

Welcome to State of Green

Presenter:

Gry Klitmose Holm, Senior Project Manager, State of Green

Agenda

- 08:30 – 09:00 Welcome and visite to House of Green
- 09:00 – 09:50 Denmark's Green Transition, by State of Green
- 09:50 – 10:00 Short break
- 10:00 – 10:55 Municipality of Copenhagen, by Mäelle Caussarieu
- 10.55 – 11.00 Group photo
- 11:00 Thank you!

Denmark is a small country. We emit 0.1% of the global greenhouse gases

Denmark

0.1%



Denmark is a small country. We emit 0.1% of the global greenhouse gases



By 2030, we will reduce
greenhouse gas emissions by

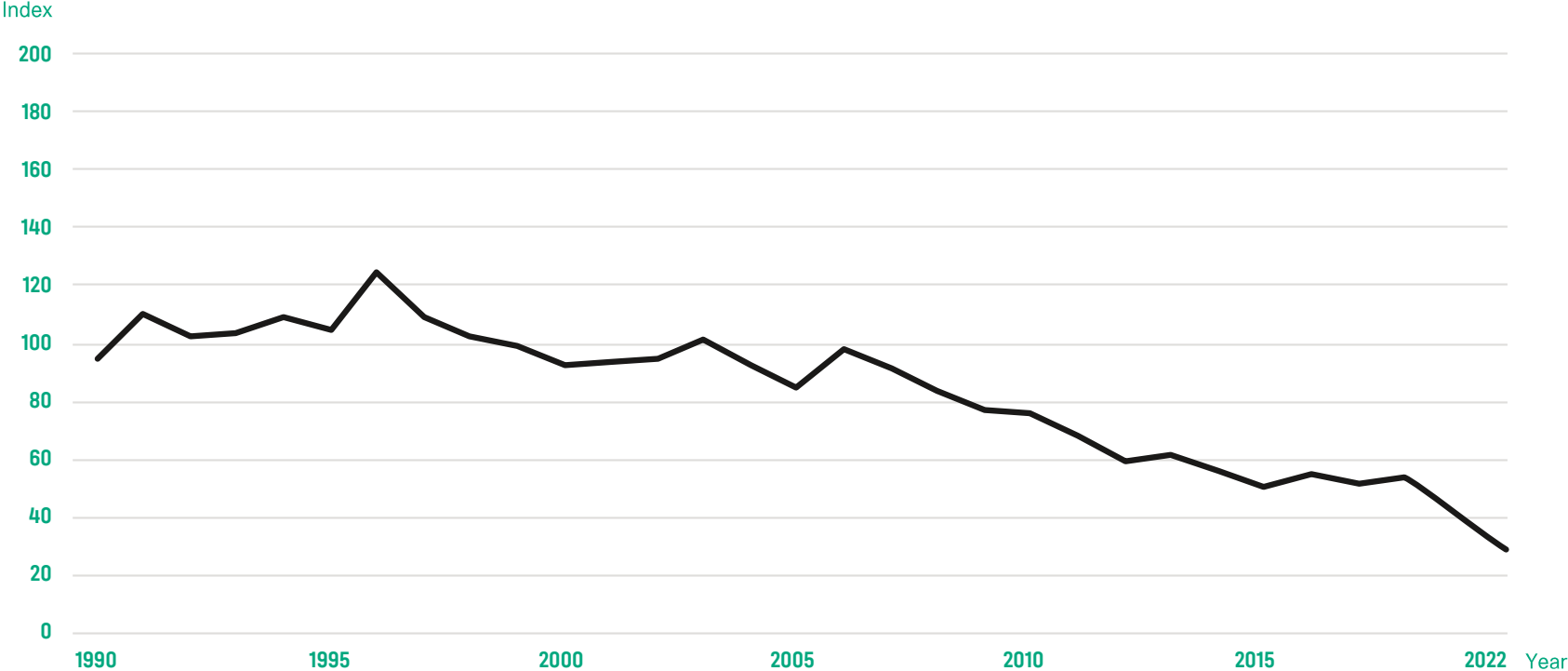
00%

An aerial photograph of a city river at dusk. A yellow boat is moving across the water, leaving a white wake. The city skyline is visible in the background, including a prominent church spire and modern buildings. The sky is a mix of blue and orange. The text 'By 2050, we will reach' is overlaid in white, sans-serif font.

