GREENEST CITY ACTION PLAN
2017-2018 UPDATE
AGENDA

Update Council on progress in implementing the Greenest City Action Plan in 2017/2018
## GreeneST City Framework

<table>
<thead>
<tr>
<th>Objective</th>
<th>Goal Areas</th>
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<tbody>
<tr>
<td>0. ZERO CARBON</td>
<td>Green Buildings, Green Transportation</td>
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<tr>
<td>0. ZERO WASTE</td>
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<tr>
<td>H. HEALTHY ECOSYSTEMS</td>
<td>Access to Nature, Clean Water, Local Food, Clean Air</td>
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</table>

**3 high-level objectives**  
**10 goal areas**
Between 2007 and 2017, **average annual temperatures** fluctuated.

The overall trend was essentially flat, but 2016/2017 winter was **colder than seasonal**.

*Temperature as measured in annual degree-heating days*
Meanwhile, our **population** grew by over **53,000 people**.
In spite of these upward pressures, community GHGs decreased by 7%.
GCAP has gotten us this far.
We need to do more, faster.
GHG EMISSIONS

2007

2017 with current policies -7%

2050 -80%

Zero Emission Building Plan
Retrofit Strategy
NEU Expansion

Transportation 2040
EV Ecosystem
Zero Waste 2040
Green Demolition

Federal and Provincial policies
RENEWABLE CITY STRATEGY

Renewable City Action Plan approved
NEU future expansion approved
Exploring landfill gas beneficial use
Zero Energy Building Learning House

The ZEB House shows a progression of building strategies to meet the BC Energy Step Code and the possible steps towards buildings using no energy.

ZEB House features four wall and three roof types with many of the interface details common to Part 9 residential buildings. The heat recovery ventilator shows installation and allows for commissioning. The purpose of the design is to provide a learning platform where strategies are demonstrated, debated, and tested.
Community building GHG emissions

2017: 1,510,000 tCO$_2$e

-5%

TARGET
-20%
Carbon intensity of buildings: GHG emissions of newly built floor area

2017: 11.8 kgCO₂e/m²

TARGET
CARBON NEUTRAL

-43%
HIGHLIGHTS

ZERO EMISSION BUILDING EXCHANGE
ZEBx to foster global knowledge sharing

REZONING REQUIREMENTS BECOME CODE IN 2021
Alignment with BC Step Code

ICE BOX CHALLENGE
Public demo of ZEB benefits
% mode share by walk, bike, and transit

2017: 48%

TARGET 50%
Annual vehicle kilometres driven per person (VKT)

2017: 3,800 km

TARGET MET

-36%

TARGET

-20%
HIGHLIGHTS

BURRARD BRIDGE UPGRADES
Improved safety for all modes

REGIONAL TRANSIT FUNDING
Mayor’s Council Plan Phase 2 funded

MOBI EXPANSION
One million rides and counting
Solid waste disposed to landfill and incinerator

2016: 371,000 tonnes

TARGET

-50%
ZERO-WASTE 2040, SINGLE-USE ITEMS
Plastic straws, foam takeout cups/containers prohibited in 2019

GREEN DEMOLITION
Expanded to pre-1950 homes; supporting Deconstruction Hub

ZERO WASTE CENTRE
Better access, more recyclables accepted
ACCESS TO NATURE
Hectares of natural area restored or enhanced

2017: 26 hectares

TARGET MET

+26

TARGET

25

2010  2017  2020
NEW BRIGHTON SALT MARSH
Juvenile salmon return within weeks of opening

HERRING HATCHING IN FALSE CREEK
Spawning nets help Pacific herring recovery

VANDUSEN VEGETABLE GARDEN
Engaging summer camp kids in local sustainable food

HIGHLIGHTS
CLEAN WATER
Water consumption per person

2017: 475 L/person/year

TARGET -33%

-18%
ADOPTED A THOUSAND CATCH BASINS
Residents help clear blocked drains; hold naming contest

HIGHLIGHTS

WATER WAGON AT SPECIAL EVENTS
Supported 18 events with 400,000 attendees

WATER EFFICIENCY ADVISOR PROGRAM
Free home visits pinpoint high water usage
Neighbourhood food assets

2017: 5,129 food assets

TARGET MET
+53%

TARGET
+50%

2010
2017
2020
HIGHLIGHTS

SURPASSED FOOD ASSETS TARGET
600 garden plots since 2013; doubled food markets

UPDATED AWARD-WINNING FOOD STRATEGY
80% of original actions completed as Strategy turns 5

KITCHENS FIT FOR PURPOSE
Design guidelines tailor kitchens to community needs
Air quality exceedences

2017: 324 instances

TARGET -100%
HIGHLIGHTS

EV-READINESS IN ALL NEW MULTI-FAMILY BUILDINGS
100% of stalls equipped with charging infrastructure

TRANSLINK ELECTRIC-BUS PILOT
Four battery-electric buses on 100 route

FAST CHARGERS ACROSS THE CITY
Five installed by BC Hydro; City to add more in 2018/2019
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<td>Lighter Footprint</td>
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<td>Green Operations</td>
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Businesses engaged in greening their operations

- 2010: 5%
- Target: 10%
Businesses engaged in greening their operations

2017: 9%

TARGET
10%

2020

2017

5%

2010

0%
GREEN ECONOMY BOOMING
Employs 1 in 15 Vancouverites

CLEANTECH MENTORSHIP
Preparing cleantech entrepreneurs for capital fundraising

CONNECTING WESTCOAST INNOVATION
Cascadia Connect: customers pitching to businesses
LIGHTER FOOTPRINT
Per-capita ecological footprint

2006: 4.27 gha/person

TARGET -33%

2006

2020
Per-capita ecological footprint

2015: 3.40 gha/person
People empowered to support Greenest City

2017: 22,200 people

+21,600
CUT OUR ECOLOGICAL FOOTPRINT

20% less ecologically intensive over last ten years

HIGHLIGHTS

GREENEST CITY GRANTS

Including projects working with underemployed/at-risk youth

CITYSTUDIO UNLOCKS HIDDEN PLACES, TALENTS

Projects that build connections
CITY OPERATIONS PROGRESS

GHGs: -55%
waste diversion: 83% public-facing; 92% other City-owned
water use: -25%

2020 targets achieved

CITY OPERATIONS HIGHLIGHTS

CITY HALL HEAT PUMP
GHGs down 34%; costs down $20k /yr

GREEN FLEETS
Renewable fuel; heavy-duty EVs

SALAD FROM THE GREEN
Golf courses grow salad for concessions
TRANS MOUNTAIN PIPELINE
Federal decision threatens our climate change efforts

SHIFTING CULTURE AROUND WATER, RESOURCE USE
Clean Water, Lighter Footprint, Zero Waste

BUSINESS AFFORDABILITY
Lack of appropriate, affordable industrial premises
AWARDS

FIRST IN NORTH AMERICA
Economist Global Livability Index

SPECIAL RECOGNITION (BC STEP CODE)
Community Energy Association Climate and Energy Action Awards

CLIMATE VANGUARD CITY
Carbon Neutral Cities Alliance

2018 CANADIAN CHAMPION
WWF One Planet City Challenge
SUCCESES

- **food assets**: +53%
- **hectares restored/enhanced**: +26%
- **vehicle km driven per capita**: -36%
- **ecological footprint**: -20%
- **new building GHGs**: -43%
- **waste to landfill and incinerator**: -23%

2020 targets achieved