

GREENEST CITY ACTION PLAN

2016-2017 UPDATE



GREENEST CITY FRAMEWORK

ZERO CARBON	Green Buildings	Climate & Renewables	Green Economy	Lighter Footprint
	Green Transportation			
ZERO WASTE	Zero Waste			
HEALTHY ECO-SYSTEMS	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

GOAL

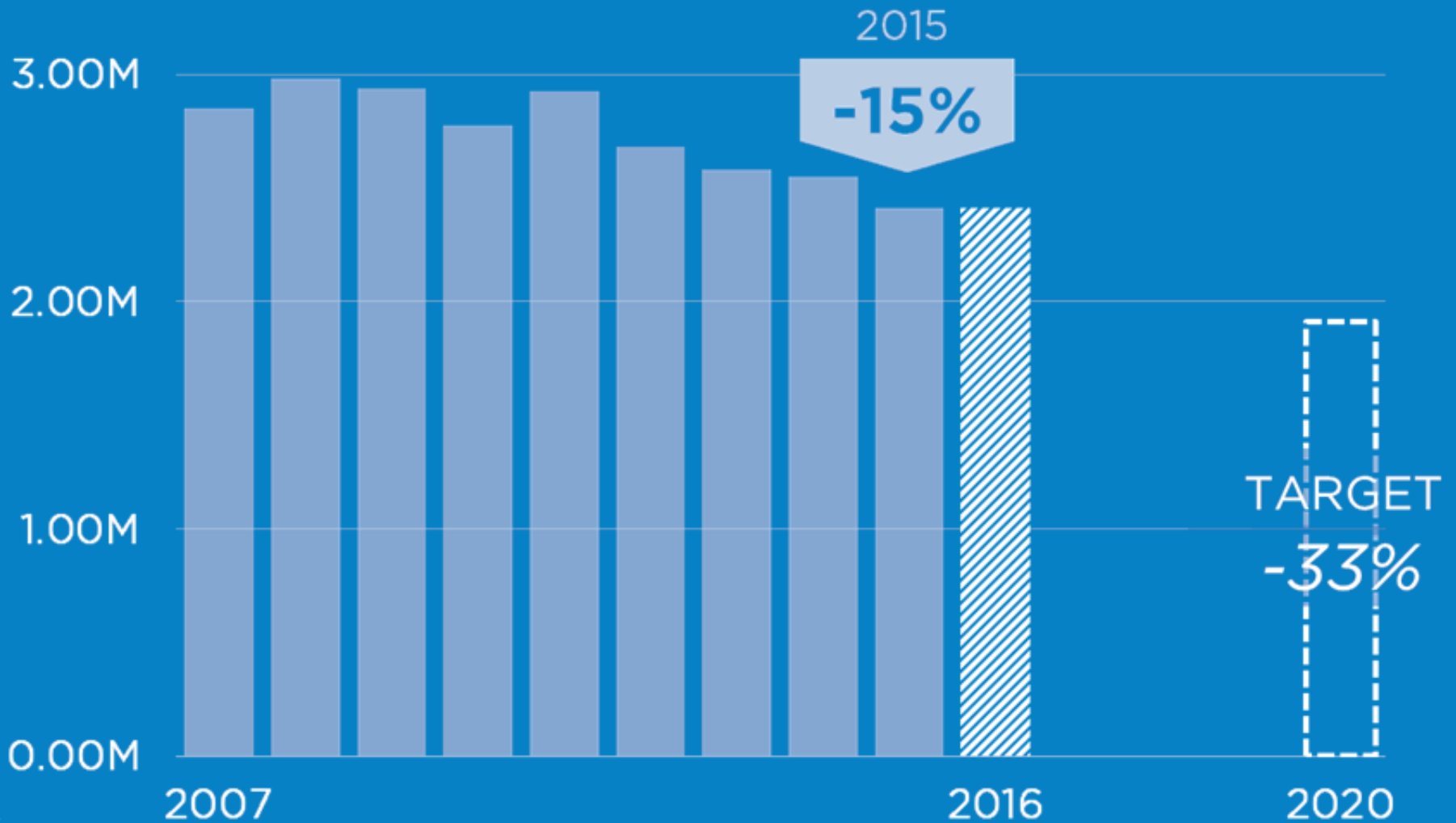
Eliminate Vancouver's dependence on fossil fuels

