





GREENEST CITY FRAMEWORK

ZERO CARBON	Green Buildings	Re		
	Green Transportation			
ZERO WASTE	Zero Waste	mate & ewables	Green E	Lighter
HEALTHY ECO- SYSTEMS	Access to Nature		Econ	Foo
	Clean Water		conomy	potprint
	Local Food			ht
	Clean Air			
3 high-level objectives] O goal are	as		



ZERO CARBON

Climate and Renewables

Green Buildings

Green Transportation



CLIMATE AND RENEWABLES

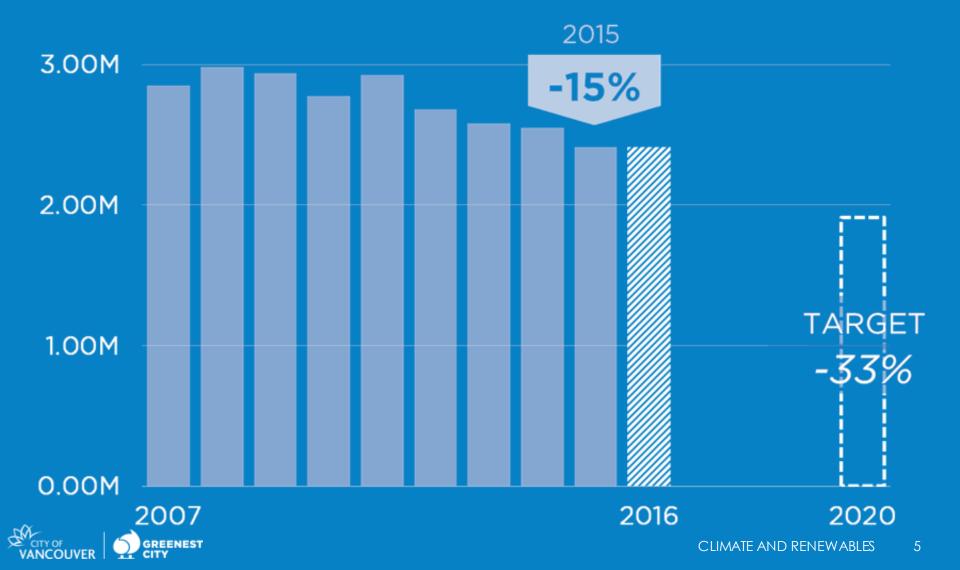
GOAL Eliminate Vancouver's dependence on fossil fuels

2020 TARGET Reduce communitybased greenhouse gas emissions 33% from 2007 levels

COUVER

Community GHG emissions

2016: no data available



RENEWABLE CITY STRATEGY UNDERWAY

Zero Emission Building Strategy Approved EV Ecosystem Strategy Approved

AND A COLUMN AS

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

THE RENEWABLE CITY STRATEGY IS ABOUT

energy efficiency better buildings district energy electric vehicles

IT IS NOT

banning natural gas, barbecues, or fuel used for cooking



GREEN BUILDINGS

GOAL Lead the world in green building design and construction

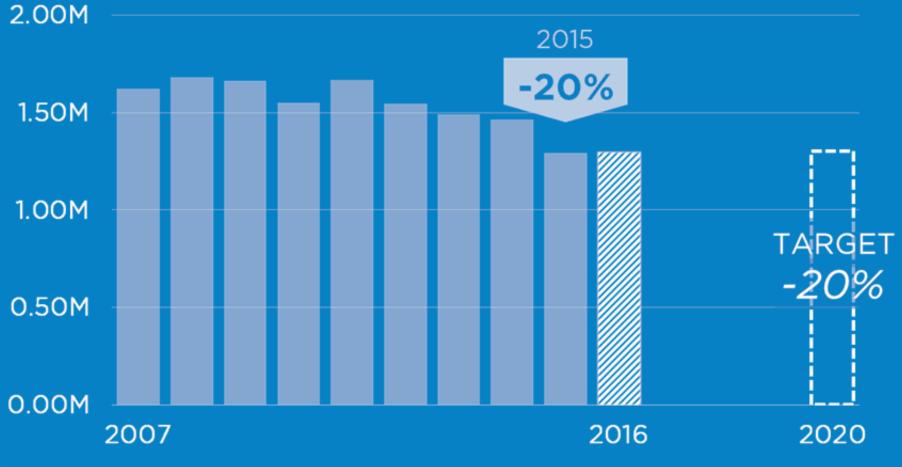
> 2020 TARGETS Require all buildings constructed from 2020 to be carbon neutral in operations

