

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

ZERO CARBON	Green Buildings	Climate & Renewables	Green Economy	Lighter Footprint
	Green Transportation			
ZERO WASTE	Zero Waste			
HEALTHY ECOSYSTEMS	Access to Nature			
	Clean Water			
	Local Food			
	Clean Air			

3 high-level objectives

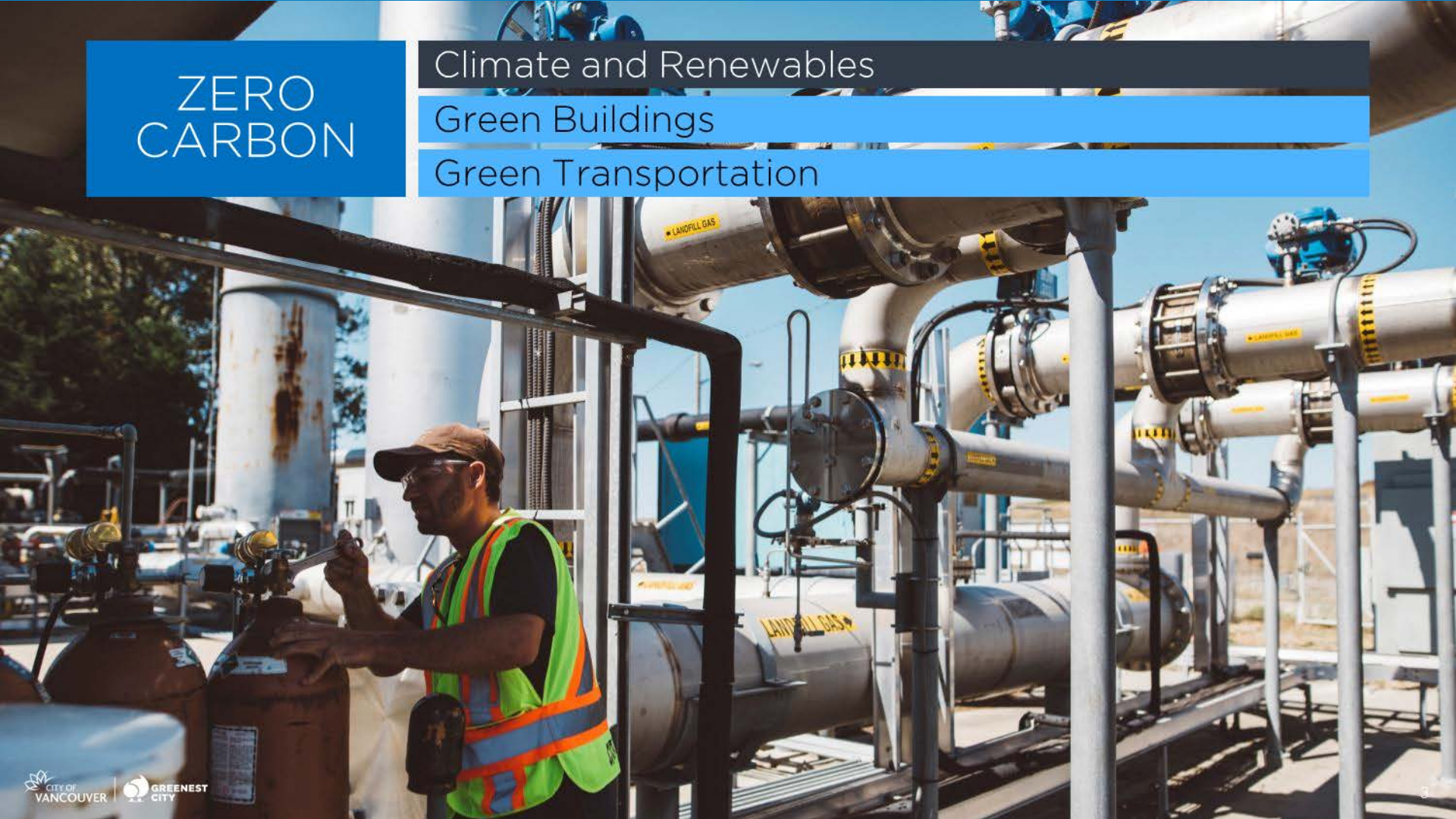
10 goal areas

ZERO CARBON

Climate and Renewables

Green Buildings

Green Transportation



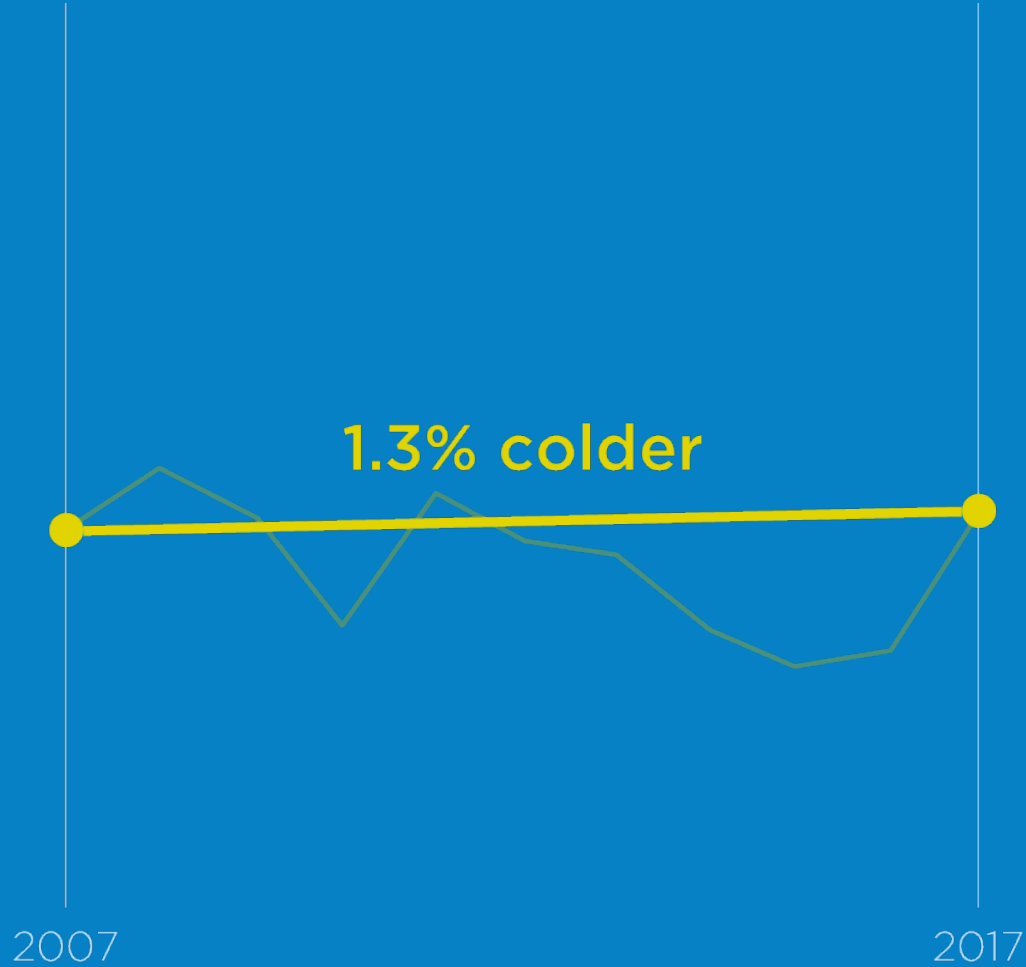
CLIMATE AND RENEWABLES



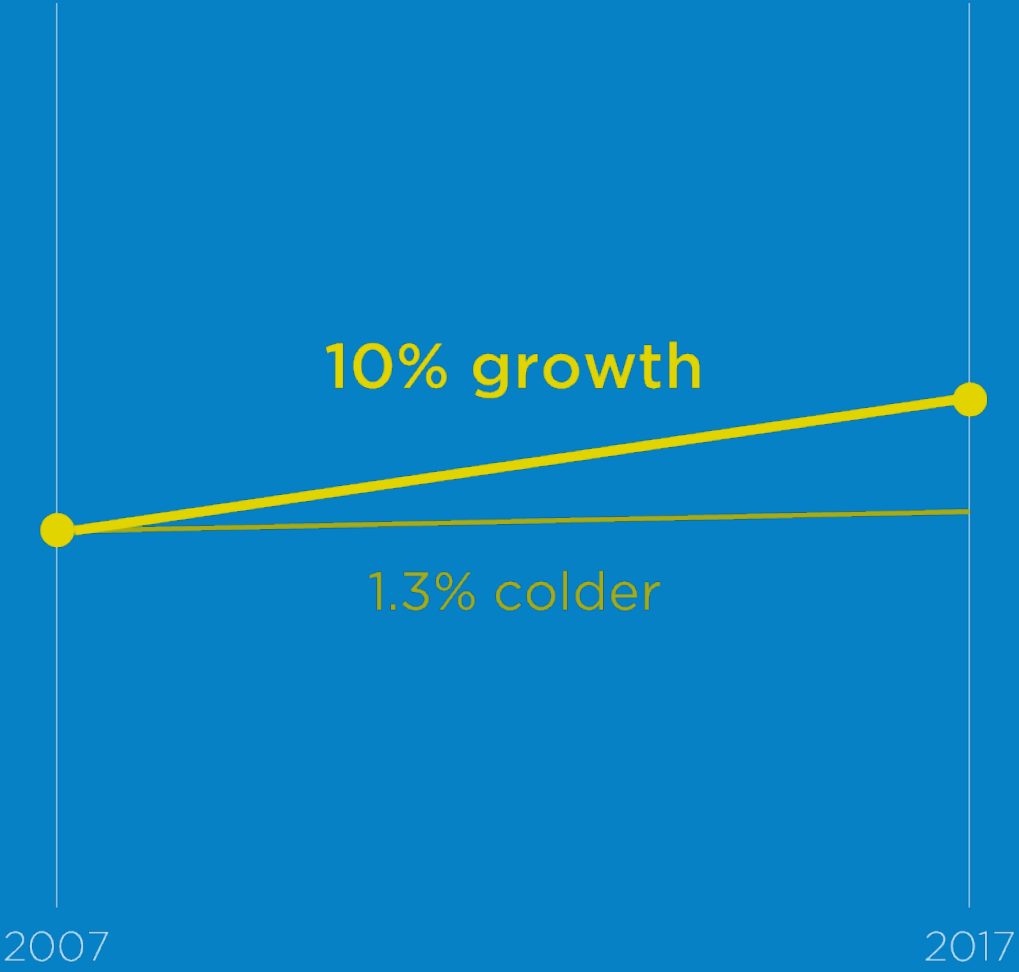
Between 2007 and 2017, **average annual temperatures** fluctuated.

