tree species to extreme heat and drought by implementing and monitoring three pilot tree-planting projects and use the outcomes of these pilots to inform the use of climate-adapted species in future tree-planting projects.	2026	PB	Complete
Explore priority areas for tree planting and retention on private land.	2025	PDS	Underway
Following update to the Tree Bylaw, develop a monitoring approach to track changes to tree coverage on private land as a result of permitted tree removal.	2025	SPSO	Not Started

MILESTONES

These milestones summarize our progress on prioritized City implementation of CCAS actions.

Milestone	Due Date	Responsible	Progress
Air Quality			
Cross-cutting: Extreme Heat and Air Quality			
Continue working with health, housing, and community-based partners to increase supports for seniors and people with disabilities as part of the Resilient Neighbourhoods Program during extreme heat and poor air quality events.	2025	VEMA, ACCS	Underway
Explore expanding social capital grants program to support resilient retrofits for social infrastructure to address near-term needs related to extreme heat and air quality events.	2025	ACCS	Underway
Explore requirements for installing cooling and air quality infrastructure (such as air conditioning and air filters) as part of tenant improvements or renovations in city-partnered emergency homeless shelters.	2025	ACCS	Underway
Utilize the updated REFM Facilities Standard Manual to ensure climate resiliency considerations are implemented in the construction of new City-owned buildings and to support upgrades for existing buildings. All new public-facing facilities will have mechanical cooling and improved air filtration systems, and designated clean air spaces will have additional filtration requirements to address wildfire smoke events.	2025	REFM	Complete
Poor Air Quality			
Expand on 2023 DIY Air Cleaner pilot in partnership with the Pacific Institute for Pathogens, Pandemics, and Society to enable community members to build their own air cleaners.	2025	VEMA	Underway
Work with Metro Vancouver and Vancouver Coastal Health on a Hyperlocal Air Quality Monitoring Initiative to build a dense air quality monitoring network using lower cost sensors to better understand neighbourhood level variations in air quality.	2024	PDS, ENG, REFM	On Hold
Explore and implement building code requirements for filtered outdoor air in new 1-3 storey residential buildings.	2024	PDS	On Hold
Drought			
Accelerate residential metering and transition to Advanced Metering Infrastructure (AMI) meter reading systems as outlined by the Water Demand Management Strategy and supported by regional direction from Metro Vancouver.	2026	ENG	Underway
Explore policy updates for increased non-potable water use in future developments under suitable densification scenarios.	2025	ENG	Underway
Explore policy that prohibits the installation of in-ground lawn irrigation systems that use potable water for new build permits applied for 2025 onwards.	2025	ENG	Underway

MILESTONES

These milestones summarize our progress on prioritized City implementation of CCAS actions.

Milestone	Due Date	Responsible	Progress
Extreme Rainfall			
Improving Our Understanding of Extreme Rainfall			
Complete an Extreme Rainfall Risk Assessment and Strategy - Phases 1 and 2 (hazard assessment and risk/vulnerability assessment) and scope Phase 3 (strategy).	2026	ENG	Underway
Initiate scoping of a study to assess steep slopes City-wide to identify areas at risk for instability (i.e. slope instability from extreme rainfall, or from slope or bluff toe erosion from sea level rise).	2025	ENG	Complete
Supporting Community Stewardship of Rainwater Infrastructure			
Pilot coordination of Adopt a Catch Basin program with Resilient Neighbourhoods Program to expand community participation and public awareness.	2025	ENG, VEMA	Not Started
Managing Rainwater Through Green Rainwater Infrastructure and the Built Environment			
Explore a dedicated funding stream for GRI maintenance tasks and renewal projects in underserved areas to accelerate project implementation.	2025	ENG	Underway
Explore and work towards early implementation opportunities for Still Creek nature-based flood mitigation through a pilot project from the Still Creek Watershed Enhancement Opportunities Study and the forthcoming Rupert and Renfrew Station Area Plan.	2025	ENG	Underway
Incorporate green rainwater infrastructure (GRI) into City right-of-way reconstruction projects.	2026	ENG	Underway
Develop methods to quantify and communicate the service provision value of GRI for benefits such as drainage, livability, urban heat island mitigation.	2025	ENG	Underway
Implement rainwater management requirements in the Vancouver Building By-law for LL Part 3 and for all Part 9 buildings.	2024	DBL, ENG	Complete
Explore a policy or bylaw for the Rupert Renfrew area that prohibits underground parking in and around Still Creek.	2025	PDS, REFM, ENG	Underway
Sea Level Rise			
Planning for Sea Level Rise and Coastal Hazards			
Complete a vulnerability assessment and study of waterfront parks and beaches.	2027	PB	Underway
Develop a coastal adaptation policy that outlines a city-wide approach to coastal adaptation planning, induding governance, policy tools, and funding mechanisms.	2026	PDS	Underway
Initiate technical work and engagement towards the development of a Fraser River Flood Mitigation Plan.	2025	PDS, ENG	Underway
Perform a cost benefit analysis to determine best value in terms of delivering safe and resilient housing and coastal and extreme rain infrastructure at South East False Creek 1A.	2024	REFM	Complete
Complete an environmental assessment of the shoreline areas of the City's flood hazard areas (i.e., False Creek, Kits Beach, Locarno to Spanish Banks, the Fraser River shoreline and areas of Burrard Inlet) where coastal adaptation will take place.	2025	REFM, ENG, PDS, PB	On Hold
Explore the development of vulnerability assessments for the severe weather and coastal flooding initial response guidelines.	2025	VEMA	Complete
Begin development of a coastal asset inventory and resilience guidelines.	2025	ENG, PB	Not Started
Collaborate with neighbouring local governments and First Nations on refined sea level rise projection criteria for short -and medium- term infrastructure planning.	2025	PDS, ENG	On hold
Piloting Creative Solutions for Coastal Resilience			
Design & construct a Sea2City coastal adaptation pilot project on the Cooper's Park shoreline and continue to seek funding for additional Sea2City pilots.	2025	REFM, ENG, PB	Underway
Explore a pilot for nature-based solutions to flooding along the Fraser River.	2025	ENG	Underway
Begin design of naturalized shoreline adaptation approaches (e.g., for West End Waterfront Plan implementation) and continue project-specific engagement with Host Nations.	2025	PB	On Hold