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



Community building GHG emissions

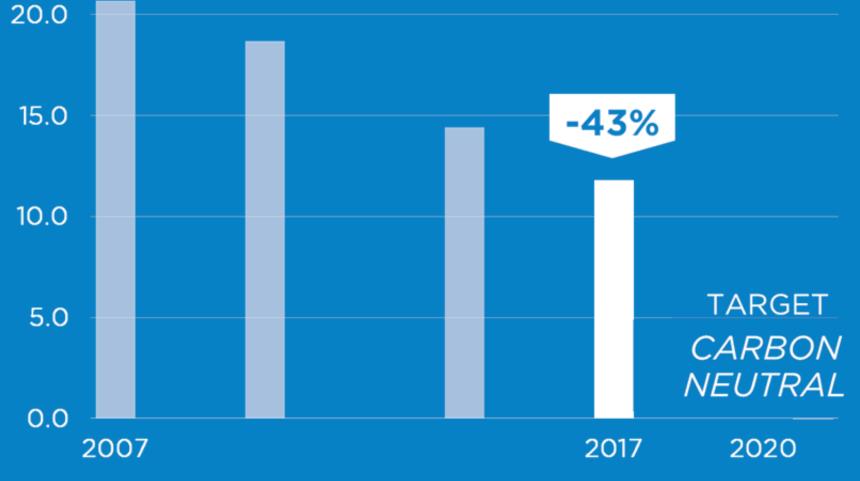
2016: no data available





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

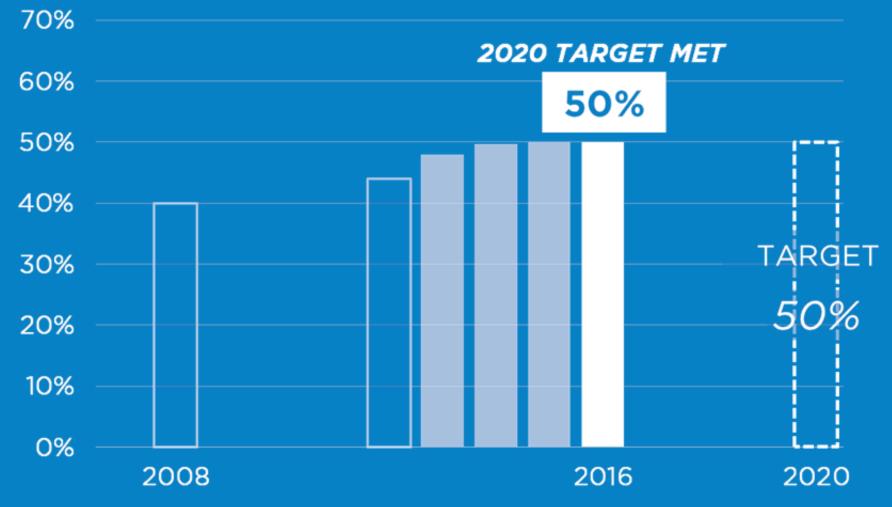
GOAL Make walking, cycling, and public transit preferred options

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

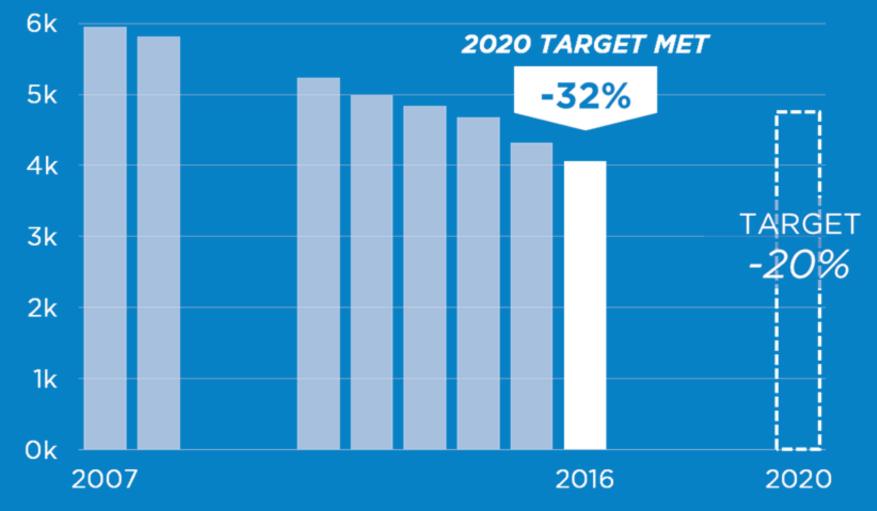
2016: 50%





Annual vehicle kilometres driven per person (VKT)