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

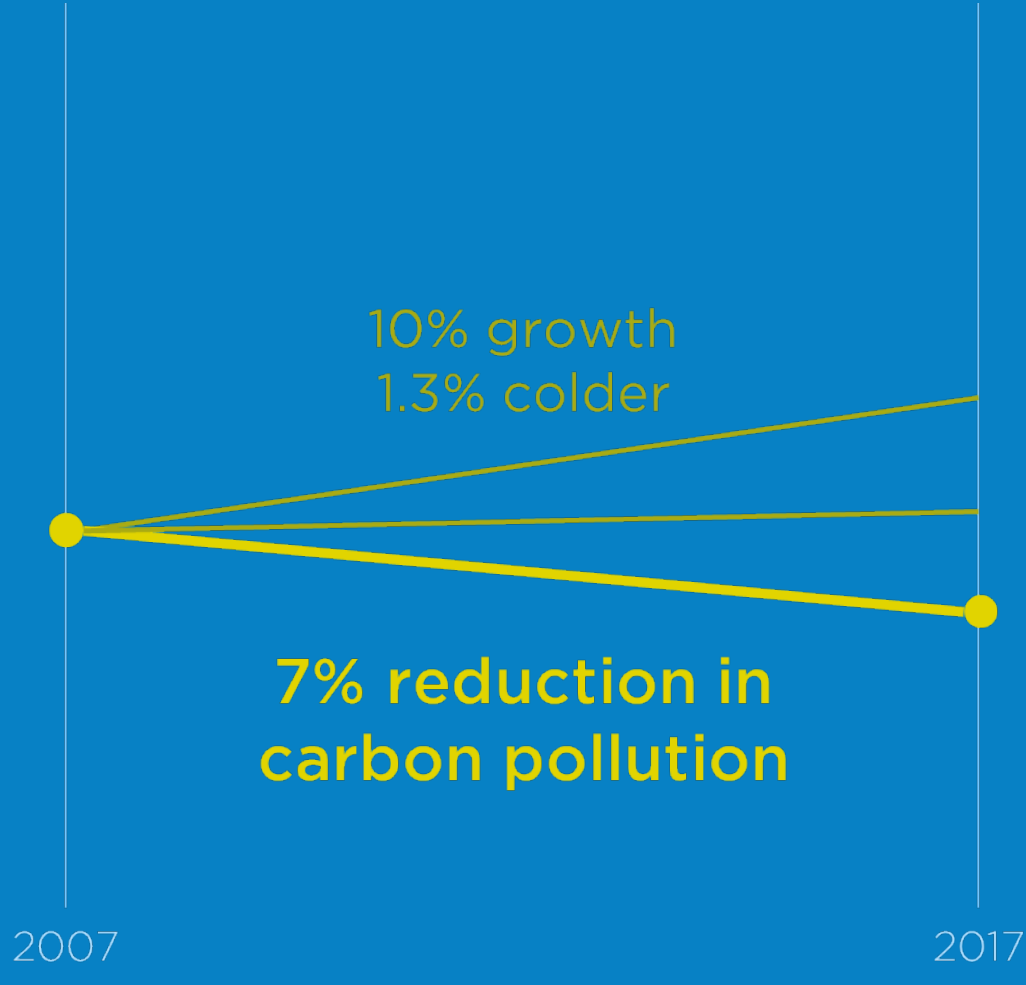
Temperature as measured in annual degree-heating days



Meanwhile,
our **population**
grew by over
53,000 people.



In spite of these upward pressures, **community GHGs** decreased by **7%**.



GHG EMISSIONS

2007

2017 *with current policies*

-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**

HIGHLIGHTS

RENEWABLE CITY STRATEGY

Renewable City
Action Plan
approved

NEU future
expansion
approved

Exploring
landfill gas
beneficial use

GREEN BUILDINGS

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.

