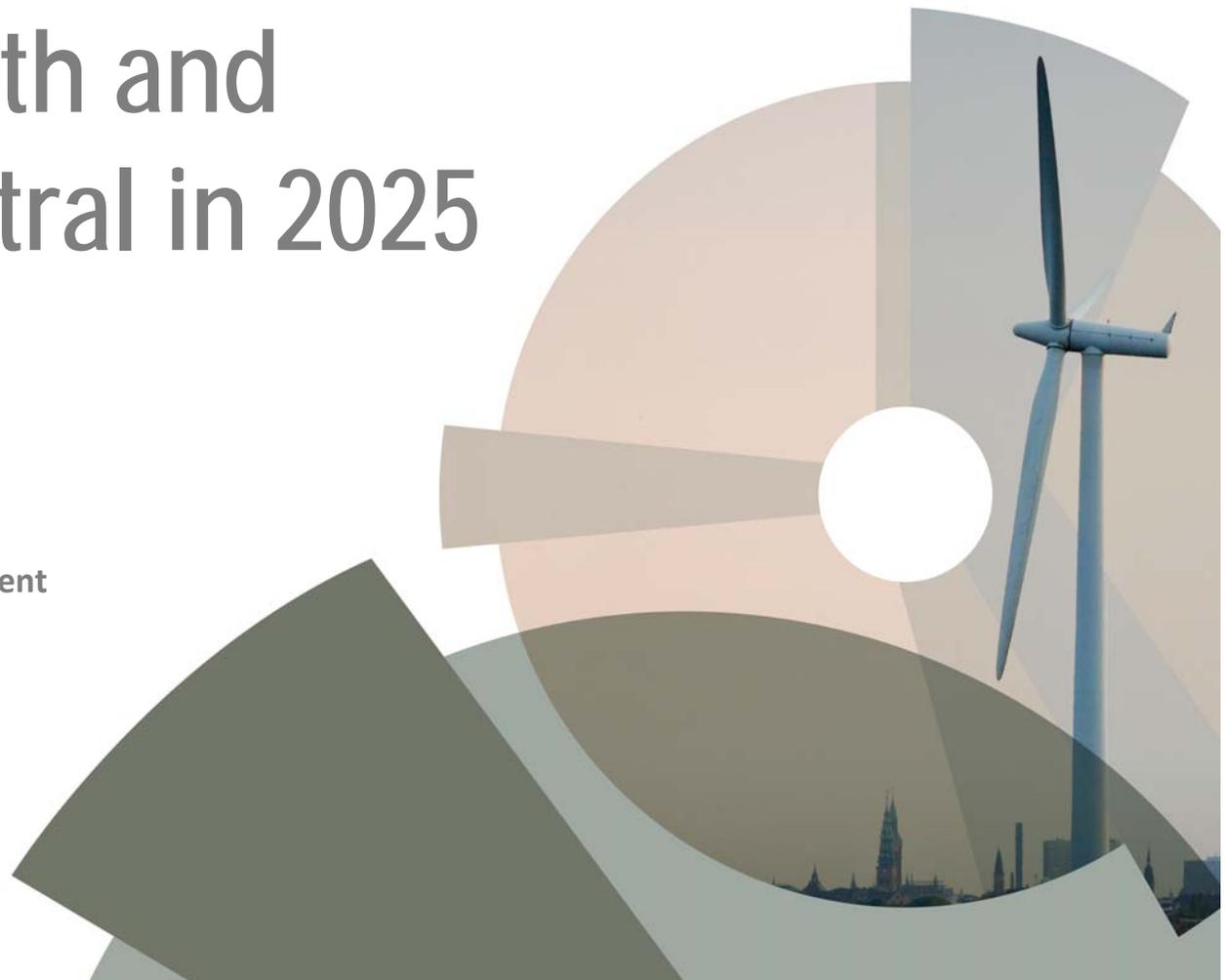


Copenhagen Green Growth and Carbon Neutral in 2025

Hans Christian Karsten
Head, Urban Environment Department
City of Copenhagen

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Facts about Copenhagen

Capital of Denmark: 88,3 km²

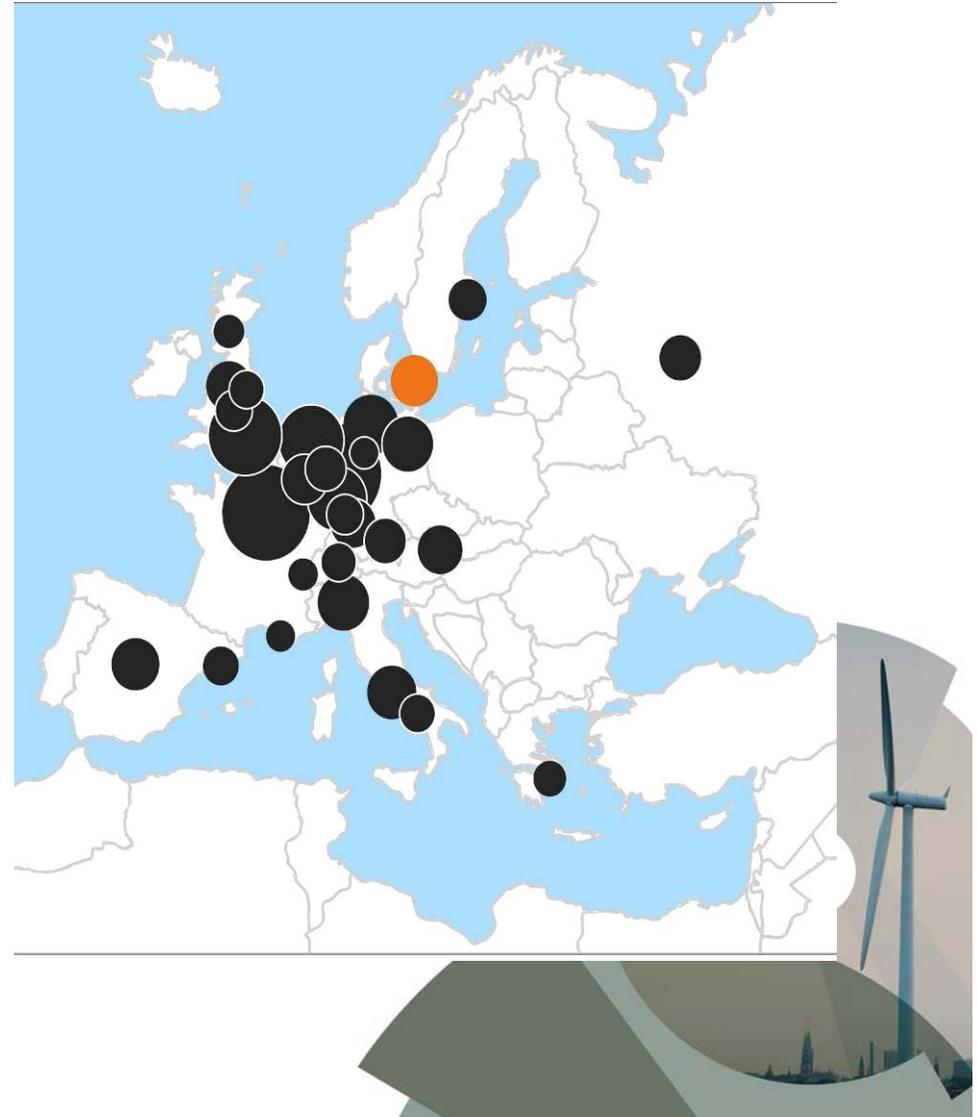
Inhabitants: 530.000
- 640.000 in 2025

Households: 291.000
(1,7 person/household)

Living in apartments: 92%

24.000 companies, 326.000 workplaces

Greater Copenhagen 1.8 mio. inhabitants
Oresund Region 2.4 mio. inhabitants



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Why Green Growth?

- *Our overall path in short*

A greener Copenhagen is better equipped for the future

- Cities have a capacity for action that national states often lack
- World Market for green solutions and innovation
- Development and testing of new solutions (Green Laboratory)
- Platform for Partnerships - research, private and public stakeholders

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What?

Climate Strategy and Goals

CO₂-neutral by 2025

Copenhagen is CO₂-neutral when...
Copenhagen's net CO₂-emission is zero

That is to say, when...
Copenhagen has reduced its CO₂-emission to a minimum
- and reduced the remaining volume of CO₂ with initiatives
out of town

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How?

