

Toward Zero-Carbon Cities

A new report by the UN's Intergovernmental Panel on Climate Change (IPCC), released 28 February 2022, finds that human-induced climate change is "causing dangerous and widespread disruption." The IPCC specifically highlights cities—home to more than half the world's population—as a large part of the impacts and risks for climate warming, but also as integral to the solution. Copenhagen, Denmark, has concrete plans to achieve carbon neutrality by 2025—setting an example for cities worldwide. (For more on cities' role in climate, see p. 16.)

COPENHAGEN'S CLIMATE PLAN

2005 BASE YEAR: Carbon emissions of **2.3 tonnes** of CO₂ and an expected population growth of **20%** over next decade

CHALLENGE: Combine infrastructural changes with green growth toward carbon neutrality in 2025

ON THE WAY TO NET-ZERO: By 2020, CO₂ emissions reduced by **54%** compared to 2005 base year

HIGHLIGHTS OF PROGRESS & GOALS



Nordhavn rooftop solar panels

Photovoltaic energy

2020: Photovoltaic capacity of **15 MW** installed, primarily on city roofs, generating **>12,000 MWh** of electricity, or **0.5%** of annual consumption

BY 2025: Have **1%** of electricity consumption, or **26,000 MWh**, generated by PV modules

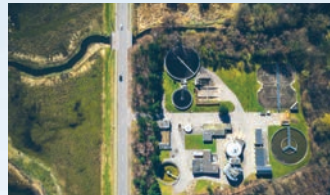


Amager power and waste energy plant

Carbon capture

2020: Final unit at Amager Power Station was converted from coal to biomass—making **>80%** of Copenhagen's district heating carbon neutral

BY 2025: Addition of a carbon capture facility with potential of capturing **500,000 tonnes** of CO₂



Nivå waste water treatment plant

Circular Copenhagen

2020: **25%** of biodegradable waste and **3,700 tonnes** of plastic waste, **23%** of total volume, sorted for recycling

BY 2025: **70%** of household waste and **13,000 tonnes** of plastic waste, **86%** of total volume, sorted for recycling



Inderhavnsbroen pedestrian+cyclist bridge

Greener mobility

2020: Per-capita emissions from road traffic declined **16%**, cycling trips increased to **28%** and **15%** of buses were converted to electricity

BY 2025: **75%** of all trips on foot, by bike or public transport, with **750 km** high-quality routes for cycle pedestrians and **100%** emission-free bus lines

Rooftop solar panels and gardens support a sustainable lifestyle in Nordhavn, Copenhagen, Denmark.