Vancity

BC Hydro
Power smart

BC HOUSING

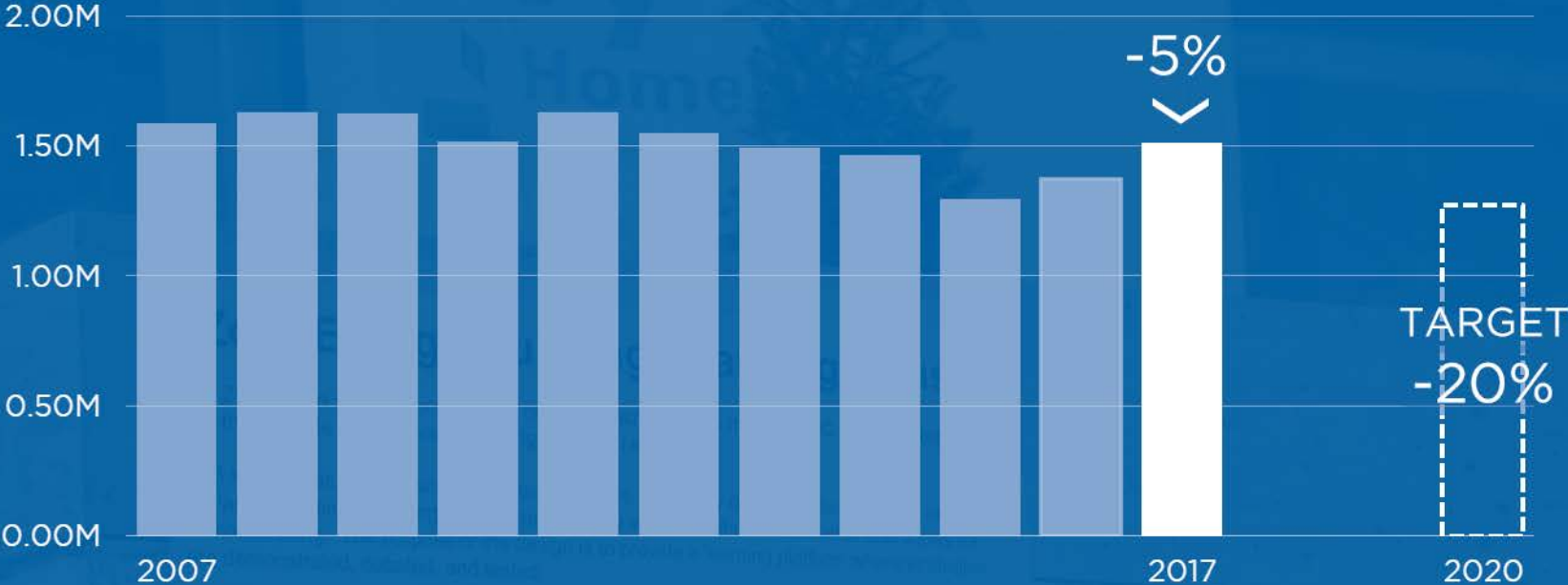
CITY OF VANCOUVER

RDH BUILDING

SMALL PLANET

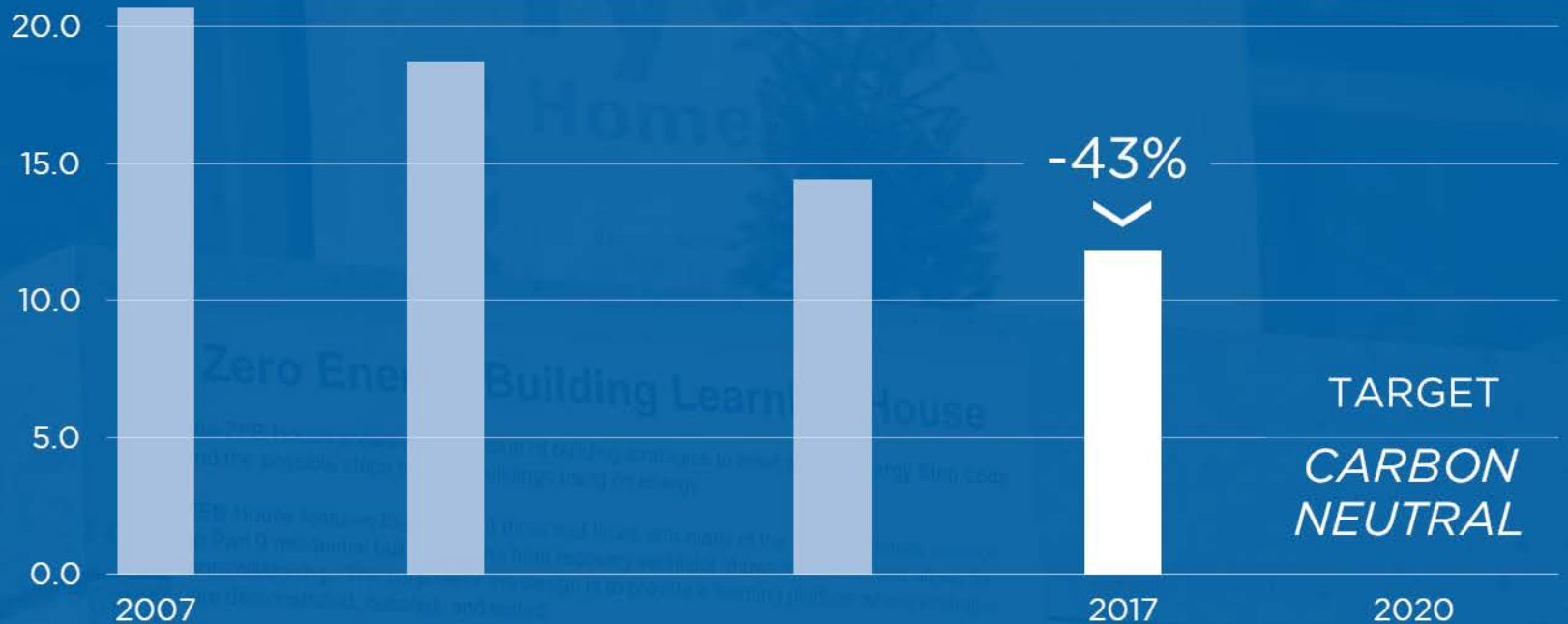
Community building GHG emissions

2017: 1,510,000 tCO₂e



*Carbon intensity of buildings:
GHG emissions of newly built floor area*

