

GREENEST CITY ACTION PLAN

Past, Present, and Future // June 23, 2015



OBJECTIVE

Update Council on:

Past

Progress implementing the Greenest City Action Plan since 2011

Present

Draft Short-Term Actions to 2020

Future

2050 Priorities



GREENEST CITY FRAMEWORK

3 HIGH-LEVEL
OBJECTIVES

10 GOAL
AREAS

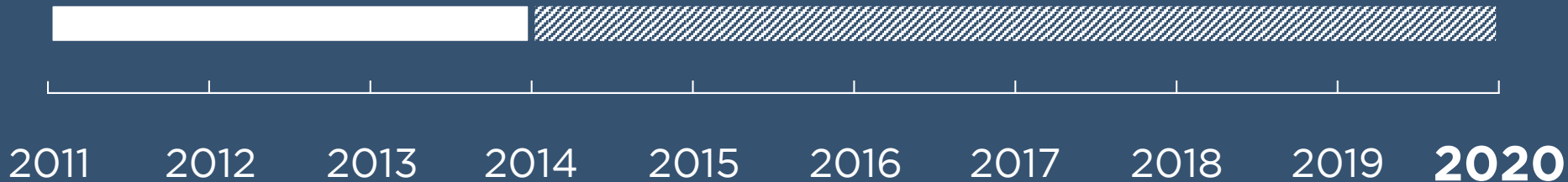
ZERO CARBON	Climate Leadership	Green Economy	Lighter Footprint
	Green Transportation		
	Green Buildings		
ZERO WASTE	Zero Waste		
HEALTHY ECOSYSTEMS	Access to Nature		
	Clean Water		
	Local Food		
	Clean Air		

PAST AND PRESENT: SHORT-TERM ACTIONS



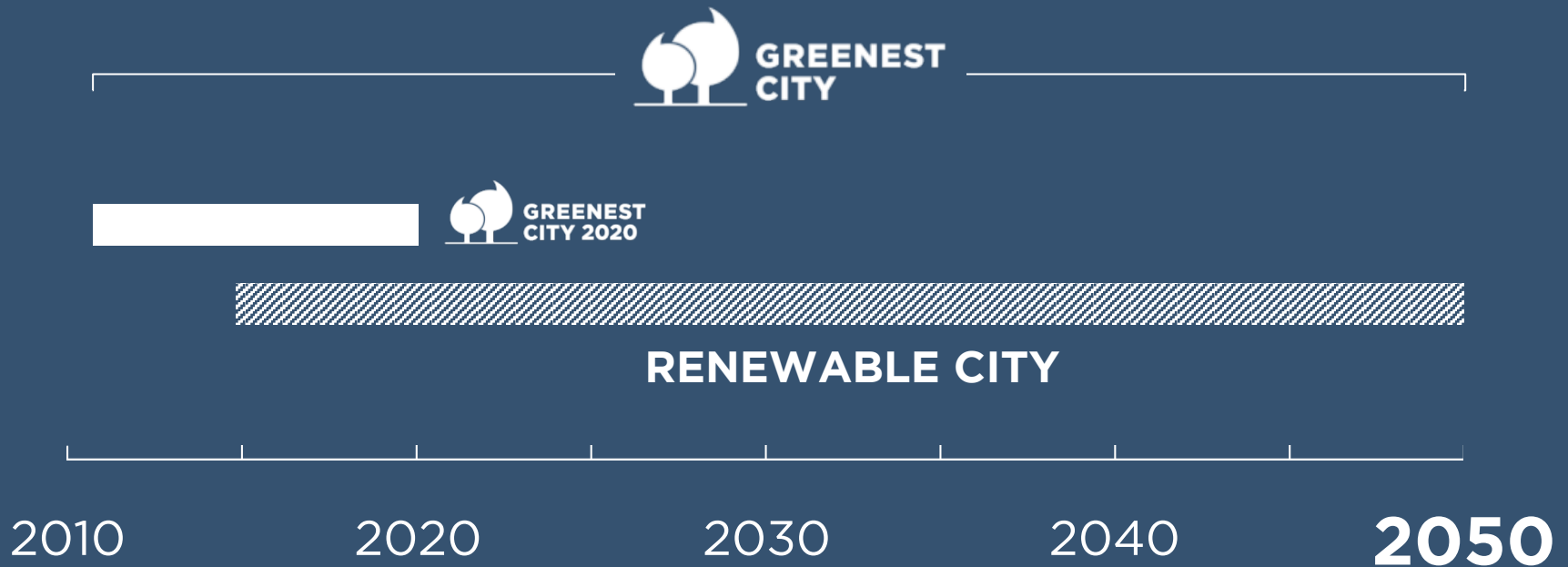
First set of
three-year
**SHORT-TERM
ACTIONS**

We are now identifying
our next set of
SHORT-TERM ACTIONS



2020 AND BEYOND

In March 2015, City Council renewed its commitment beyond 2020 to a **renewable future**.



CONSULTATION

Consultation on our **SHORT-TERM ACTIONS** for the next four years runs from Sept 2014 to Sept 2015.





GREENEST CITY PUBLIC ENGAGEMENT



RESULTS TO DATE AND FUTURE STRATEGIES

ZERO CARBON	Climate Leadership	Green Economy	Lighter Footprint
	Green Transportation		
	Green Buildings		
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CLIMATE LEADERSHIP

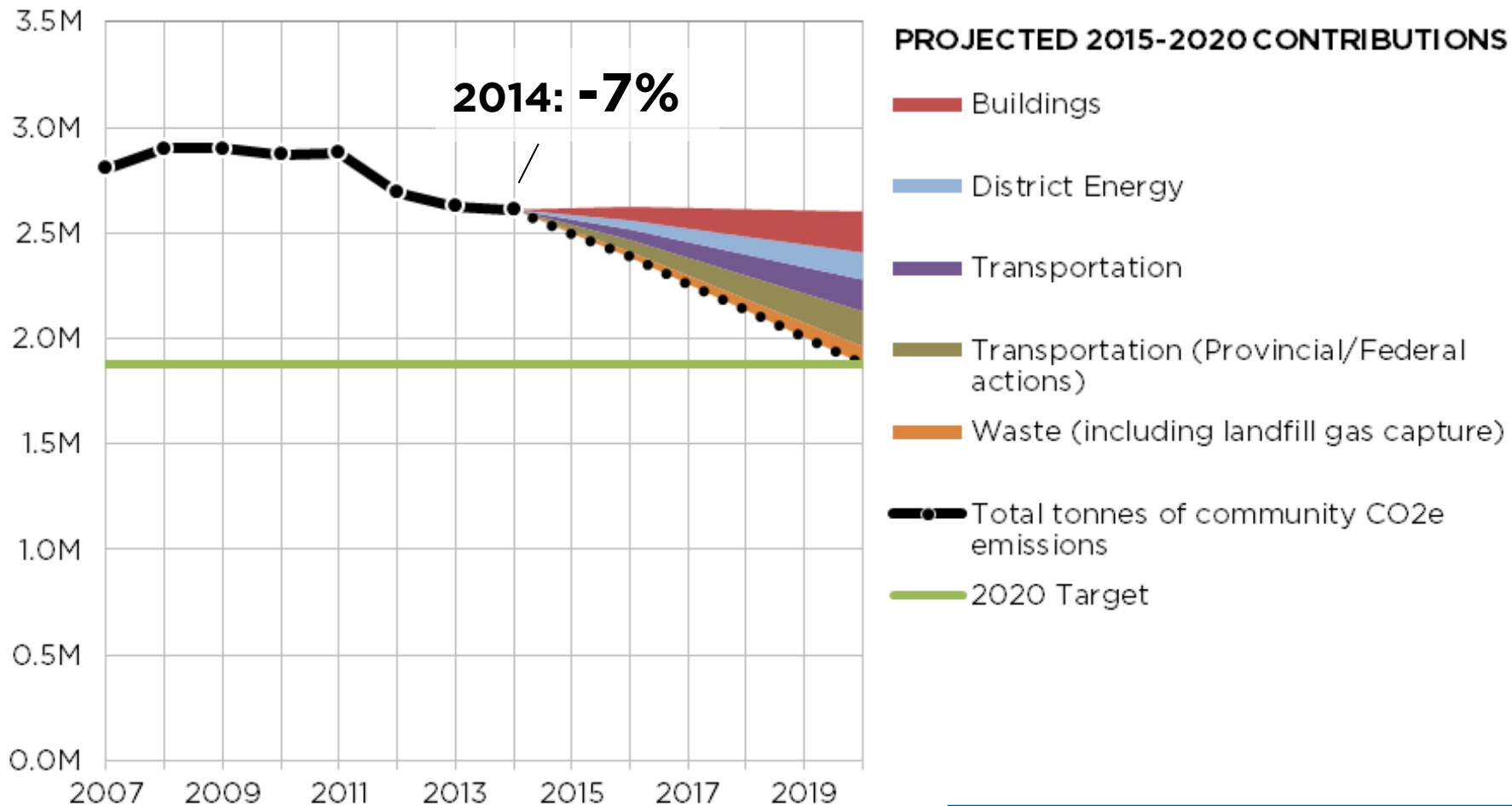
GOAL: Eliminate Vancouver's dependence on fossil fuels