By 2050, we will reach

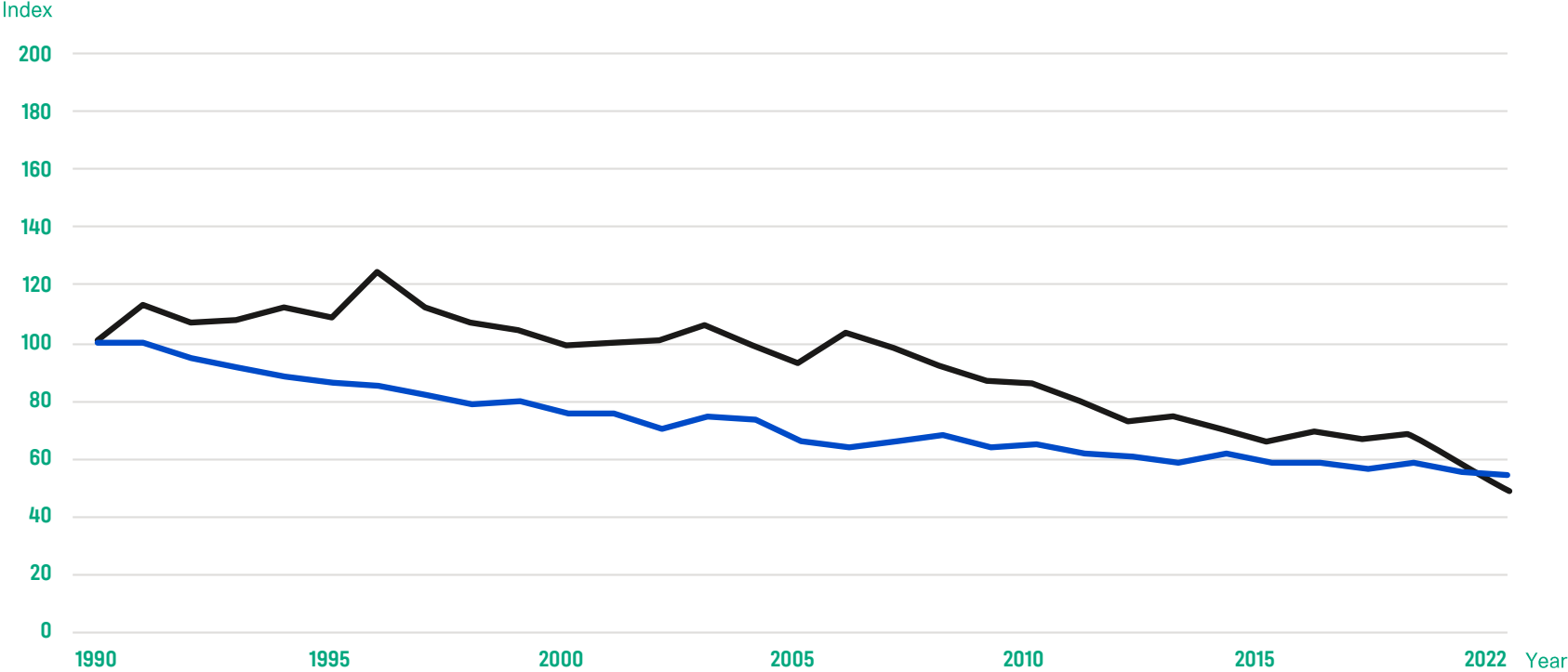
net-zero

Since 1990, we have reduced greenhouse gas emissions by 45%



-45%
CO2e

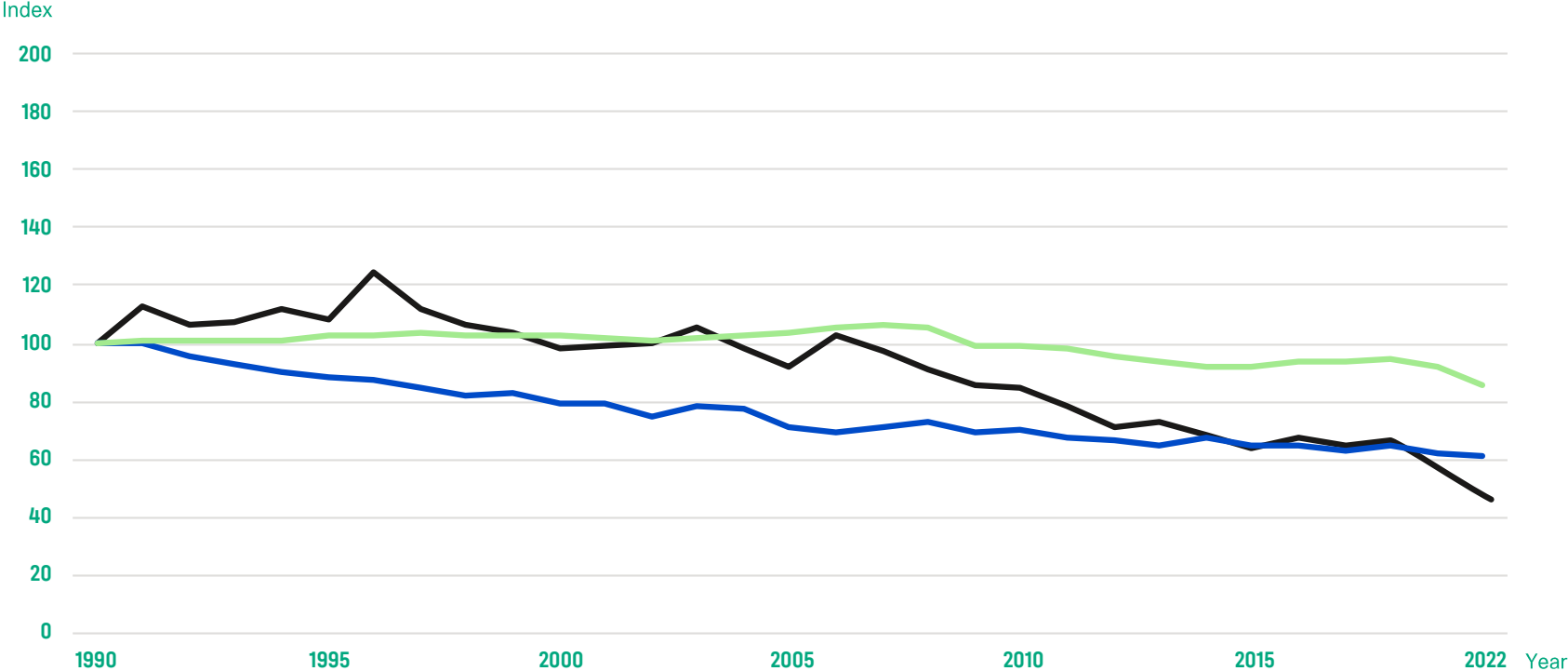
We have reduced our water consumption by 41%