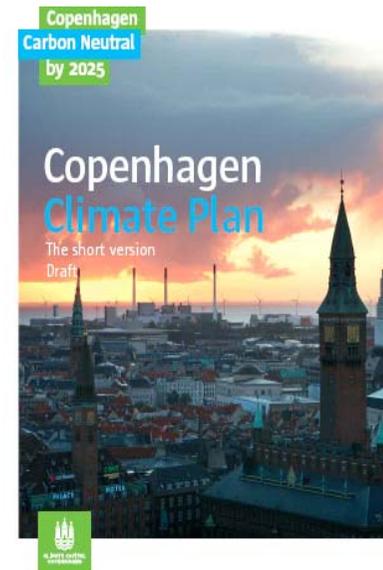
Copenhagen Climate Plan

**2015 20 % CO₂-
reduction**



**2025 Carbon Neutral
Copenhagen**

- » Unanimously approved August 2009 by the City Council
- » 50 initiatives in 6 focus areas
- » Based on technical reports
- » An integrated approach

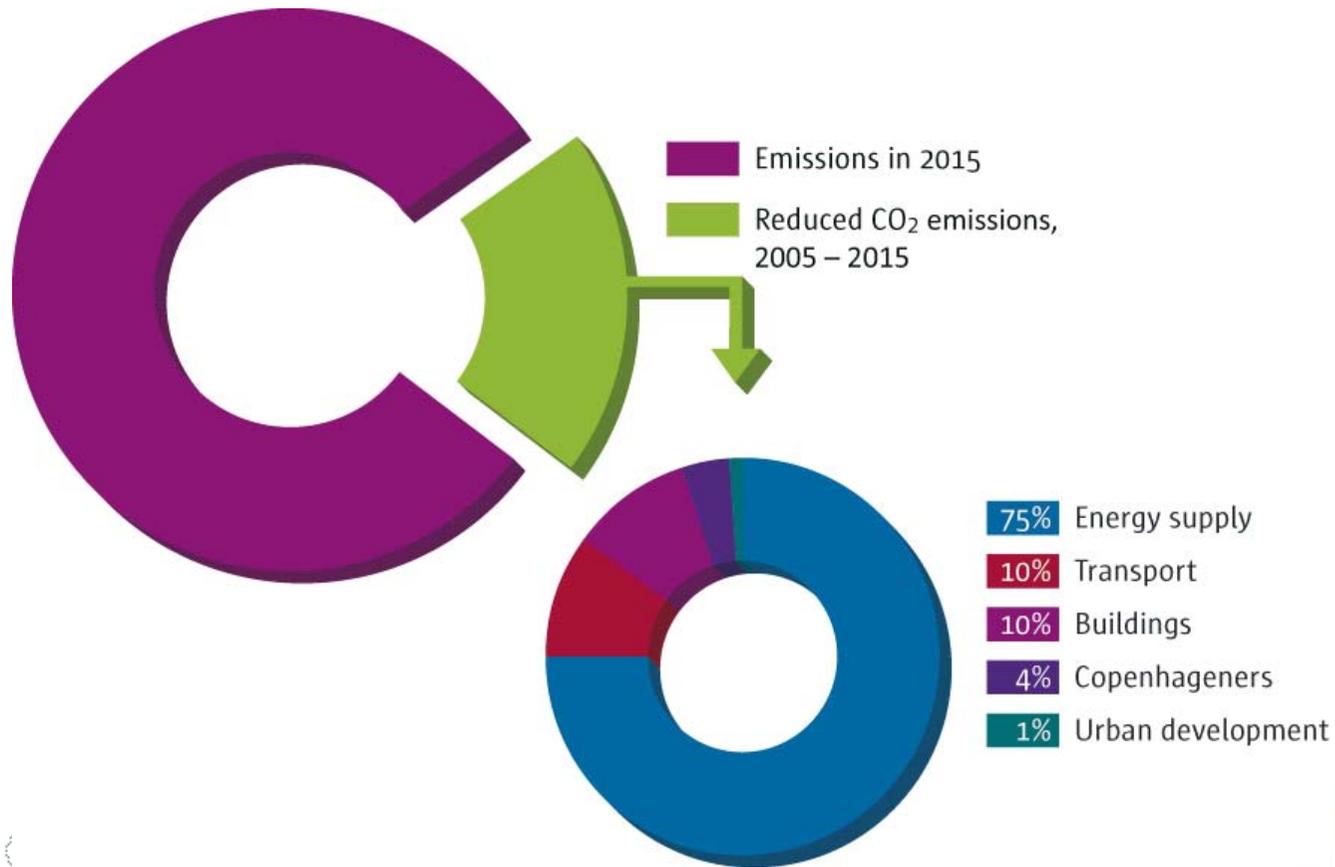


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20% reduction 2005 - 2015

Distribution of the CO₂ reduction:



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2010-2015: 50 initiatives



2012-2025: New Climate Action Plan

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A good starting point (2009)

