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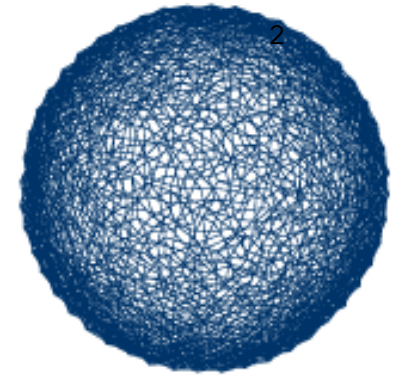
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CPH2025 Climate Plan

How Is Copenhagen Reaching the Ambitious Target?



Adoption of the carbon neutrality target



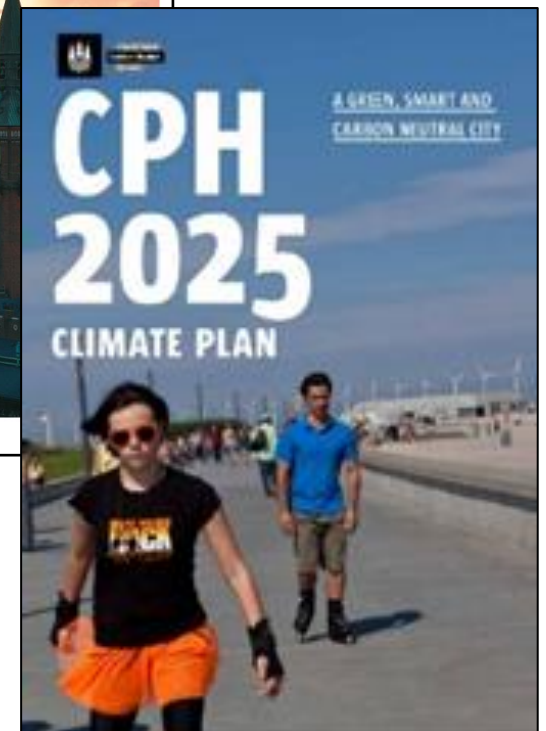
The plan was adopted in the lead-up to the 15th Conference of the Parties to the UNFCCC which was held in Copenhagen in 2009.

*“In 2025 Copenhagen will become **the first carbon neutral capital in the world**, and businesses and universities in the city will be leading in developing green solutions that will create jobs and green growth.”*