2020 TARGET

Reduce community-based greenhouse gas emissions 33% from 2007 levels

Community GHG emissions

2016: no data available



RENEWABLE CITY STRATEGY UNDERWAY

Zero Emission
Building Strategy
Approved

EV Ecosystem
Strategy
Approved

LANDFILL GAS CAPTURE

74% captured
in 2016



HIGHLIGHTS

WORLD STANDS WITH PARIS AGREEMENT

Vancouver will do its part

FULL UPDATE COMING IN SEPTEMBER

recommended interim targets and implementation plan

RCS ECONOMIC MODELLING

updated analysis shows significant cost savings

RENEWABLE CITY UPDATE

GREEN BUILDINGS

GOAL

Lead the world in green building design and construction

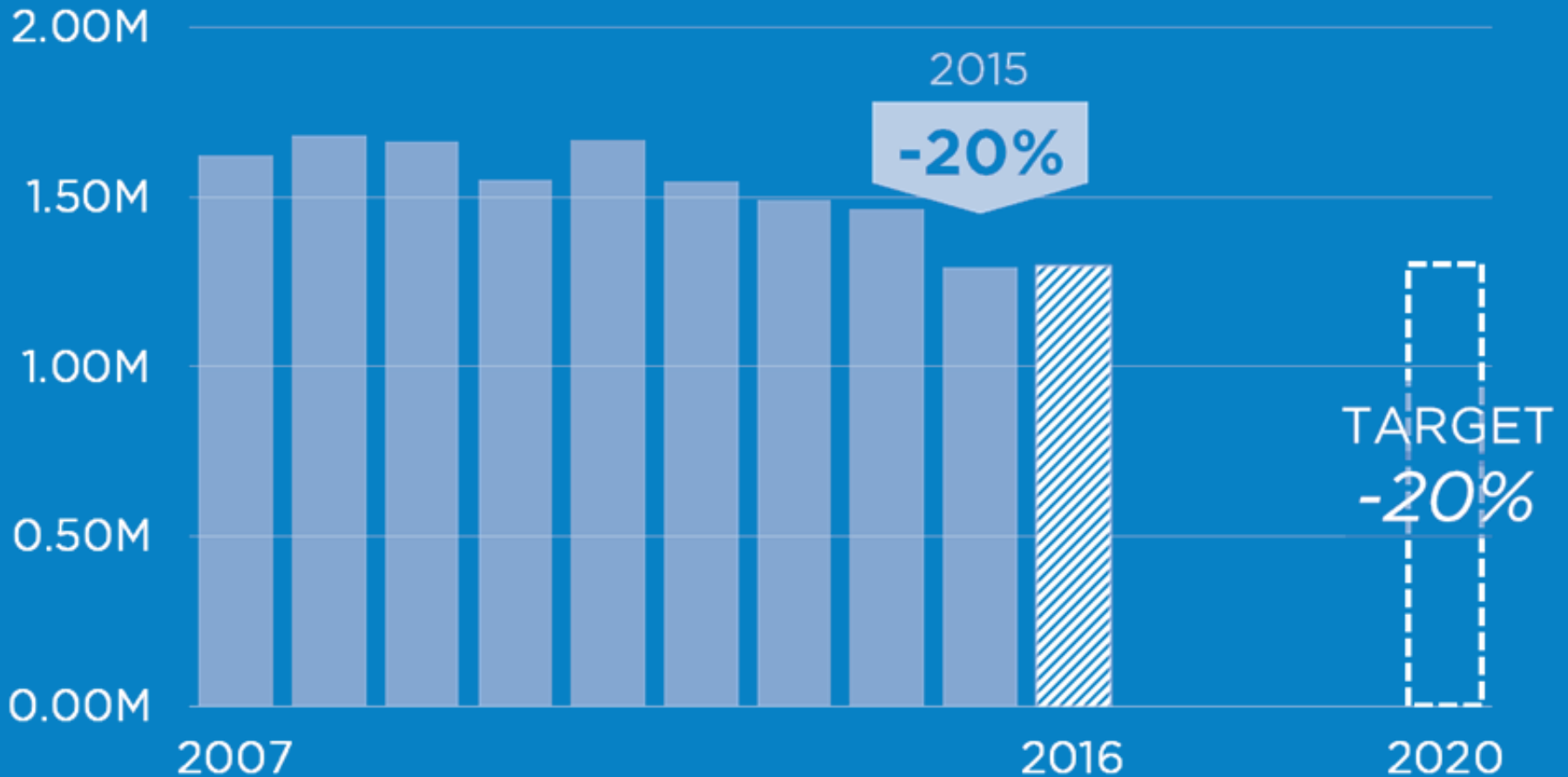
2020 TARGETS

Require all buildings constructed from 2020 to be carbon neutral in operations

Reduce energy use and greenhouse gas emissions in existing buildings by 20% over 2007 levels