-40%
water consumption

-45%
CO2e

We have reduced our energy consumption by 15%

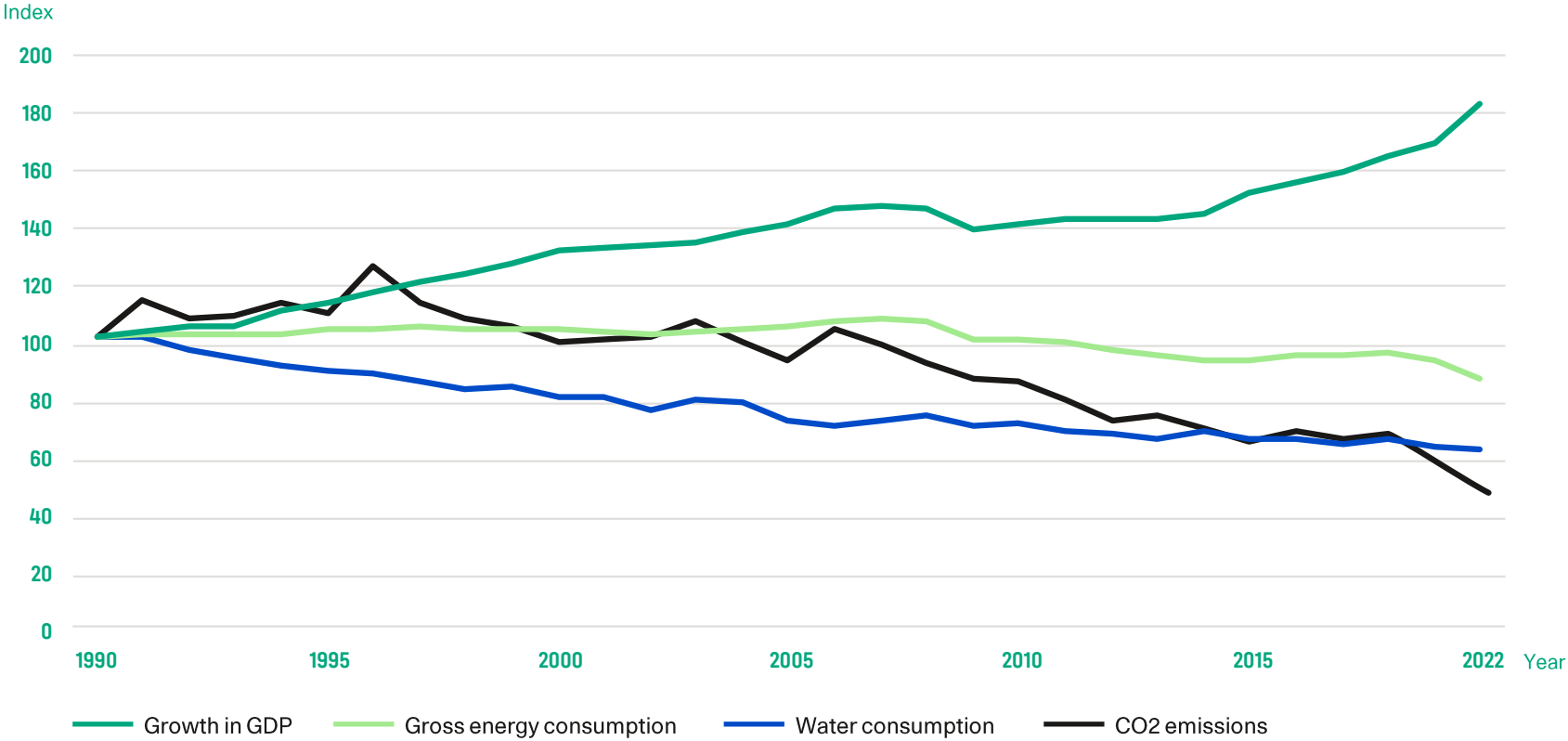


-15%
gross energy consumption

-40%
water consumption

-45%
CO2e

We have increased GDP by 76%



76%

growth in GDP

-15%