- CPH2025 Climate Plan politically approved in 2012



COP15
COPENHAGEN
UNITED NATIONS CLIMATE CHANGE CONFERENCE 2009



Plans towards 2025 and perspective for 2050



2012



2014



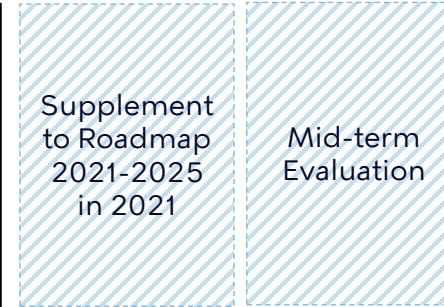
2016



2018



2020



2021

2023

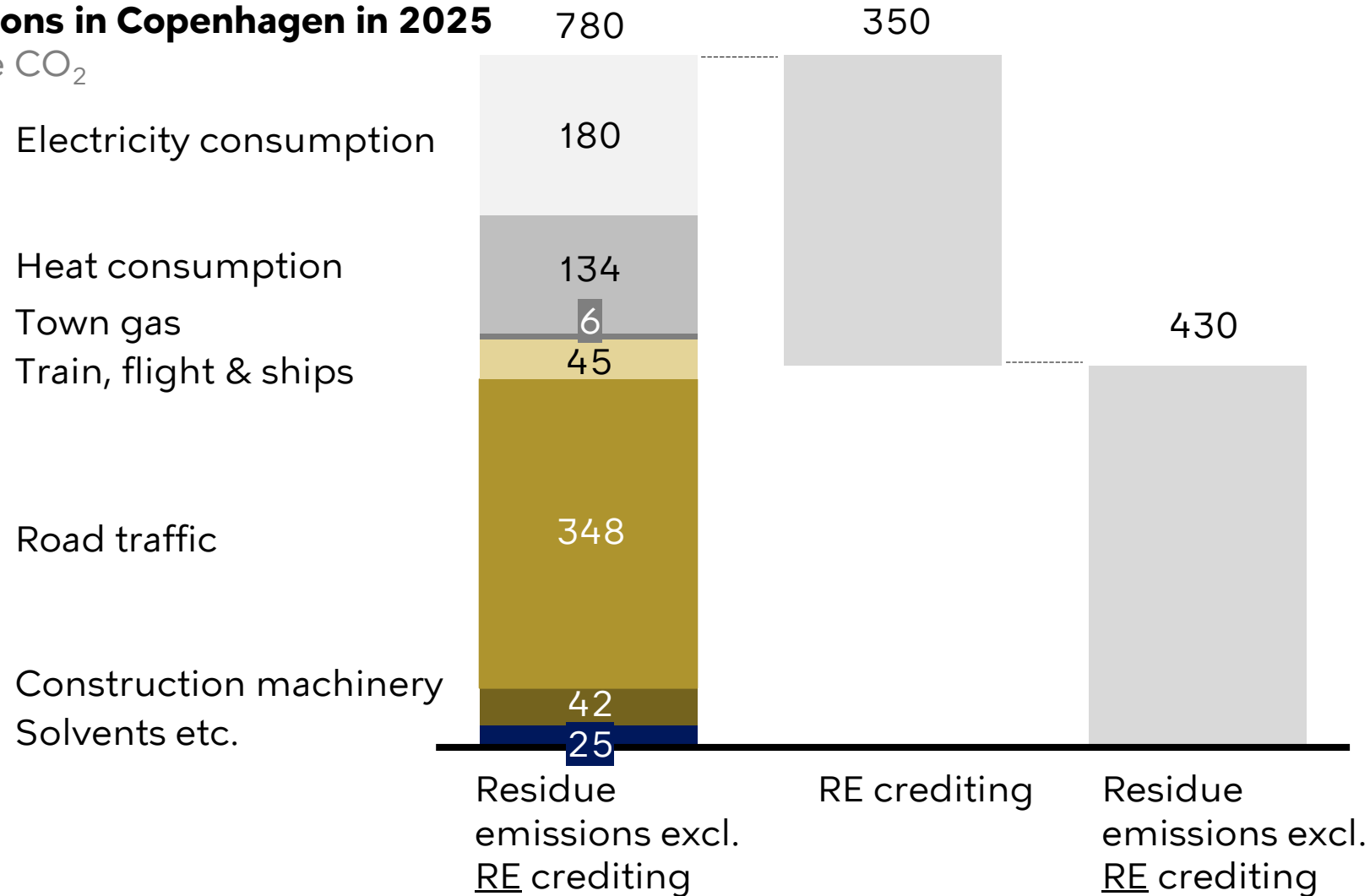
Perspective 2050:

"In 2050 Copenhagen will be fossil-free with clean air, without waste and without noise from traffic"

Residual emissions of 430,000 tonne of CO₂ in 2025 incl. RE-crediting

CO₂-emissions in Copenhagen in 2025

1,000 tonne CO₂



Main initiatives in Roadmap 2021-2025

Energy Consumption

- Focus on efficient operations in **Energy Leap**, social housing associations and generally.
- Continued actions in **refurbishment and new build**
- PV action plan
- Initiatives on local area plans and on conversion of oil-heating.

Energy Production

- Focus on peak load production and heat pumps for district heating
- Transformation of all other utilities to CO₂-neutral (town gas, waste-water processing and district cooling)
- Continue efforts on **wind energy**
- Establish **biogas** and waste-sorting facilities.
- Increased waste-sorting



Increased actions on wind energy and carbon capture

Mobility

- Transformation of **busses**
- Shore power to cruise ships
- Maritime environmental zone in Copenhagen's inner basin
- Increased actions on conversion of **non-road machinery**