2020 TARGET

Reduce community-based greenhouse gas emissions 33 per cent from 2007 levels



TONNES OF COMMUNITY CO₂e EMISSIONS



2014 RESULTS AND PROJECTIONS TO 2020

CLIMATE LEADERSHIP

GOAL: Eliminate Vancouver's dependence on fossil fuels

Reduce community-based greenhouse gas emissions 80 per cent from 2007 levels

Derive 100% of the energy used in Vancouver from renewable sources

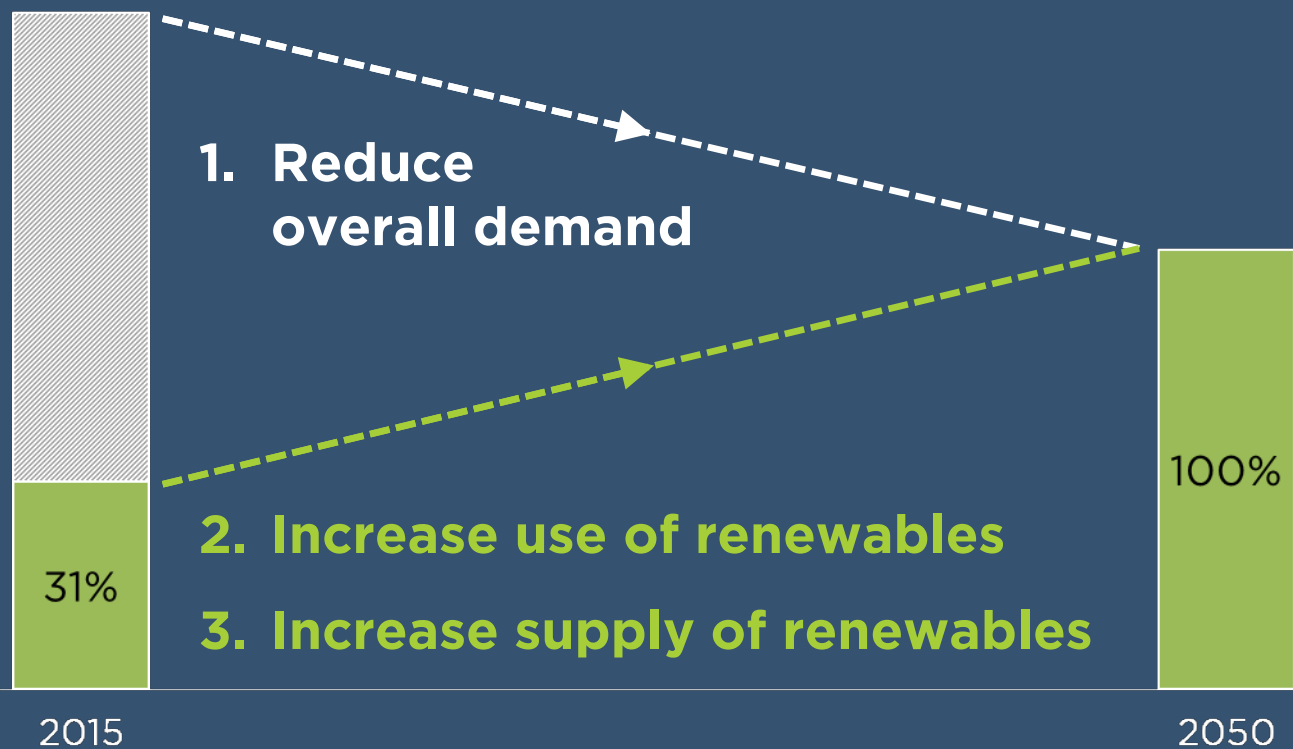
2050 TARGETS



OUR PATH TO A RENEWABLE CITY

31% of Vancouver's energy is **already renewable**.

We will be taking action to:



so that

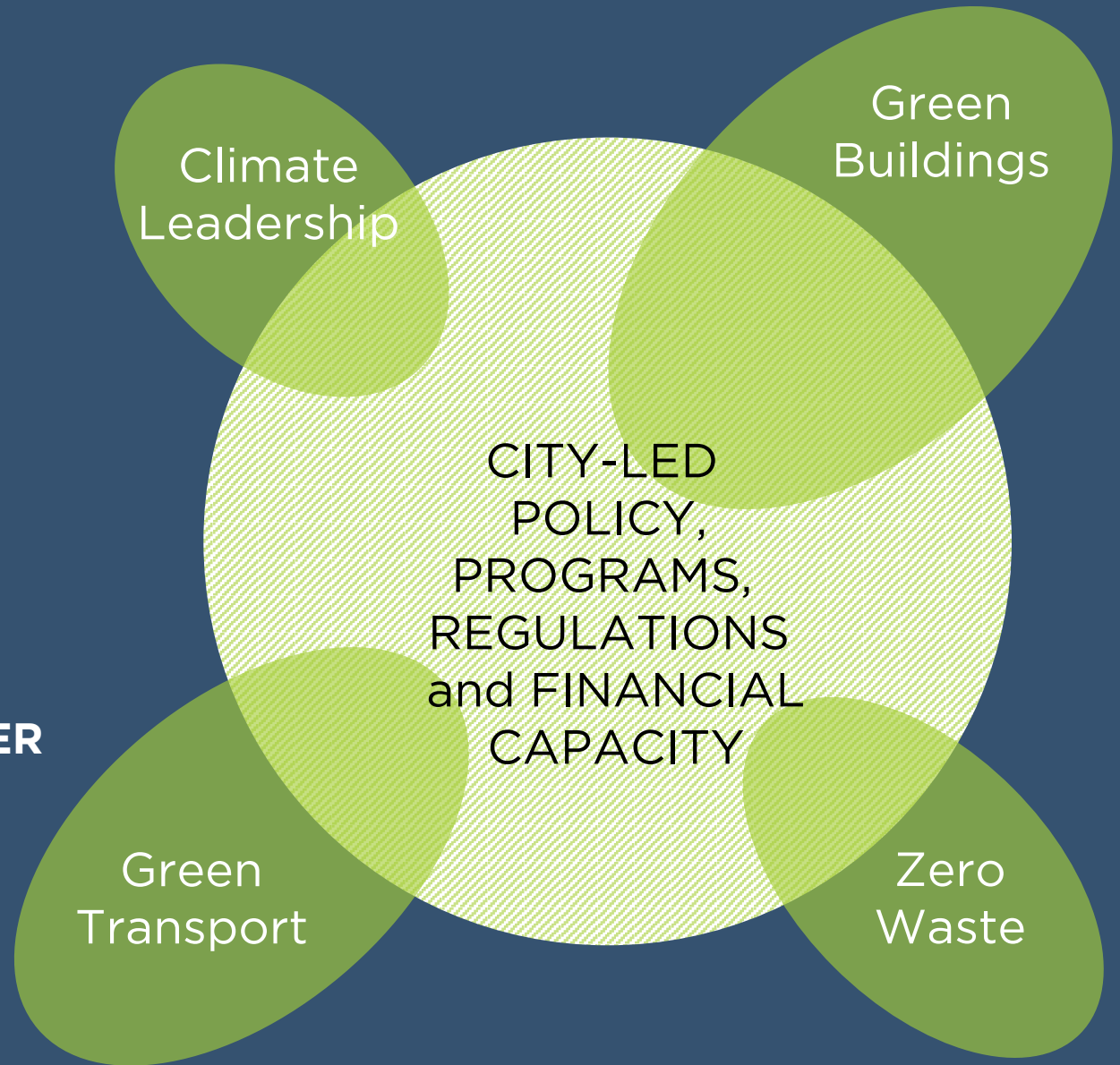
100%
of Vancouver's
energy is
renewable
before 2050.