- 37 % choose the bike to work or education
- 98 % of all heating is covered by district heating
- 35 % of the heating is produced by CO₂-neutrals
- 13 % of electricity-consumption from windturbines
- CO₂ reduced by 20 % in the period 1990-2005
- Copenhageners: 30% below average, national CO₂-emissions (2006)
- GDP has raised 66 % during the same period



Green Energy Production

Case: Amager Power Plant

Strategy: From Coal to Biomass

Amager Power Plant blok 1

= CO₂-reduction: appr. 130.000 tons in 2010

Before 2015 additional reduction of 245.000 tons

»Wood chips and straw



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Green Energy Supply Case: Wind turbines

Strategy: More wind-power

Citizens can invest in wind turbines

Minimum 20 % of wind turbine electricity will be sold as shares in 2012

14 wind turbines

= 50.000 tons reduction of CO₂

»

More than 100 wind turbines by 2025

= 262.000 tons reduction of CO₂ in 2015 and
650.000 tons in 2025



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Green Mobility

CASE: Electric & Hydrogen cars

Status:

8 hydrogen & 25 electric hybrid cars
1 hydrogen station

Next move 2011-2012:

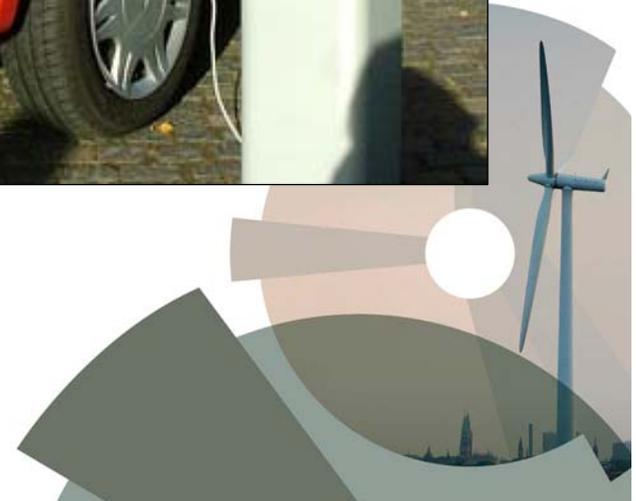
Start-up: Regional Hydrogen and
fuel cell partnership.
Acquire 5-10 of the next-generation hydrogen
car
Buy 50 electric vehicles

In 2012 we will:

Buy 200 electric vehicles



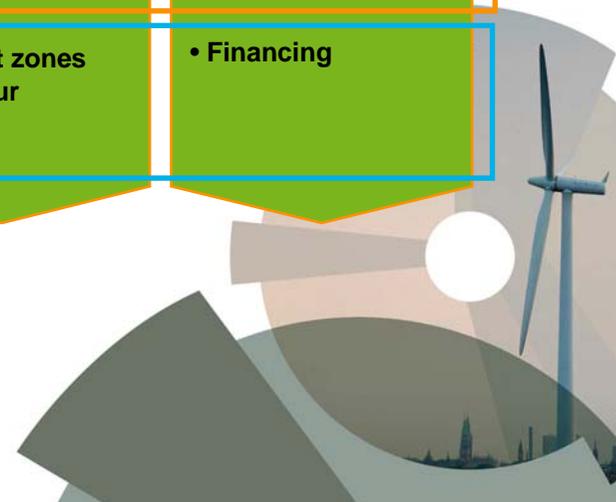
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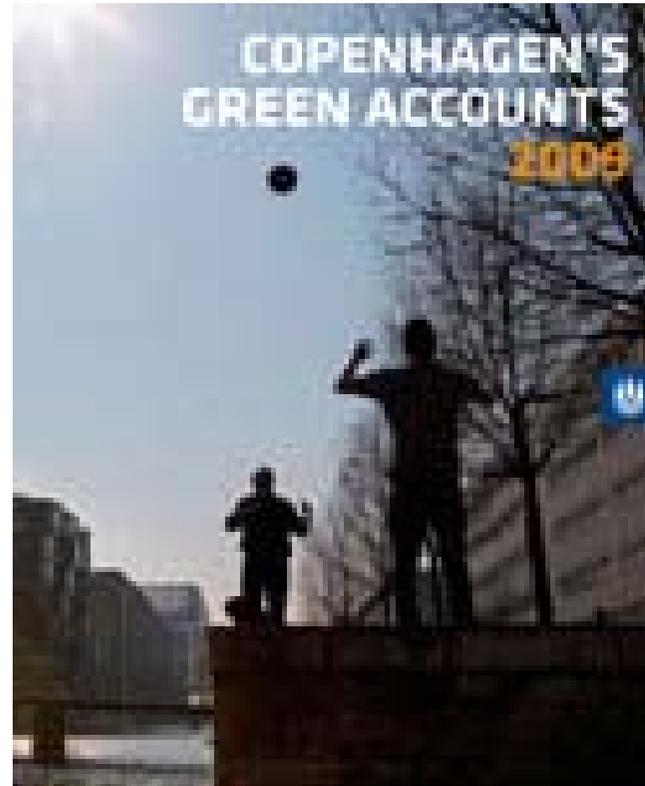
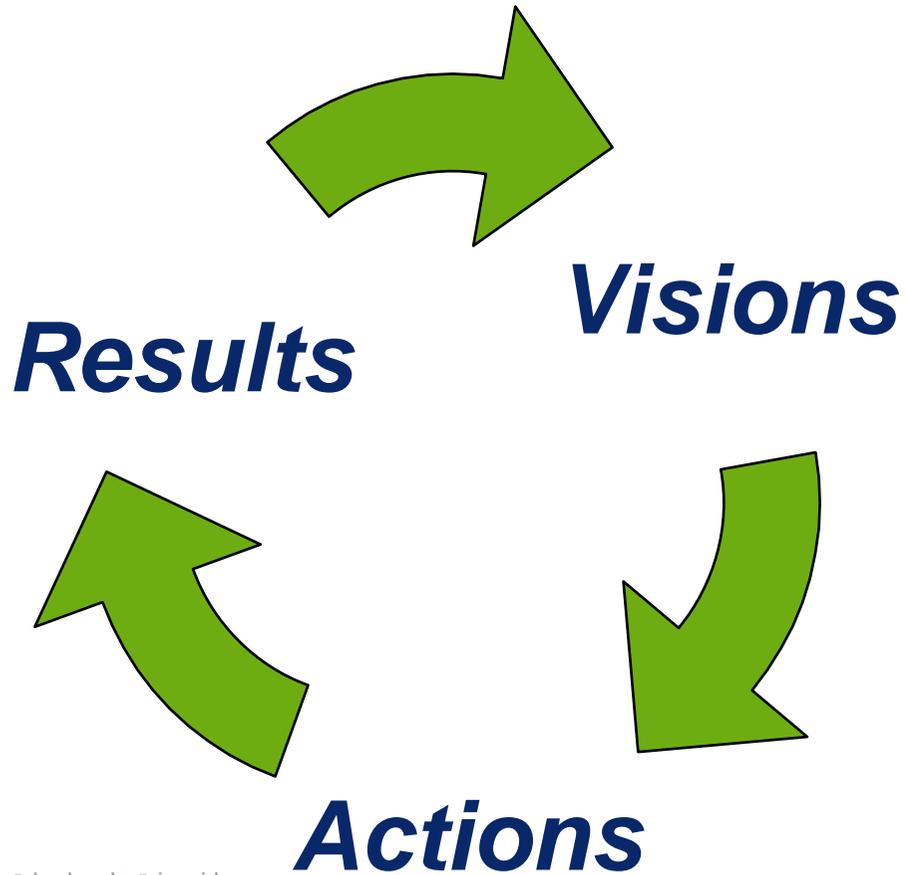
How? CPH 2025 Climate Action Plan

Green Growth and Climate				
	Green Energy Consumption	Green Energy Supply	Green Mobility	Climate Adaption
Existing initiatives	<ul style="list-style-type: none"> • Retrofitting of buildings • Low energy-buildings • Smart Grid 	<ul style="list-style-type: none"> • Windturbines • Sustainable energy supply (Nordhavn) 	<ul style="list-style-type: none"> • City of Bikes (50%) • Hydrogen cars • Electrical cars 	
New initiatives	<ul style="list-style-type: none"> • Water 	<ul style="list-style-type: none"> • Biomass in Power Plants • Waste • Geothermal • Solar 	<ul style="list-style-type: none"> • New fuels • Public transport and taxi • Freight • Citylogistic and IT 	<ul style="list-style-type: none"> • Pilot projects for climate adaption
Crosscutting initiatives & framework conditions	<ul style="list-style-type: none"> • Copenhagen Municipality as a Green Company • Behaviour 	<ul style="list-style-type: none"> • Integrated energysystems 	<ul style="list-style-type: none"> • Payment zones • Behaviour 	<ul style="list-style-type: none"> • Financing

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Climate = Long Term Political Commitment



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