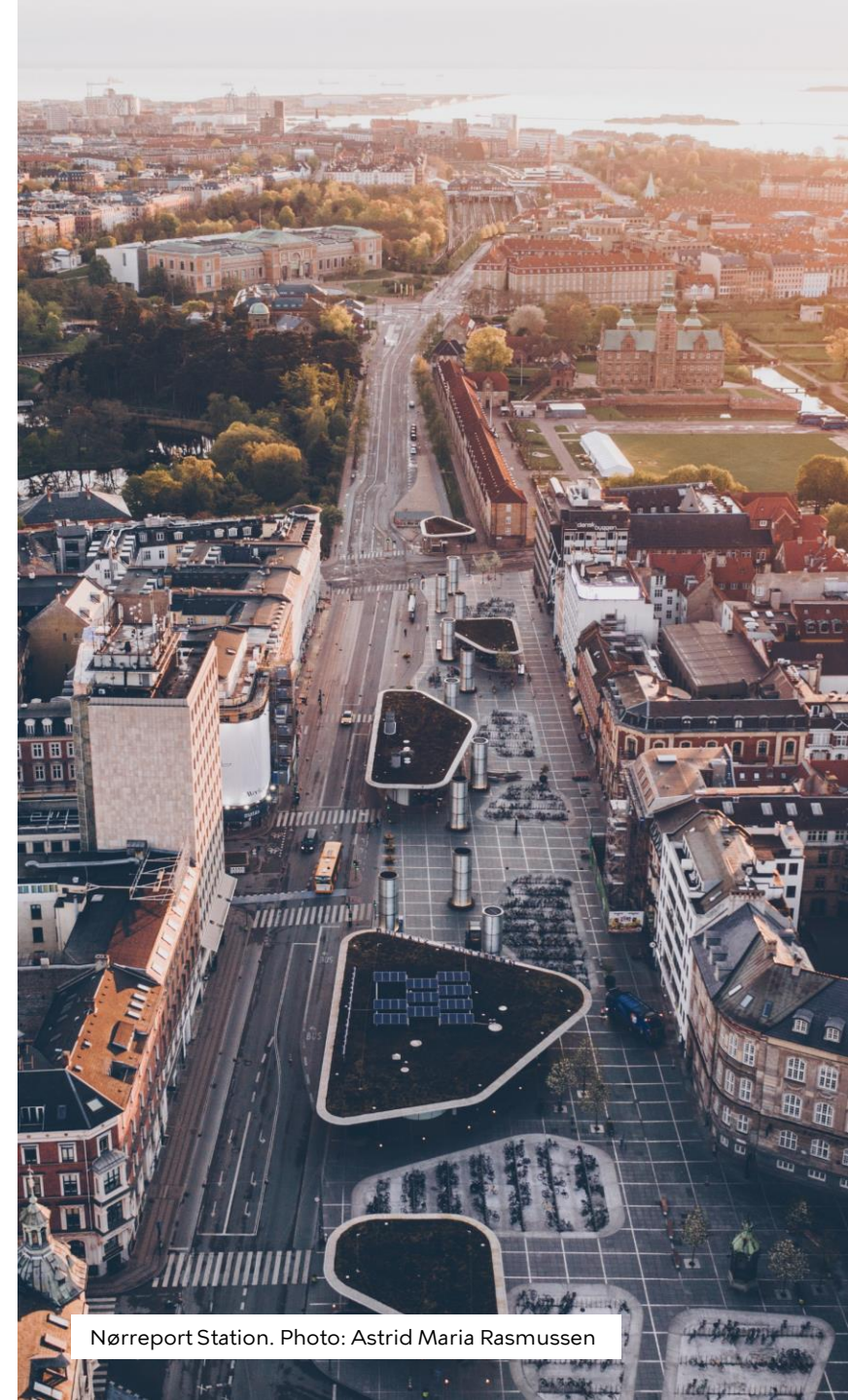
Actions on road transport

City administration initiatives

- **Reduction of energy consumption** in service buildings and by streetlights
- Conversion of the city's **vehicles** and tightening of requirements to supplier transport
- Increased environmental and climate requirements for the city's procurement
- Climate Ambassador Training Programme and 'The Sustainable City'-showroom
- Initiatives on afforestation