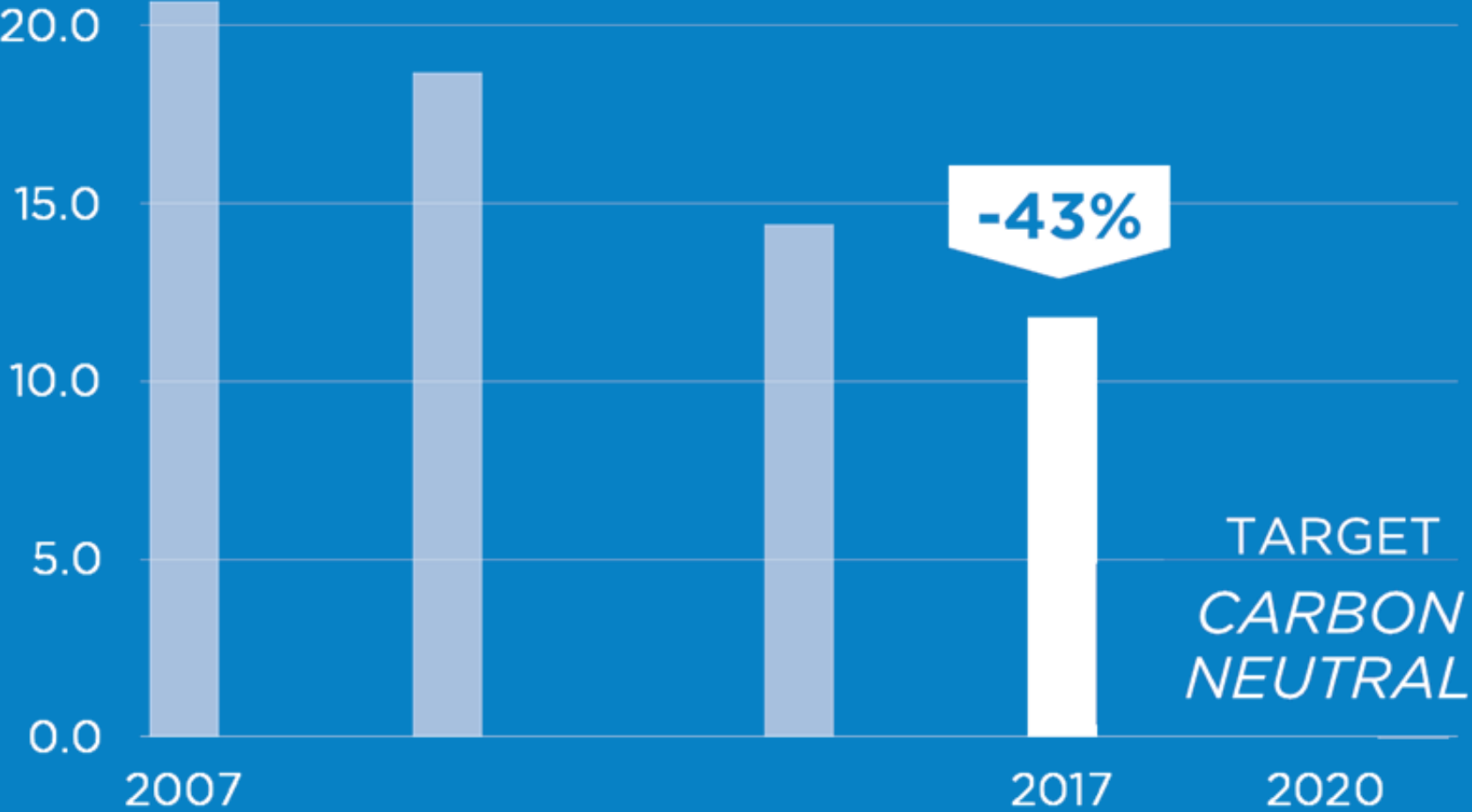
Community building GHG emissions

2016: no data available



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

2017: 11.8 kgCO₂e/m²



HIGHLIGHTS

ZERO EMISSION BUILDING STRATEGY

lower energy use =
lower heating bills

REZONING POLICY UPDATE

cut emissions in half;
all energy types
allowed

THERMAL IMAGING

pinpointing
heat losses



GREEN TRANSPORTATION

GOAL

Make walking, cycling,
and public transit
preferred options

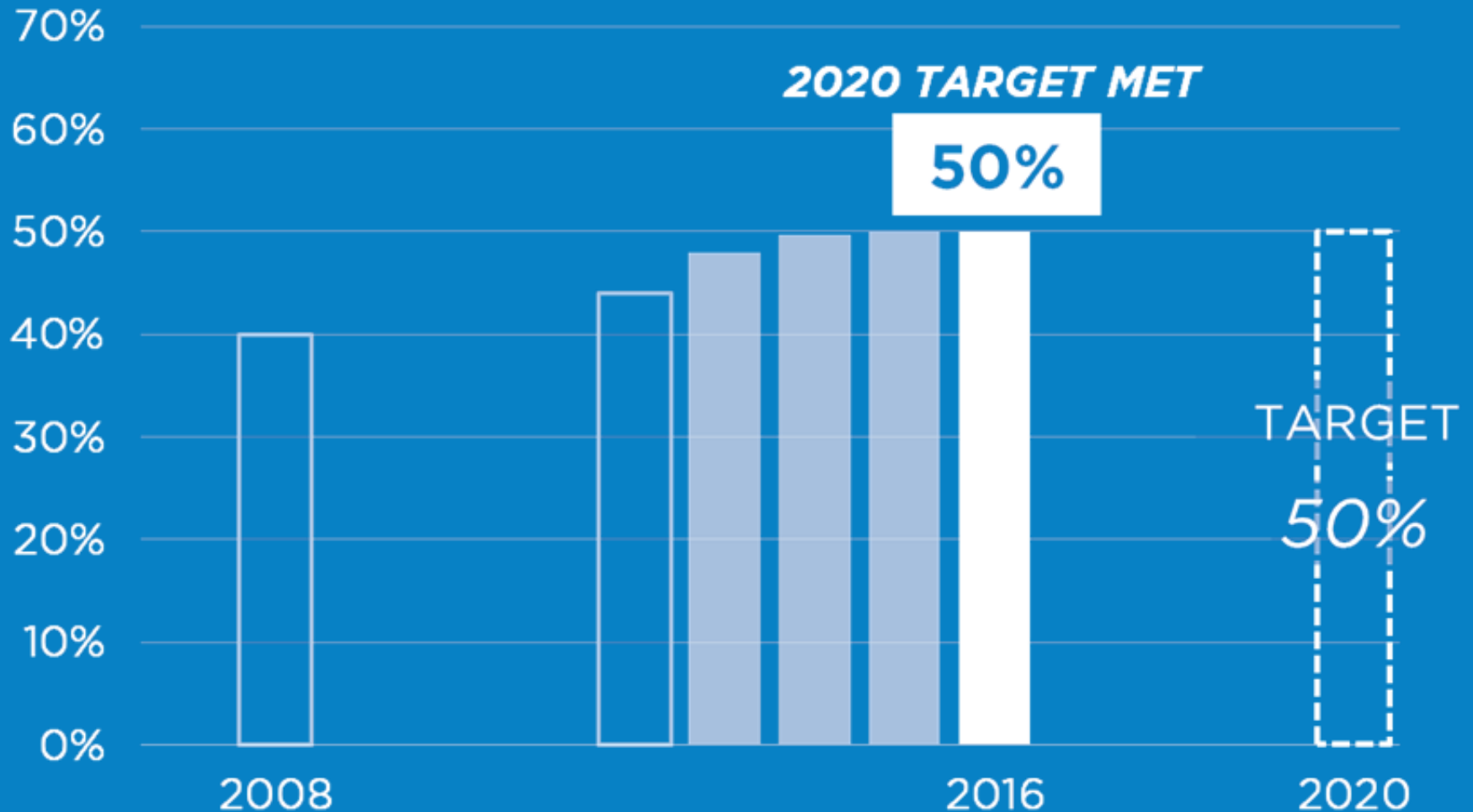
2020 TARGETS

Majority (>50%) of trips
by foot, bicycle and
public transit

Reduce average
distance driven per
resident by 20% from
2007 levels

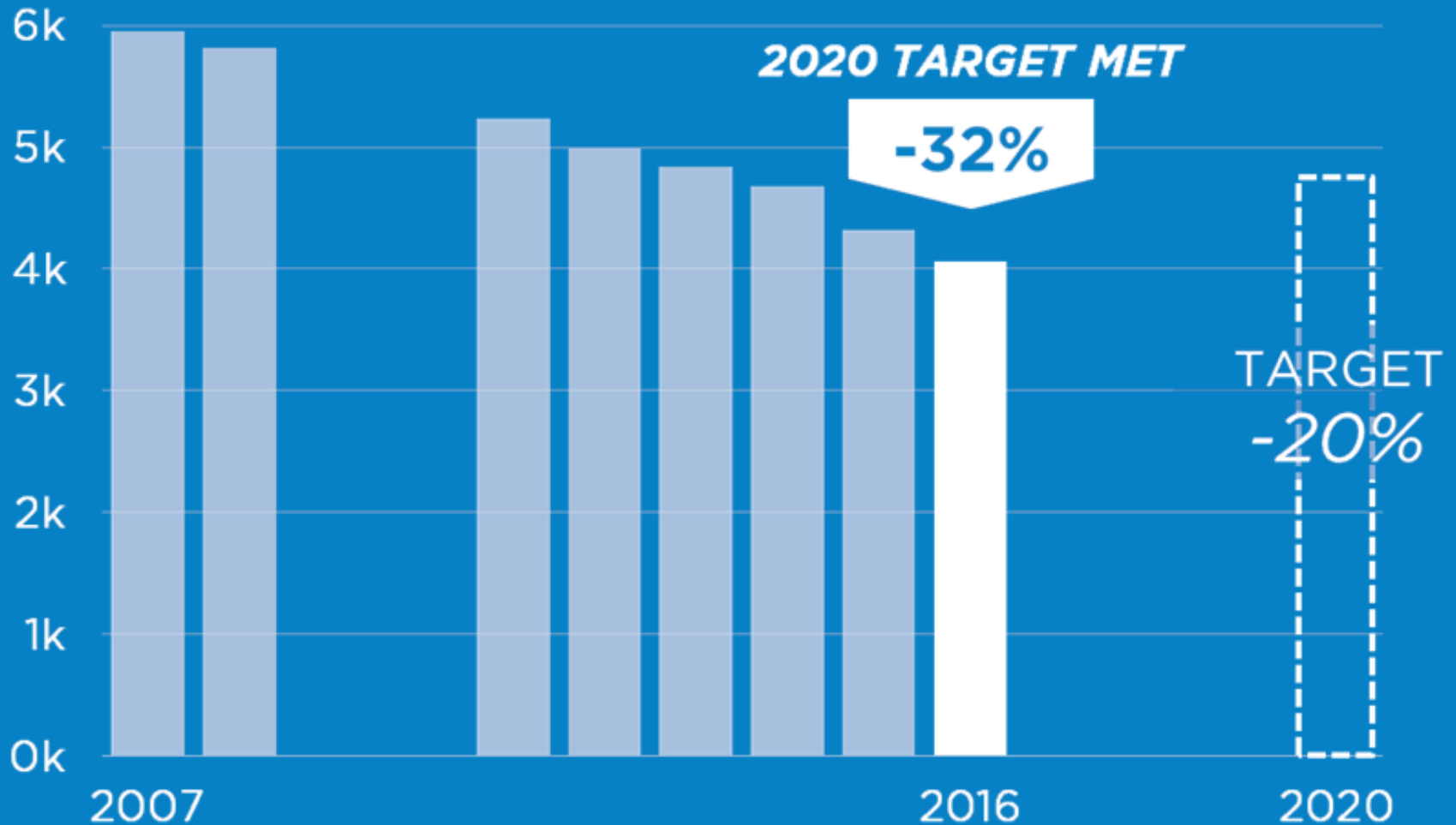
% mode share by walk, bike, and transit

2016: 50%



Annual vehicle kilometres driven per person (VKT)

2016: 4,060 km



MOBI BIKESHARE

1.2M+ km travelled
(30x around the
world)