2016: 4,060 km





MOBI BIKESHARE

1.2M+ km travelled

(30x around the

world)

REENEST

ARBUTUS GREENWAY

temporary path; public consulted early 2017

DME

90

TRANSIT FUNDING & IMPROVEMENTS

Phase 1 funded; downtown trolley expansion

HIGHLIGHTS

Shaw)Go

GREEN TRANSPORTATION

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







Additional trees planted

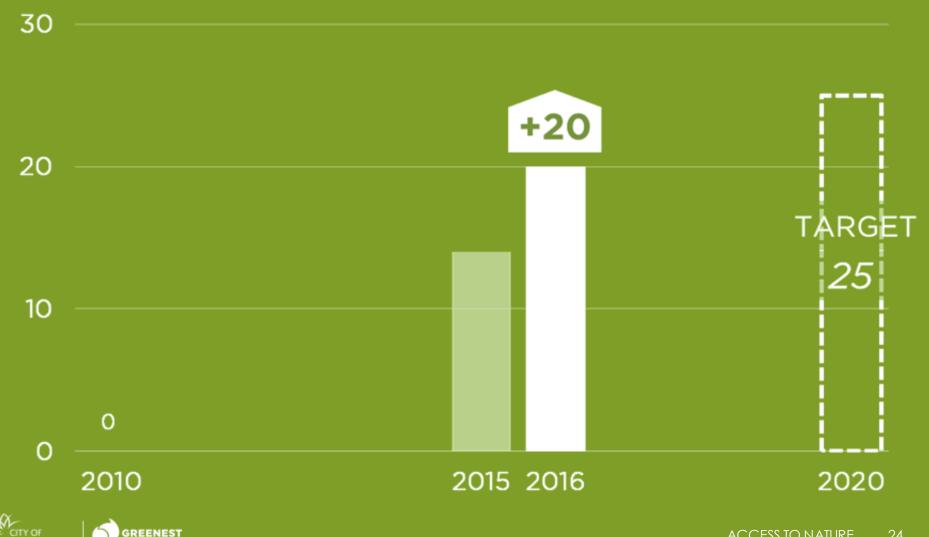
2016: 82,000 trees





Hectares of natural area restored or enhanced

2016: 20 hectares



OUVER

HIGHLIGHTS

PINE & 5th BEE SANCTUARY supporting urban pollinators

EAGLES IN LOCARNO Parks arborists built a better nest

VANPLAY LAUNCH year-long consult for Master Plan

INEST

ACCESS TO NATURE 25

CLEAN WATER

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

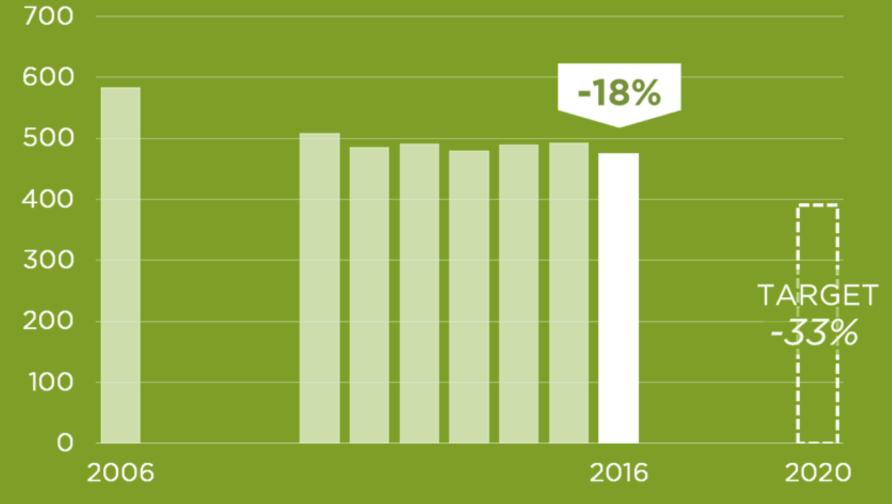
2020 TARGETS

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 knowledgesharing LEAKY TOILET CAMPAIGN

