



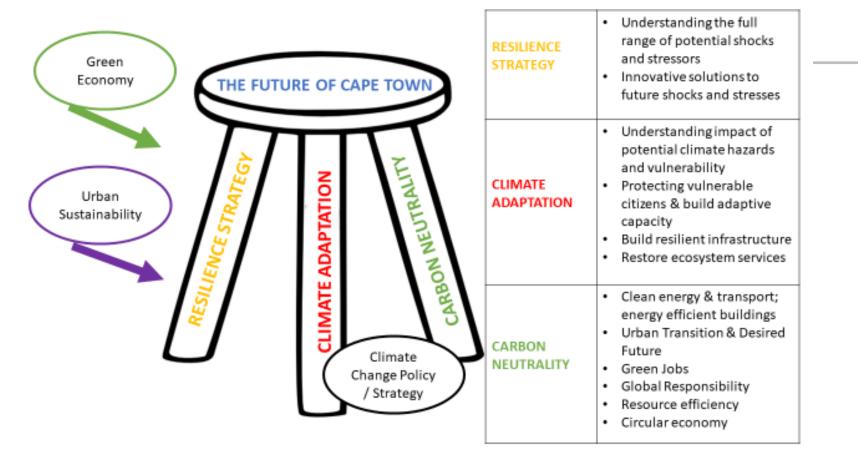
TRANSFORMING THE CITY THROUGH CLIMATE SMART DEVELOPMENT

LESLEY SIBANDA

Public Information session on the C40 Reinventing Cities Competition

CAPE TOWN'S LOWER CARBON JOURNEY







CARBON NEUTRAL CITY-WIDE 2050...



Paris Agreement Compatible Climate Action Plan



Develop pathway to deliver emissions neutrality by 2050 and set an ambitious interim target.

ADAPTATION

Improve city resilience now and in future climate change scenarios.

Detail social, environmental and economic benefits and improve equitable distribution.





How do we do it?



Focused acceleration:

A strategic approach to climate action in cities to 2030



Approximate share of C40 cities emissions

60%

30%

Opportunity

Centralized renewables³ Distributed renewables³

New build standards

Lighting upgrades

Building envelope retrofits HVAC and water heating

Transit-oriented development

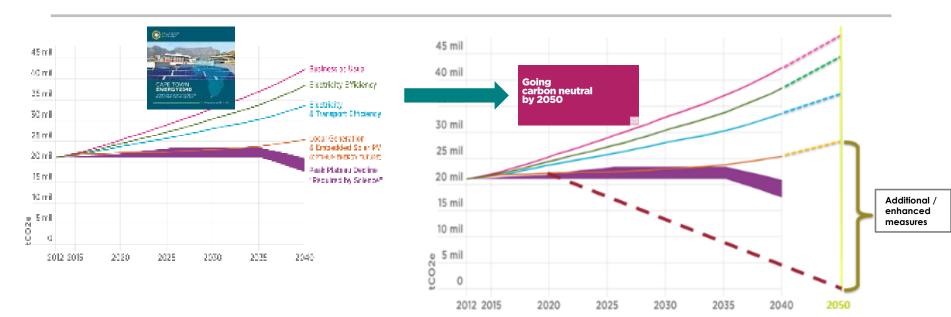
Next-generation vehicles (shared, connected EV-AVs)

Commercial freight

Average range of 2030 emissions reduction potential across city types,¹ % of 2030 target²



Shifting gears: from Energy2040 to Carbon Neutral 2050



This ambitious target requires a **pathway** and **action plan** by **2020**

Extended planning horizon

CITY OF CAPE TOWN ISIXEKO SASEKAPA STAD KAAPSTAD Deadline 2020 Climate Action Planning in Africa programme

Carbon neutral CAP









CARBON NEUTRAL NEW BUILD 2030



BACKGROUND



SOUTH AFRICA TAKES A SEAT AT THE TABLE

Net Zero Carbon Buildings Declaration (first public announcement August 2018):

ensuring that new buildings operate at net zero carbon by 2030; additionally pledged to ensure all buildings in the cities, old or new, will meet net-zero carbon standards by 2050.

SAN FRANCISCO S PORTLAND PARIS TOKYO S NEW YORK VANCOUVER & WASHINGTON D.C SANTA MONICA MON **ZLOS JOHANNESBURG** STOCKHOLM NEWBURYPORT

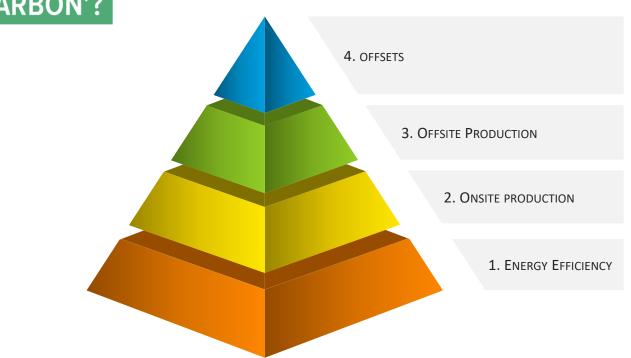
> Chapter 5 objective: Zero emission building standards by 2030

BUSINESS UNUSUAL

WHAT IS 'NET ZERO CARBON'?