gross energy consumption

-40%

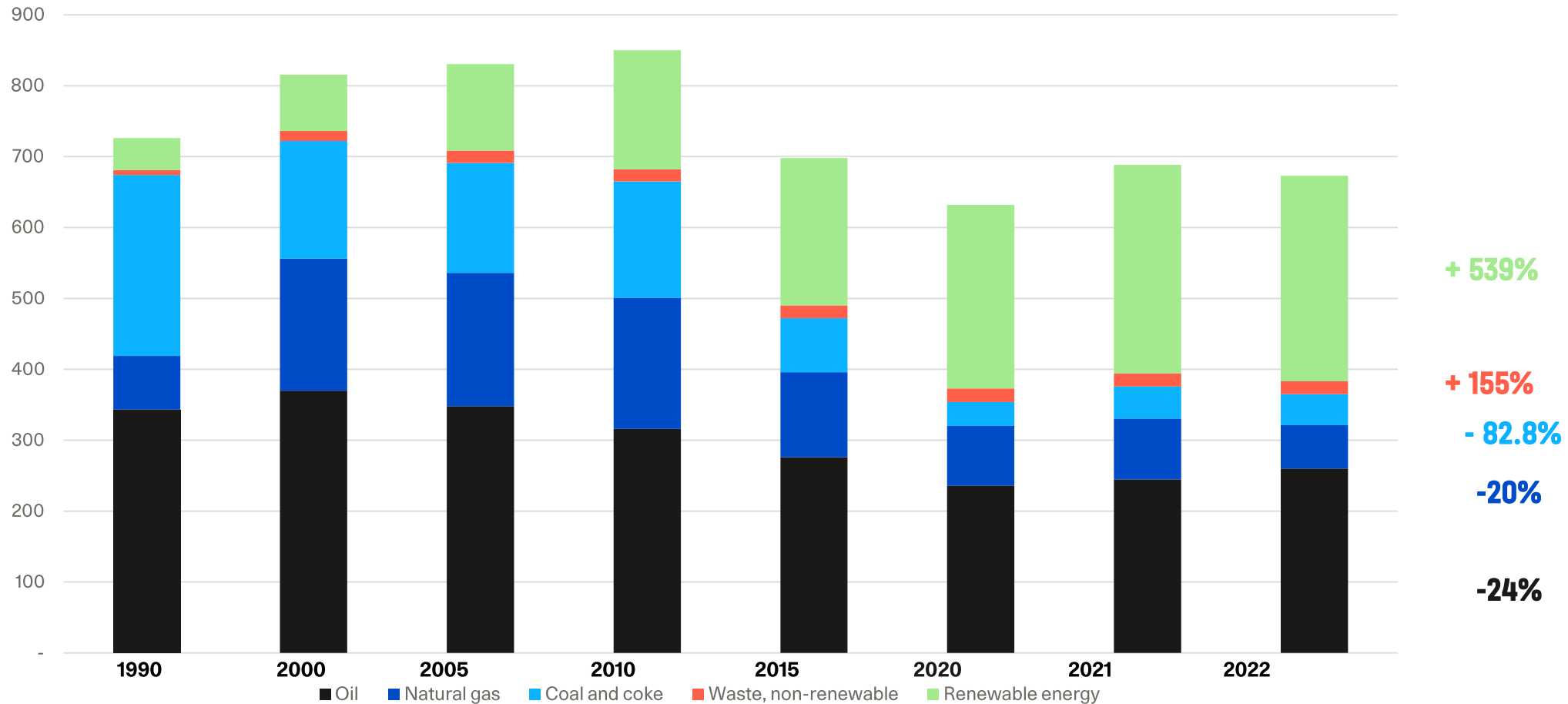
water consumption

-45%

CO2e

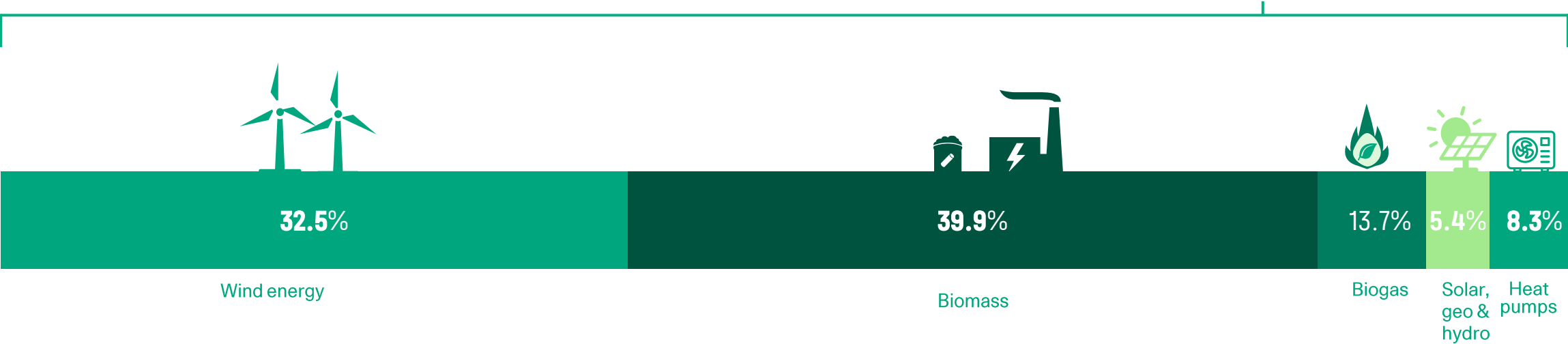
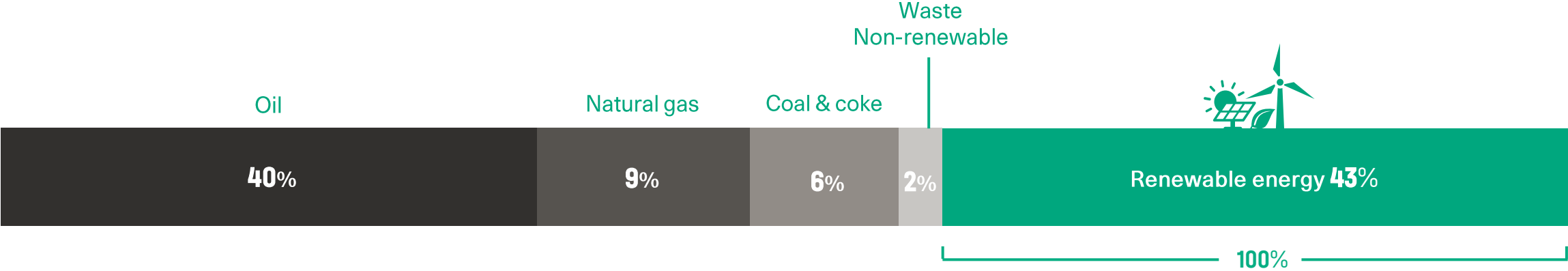
Denmark's energy mix over time

Gross energy consumption* (PJ)