one leaky toilet = 135 litres per day



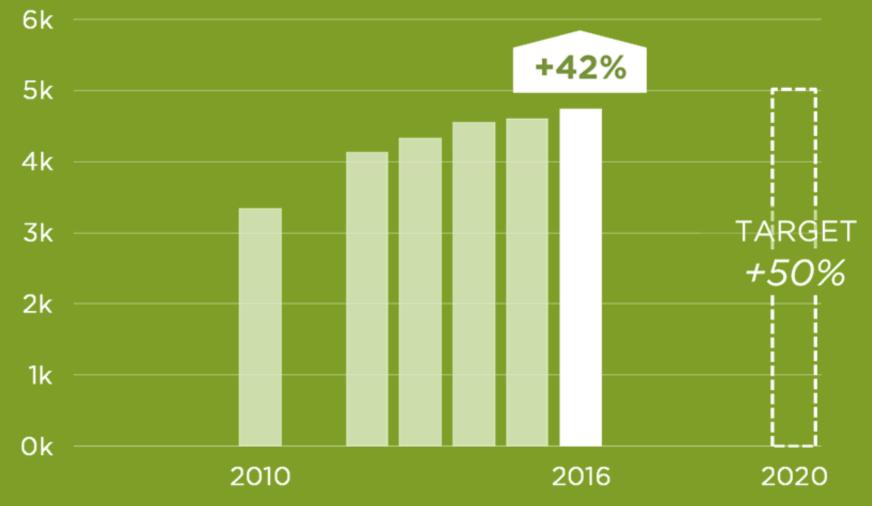
LOCAL FOOD

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





HIGHLIGHTS

GARDEN IMPROVEMENTS

ROMA ROM

small grants for repairs and tools

REENEST

COMMUNITY KITCHENS

using assets to their fullest potential

MOBILE MARKETS taking produce

to the people

LOCAL FOOD 31

CLEAN AIR

V affordability in existing buildings Cellular repeaters in undergro

for EV charging preparation for Hubs supplement

E Hubs supplement

GREENEST

VCOUVER

MURB retrofit incentive in

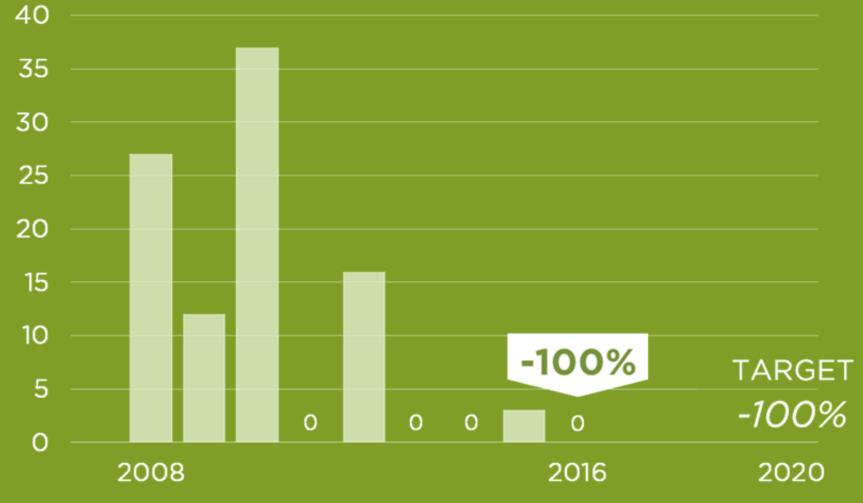
GOAL Breathe the cleanest air of any major city in the world

> 2020 TARGET Meet or beat the most stringent air quality guidelines from Metro Vancouver, British Columbia, Canada, and the World Health Organization

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

Air quality exceedences

2016: O instances





AN EV CHARGING "ECOSYSTEM"