ARBUTUS GREENWAY

temporary path;
public consulted
early 2017

TRANSIT FUNDING & IMPROVEMENTS

Phase 1 funded;
downtown trolley
expansion



HIGHLIGHTS

ZERO WASTE

GOAL

Create zero waste

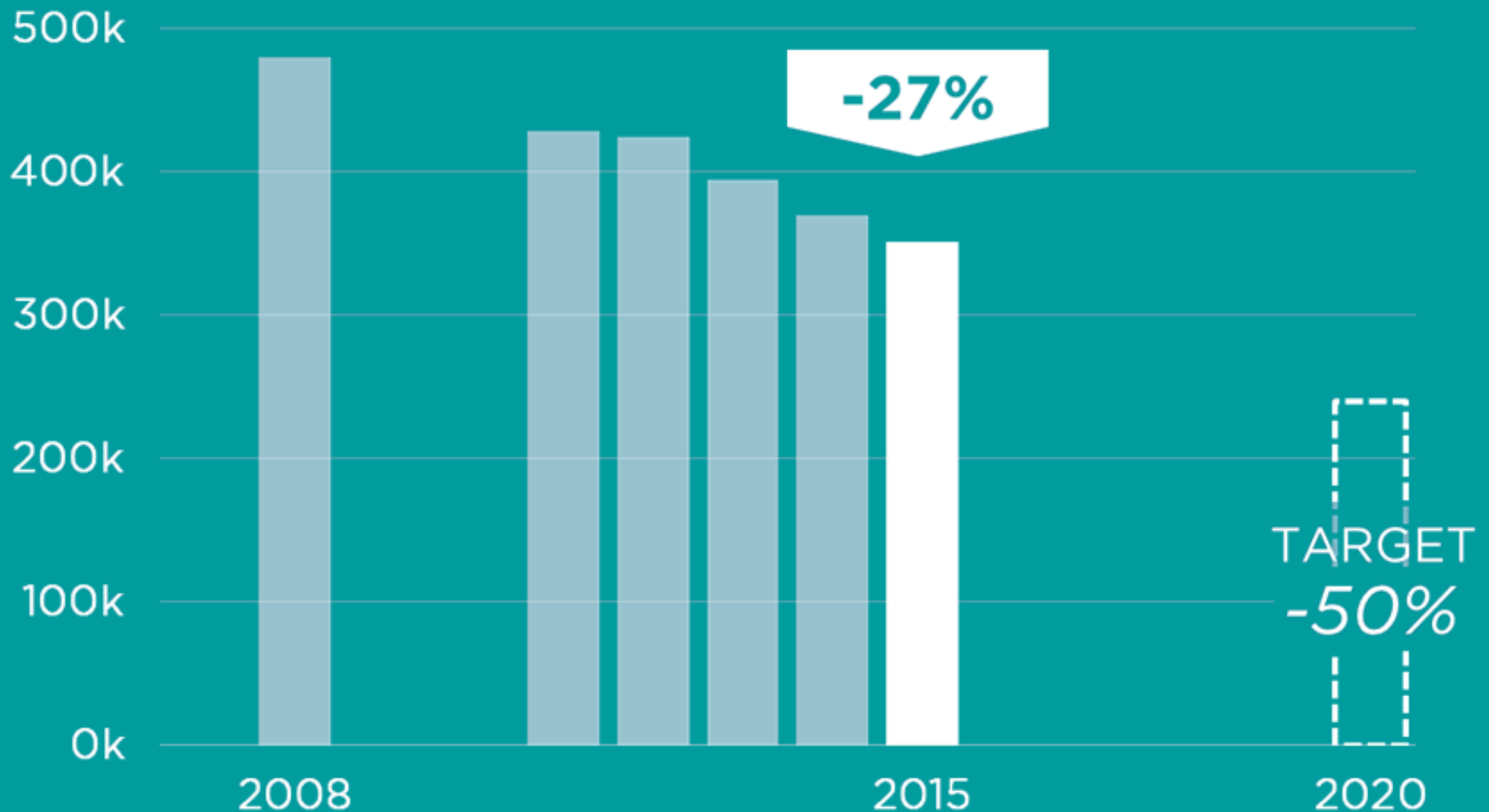
2020 TARGETS

Reduce total solid waste going to landfill and incinerator by 50% from 2008 levels



Solid waste disposed to landfill and incinerator

2015: 351,000 tonnes



HIGHLIGHTS

TEXTILE REUSE

Upcycling workshops
and businesses:
textiles = valuable
resource

STREET RECYCLING

West End
on-street pilot
with 31 stations

MICRO-CLEANING

400 city blocks,
12,000 bags;
job skills and
opportunities

HEALTHY ECO- SYSTEMS

Access to Nature

Clean Water

Local Food

Clean Air

ACCESS TO NATURE

GOAL

Vancouver residents enjoy incomparable access to green spaces

2020 TARGETS

Ensure every person lives within a five-minute walk of a park, greenway or other natural space