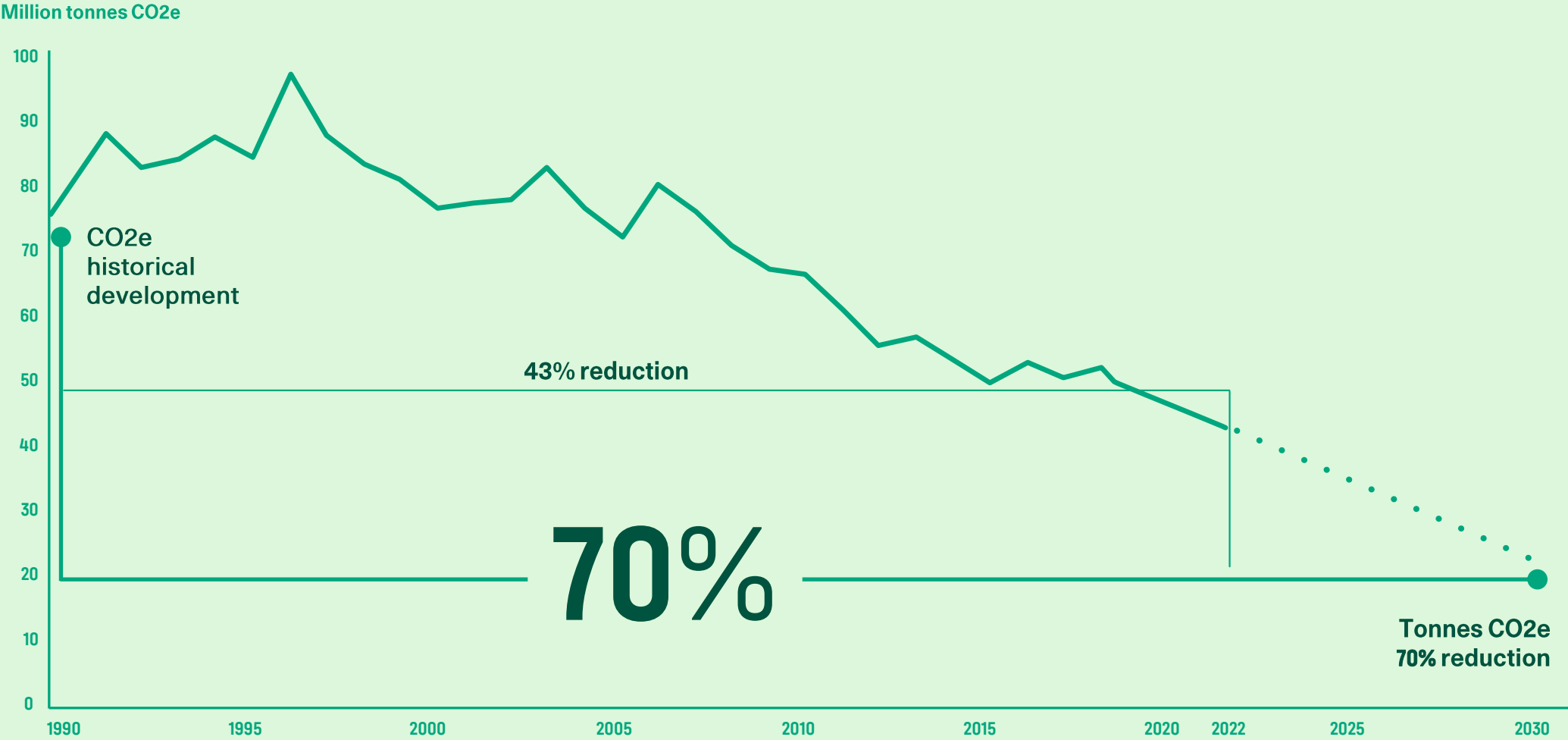


*Adjusted for climate variations and for fuels for net electricity

Denmark's energy mix 2022



Denmark has come far already. But we must go further. Faster





**STATE
OF
GREEN**

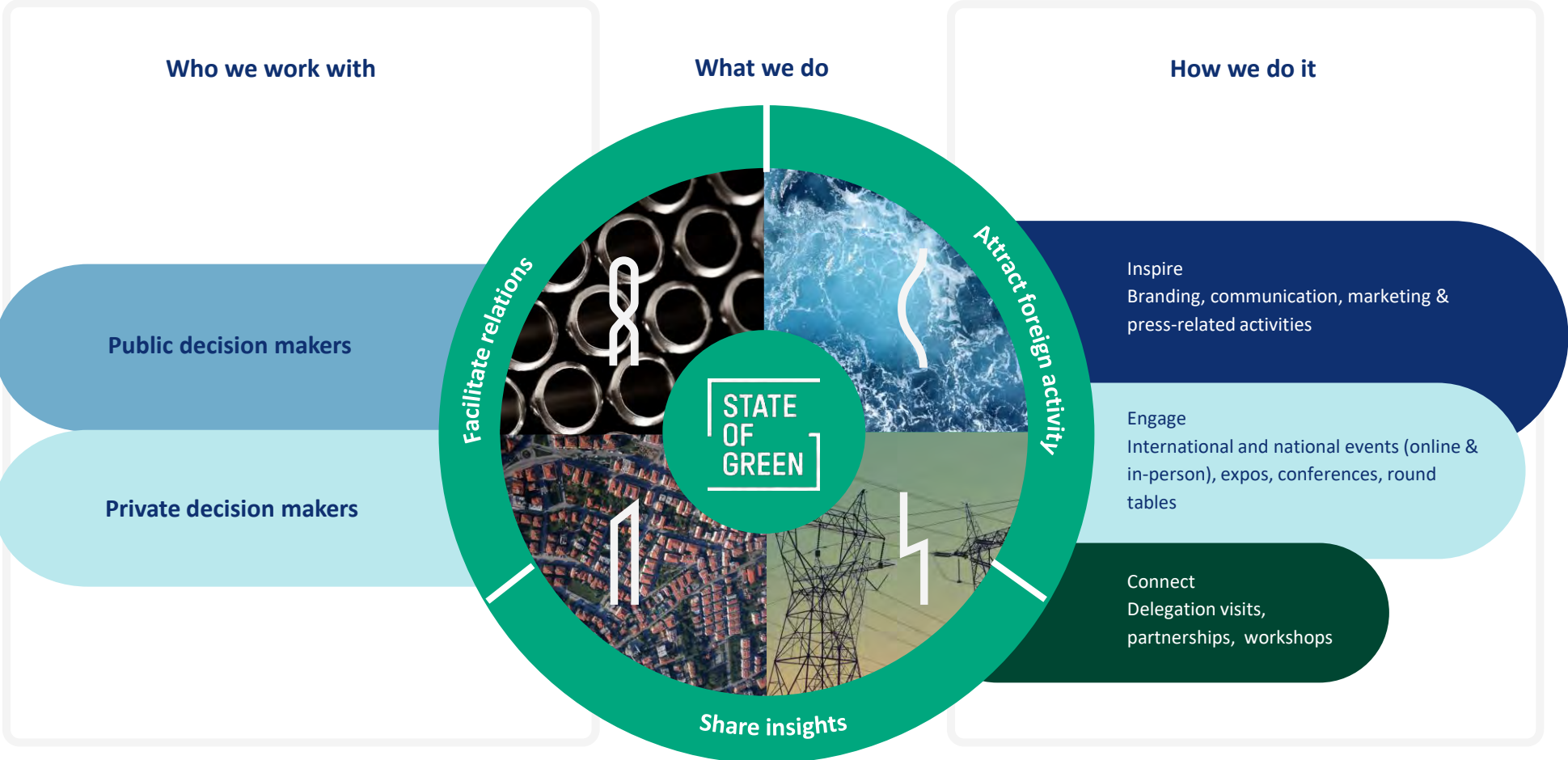
A landscape featuring rows of solar panels in the foreground and several wind turbines in the distance under a clear sky.