MILESTONES

These milestones summarize our progress on prioritized City implementation of CCAS actions.

Milestone	Due Date	Responsible	Progress
All Hazards			
Explore opportunities with partners to address the unique needs of people experiencing homelessness and housing precarity in climate-related events.	2025	VEMA, ACCS	Underway
Formalize the Resilient Neighbourhoods Program and officially expand mandate beyond Extreme Heat planning.	2025	VEMA	Underway
Update Resilient Neighbourhoods Toolkit with community-led climate resilience actions to adapt to climate change and align with Neighbourhood and Community Placemaking Grants for 2024.	2025	VEMA	Underway
Continue to advance risk management initiatives for park trees, street trees, and forested areas to address risks associated climate-related events such as wildfire and pest and pathogen outbreaks.	ongoing	PB	Underway
Enabling			
Mainstreaming Climate Adaptation in City Practices			
Generate localized cost-implication estimates from inaction on dimate adaptation, using ICLEI's 'The cost of doing nothing' toolbox for municipal governments.	2025	PDS	Underway
Pilot the use of a climate equity evaluation framework through which CCAS actions will be evaluated to ensure equitable development and implementation.	2025	PDS	Complete
Integrate updated climate projections into City processes to inform relevant planning, policies, and infrastructure projects.	2025	PDS	Underway
Continue to integrate climate adaptation into the dimate budget and use to guide future planning and investment decisions.	ongoing	PDS, FSC	Underway
Establish a Climate Friendly Buildings Advisory Committee to seek input from diverse residents living in multifamily buildings to understand benefits and challenges of future regulations and programs aimed at reducing carbon pollution generated in existing multifamily buildings while adapting these buildings to be more resilient to the impacts of dimate change.	2024	PDS	Complete
Collaborating With Key Partners and Senior Levels of Government			
Continue to participate in regional, national, and international collaborations to advance best practice on municipal climate adaptation planning (e.g., C40 Cool Cities Network, Fraser Basin Council).	2025	PDS	Underway
Leverage funding opportunities and maximize intergovernmental collaboration through alignment with National Adaptation Strategy and British Columbia Climate Preparedness and Adaptation Strategy.	2025	PDS	Underway
Building Community Awareness of Climate Change Hazards and Responses			
Improve public access to information and awareness by completing a public-facing multi-hazard and risk story map (identified in Resilient Vancouver) by 2025.	2025	VEMA	Complete
Enhance public communications around each of the climate-related hazards to improve the reach and relevance of City messaging by leveraging community partners and translating materials.	2025	PDS, VEMA	Underway
Setting Intentions and Commitments for the 2026-30 Strategy			
Build on existing relationships and partnerships to ensure that communities that are most impacted by climate change (including Host Nations, urban Indigenous, and equity-denied communities) are aware of and engaged in the 2025 CCAS update process.	2025	PDS	Underway
Ensure priority actions for the 2025 CCAS align with the UNDRIP Action Plan (once finalized and approved), acknowledging the importance of building resilience to climate hazards while addressing past harms.	2025	PDS	Underway
Seek meaningful collaboration with Musqueam, Squamish and Tsleil-Waututh Nations to support Host Nation priorities for the 2025 CCAS refresh (UNDRIP Action 3.10).	2025	PDS	Underway

Endnotes

1 *Heat warnings are issued for Vancouver when two or more consecutive days of daytime maximum temperatures are expected to reach 29°C or warmer and nighttime minimum temperatures are expected to fall to 16°C or warmer.*

2 *Temperature data is recorded at Vancouver International Airport. Due to wind, proximity to the ocean, and lack of urban heat island effect, recorded temperatures are often cooler than those experienced inland.*

3 *Air quality advisories are issued when degraded regional air quality exceeds or is expected to exceed Metro Vancouver's air quality objectives. (https://metrovancouver.org/services/air-quality-climate-action/Documents/ambient-air-quality-objectives.pdf)*

4 *Our region experiences a number of factors that affect reservoir levels and available drinking water. This is partially managed through annual summer water restrictions, which can be used as an indicator of the changing severity of drought conditions in Vancouver. In future, additional indicators may be needed to capture our evolving response to drought.*

5 *Rainfall warnings are issued based on several different parameters, depending on season and anticipated duration of rainfall event.*

6 *>5m chart datum (CD) represents the limit of pure astronomical tides (i.e., without sea level rise and storm surge events), and the bottom threshold of the City's moderate risk monitoring protocol*

7 *Measurement will be conducted every 5 years using LiDAR and i-Tree methods, per Urban Forest Strategy.*

For more information, go to ***vancouver.ca/climateadaptation***

CITY OF VANCOUVER | CLIMATE EMERGENCY

Published July 2025

Front cover photo: iStock