Plant 150,000 additional trees

Restore/enhance 25ha of natural areas

Increase canopy cover to 22% by 2050



NEW METHOD: **ACCESS TO PARKS/GREENSPACE**

80%

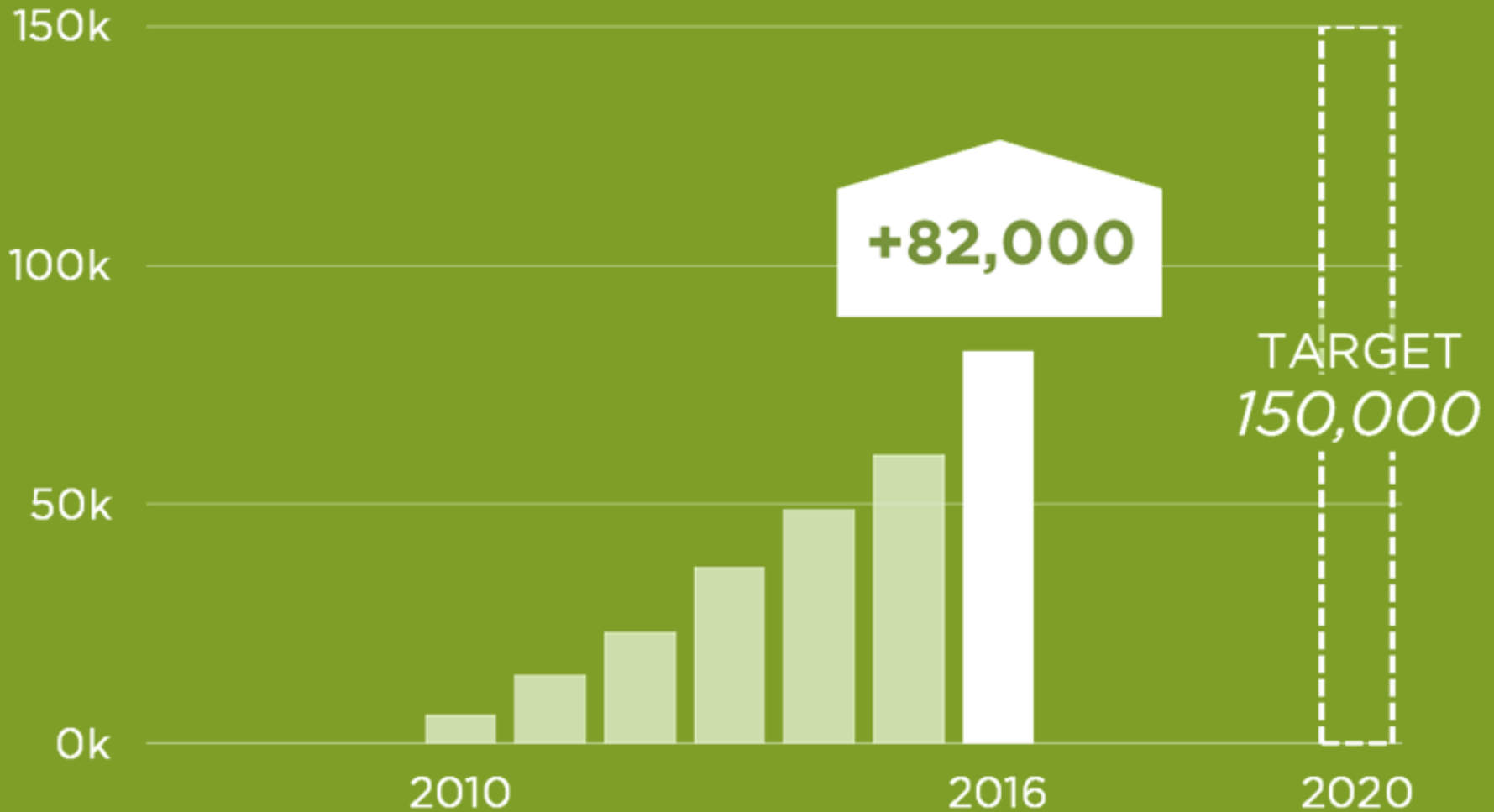
residents within **5 min**

99%

residents within **10 min**

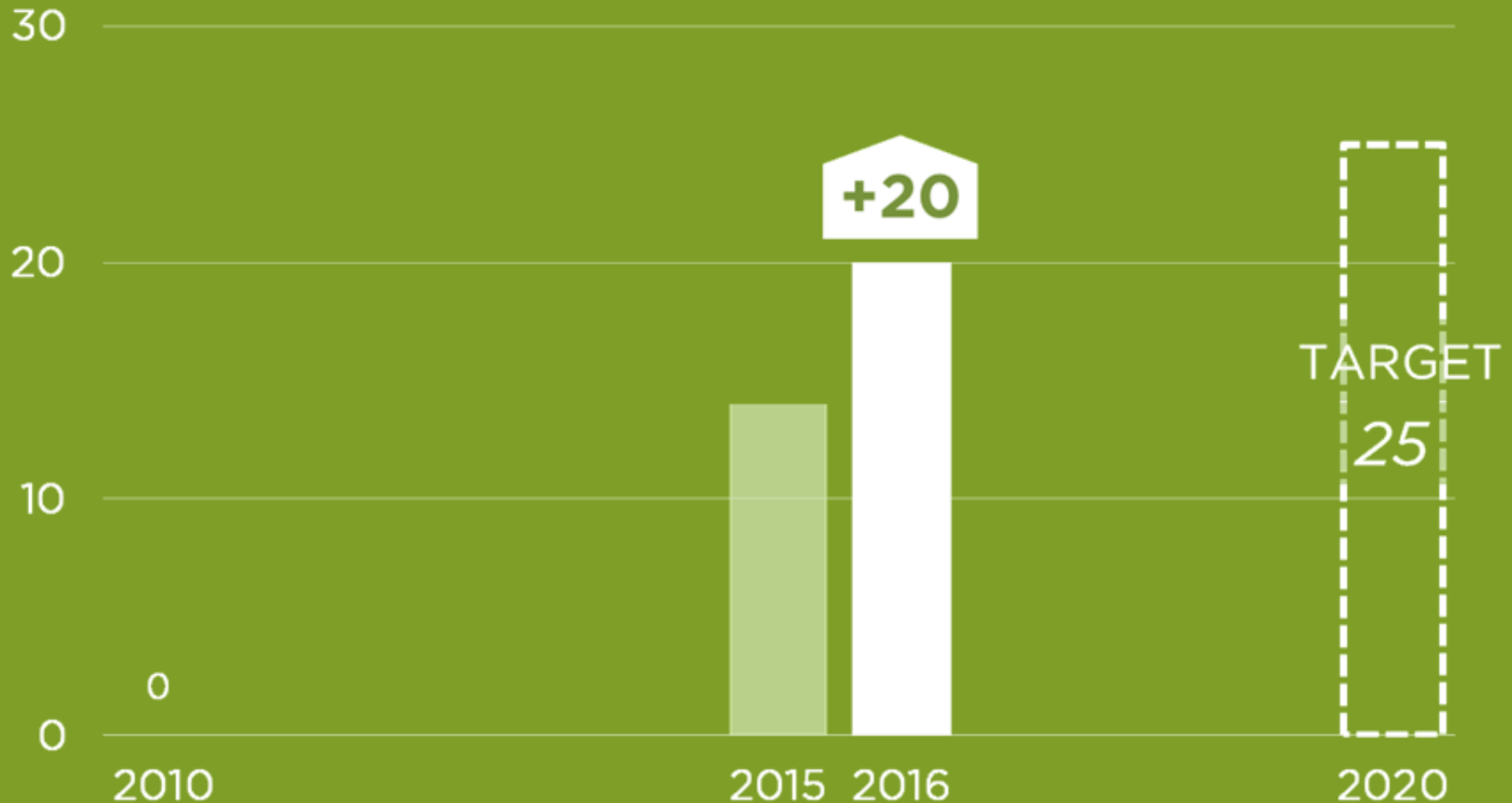
Additional trees planted

2016: 82,000 trees



Hectares of natural area restored or enhanced

2016: 20 hectares



PINE & 5th BEE SANCTUARY

supporting urban
pollinators

EAGLES IN LOCARNO

Parks arborists built
a better nest

VANPLAY LAUNCH

year-long consult
for Master Plan

CLEAN WATER

GOAL

Vancouver will have the best drinking water of any city in the world

2020 TARGETS

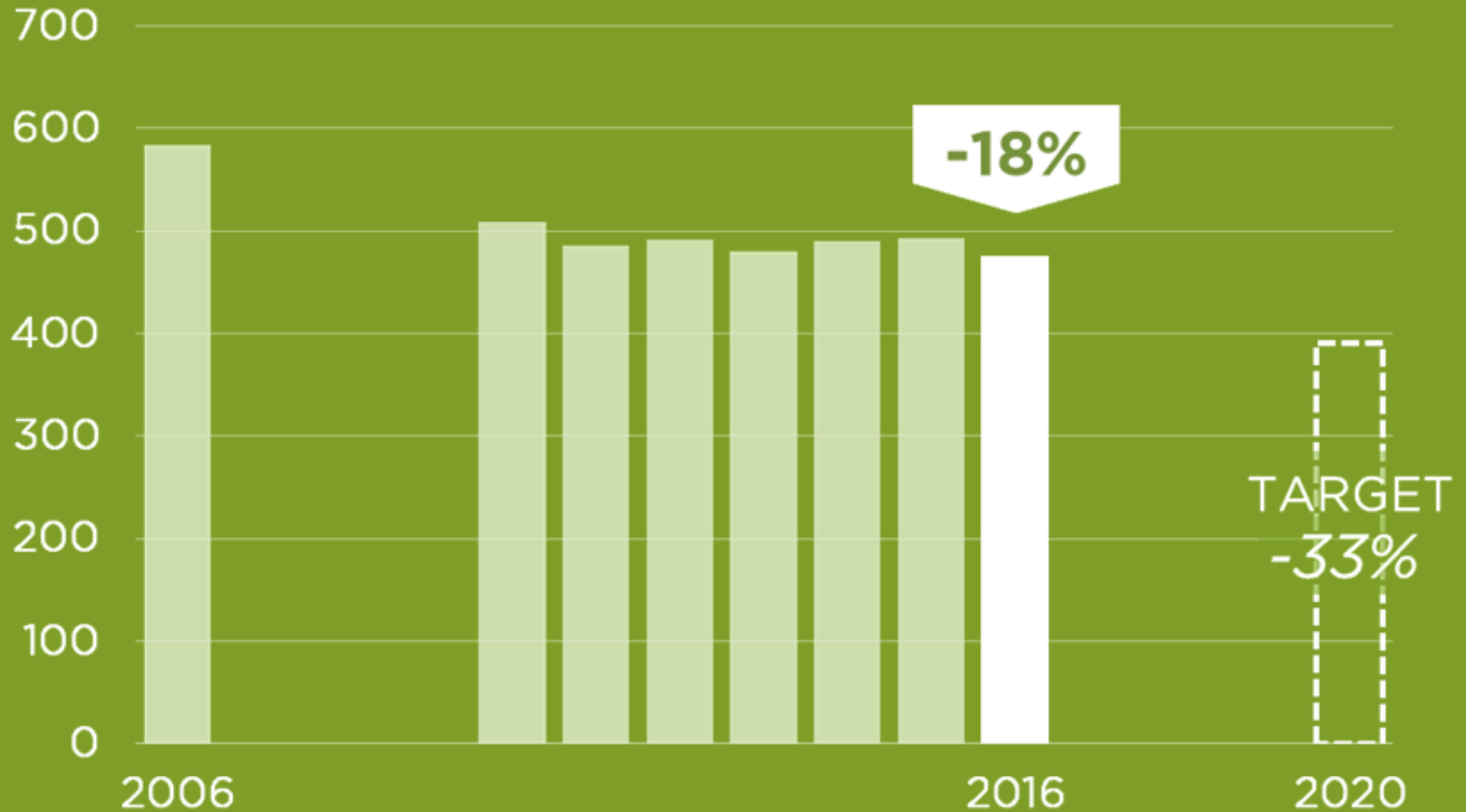
Meet or beat the strongest of BC, Canadian and international drinking water quality standards and guidelines