CARBON NEUTRAL CITIES ALLIANCE



As with Greenest City, **Renewable City goals** will rely on collaboration with business, government and the public.

CITY INFLUENCE OVER RENEWABLE CITY



GREENEST CITY FRAMEWORK

REVISED

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

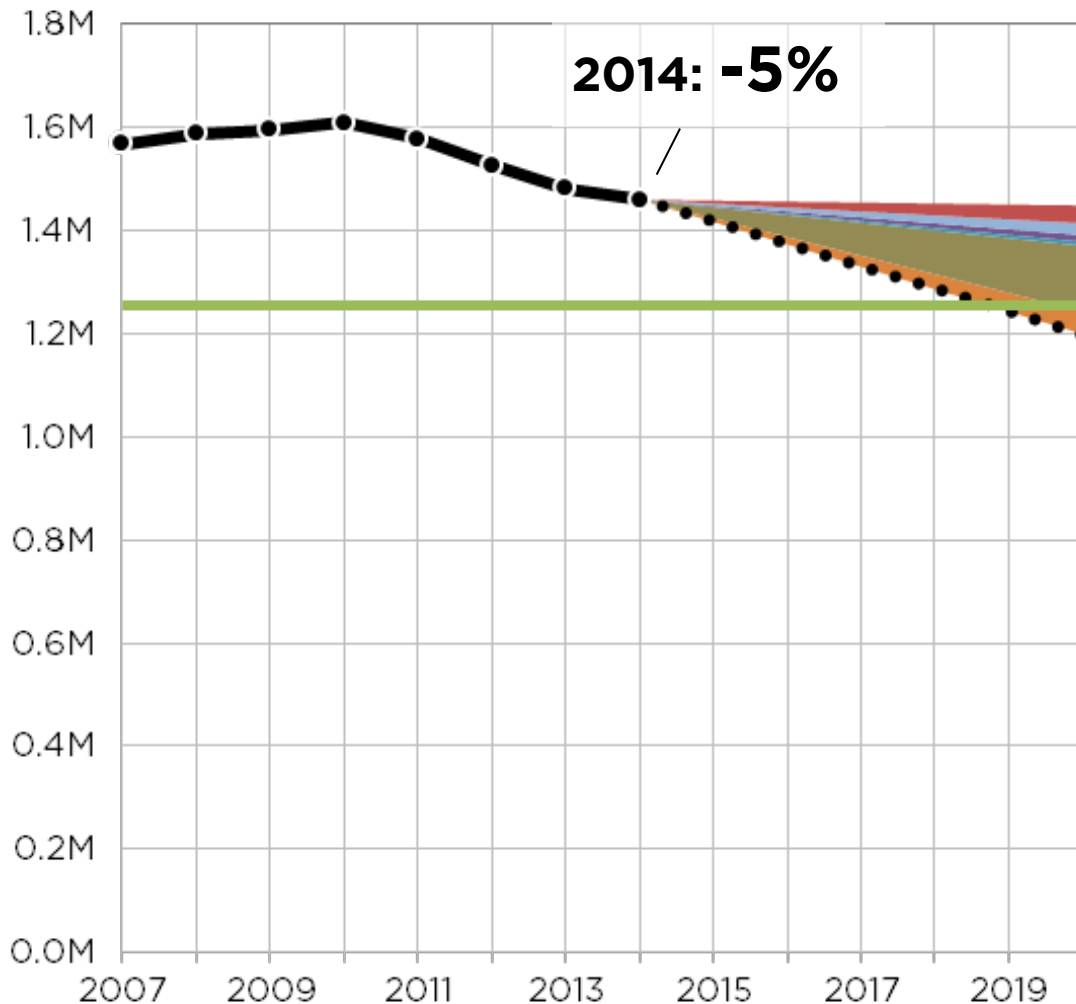
GOAL: Lead the world in green building design and construction

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

TONNES OF COMMUNITY BUILDING CO₂e EMISSIONS



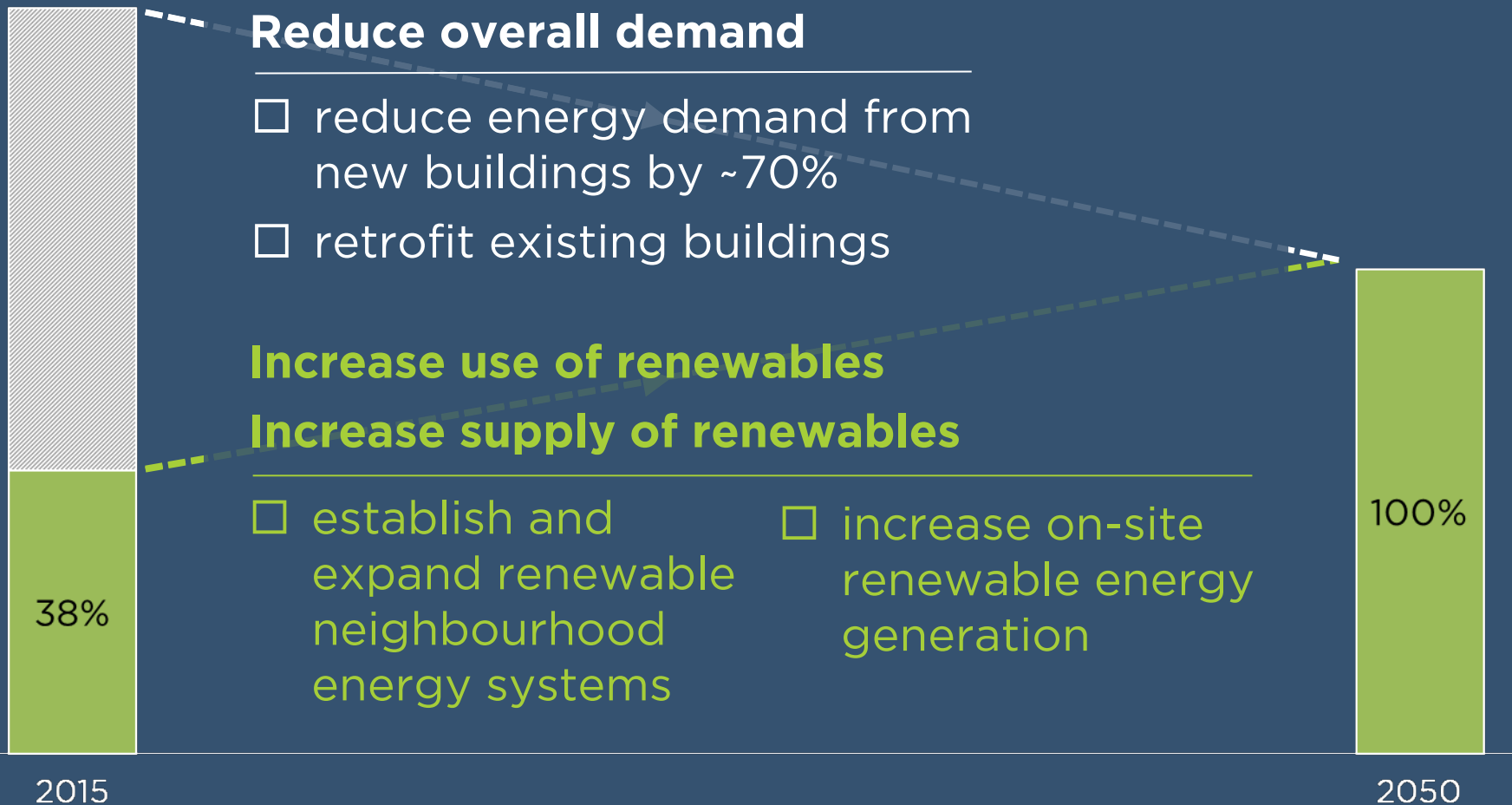
PLANNED 2015-2020 ACTIONS

- Further VBBL retrofit requirement updates
- Launch and expand programs for multi-unit residential buildings
- Launch engagement/ technology programs for single-family homes
- Require benchmarking
- Expanded low-carbon district energy
- Provincial actions
- Total tonnes of CO₂e from community bldgs
- 2020 Target