2017: 11.8 kgCO₂e/m²



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

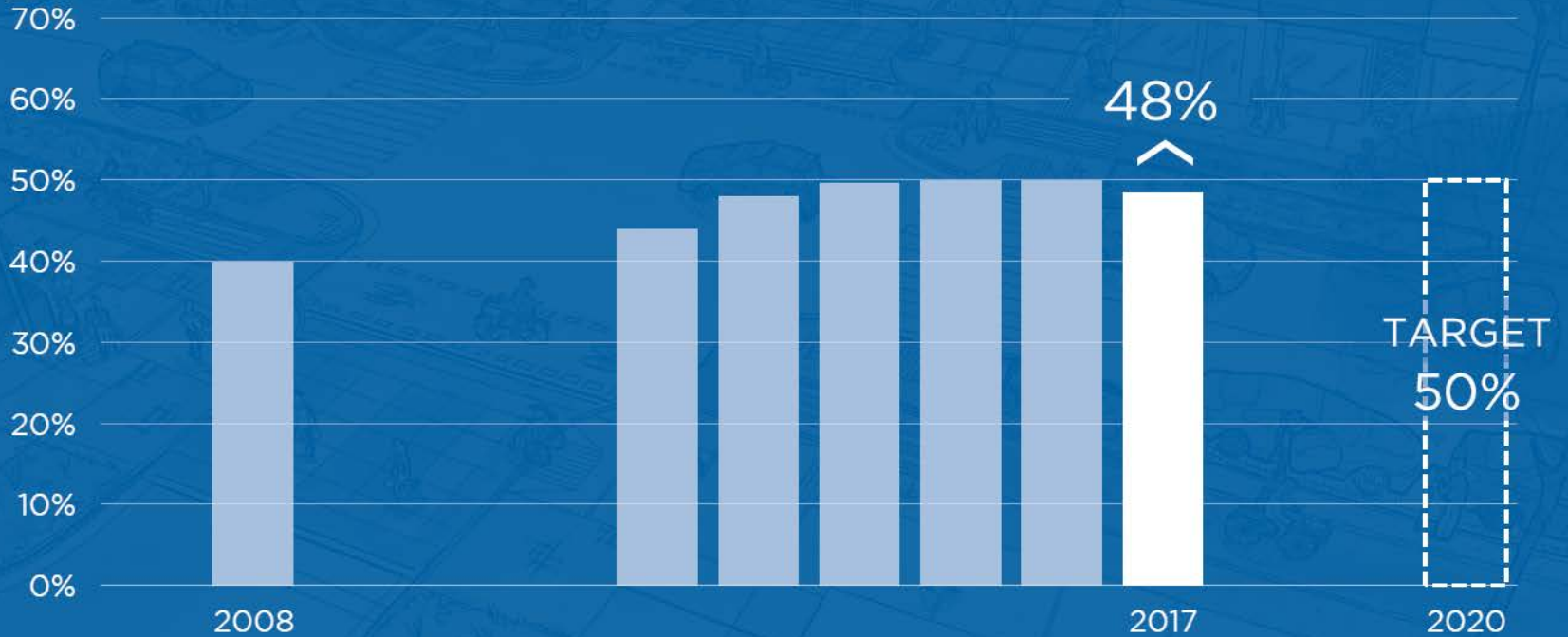
Public demo of
ZEB benefits



GREEN TRANSPORTATION

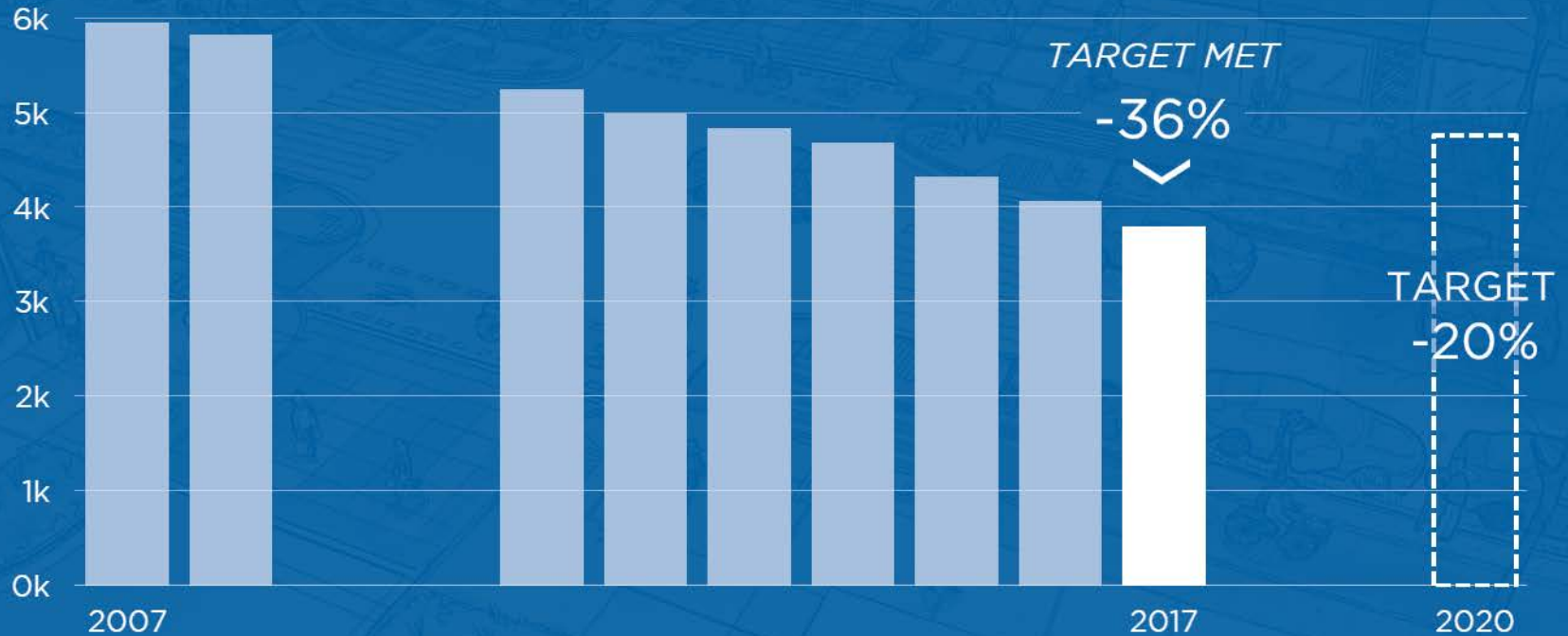
% mode share by walk, bike, and transit

2017: 48%



Annual vehicle kilometres driven per person (VKT)