Roadmap 2021-2025

- The third and last roadmap in CPH2025 Climate Plan
- Contains 47 initiatives across four pillars
- The initiatives in Roadmap 2021-2025 is expected to contribute with 200,000 tonne CO₂ reductions in 2025
- In the second half of 2021 a supplement will be added to Roadmap 2021-2025 with additional initiatives on CO₂ reduction



Nørreport Station. Photo: Astrid Maria Rasmussen

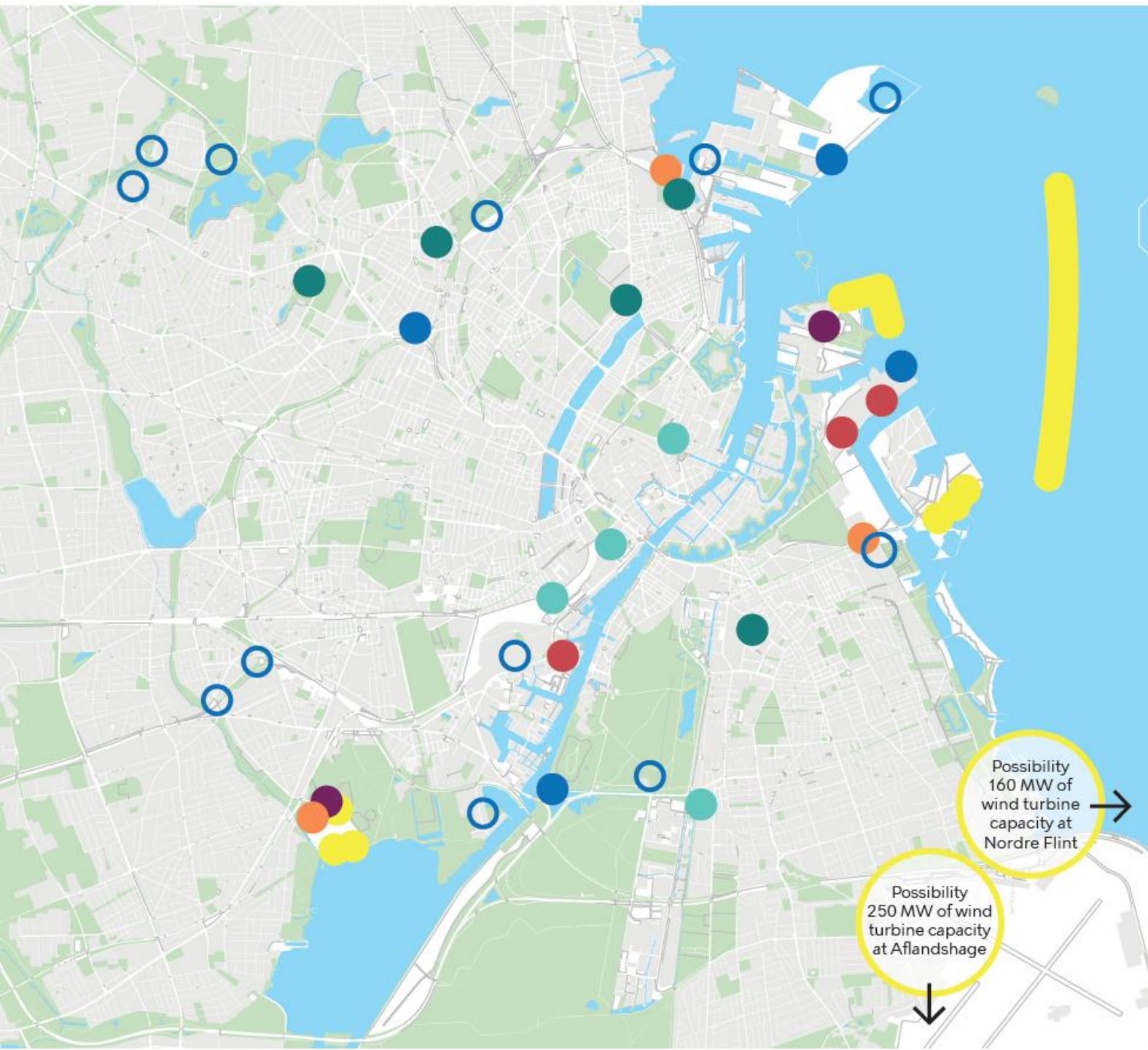
Supplement to Roadmap 2021-2025

- It will be politically processed in the second half of 2021, and it will contain initiatives that will reduce CO₂-emission by 430,000 tonnes at least.
- Central initiatives in the supplement:
 - Analyses on mobility with a possibility for reducing CO₂-emissions from road traffic in Copenhagen by 50-175,000 tonnes CO₂.
 - Establishment of Carbon Capture facility on ARC with a possibility to capture 500,000 tonnes CO₂.
 - Establishment of two offshore wind turbines farms in Øresund (Nordre Flint & Aflandshage) with a possibility to erect 400MW wind turbines.
 - A possibility to raise the level of ambition on initiatives related to energy efficiency and circular economy.