Reduce per capita water consumption by 33% over 2006 levels



Water consumption per person

2016: 476 L/person/year



HIGHLIGHTS

SINGLE-PASS SYSTEM PHASE-OUT

4B litres through
single-pass systems

GOLF COURSE WATER USE

water budgets
and knowledge-
sharing

LEAKY TOILET CAMPAIGN

one leaky toilet =
135 litres per day



LOCAL FOOD

GOAL

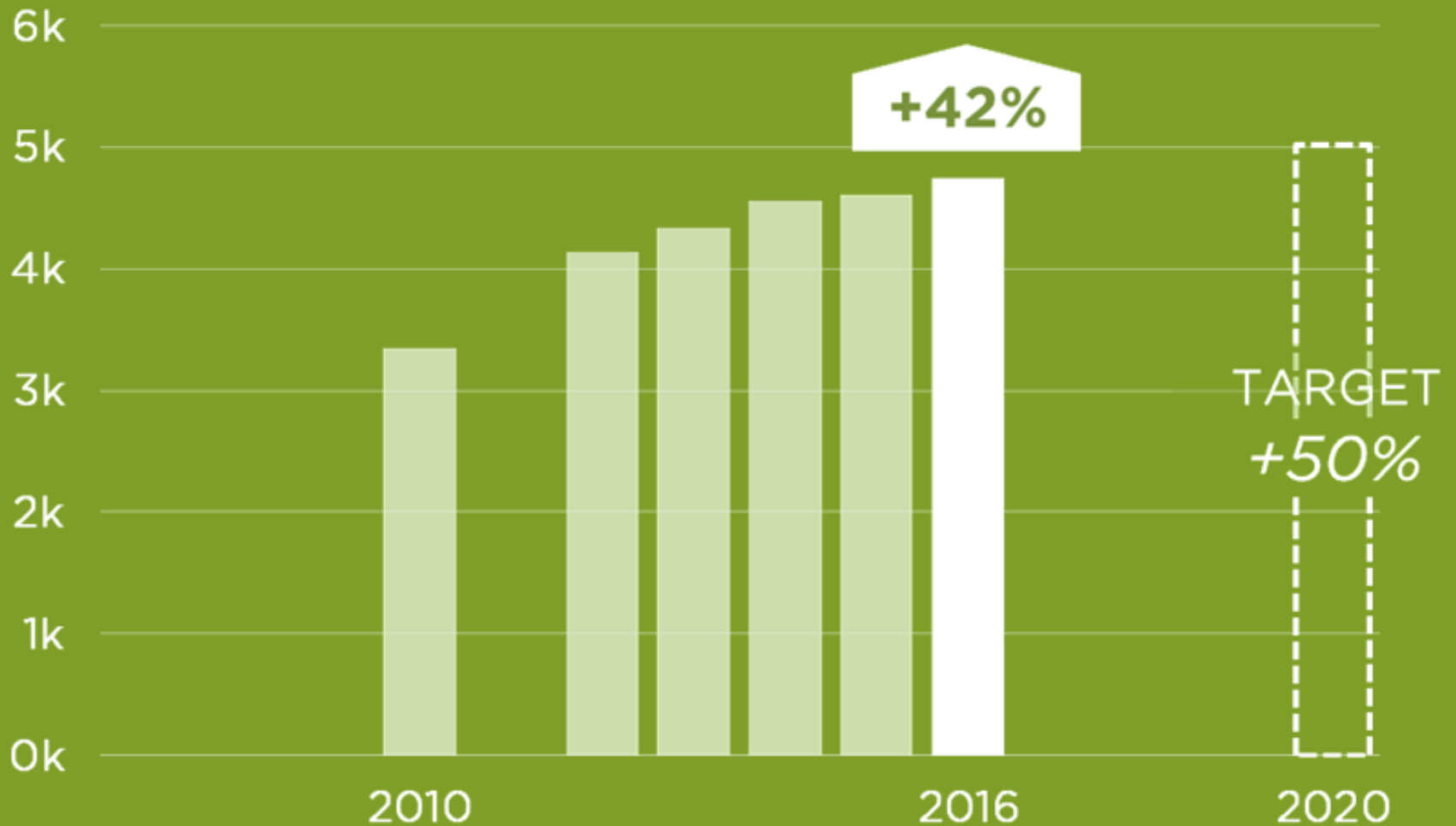
Vancouver will become a global leader in urban food systems

2020 TARGET

Increase city-wide and neighbourhood food assets by a minimum of 50% over 2010 levels

Neighbourhood food assets

2016: 4,740 food assets



A person is smiling and holding three fresh vegetables: a red tomato, a red bell pepper, and a purple onion. They are standing in front of a cardboard box with the word 'Rich' visible on it. The background is slightly blurred, showing a window and other boxes.

