

GREENEST CITY

2020 ACTION PLAN

2021 FINAL PROGRESS UPDATE

The *Greenest City 2020 Action Plan (GCAP)* has wrapped up: a decade-long effort to make Vancouver a greener place to live, work and play. We hit eight of our 18 targets, and even where we didn't cross the finish line, we made significant progress in all 10 goal areas.

CHANGES TO OUR CITY

You can see some of our successes all across the city. A bike network nearly 330km long, including a 28km seawall, the world's longest uninterrupted waterfront path. A "growing" culture of growing food and supporting food systems. 150,000 trees planted, and 34 hectares of natural areas restored or enhanced. Nearly 45,000 people taking personal action on Greenest City goals through City-led or supported programs.

There are other changes you can't see, but they're making a big difference. New buildings emit 81% less carbon pollution than they would have in 2007, thanks to building code changes. We're sending 30% less waste to landfill or incinerator, and using 26% less water per capita. The average resident is driving less and making more trips by foot, bike or transit. Green jobs in Vancouver grew almost 90%, and double the number of local businesses are actively greening their operations versus a decade ago.

WHAT WE LEARNED

Use all our tools. Incentives and supporting people making voluntary changes certainly have a part to play in our low-carbon shift. To move faster, we need to use all available tools. To really start to achieve the scale of change we need to see, we need bold but equitable regulatory actions.

Leading a global shift. Our actions have a bigger impact than just within Vancouver. We've inspired action in the region, nationally, and globally. We need to continue showing strong leadership and accountability as we move forward with tough climate policies around existing buildings, complete communities, and transportation pricing.

Holding ourselves accountable. GCAP showed the importance of tracking our progress transparently. For the *Climate Emergency Action Plan*, we've projected the impact of our Big Moves, and we will track the outcomes, milestones and expenditures we need to make. We'll also do a better job of telling the bad news with the good.

Public demand for action. Our polling shows 90% of Vancouverites are concerned about the climate crisis. But less than 10% understand what constitutes meaningful action, beyond recycling and saving energy. We need to do better at making those connections for people so we all understand the scale of the changes ahead. A responsible transition to a safer greener future is still possible, but many of the easy things have already been done.

UNPRECEDENTED TIMES

When we set out to be "the greenest city in the world by 2020", who would have known what 2020 had in store? The COVID-19 pandemic kept people at home and off the roads, cutting our community carbon pollution. But this also meant fewer trips by transit and other sustainable modes. Meanwhile, our homes and buildings are not coping well with our changing climate. They're still too dependent on fossil fuels to heat in the winter, and too hot during the summer heat waves we are facing almost every year. And perhaps the most alarming of all, our air quality has gotten worse. We've experienced unprecedented wildfire events, turning our skies orange four of the last six years. Our air quality numbers in 2020 were nine times worse than our 2007 baseline.

NEXT STEPS

The latest IPCC report from August 2021 confirms what we're already experiencing locally. Scientists are sounding the alarm about even our best-case scenarios. As it is, we are now almost certainly heading to a 1.5°C global temperature increase, with 2°C becoming more and more likely without immediate, decisive action.

The science shows our *Climate Emergency Action Plan (2020)* targets are achievable, but they are audacious. Vancouver will have to make bold and difficult decisions—and not in some distant future, but in the next year—to keep us on the right path to keeping our city safe, stable and prosperous for all our future generations.