"A HIGHLY ENERGY EFFICIENT BUILDING WITH ALL REMAINING OPERATIONAL ENERGY USE FROM RENEWABLE ENERGY, PREFERABLY ON-SITE BUT ALSO OFF-SITE PRODUCTION, TO ACHIEVE NET ZERO CARBON EMISSION ANNUALLY IN OPERATION".

Word Green Building Council



SUPPORTING NATIONAL GOALS



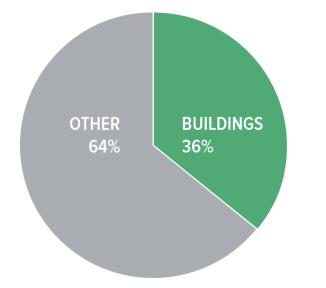


C40 CITIES

BUILDINGS ARE KEY

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A RAPIDLY-INCREASING AND URBANISING POPULATION MEANS THAT SOUTH AFRICAN CITIES ARE ONLY 'HALF-FORMED'.

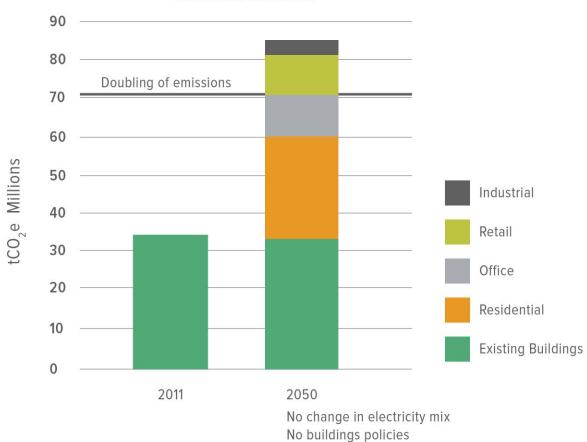


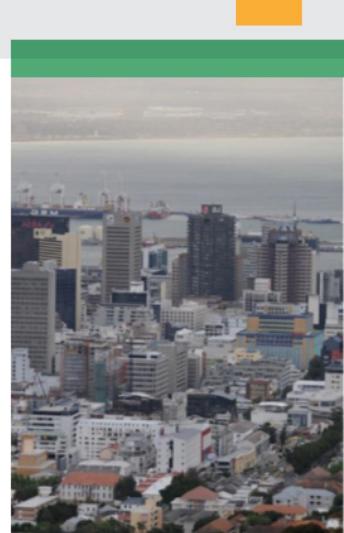
AVERAGE GREEN HOUSE GAS EMISSIONS OF A SOUTH AFRICAN METRO



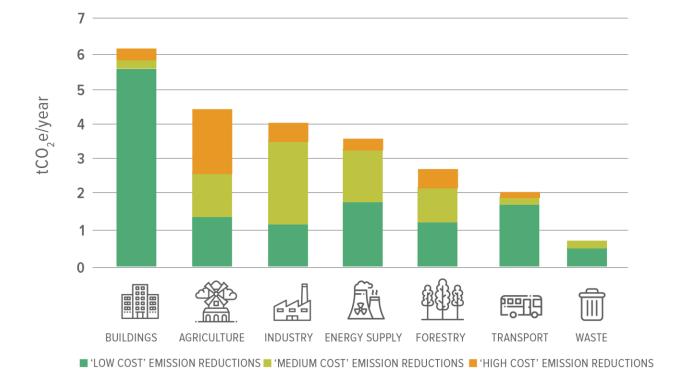
THE COST OF INACTION

BUILDINGS EMISSIONS





BUILDING EFFICIENCY IS ONE OF THE MOST AFFORDABLE WAYS TO CUT EMISSIONS



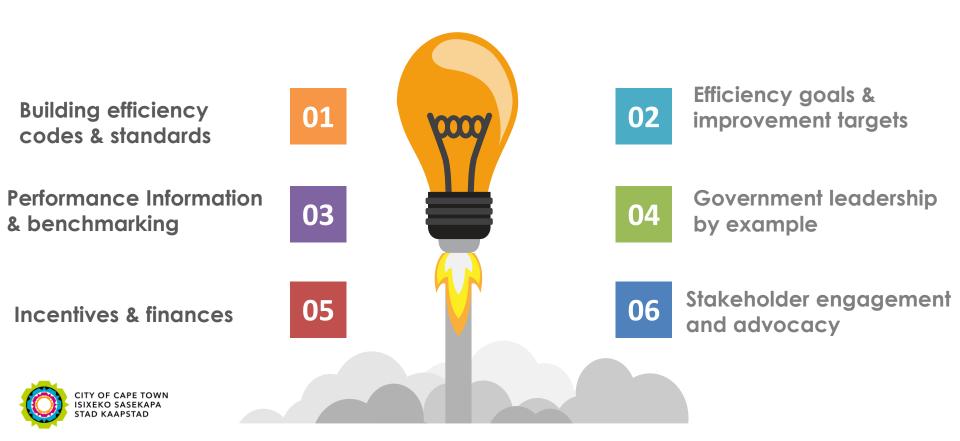
wri.org/buildingefficiency

Source: https://www.wri.org/blog/2016/05/4-surprising-ways-energy-efficient-buildings-benefit-cities



full report: http://publications.wri.org/buildingefficiency/#c2

Actions required to achieve NZC buildings





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Thank You

Making progress possible. Together.