2017: 3,800 km





HIGHLIGHTS

**BURRARD BRIDGE
UPGRADES**

Improved safety
for all modes

**REGIONAL TRANSIT
FUNDING**

Mayor's Council Plan
Phase 2 funded

**MOBI
EXPANSION**

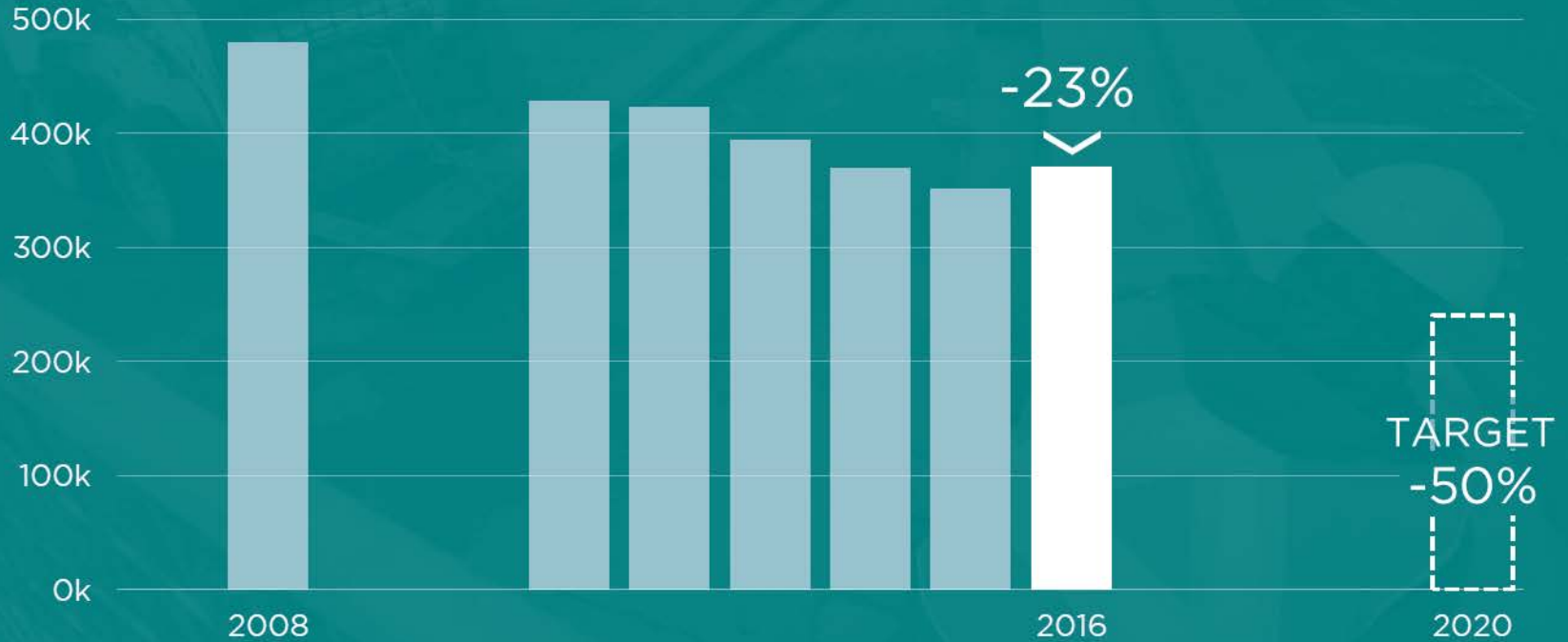
One million rides
and counting



ZERO WASTE

Solid waste disposed to landfill and incinerator

2016: 371,000 tonnes





HIGHLIGHTS

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



HEALTHY ECOSYSTEMS

Access to Nature

Clean Water

Local Food

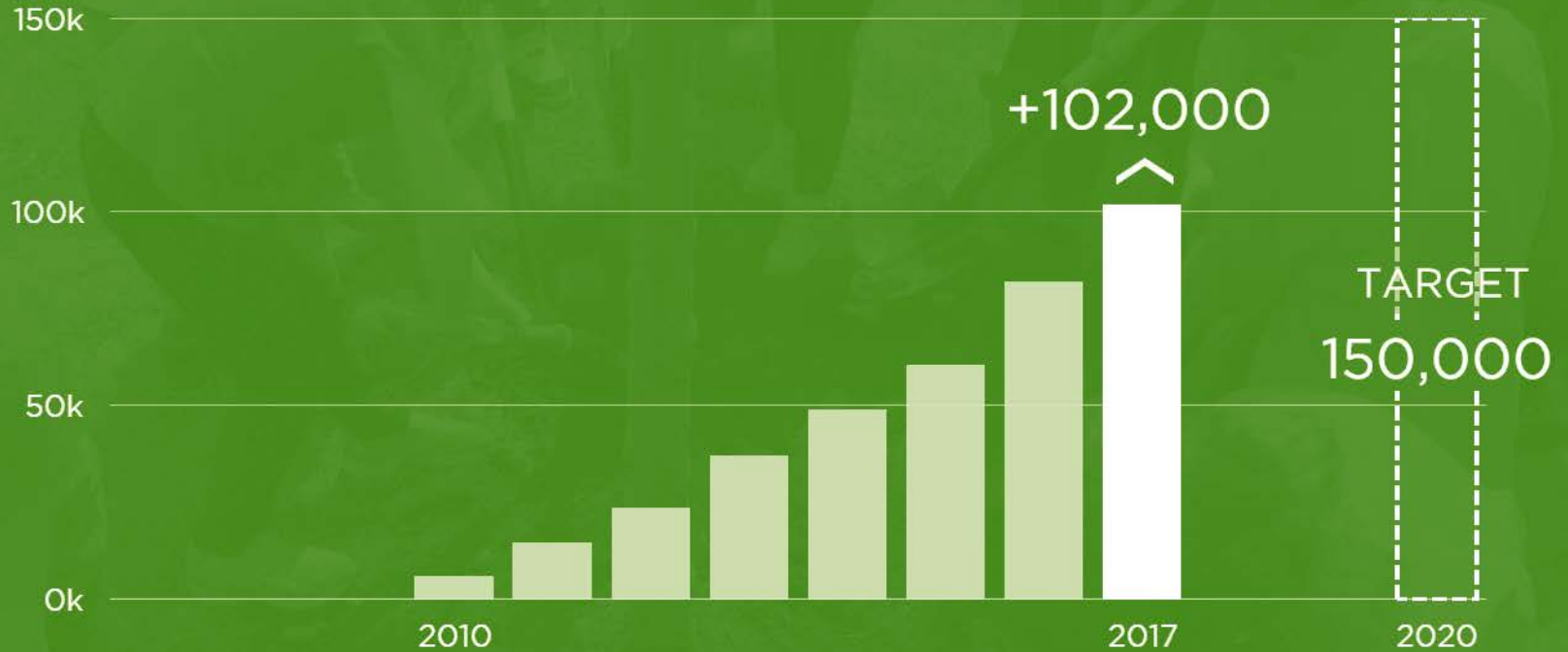
Clean Air



ACCESS TO NATURE

Additional trees planted

2017: 102,000 trees



Hectares of natural area restored or enhanced

2017: 26 hectares





HIGHLIGHTS

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

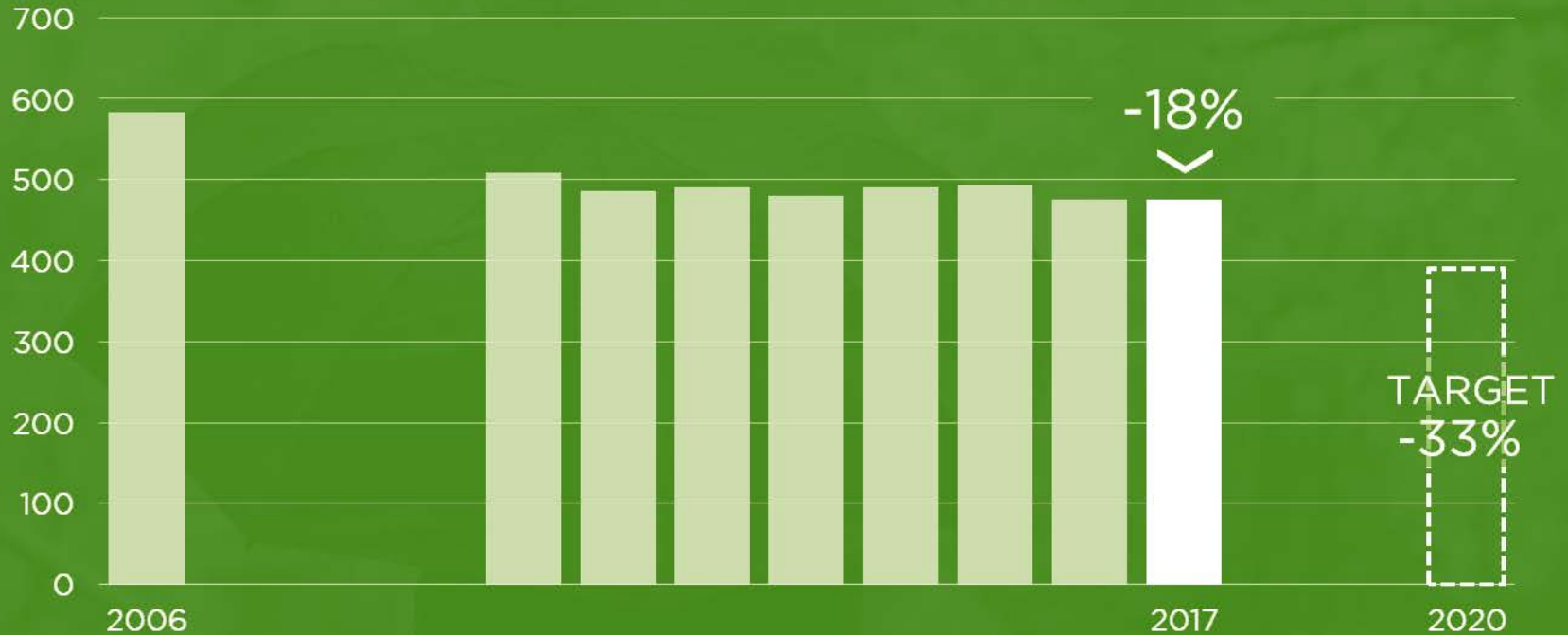
Engaging summer
camp kids in local
sustainable food