Sustainable Living

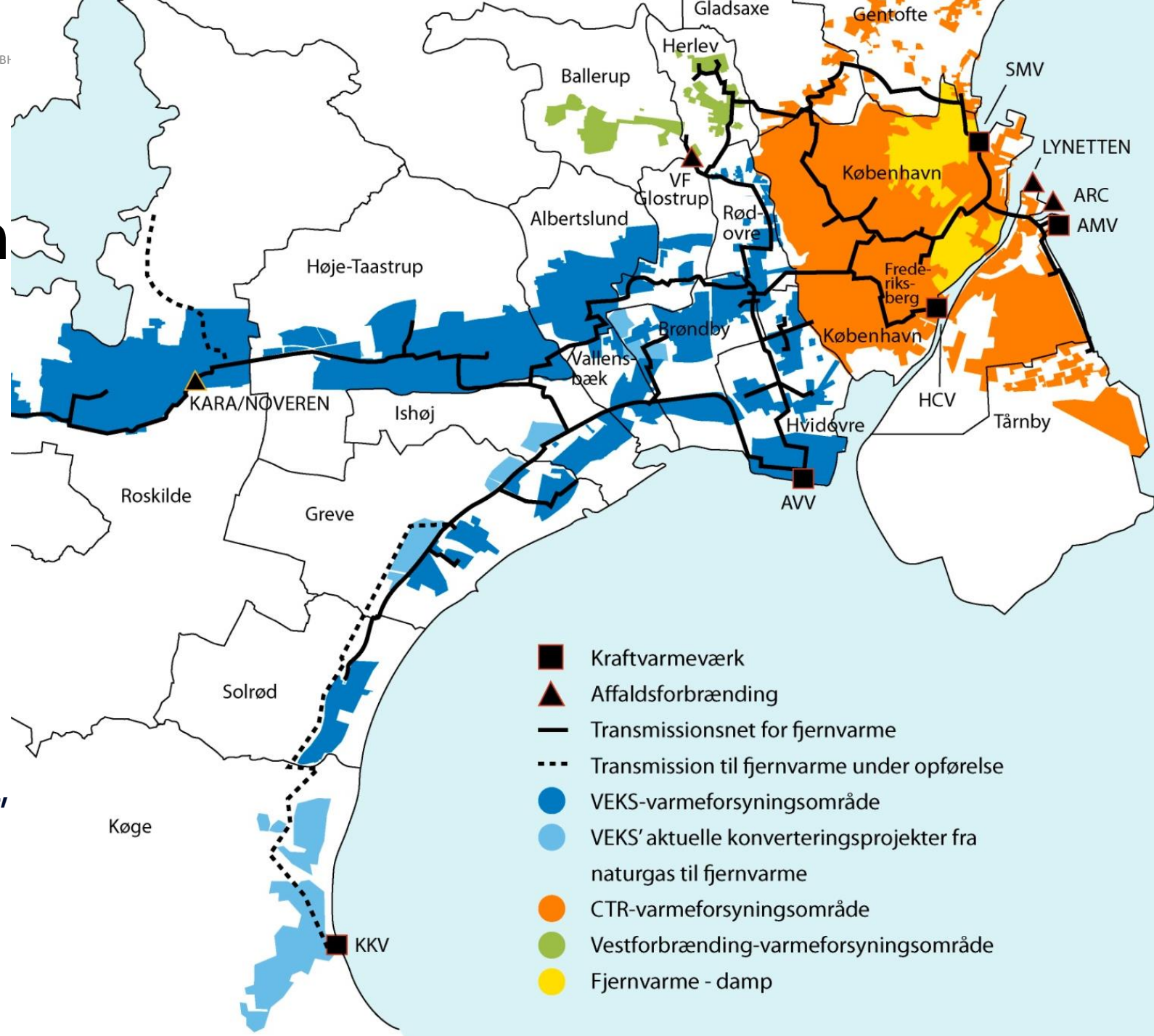
Energy Production in CPH



- Existing heat pumps/geothermal energy
- Potential heat pumps/geothermal energy
- Waste-water treatment facilities
- Electricity production (wind turbines and PV modules)
- Heating and power plants
- Heating plants
- District cooling plants
- Town gas plants

District heating in the Capital Region

- Covers 18 municipalities - in 4 integrated systems
- District heating to more than one million people
- Covers 20% of heat consumption in Denmark
- Approximately 80% CO₂-neutral, that last 20% stems from plastic and peak load production






The Bicycle Snake

More than 17,500 bikers on weekdays

The Harbour Circle

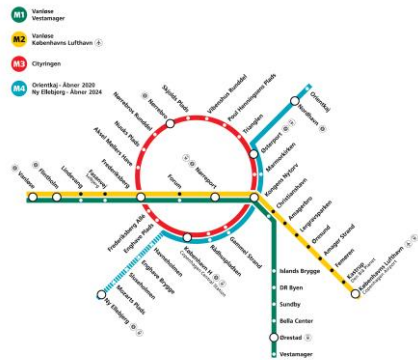


- 16 kilometer long route for biking and walking
- 75% increase in journeys on bike
- 200% increase in journeys on foot
- Almost 40% increase in people taking a stay around the route