2014 RESULTS AND PROJECTIONS TO 2020

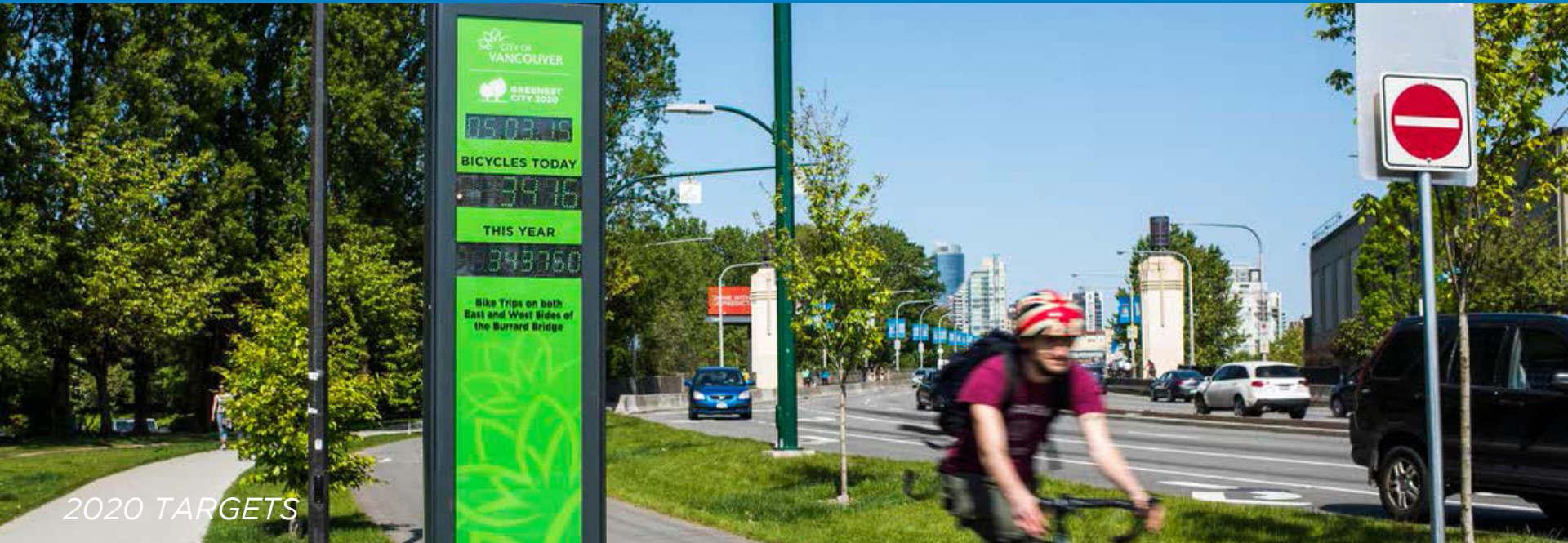
OUR PATH TO A RENEWABLE CITY

We will be taking action to:



GREEN TRANSPORTATION

GOAL: Make walking, cycling, and public transit preferred options

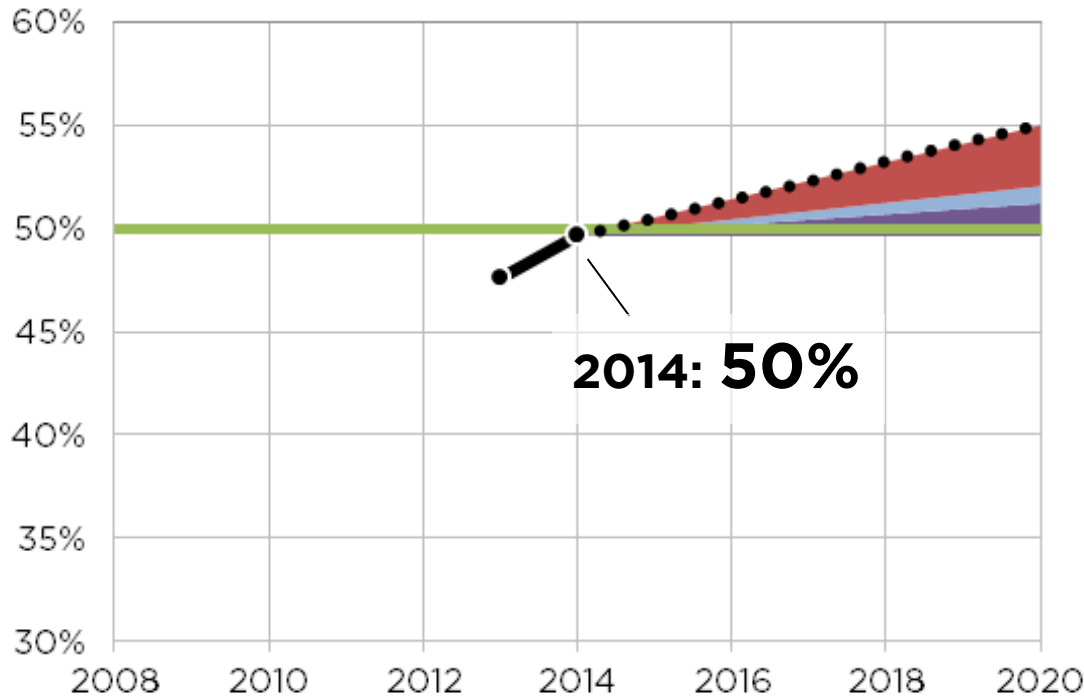


2020 TARGETS

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, TRANSIT



PROJECTED 2015-2020 CONTRIBUTIONS

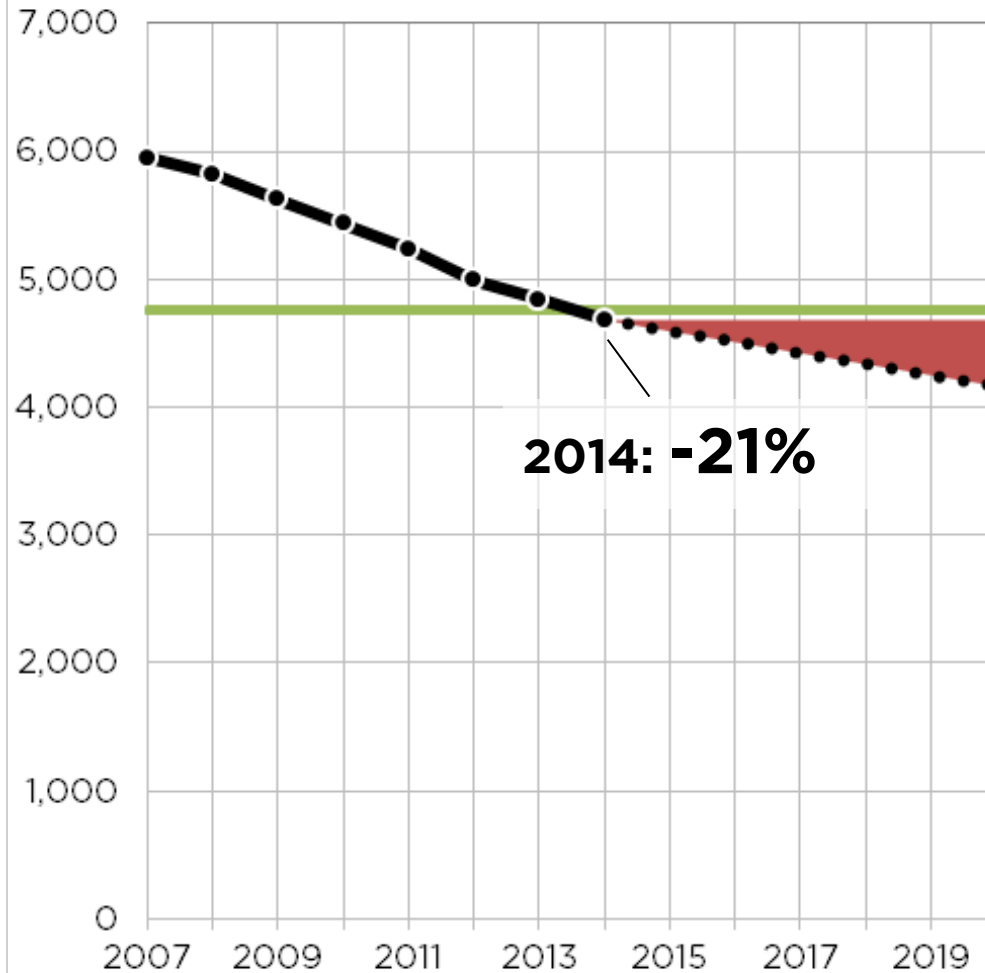
- Transit trip increase
- Walk trip increase
- Bike trip increase
- % mode share by walk, bike and transit
- 2020 Target