Like many countries, Denmark was once entirely dependent on imported fossil fuels. Today, many consider Denmark a global green frontrunner. We want to share our experiences and help others towards a more sustainable society.

An aerial photograph of a roundabout with a central green island. The road is dark asphalt with white lane markings and arrows. The surrounding area is lush green grass. The text is overlaid in the upper left quadrant.

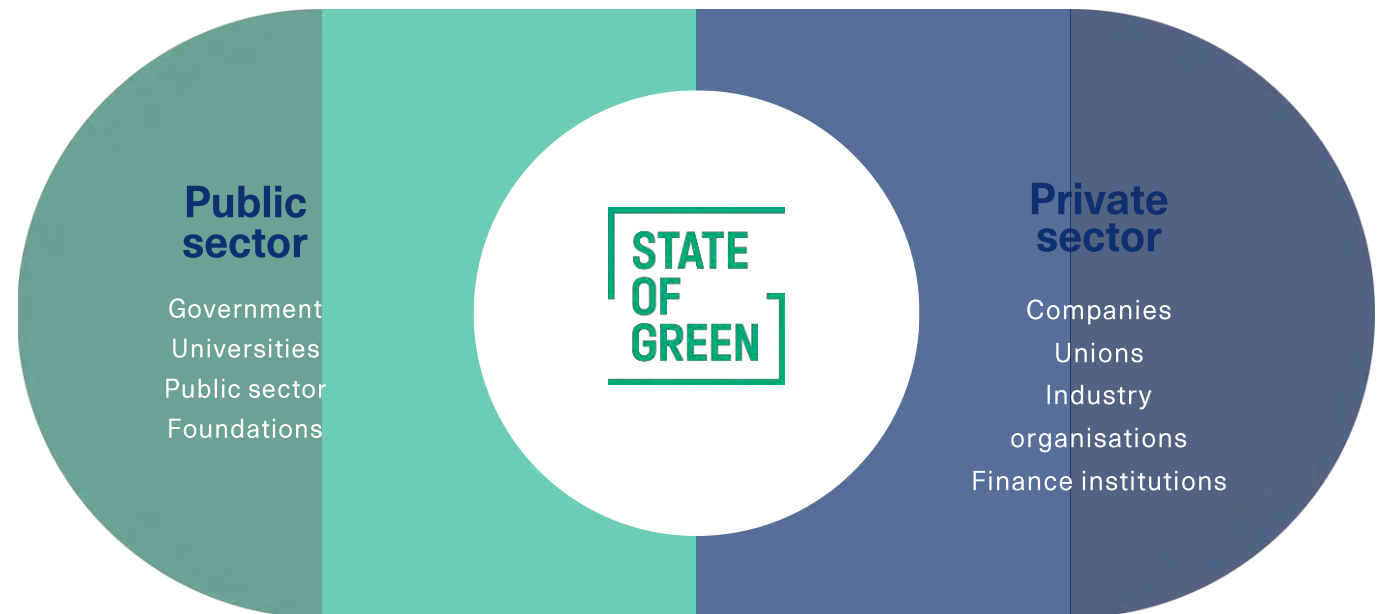
State of Green is your one-stop shop to 600+ Danish solution providers. We connect international decision makers with Danish players driving the global transition to a sustainable, low-carbon, resource-efficient society

How we create value



Bridging the green gap between the public and private sector

We are the only one-point entry to both the public and the private sector, gathering state-of-the-art green knowledge and solutions from Denmark.