HIGHLIGHTS

GARDEN IMPROVEMENTS

small grants for repairs and tools

COMMUNITY KITCHENS

using assets to their fullest potential

MOBILE MARKETS

taking produce to the people



CLEAN AIR

GOAL

Breathe the cleanest air of any major city in the world

2020 TARGET

Meet or beat the most stringent air quality guidelines from Metro Vancouver, British Columbia, Canada, and the World Health Organization

MURB retrofit incentive

EV affordability in existing buildings

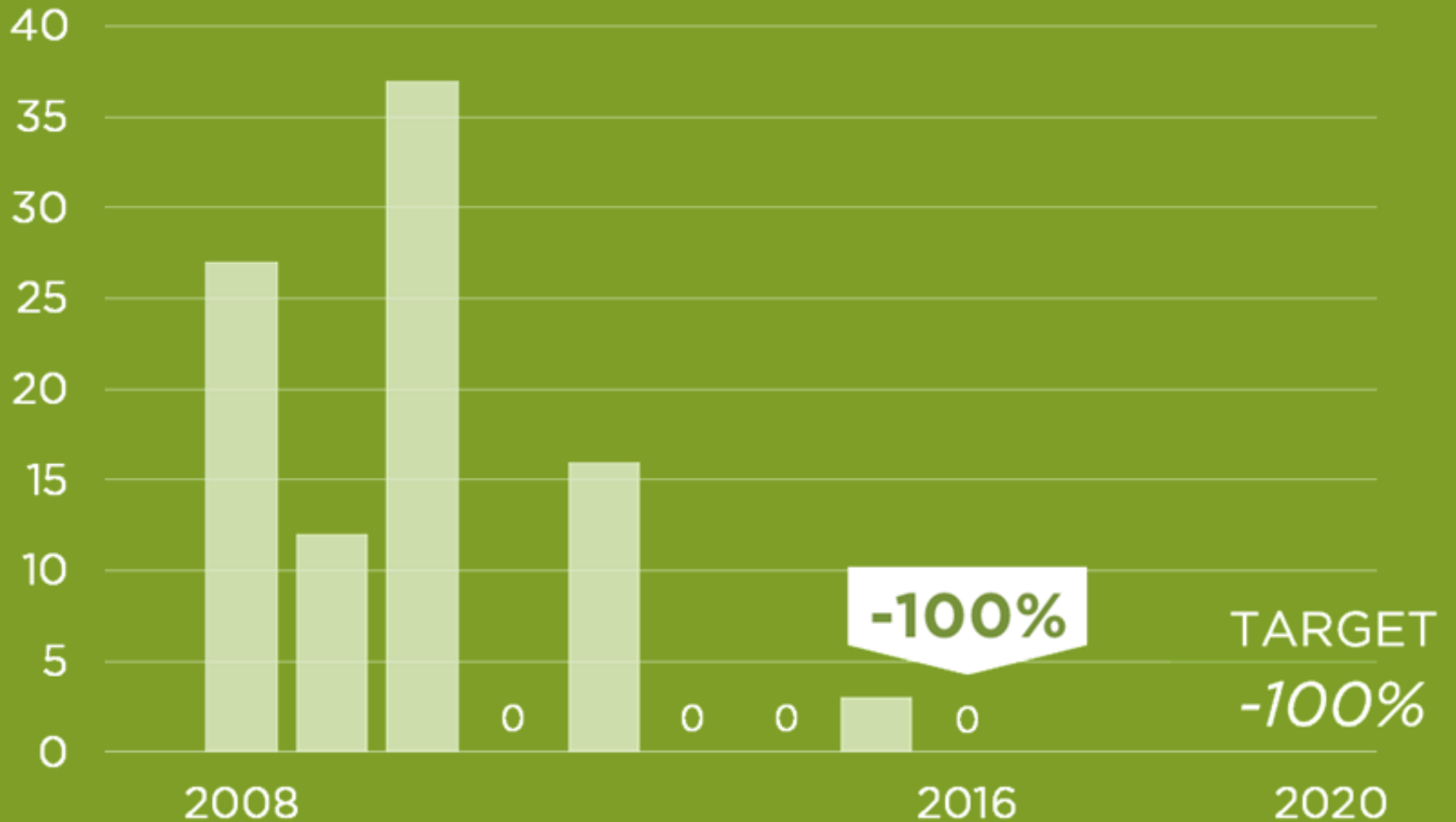
Cellular repeaters in underground parking for EV charging network services and preparation for autonomous vehicles

E Hubs supplement home charging

Public fast charging enables EV car-sharing, EV commercial fleets and EV taxis

Air quality exceedences

2016: 0 instances



AN EV CHARGING “ECOSYSTEM”