PLANNED 2015-2020 ACTIONS

- 1 Initiate extension of Millennium Line SkyTrain under Broadway to Arbutus
- 2 Improve walking and cycling infrastructure on False Creek bridges (e.g., Burrard-Pacific intersection)
- 3 Implement a Bike Sharing Program

2014 RESULTS AND PROJECTIONS TO 2020

TOTAL VEHICLE KILOMETRES DRIVEN PER PERSON



PROJECTED 2015-2020 CONTRIBUTIONS

- Green Transportation 2015-2020 Priority Actions
- Total vehicle km driven per person
- 2020 Target

2014 RESULTS AND PROJECTIONS TO 2020

OUR PATH TO A RENEWABLE CITY

GREEN TRANSPORTATION

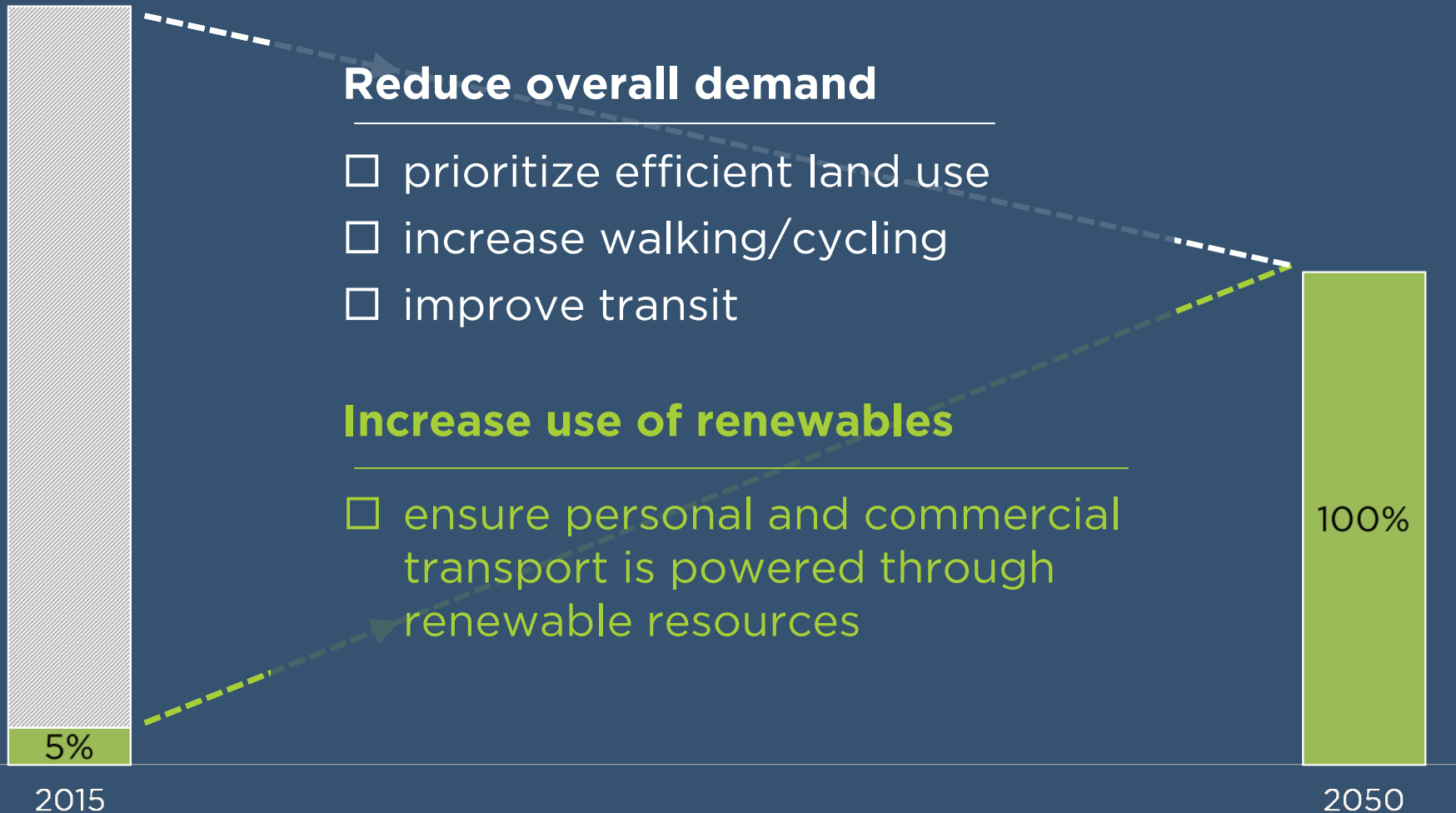
We will be taking action to:

Reduce overall demand

- prioritize efficient land use
- increase walking/cycling
- improve transit

Increase use of renewables

- ensure personal and commercial transport is powered through renewable resources



RESULTS TO DATE AND FUTURE STRATEGIES

ZERO CARBON	Climate Leadership	Green Economy	Lighter Footprint
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ZERO WASTE

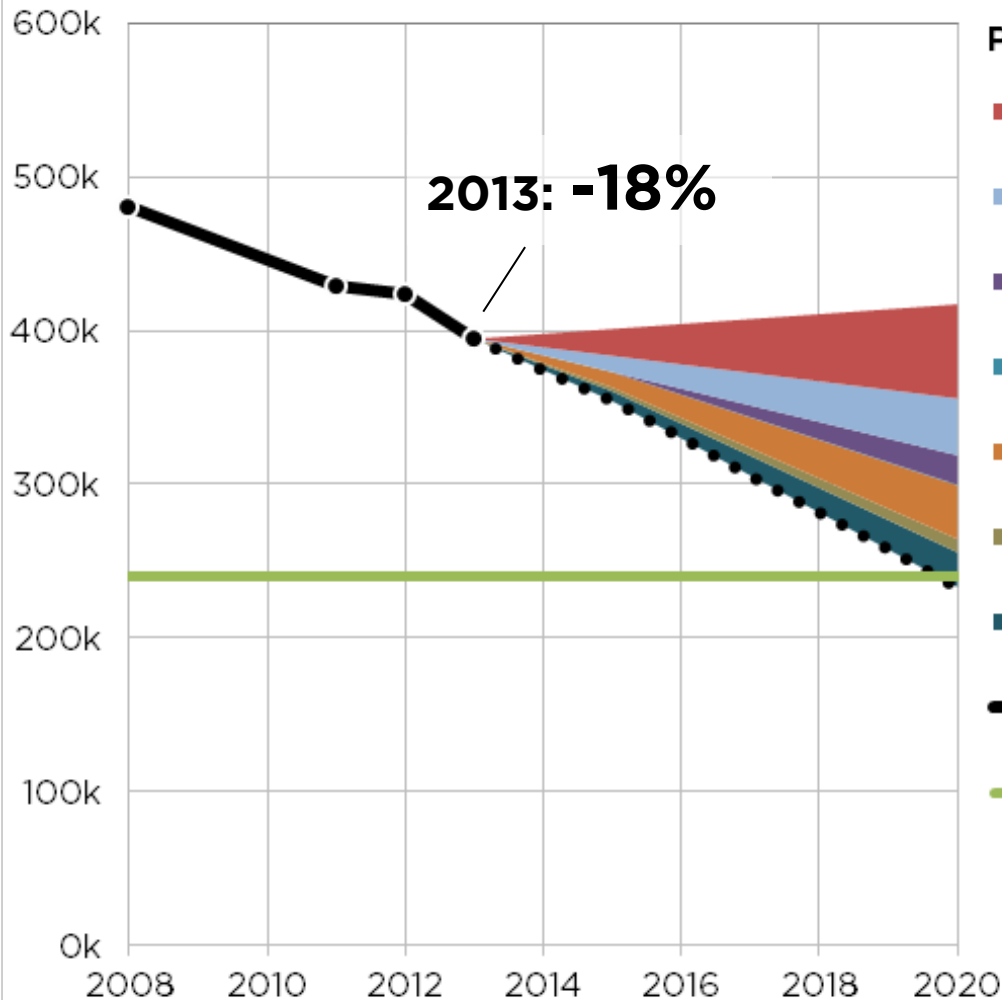
GOAL: Create zero waste



2020 TARGET

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

TONNES OF WASTE TO LANDFILL/INCINERATOR



PLANNED 2015-2020 ACTIONS

- Support expanded food scraps recycling (all sectors)
- Wood waste diversion
- Advocate for EPR for additional materials
- Divert streetscape material: Keep Vancouver Spectacular program
- Continue: C&D Waste Diversion
- Continue: Existing EPR
- Continue: Keep recyclables out of garbage
- Tonnes of waste to landfill or incinerator
- 2020 Target