GOAL	TARGET	INDICATOR	BASELINE	TARGET	2012	2013	2014	2015	2016	2017	2018	2019	2020	CHANGE	IMPROVED
CLIMATE AND RENEWABLES	Target: Reduce community-based greenhouse gas emissions by 33% from 2007 levels by 2020	Total tonnes of community CO ₂ e emissions from Vancouver	2,850,000 tCO ₂ e	-33%									2,335,000 tCO ₂ e	-16%	Yes
	Target 1: Require all buildings constructed from 2020 onward to be carbon neutral in operations.	Kilograms of CO ₂ e per square metre of newly built floor area	20.7 kgCO ₂ e/m ²	carbon neutral										3.9 kgCO ₂ e/m ² (2022)	-81%
GREEN BUILDINGS	Target 2: Reduce energy use and GHG emissions in existing buildings by 20% over 2007 levels.	Total tonnes of CO ₂ e from all community buildings	1,630,000 tCO ₂ e	-20%									1,420,000 tCO ₂ e	-10%	Yes
	Target 1: Make the majority of trips (over 50%) by foot, bicycle and public transit.	Per cent mode share by walk, bike and transit	40% of trips	50% of trips									54% of trips (2019) ¹	+14%	Yes
GREEN TRANSPORTATION	Target 2: Reduce average distance driven per resident by 20% from 2007 levels.	Total vehicle km driven per person	5,950 km	-20%									4,000 km (2019) ¹	-33%	Yes
	Target: Reduce total solid waste going to the landfill or incinerator by 50% from 2008 levels.	Annual solid waste disposed to landfill or incinerator from Vancouver	480,000 tonnes (2008)	-50%									334,000 tonnes (2019) ²	-30%	Yes
ACCESS TO NATURE	Target 1: Ensure that every person lives within a five minute walk of a park, greenway or other green space. ³	Per cent of city's land base within a 5 min walk to a green space	92.6% of land base (2010)	95% of land base									92.7% of land base	+0.1%	Yes
	Target 2: Plant 150,000 additional trees.	Total number of additional trees planted	-- (2010)	+150,000 trees									150,000 trees	+150,000	Yes
	Target 3: Restore or enhance 25 hectares of natural areas between 2010 and 2020.	Total hectares of natural areas restored or enhanced	-- (2010)	25 hectares									34 hectares	+34	Yes
	Target 4: Increase canopy cover to 22% by 2050.	Per cent of city's land area covered by tree leaf canopies	18% (2013) ³	22% (2050) ³									23% (2018) ⁴	n/a	n/a
CLEAN WATER	Target 1: Meet or beat the most stringent drinking water quality standards and guidelines ⁵ .	Total number of instances of not meeting drinking water quality standards	0 instances (2006)	0 instances									0 instances	0	Yes
	Target 2: Reduce per capita water consumption by 33% from 2006 levels.	Total water consumption per capita	583 L/person/day (2006)	-33%									433 L/person/day	-26%	Yes
LOCAL FOOD	Target: Increase city-wide and neighbourhood food assets by a minimum of 50% over 2010 levels.	Total number of neighbourhood food assets ⁶ in Vancouver	3,344 food assets (2010)	+50%									5,258 food assets	+57%	Yes
CLEAN AIR	Target: Meet or beat the most stringent air quality guidelines ⁷	Total number of instances of not meeting of air quality standards	27 instances (2008)	0 instances									230 instances ⁸	+203	No
GREEN ECONOMY	Target 1: Double the number of green jobs over 2010 levels.	Total number of local food and green jobs	16,700 jobs (2010)	+100%									34,088 jobs	+87%	Yes
	Target 2: Double the number of companies engaged in greening their operations over 2011 levels.	Per cent of businesses engaged in greening their operations	5% of businesses (2011)	+5% of businesses									20.5% of businesses	+15.5%	Yes
LIGHTER FOOTPRINT	Target: Reduce Vancouver's ecological footprint by 33% over 2006 levels.	Total global hectares per capita	4.27 gha/person (2006)	-33%									3.40 gha/person (2015)	-20%	Yes
		Number of people empowered to take action ⁹ (cumulative)	600 people (2011)	--									44,500 people	+43,900	Yes
GREEN OPERATIONS	Target Zero Carbon: 50% reduction in GHGs from City operations from 2007 levels	Total tonnes of CO ₂ e from City operations	495,000 tCO ₂ e (2007)	-50%									225,000 tCO ₂ e	-55%	Yes
	Target Zero Waste: 80% average waste diversion in City-used facilities ¹⁰	Total diversion rate	47% diversion (2012)	80% diversion									82% diversion	+35%	Yes
	Target Healthy Ecosystems: Reduce water use in City operations by 33% from 2006 levels	Total water use by City facilities (m ³) ¹¹	2,600,000 m ³ (2006)	-33%									1,320,000 m ³	-49%	Yes

1 2019 results are given. 2020 results were abnormally impacted by the sudden decline of resident trips across all modes due to the COVID-19 pandemic.
 2 Solid waste data is compiled first at a regional level and then at the city level. As a result, Vancouver's data is always one year behind the reporting period.
 3 5% of the city's land base is industrial land, and is not considered part of the target. The Park Board has improved the measurement for 5-minute access to green space. The City will transition to the new measurement in Vancouver's next environmental plan.
 4 The original baseline of 18% (and target of 22%) were subject to an accuracy issue in our original LIDAR measurement in 2013. A 2020 reassessment found our canopy cover to be 21% in 2013, and 23% in 2018. While the original baselines are shown here, these revised figures will be the baseline going forward in the Climate Emergency Action Plan and other strategies. The upcoming Urban Forest Strategy Update will also revise the target to 30% by 2050.
 5 Based on water quality standards from British Columbia, Canada and appropriate international standards.
 6 Food assets include: community garden plots, farmers markets, community orchards, community composting facilities, community kitchens, community food markets, food hubs, and urban farms. While the food asset target was met in 2017, specific projections such as securing a food hub and 35 urban farms were not realized, and some assets such as community garden plots are now in decline.
 7 Based on air quality standards from Metro Vancouver, British Columbia, Canada, and the World Health Organization. Four indicators of air quality are used for comparison to world standards: 24-hr average particulate matter (PM_{2.5}) concentration >25 µg/m³, 1-hr average nitrogen dioxide (NO₂) concentration >113 µg/m³, 24-hr average sulphur dioxide (SO₂) concentration >20 µg/m³, and 8-hr ground-level ozone (O₃) concentration >51 ppb.
 8 2020 air quality metrics were measured by Metro Vancouver from data from three monitoring stations in Vancouver (Robson Square, Clark Drive, Pandora Park near the Burrard Inlet area).
 9 "People empowered to take action" are defined as those who are enabled by City-supported programs to change their lifestyle or are implementing a community project that helps Vancouver achieve its Greenest City goals as a result of support provided by a City-led or City-supported program. Examples include learning to preserve food or ride a bike in a community centre class, as well as people involved in projects supported by the Vancouver Foundation and City of Vancouver Greenest City Fund. The definition excludes people participating in a dialogue or consultation, attending an event, using infrastructure (e.g., bike lanes, food scraps collection), or receiving a personal incentive (e.g., home energy retrofits).
 10 An average waste diversion rate across all City-owned facilities encompasses both public and non-public facility waste diversion rates as previously reported in GCAP Updates. This combined diversion rate more accurately reflects total waste diversion amounts.
 11 Without universal water metering of our civic facilities, metric tracking is a best estimate only, based on available data and extrapolation. Accuracy will increase through continued water meter installations at prioritized City buildings.