Public-private partnership

Public

Private

Government

Business organisations

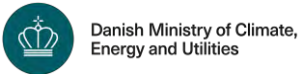
Strategic partners

Associate partners



TOPSOE

PensionDanmark



COWI



CIP

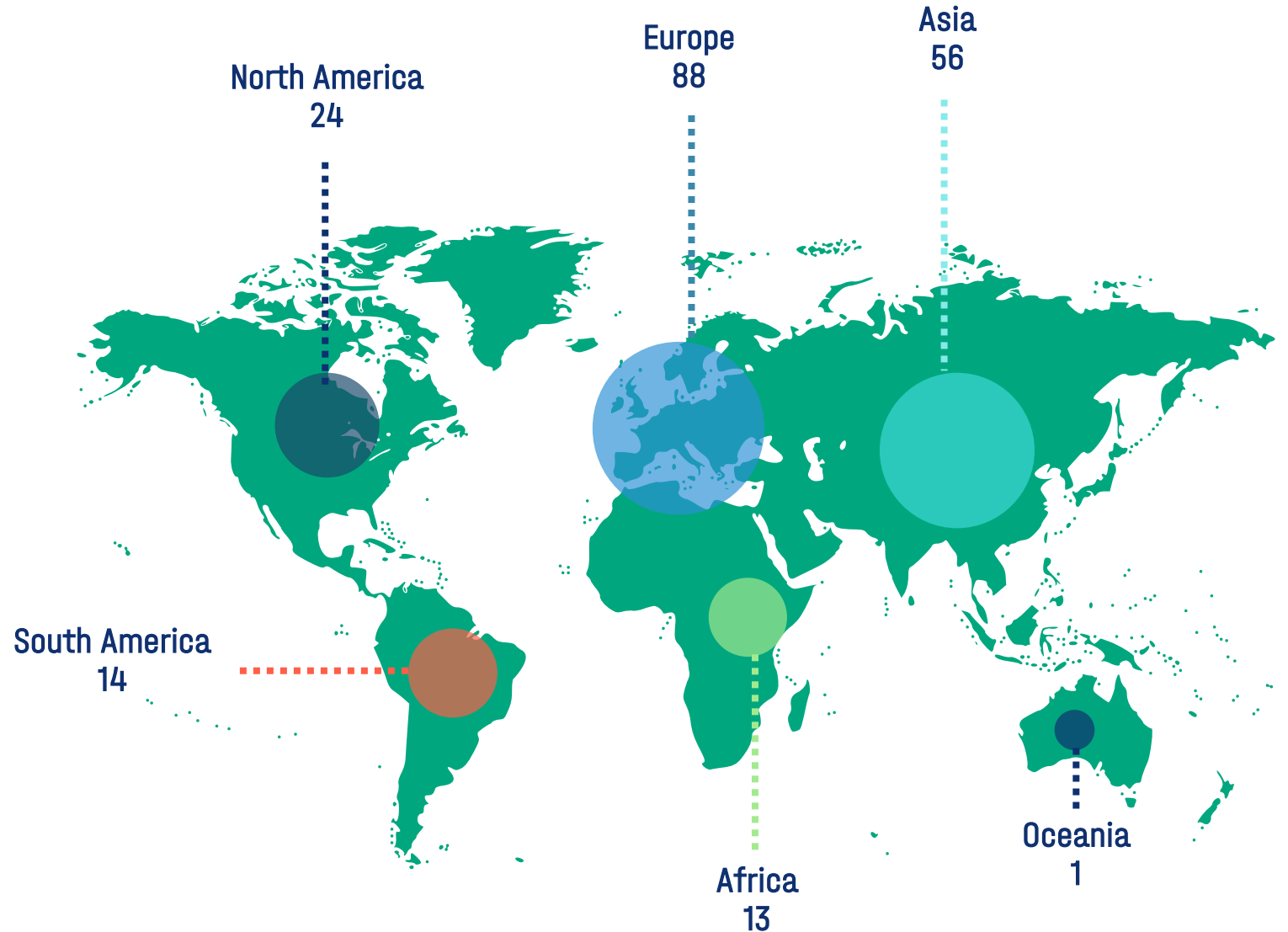
Copenhagen Infrastructure Partners



Our global impact

Every year, State of Green welcomes hundreds of delegations from all over the world at House of Green and engages international decision makers through online and in-person events.

In 2023, State of Green welcomed more than 175 delegations at House of Green.



Denmark's green transition

We haven't always been this green

It took 50 years of hard work





1970s

Wake-up call: oil crisis

Pollution and growing environmental awareness

1980s

Energy diversification and energy efficiency steps

Environmental regulatory action



1990s

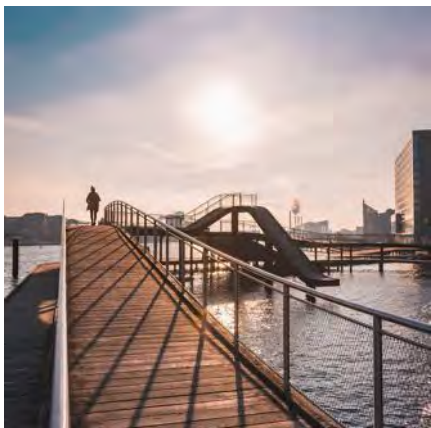
Energy self-sufficiency

Stricter environmental regulation and growing influence on EU policies

2000s

Scaling offshore wind energy

New paradigm: Considering waste as a resource



2010s

Net-zero vision 2050

Extreme weather events lead to climate adaptation

2020s

Bold climate targets and comprehensive action

Moving towards a circular economy

1970s



> Environment

- 1971** World's first ministry of environment is established
- 1973** First Environmental Protection Act established
- 1970s** Denmark starts to combat air pollution
- 1970s** Concern about increased amount and complexity of waste disposal

> Energy

- 1970s** 99% dependent on imported energy
– **Denmark is hit hard by oil crisis**
- 1976** Denmark's first national energy action plan
- 1978** First major wind turbine in Denmark generates electricity



> Environment

- 1987** First national action plan on water environment (stricter regulation on wastewater treatment)
- 1987** Landfill tax introduced to divert waste towards energy recovery in incineration plants

> Energy

- 1985** Denmark's parliament: **No to nuclear power** - yes to expansion of wind energy capacity and energy efficiency
- 1987** Installation of Europe's largest onshore windfarm at the time



1990s

> Environment

- 1990** Clean air: catalytic converters become mandatory in cars
- 1993** Systematic collection of waste data
- 1993-96** Tax on water and wastewater, mandatory water metres and economic incentives to reduce water loss
- 1997** Ban on landfilling of all combustible waste

> Energy

- 199X** CO2 taxes were introduced on certain energy products – to improve energy efficiency
- 1991** Installation of the world's first offshore windfarm
- 1997** Denmark self-sufficient in energy supply
- 1997** No new coal plants can be built in Denmark



> Environment

- 2000** National groundwater mapping programme initiated – first country to do so
- 2002** First harbour bath reopens in Copenhagen after modernisation of sewerage system
- 2008** Water sector reform act: Water utilities become municipally owned public limited companies
- 2000s** New paradigm: Considering waste as a resource

> Energy

- 2000** Installation of Middelgrunden offshore wind farm off Copenhagen's coast
- 2002** **Horns Rev 1 and Horns Rev 2 offshore wind farms installed in the North Sea**
- 2008** Energy agreement to increase share of renewables