chargers where and when
they are needed: home,
workplace, public

CHARGERS AT BUSINESSES

activating business uptake
of station hosting



HIGHLIGHTS



ZERO
CARBON

ZERO
WASTE

HEALTHY
ECO-SYSTEMS

Green Economy

Lighter Footprint

Green Operations



GREEN ECONOMY

GOAL

Secure Vancouver's reputation as a mecca of green enterprise

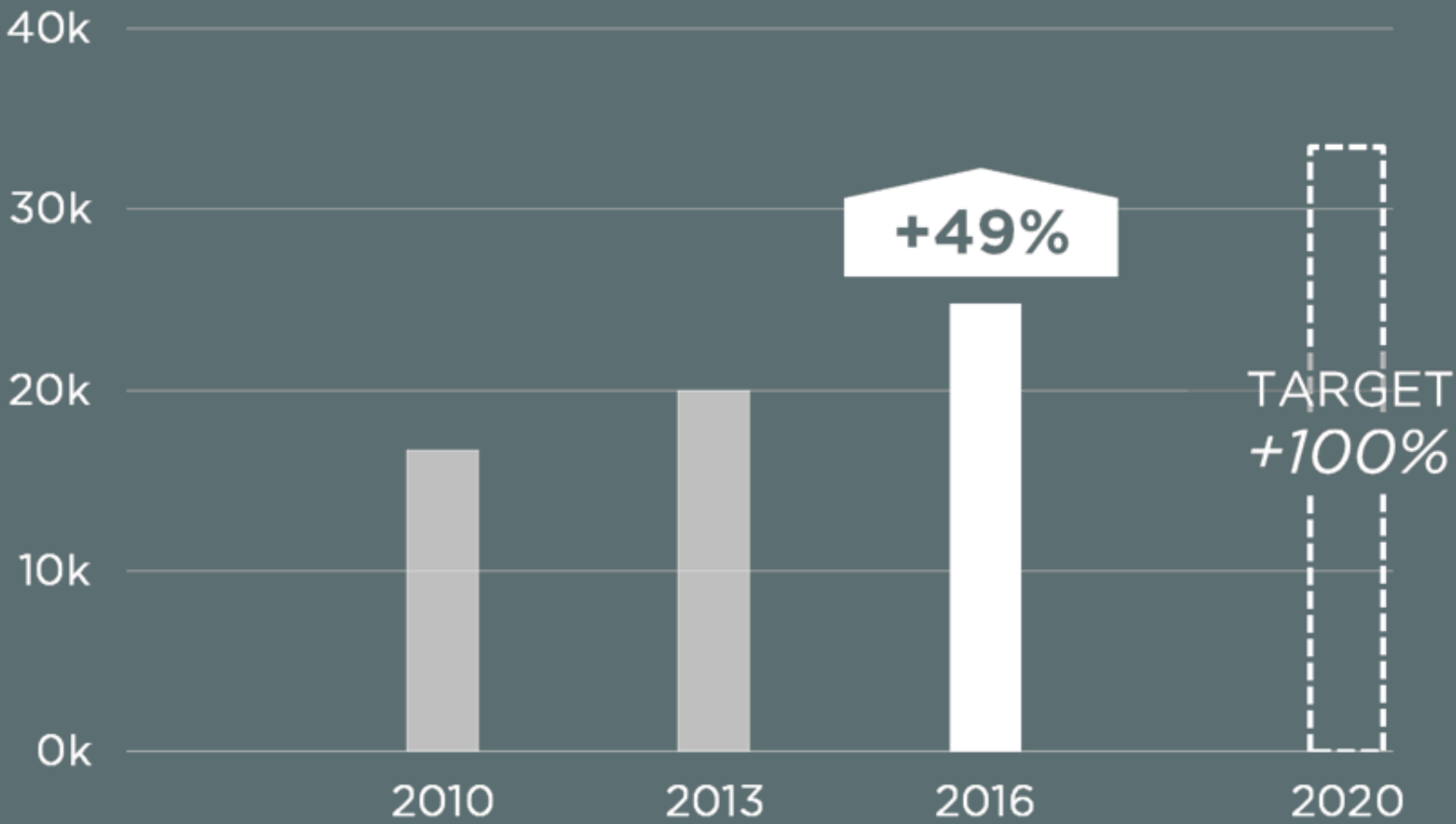
2020 TARGETS

Double the number of green jobs over 2010 levels by 2020

Double the number of companies that are actively engaged in greening their operations over 2011 levels by 2020

Green and local food jobs

2016: 24,800 jobs



25,000 GREEN AND LOCAL FOOD JOBS

green buildings, local food, materials management

FLATS CLIMATE ACTION PLAN

businesses armed with innovative approaches

GREEN & DIGITAL DEMONSTRATION

Bokoeco and LoopShare early successes

HIGHLIGHTS

LIGHTER FOOTPRINT

GOAL

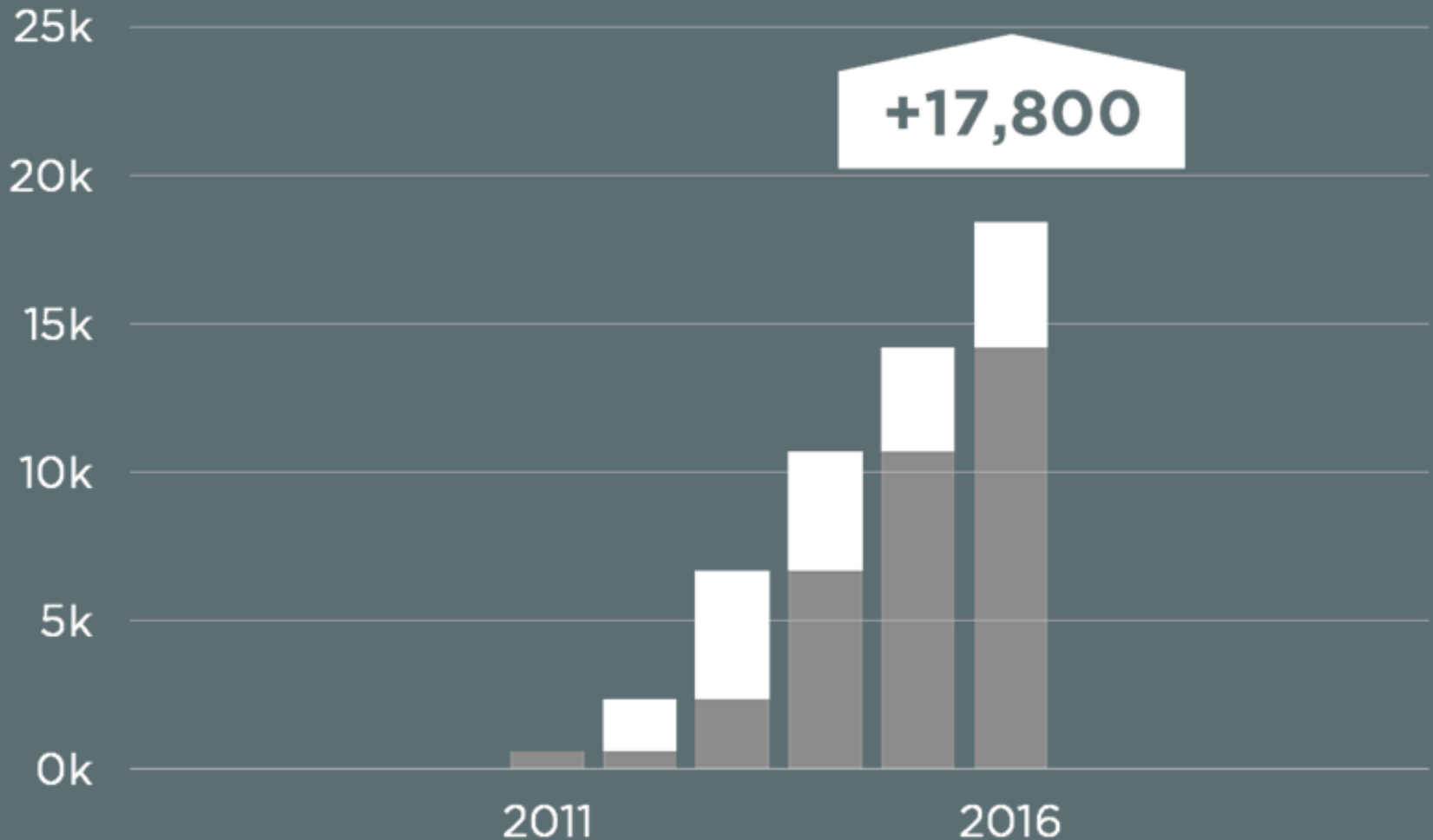
Achieve a one-planet ecological footprint

2020 TARGET

Reduce Vancouver's per-capita footprint by 33% from 2006 levels

People empowered to support Greenest City

2016: 18,400 people





HIGHLIGHTS

PROJECT GREEN BLOC

neighbourhoods
working to cut
eco-footprint

GREENEST CITY FUND

relaunched for 2017;
upcycling with
social impact

CITYSTUDIO PROJECTS

Umbrella Taxi, Teatalk,
Food Recovery Map,
Illumilane

GREEN OPERATIONS

2020 TARGETS

50% reduction in GHGs
from City operations
from 2007 levels

70% waste diversion
in public-facing
City facilities;
90% in all other
City-owned facilities

Reduce water use in
City operations by 33%
from 2006 levels



HIGHLIGHTS

GREEN OPERATIONS PROGRESS

-56%

GHGs

-23%

water use

65%

public-facing

91%

other City-owned

waste diversion

RENEWABLE ENERGY FOR CITY BUILDINGS

Fire Hall # 17 to Passive House standard

PARKS BOARD WATER USE

four projects cut **total** Parks water use by 31%

WASTE FLEET CONVERSION

GHGs down 20%

GREENEST CITY CHALLENGES

CONTINUED GHG REDUCTIONS

impact of changes can be long-term

WATER USAGE

tackling through the *Clean Water Work Program*

COMMUNICATING WITH PUBLIC

improving engagement and partnerships

GREENEST CITY SUCCESSES

2020 targets achieved

50%

mode
share

-32%

vehicle km
driven per
capita

-43%

new
building
GHGs

-27%

waste to
landfill and
incinerator

+42%

food
assets

+49%

green
jobs

Vancouver Food Strategy

Milan Pact Award

First in North America

Economist Global Livability Index

Most Sustainable City
in North America

Arcadis Sustainable Cities

First in North America

Mercer Quality of Life Survey

QUESTIONS