LATEST RESULTS AND PROJECTIONS TO 2020

OUR PATH TO A RENEWABLE CITY

ZERO WASTE

We will be taking action to:

Reduce overall demand

- ensure reuse/repurposing, to minimize energy used for processing

Increase use of renewables

- ensure transport vehicles use renewable energy

Increase supply of renewables

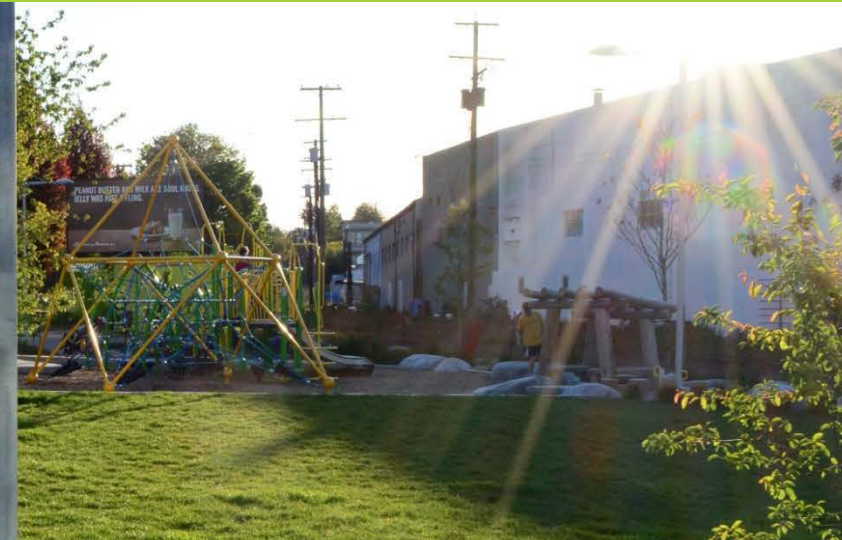
- capture and use biomethane

RESULTS TO DATE AND FUTURE STRATEGIES

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ACCESS TO NATURE

GOAL: Vancouver residents enjoy incomparable access to green spaces

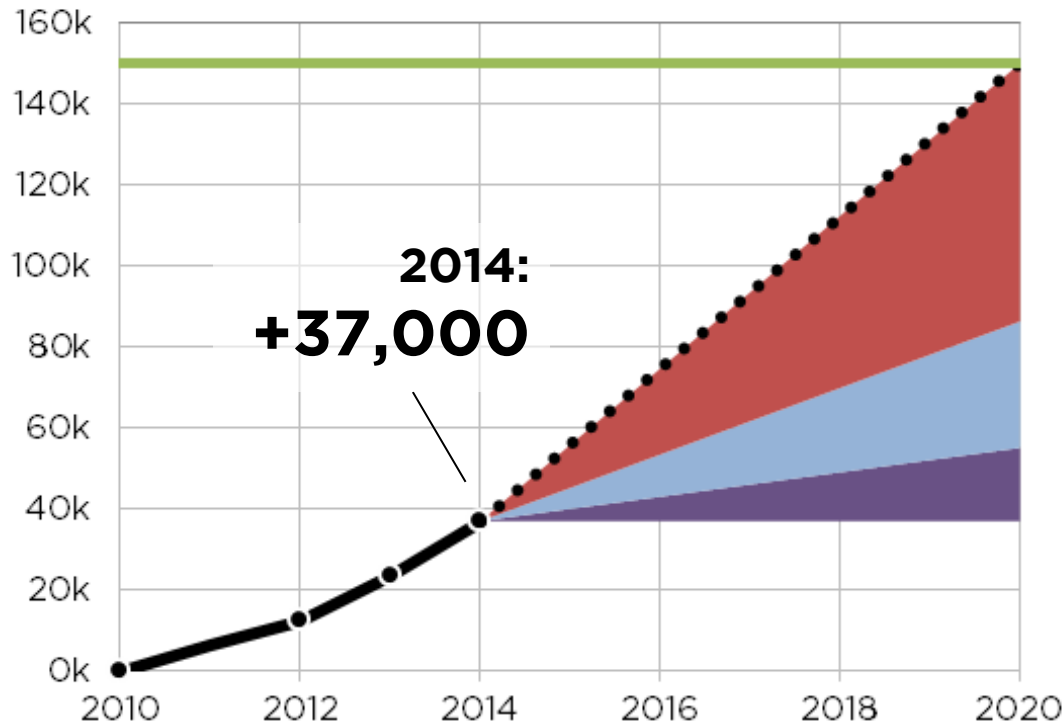


2020 TARGETS

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

Plant 150,000 additional trees in the city between 2010 and 2020

TOTAL NEW TREES PLANTED



PROJECTED 2015-2020 CONTRIBUTIONS

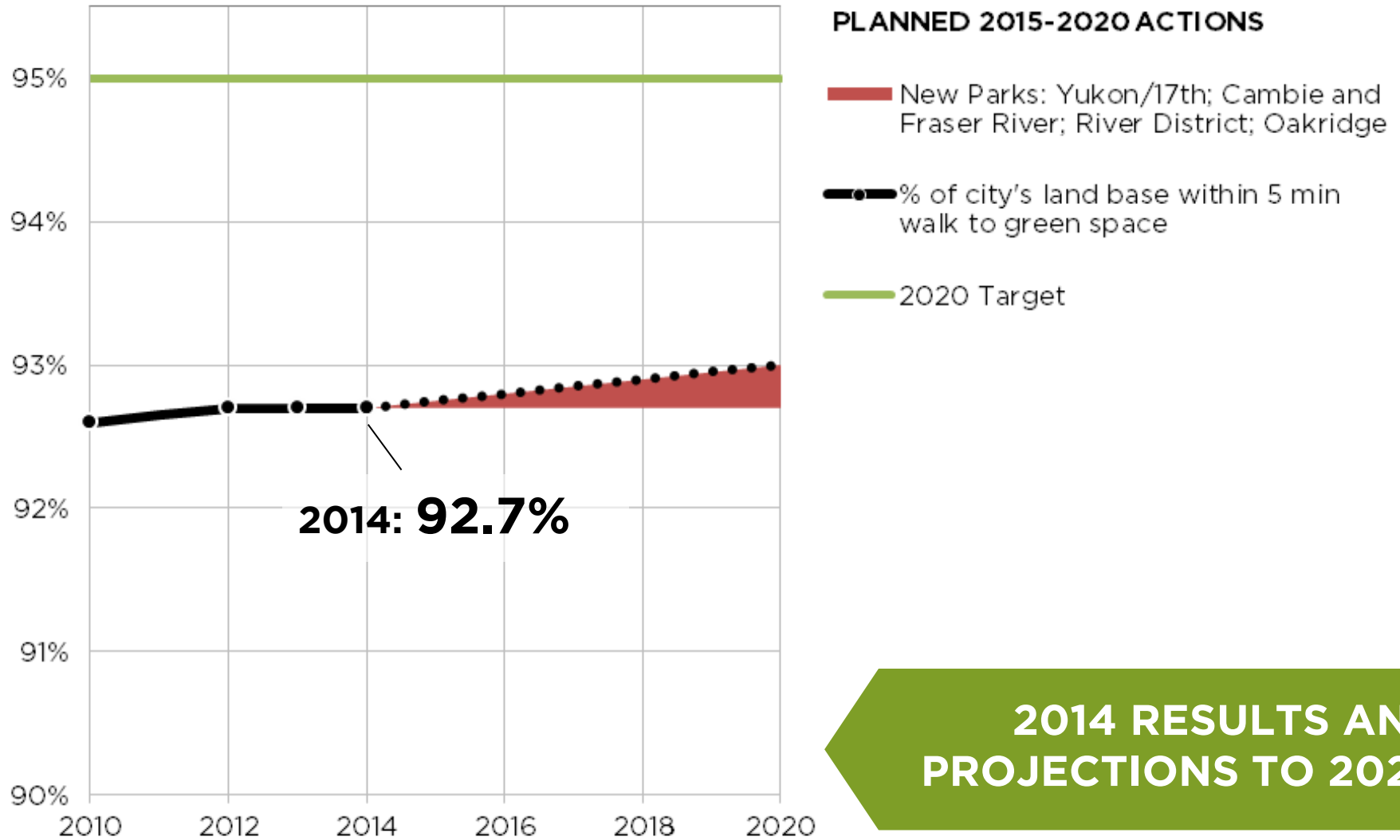
- Private property trees
- Park and public trees
- Street trees
- Total new trees planted
- 2020 Target