CLEAN WATER

Water consumption per person

2017: 475 L/person/year





CAPILANO CASCADE SEYMOUR SPARKLES COQUITLAM CLOUDBURST

HIGHLIGHTS

ADOPTED A THOUSAND CATCH BASINS

Residents help clear blocked drains; hold naming contest

WATER WAGON AT SPECIAL EVENTS

Supported 18 events with 400,000 attendees

WATER EFFICIENCY ADVISOR PROGRAM

Free home visits pinpoint high water usage

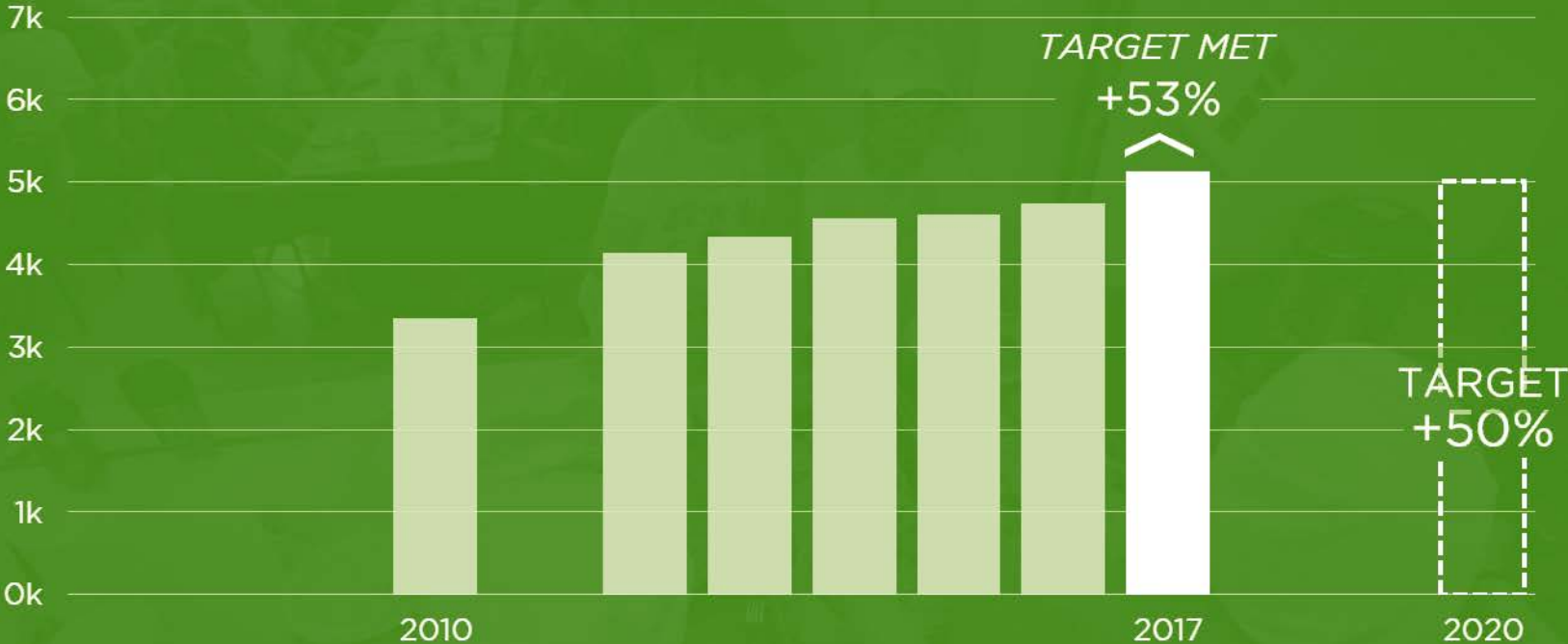
FRESH, PURE AND LOCAL - VANCOUVER HAS SOME OF THE BEST TAP WATER IN THE WORLD!
To book this water wagon for your event, visit us at www.vancouver.ca/water-wagon

LOCAL FOOD



Neighbourhood food assets

2017: 5,129 food assets





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

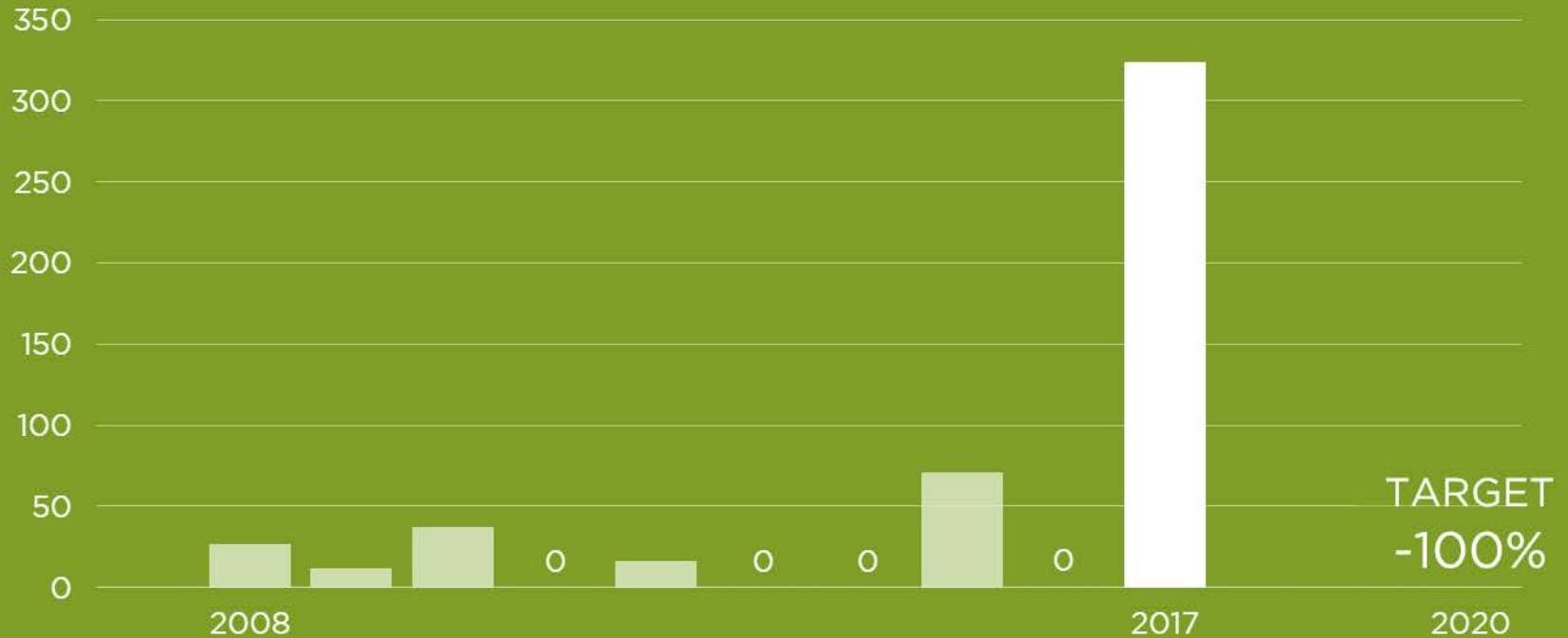
Design guidelines
tailor kitchens to
community needs