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

GREENEST

VANCOUVER

CHARGERS AT BUSINESSES

activating business uptake of station hosting

mallev.com

HIGHLIGHTS

ZERO CARBON

ZERO WASTE

Green Economy

Lighter Footprint

Green Operations



HEALTHY ECO-SYSTEMS

GREEN ECONOMY

GOAL Secure Vancouver's reputation as a mecca of green enterprise

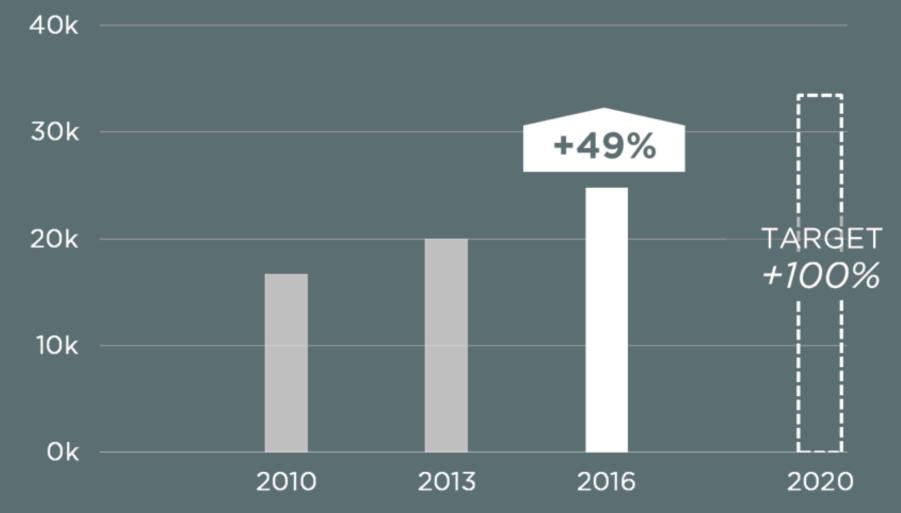
2020 TARGETS

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

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FLATS CLIMATE ACTION PLAN

businesses armed with innovative approaches

GREEN & DIGITAL DEMONSTRATION

Bokoeco and LoopShare early successes

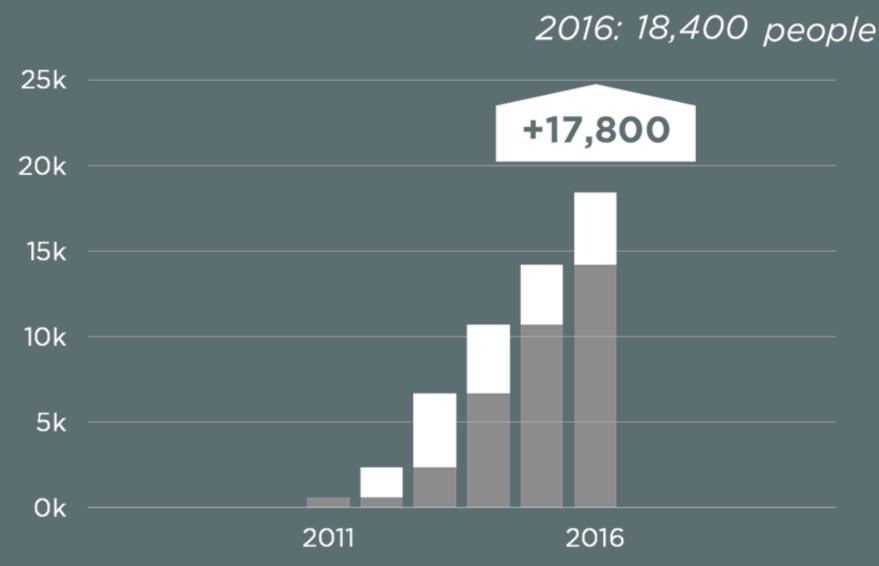
HIGHLIGHTS

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





HIGHLIGHTS

PROJECT GREEN BLOC

neighbourhoods working to cut eco-footprint GREENEST CITY FUND CITYSTUDIO PROJECTS

relaunched for 2017; Umbrella Taxi, Teatalk, upcycling with Food Recovery Map, social impact 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

EENEST

OLIVE

HIGHLIGHTS

GREEN OPERATIONS PROGRESS GHGs water



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 vehicle km driven per capita

new building GHGs waste to Iandfill and incinerator food assets

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