PLANNED 2015-2020 ACTIONS

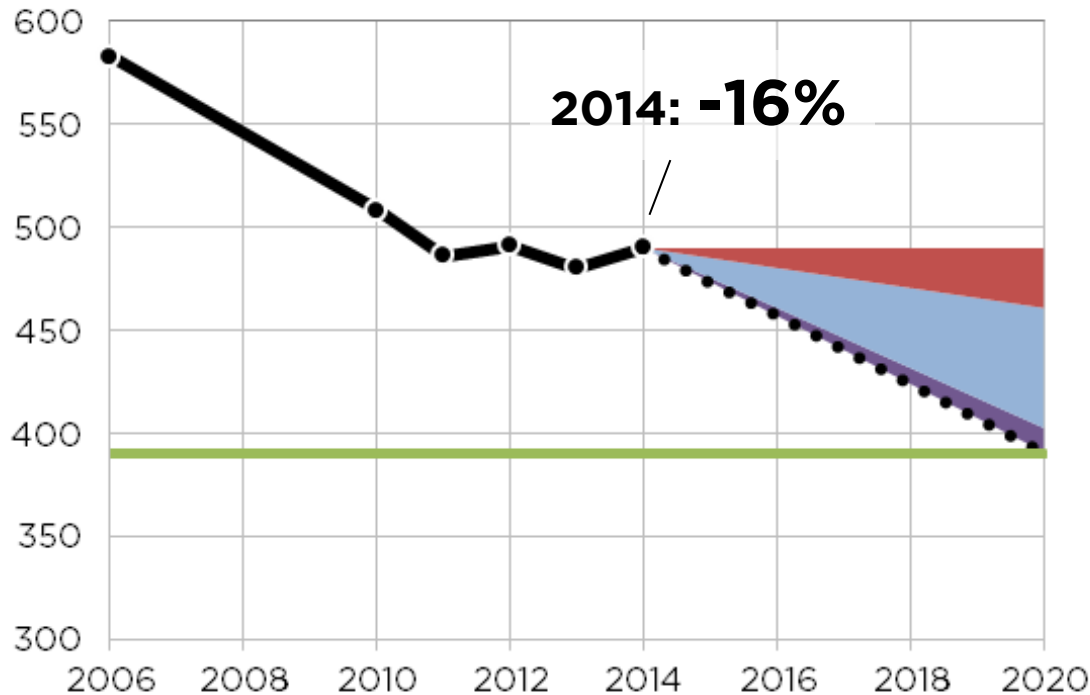
- 1 Strategically expand tree planting
- 2 New inventory system for trees on City land
- 3 Update tree management plans, planting standards and best practices
- 4 Develop policies to retain more healthy, mature trees

2014 RESULTS AND PROJECTIONS TO 2020

% OF CITY'S LAND BASE WITHIN 5 MIN WALK TO GREEN SPACE



TOTAL WATER CONSUMPTION PER CAPITA



PLANNED 2015-2020 ACTIONS

- Reduce water consumption in ICI sector
- Reduce water consumption in residential sector
- Water system losses and management; civic uses
- Total water consumption per capita (L/person/day)
- 2020 Target

CLEAN WATER

GOAL

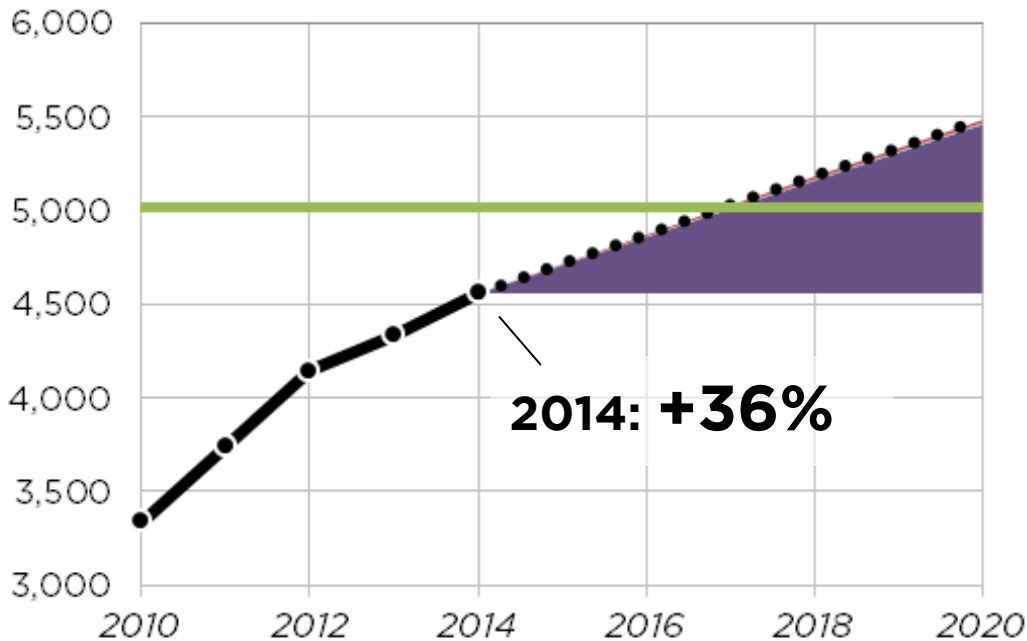
Vancouver will have the best drinking water of any city in the world

2020 TARGET

Reduce per capita water consumption by 33% over 2006 levels

2014 RESULTS AND PROJECTIONS TO 2020

NUMBER OF NEIGHBOURHOOD FOOD ASSETS



PLANNED 2015-2020 ACTIONS

- Urban Farming Policy
- Farmers markets and community food markets
- Urban agriculture and community kitchens
- Food Bank
- Number of neighbourhood food assets
- 2020 Target