CLEAN AIR



Air quality exceedences

2017: 324 instances





5



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



ZERO
CARBON

ZERO
WASTE

HEALTHY
ECOSYSTEMS

Green Economy

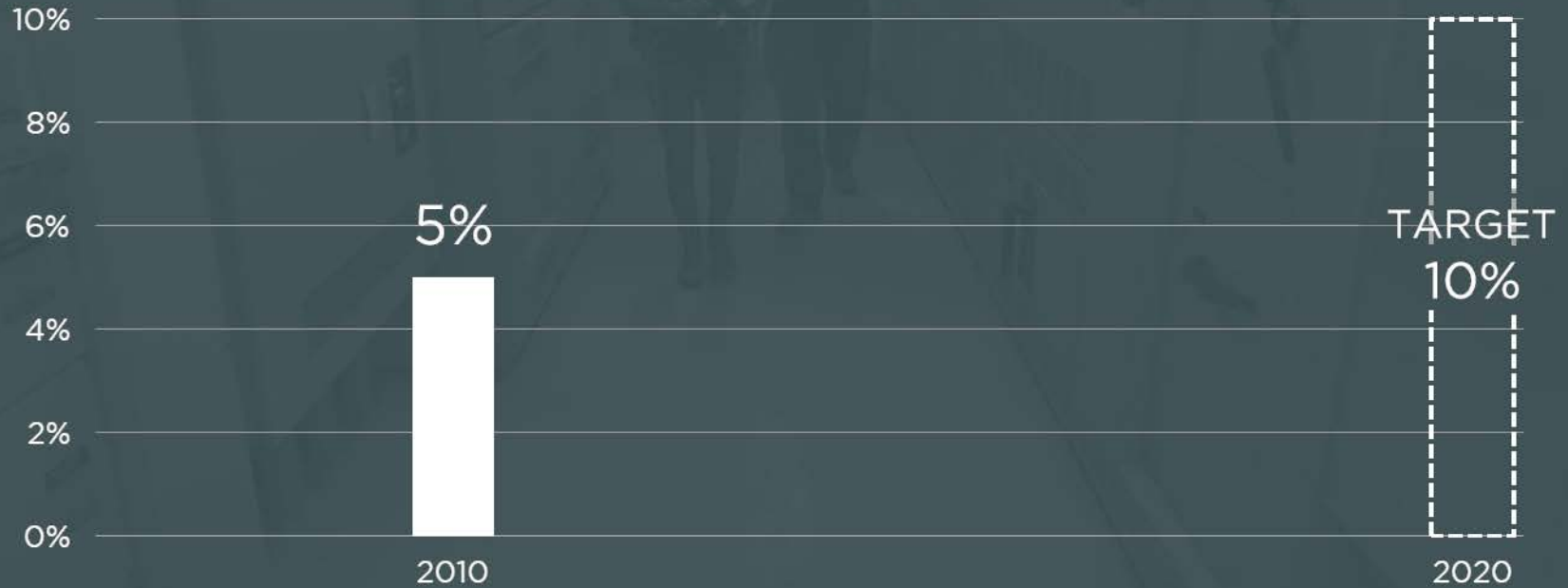
Lighter Footprint

Green Operations



GREEN ECONOMY

Businesses engaged in greening their operations



Businesses engaged in greening their operations

2017: 9%



HIGHLIGHTS

GREEN ECONOMY BOOMING

Employs 1 in 15
Vancouverites

CLEANTECH MENTORSHIP

Preparing cleantech
entrepreneurs for
capital fundraising

CONNECTING WESTCOAST INNOVATION

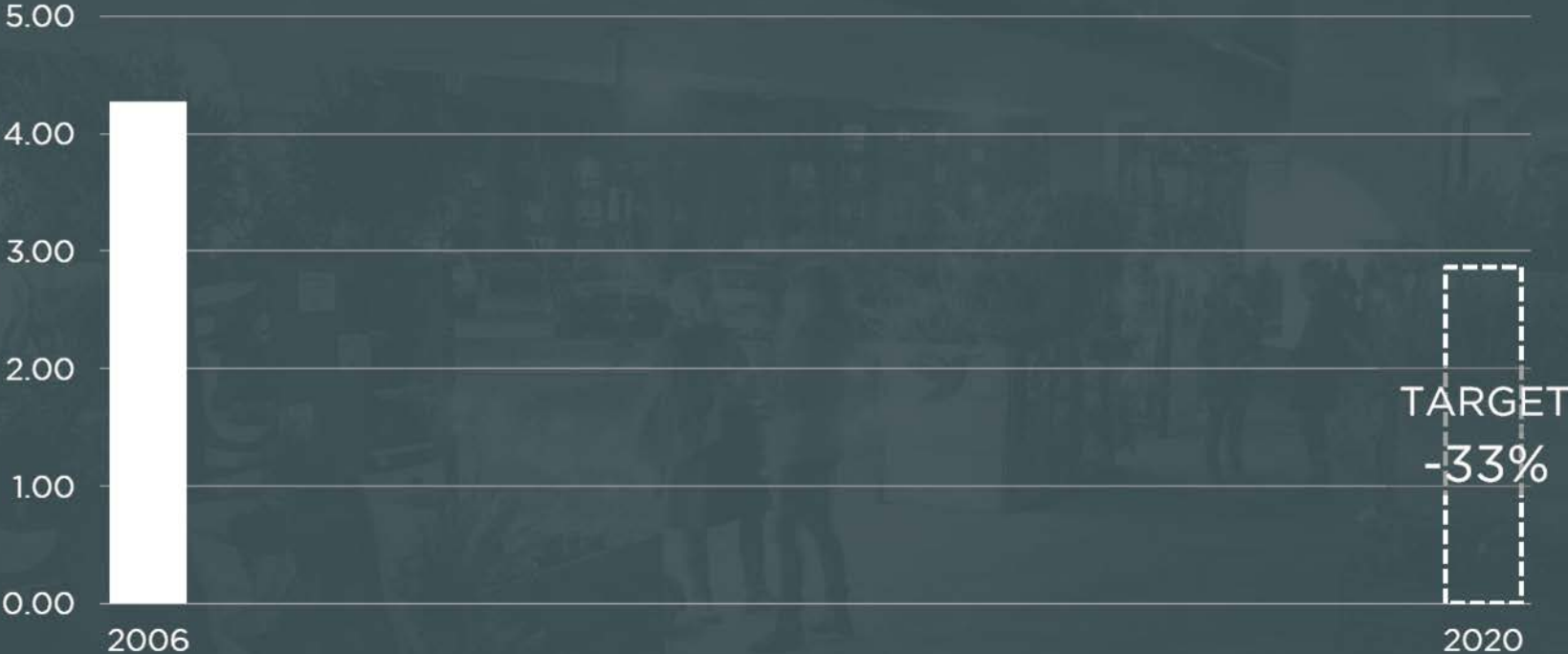
Cascadia Connect:
customers pitching
to businesses