Green public transport

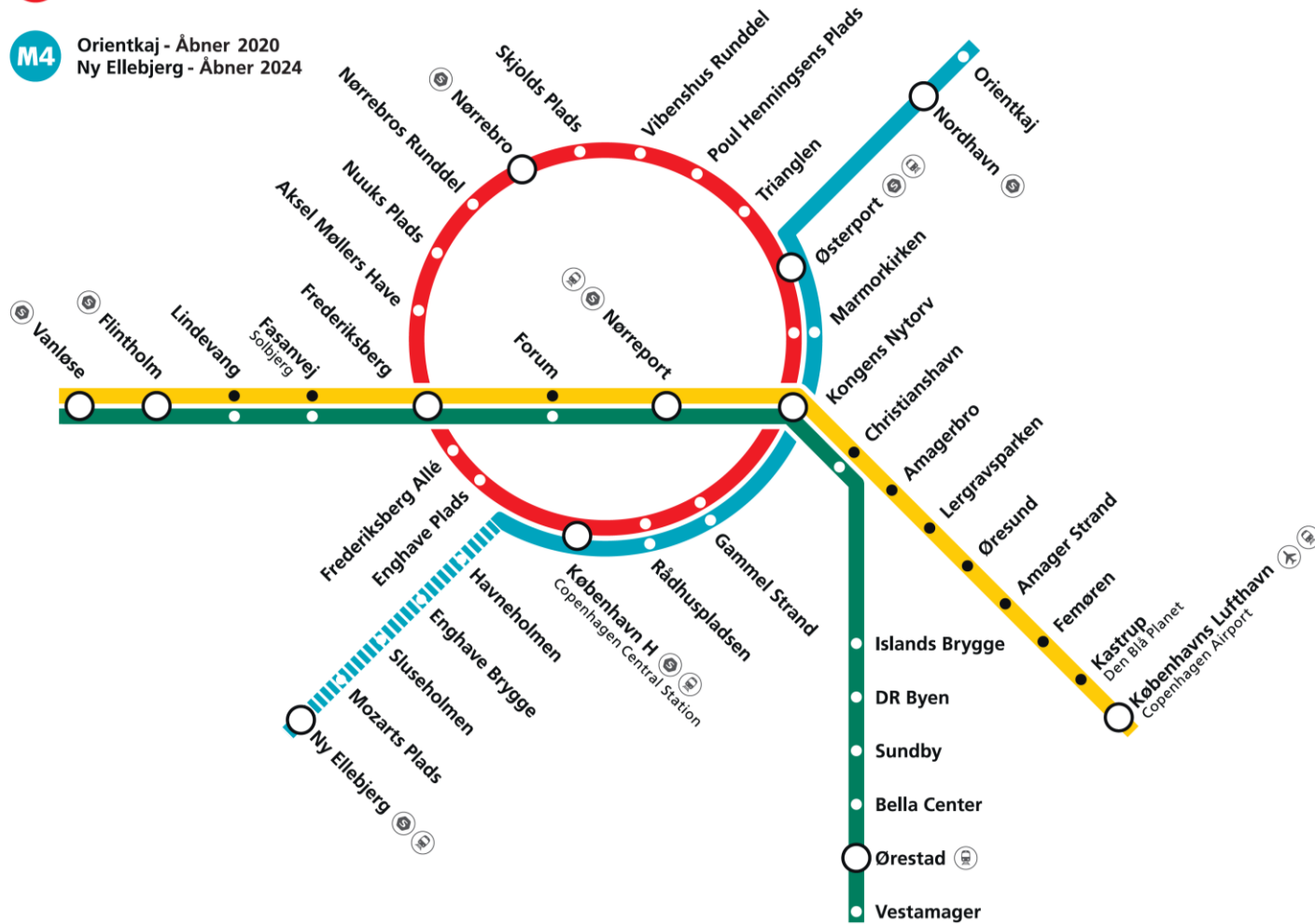


New metro, buses and harbour buses on biogas and electricity



- M1** Vanløse Vestamager
- M2** Vanløse Københavns Lufthavn ✈️
- M3** Cityringen
- M4** Orientkaj - Åbner 2020 Ny Ellebjerg - Åbner 2024

The metro



A row of recycling bins is shown in an outdoor setting. The central bin is grey and has a white label that reads "HARD PLAST". To its left is a brown bin, and to its right is a yellow bin. The text "70% recycling of household and commercial waste in 2024" is overlaid in large white font on the left side of the image.

**70%
recycling of household
and commercial waste in
2024**

Partnerships

A night street scene in a city. The street is illuminated by streetlights and the headlights of a bus and cars. Buildings line both sides of the street, with some windows lit up. Pedestrians are visible on the sidewalks. The word "Partnerships" is overlaid in large white text across the center of the image.