LOCAL FOOD

GOAL

Vancouver will become a global leader in urban food systems

2020 TARGET

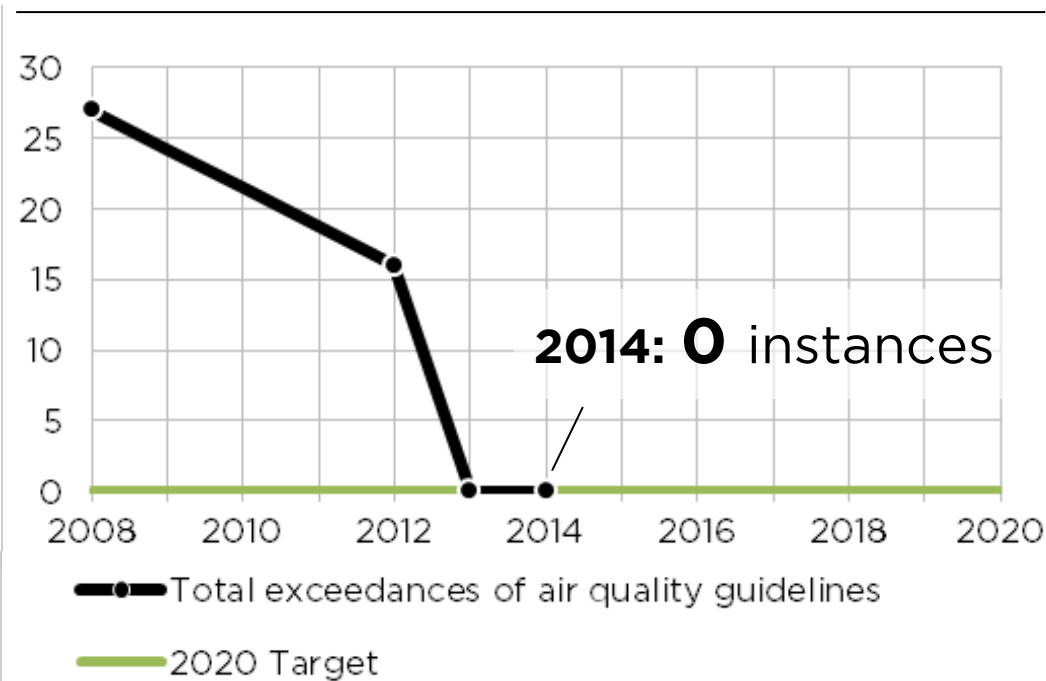
Increase city-wide and neighbourhood food assets by a minimum of 50% over 2010 levels

2014 RESULTS AND PROJECTIONS TO 2020

PLANNED 2015-2020 ACTIONS

- 1 Develop electric vehicle infrastructure strategy
- 2 Investigate labeling gas pumps for air quality impacts
- 3 Ensure air quality data and information is available

TOTAL EXCEEDANCES OF AIR QUALITY GUIDELINES



CLEAN AIR

GOAL

Breathe the cleanest air of any major city in the world

2020 TARGET

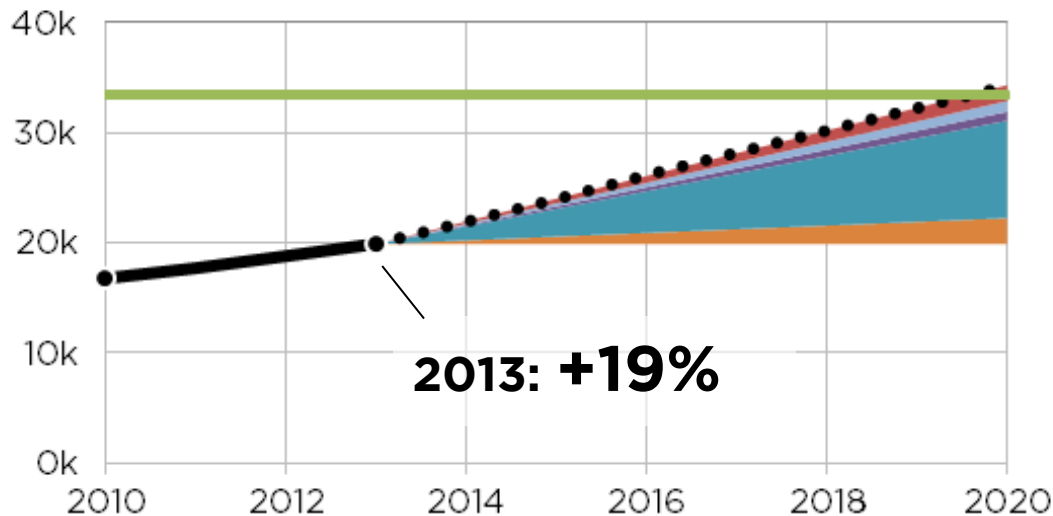
Meet or beat the most stringent air quality guidelines from Metro Vancouver, British Columbia, Canada, and the World Health Organization

2014 RESULTS

RESULTS TO DATE AND FUTURE STRATEGIES

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NUMBER OF GREEN/LOCAL FOOD JOBS



PROJECTED 2015-2020 CONTRIBUTIONS

- City-led actions (retrofit programs, district energy)
- VEC-led actions (GDDP, cleantech accelerator, False Creek Flats, trade missions)
- Other actions (organics ban, EPR, etc.)
- Market transformation
- Business-as-usual business growth
- Number of local food and green jobs
- 2020 Target

LATEST RESULTS AND PROJECTIONS TO 2020

GREEN ECONOMY

GOAL

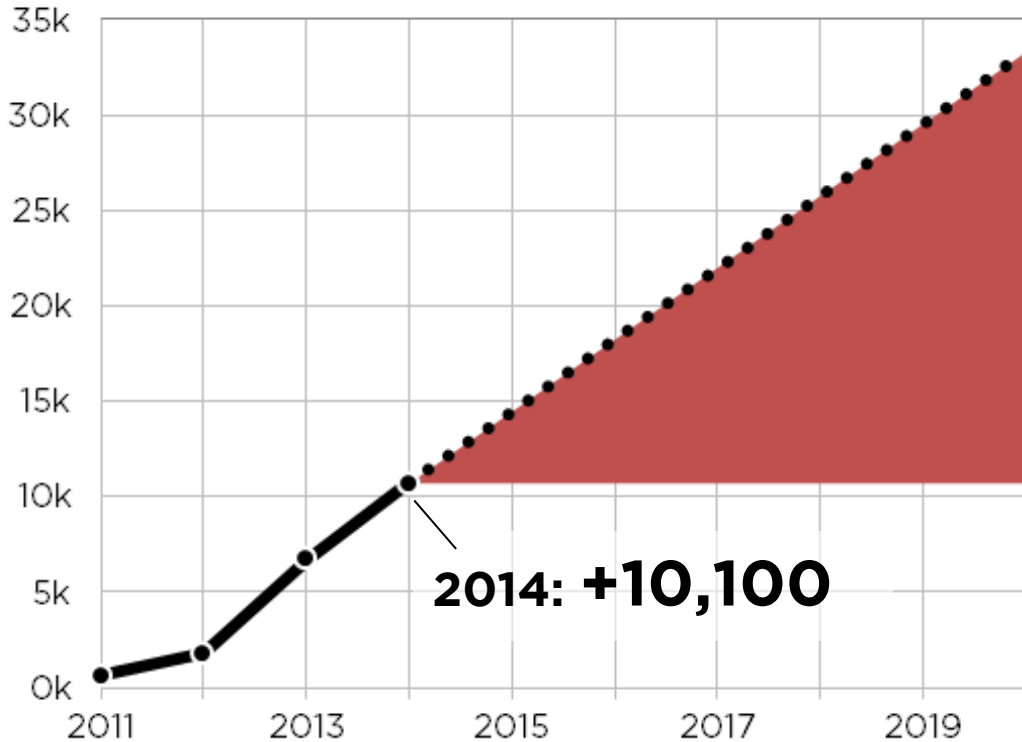
Secure Vancouver's reputation as a mecca of green enterprise

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

NUMBER OF PEOPLE EMPOWERED BY CITY-LED OR SUPPORTED PROJECT



PLANNED 2015-2020 ACTIONS

- █ Continue/improve Greenest City Grants and City Studio Programs
- █● Number of people empowered by City-led or supported project

LIGHTER FOOTPRINT

GOAL

Achieve a one-planet ecological footprint

2020 TARGET

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

2014 RESULTS AND PROJECTIONS TO 2020

POSITIVE RESULTS SINCE 2011

2020 targets achieved

50%

Mode
share

-21%

Vehicle km
driven per
capita

-7%

GHGs

-18%

Waste to
landfill or
incinerator

+36%

Food
assets

+19%

Green
jobs

*Two-time winner of
Earth Hour City Challenge:*

Global Capital 2013
Canadian Capital 2015

Continuing areas of focus:

accelerating GHG reductions
reducing water consumption
greening businesses

PUBLIC ENGAGEMENT

for GCAP and Renewable City,
online and in person

June to
October

GREENEST CITY STRATEGY

to Council

Fall 2015

RENEWABLE CITY STRATEGY

to Council

Fall 2015

SUMMARY

Significant progress has been made to date, with much more work to do.

JOIN US!

Join us on June 30th and at events throughout the summer to plan the next wave of action to get us to our 2020 targets and to build the Renewable City.

vancouver.ca/greenestcity
greenestcitystories.ca

**BRIGHT
GREEN
SUMMER**
Share your stories.