LIGHTER FOOTPRINT



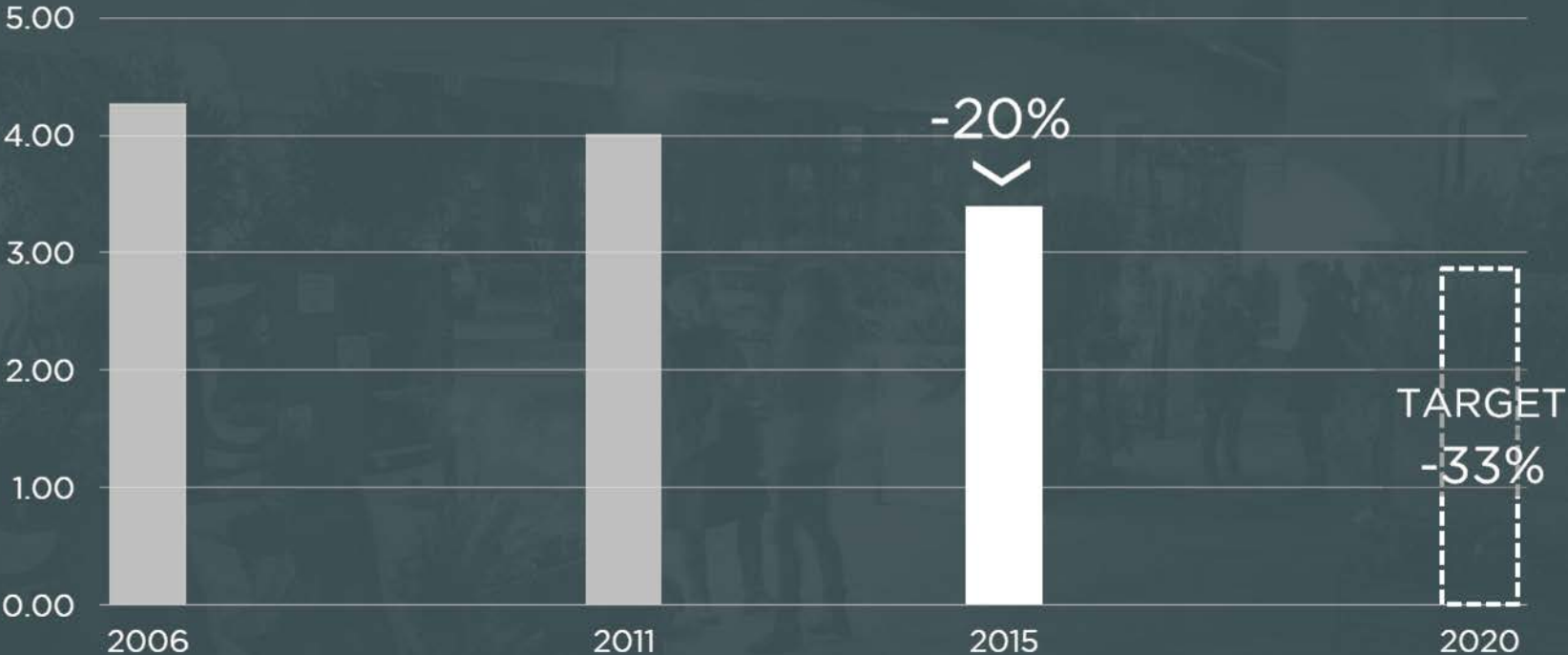
Per-capita ecological footprint

2006: 4.27 gha/person



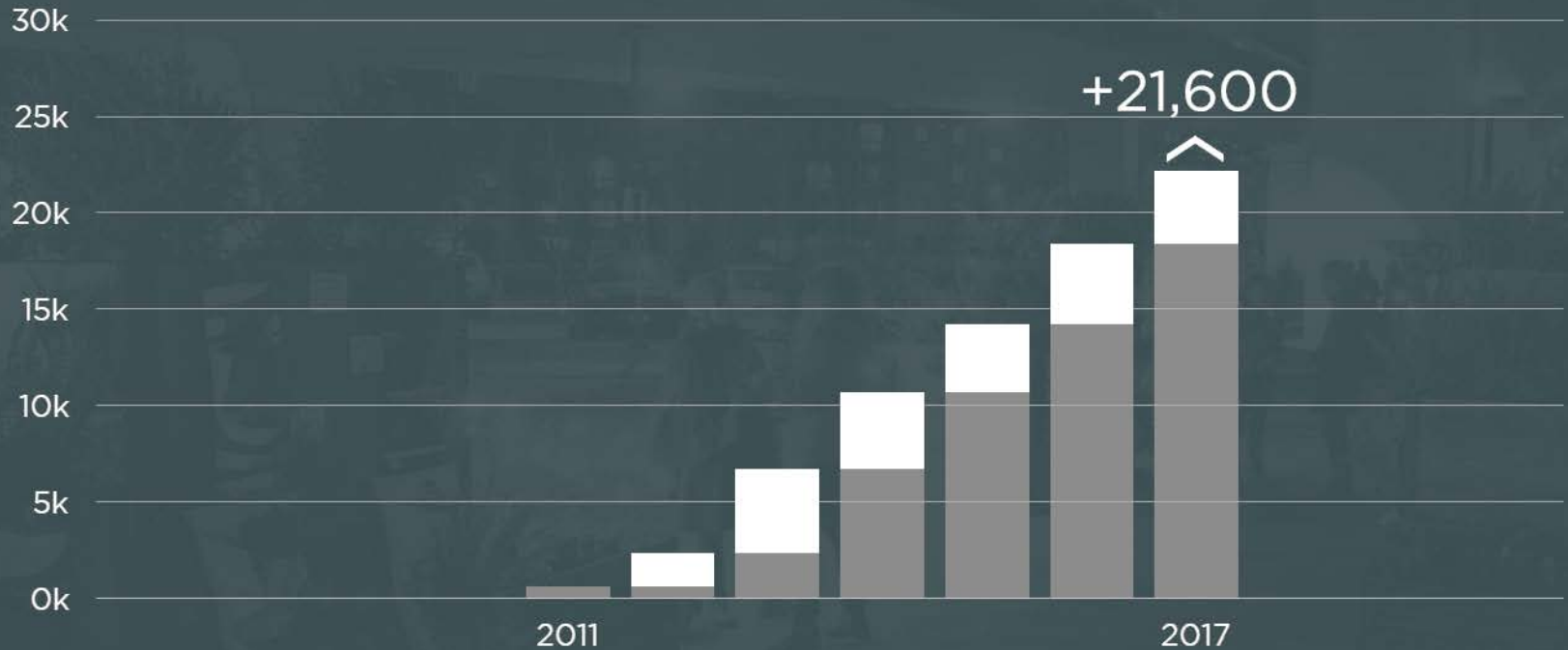
Per-capita ecological footprint

2015: 3.40 gha/person



People empowered to support Greenest City

2017: 22,200 people





HIGHLIGHTS

**CUT OUR
ECOLOGICAL FOOTPRINT**

20% less ecologically
intensive over
last ten years

**GREENEST CITY
GRANTS**

Including projects
working with
underemployed/
at-risk youth

**CITYSTUDIO UNLOCKS
HIDDEN PLACES, TALENTS**

Projects that build
connections



AERMEC

GREEN OPERATIONS

CITY OPERATIONS PROGRESS



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

CHALLENGES

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

SHOULD I BE WORRIED?

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

SUCCESSSES

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

QUESTIONS