Sidehoved

Copenhagen Hill

Waste to Energy & Carbon Capture
Capturing up to 500.000 tons of CO₂



District cooling

Purpose

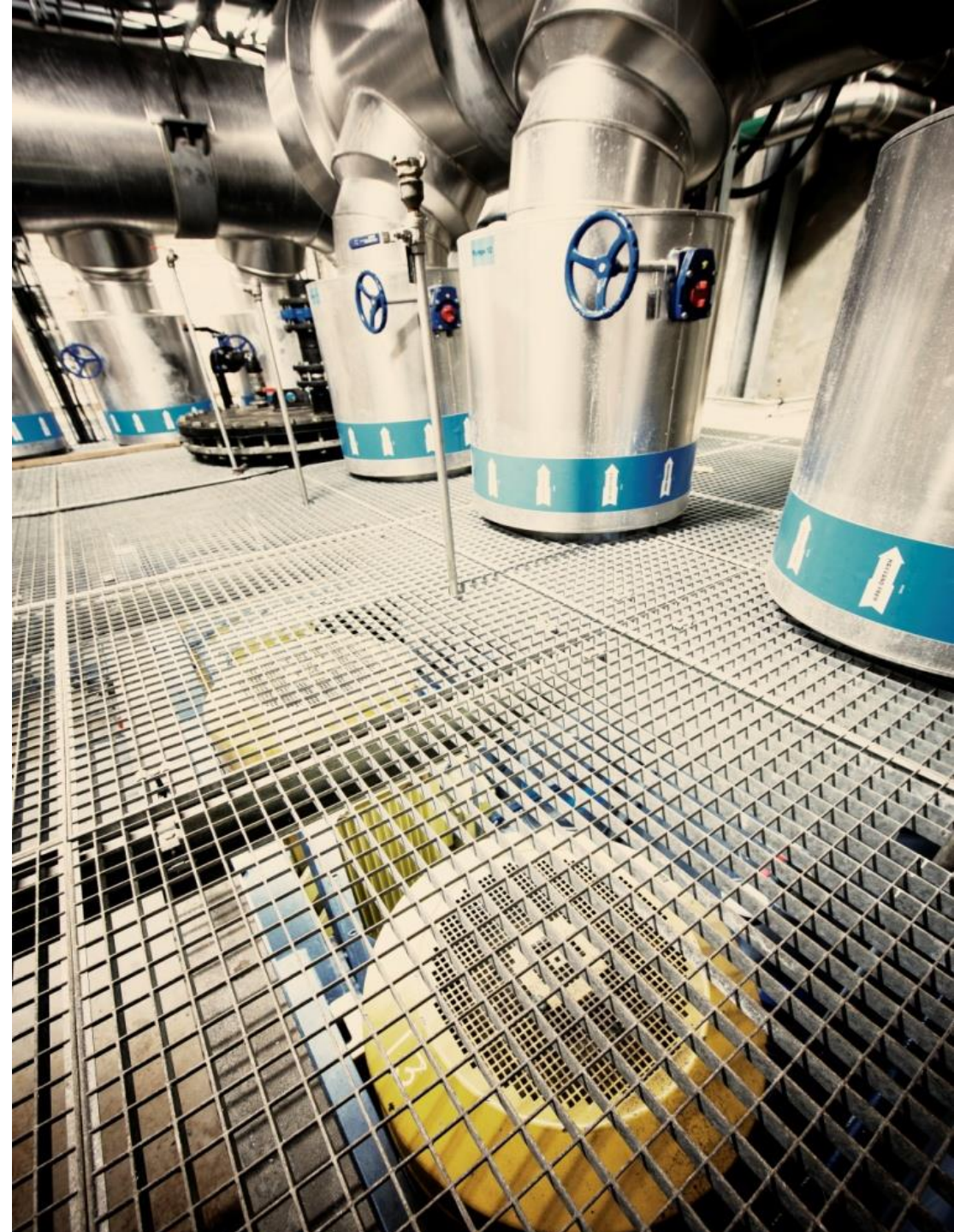
- Reduce CO₂ emissions from district cooling
- Partnership with utility and building owners

Actions

- Using seawater as primary cooling resource
- Cooling plants distribute seawater to customers in insulated pipes

Results

- Estimated saving potential of 150 MW from businesses in the city centre
- HOFOR has already signed contracts for 42 MW



Energy Leap

Purpose

- Reduce energy consumption in buildings
- Establish partnership with building owners, developers, organizations

Actions

- Benchmarking, network, knowledge sharing, workshops, communication and target setting
- Focus on active energy management and retrofitting of building

Results

- 43 partners ~20 pct of the building stock in Copenhagen
- 3 % energy reduction annually



Energy Leap - partners:



EnergyLab Nordhavn Hub for innovation



Streetlights

Purpose

- Reduce electricity consumption from streetlights
- Partnership with Citelum

Action

- 20.000 streetlights to LED
- Exchange 8.000 light posts

Results

- 18.000 LED streetlights installed
- 6.800 light poles
- 57 pct. Reduction in electricity consumption



ShareNow

- alternative to owning a car

- **Purpose:** To offer a flexible car-sharing.
- **Actions:** 400 electrical cars, accessible from practical places, with easy registering and payment.
- **Results:** Have to make Copenhagener switch from fossil-cars to electrical alternatives.



Learnings from Copenhagen

- Set an ambitious target and develop the solutions while moving forward
- Citizens, universities, utilities, businesses and building owners want to contribute – cities should facilitate opportunities
- Accept partnerships isn't easy to establish and it takes resources without knowing the specific result
- Use the city as a living lab for future climate solutions
- Have the right internal competences with different expertise's





Thank you