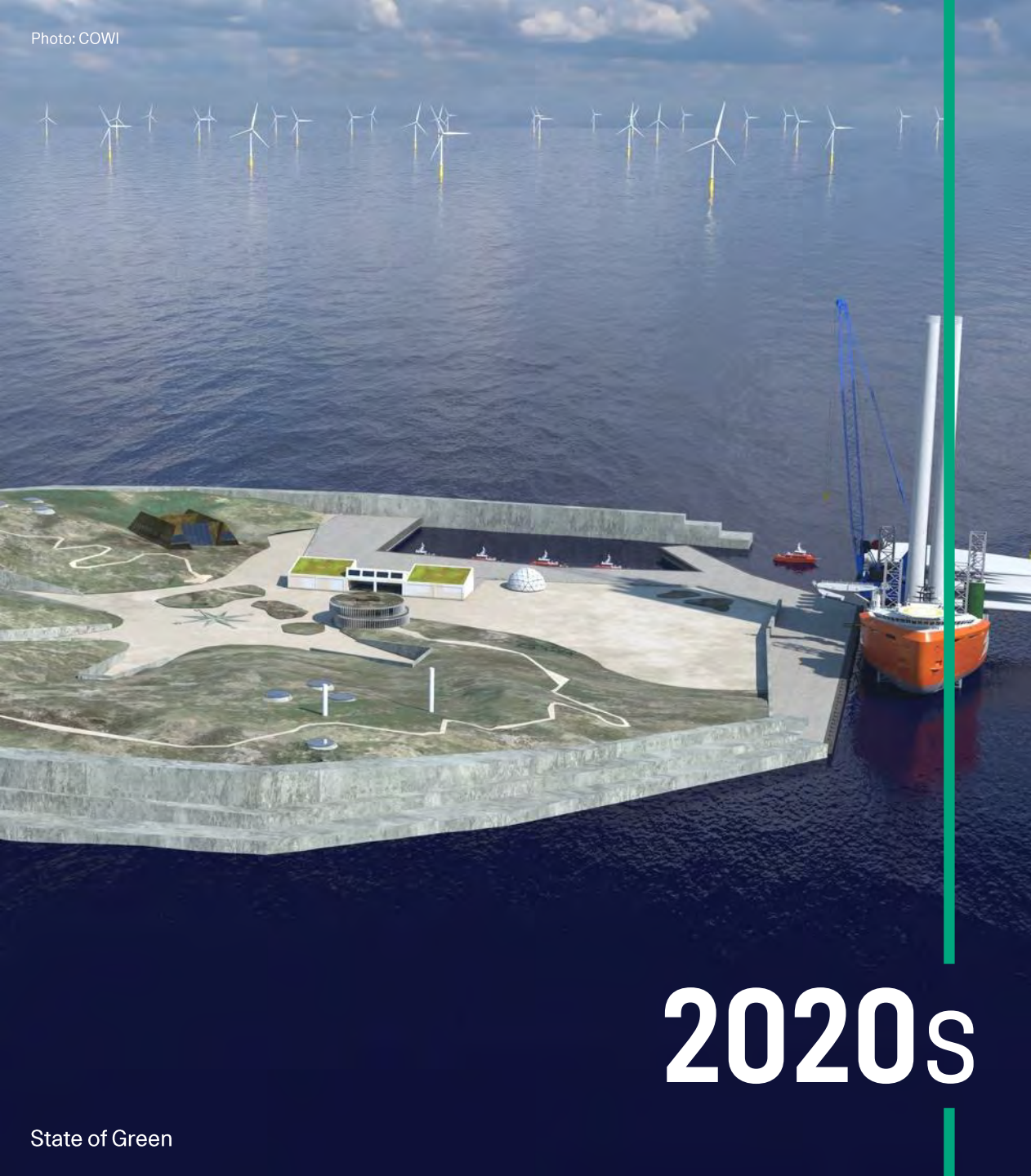
2010s

> Environment

- 2013** Mandatory climate change adaptation plans for all municipalities
- 2013** National waste and circular economy strategies: Recycle more, incinerate less, prevent waste
- 2010s** Energy and resource recovery from wastewater

> Energy

- 2012** **DK's first energy agreement with broad political support: DK independent of fossil fuels by 2050**
- 2012** Copenhagen aims to be the world's first carbon-neutral capital city by 2025
- 2018** Energy agreement updated to enable RE to fully cover the Danes' electricity consumption by 2030
- 2019** Climate the most important topic in national elections



2020s

> Environment

- 2020** Action plan for climate neutral water and waste sectors by 2030
- 2020** New waste management plan: all Danes must sort their waste into ten fractions at home
- 2021** 94/98 Danish municipalities are developing climate action plans

> Energy

- 2020** Denmark's first legally binding climate act – 70% reduction by 2030
- 2020** Plan to establish the world's first energy islands
- 2020** Agreement to end new oil and gas exploration in the Danish North Sea

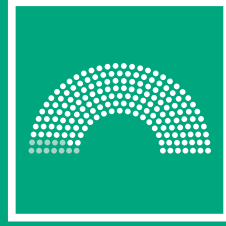
What have we learnt?



Financing



Broad political agreements



Public-private partnerships



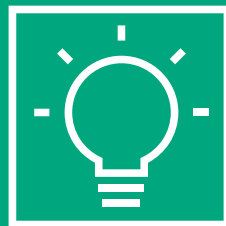
Just transition



Societal collaboration



Research and development



1970s



2020s

We have specialised our knowledge and solutions

Powering our future with sustainable energy



- Energy efficiency
- Clean energy sources
- District energy
- Sustainable transport
- Power-to-X / green hydrogen
- Smart energy systems

Ensuring water security for a growing world



- Climate change adaptation
- Water resource management
- Water supply
- Water in industries
- Wastewater management
- Smart water solutions

Creating smart, green and liveable cities



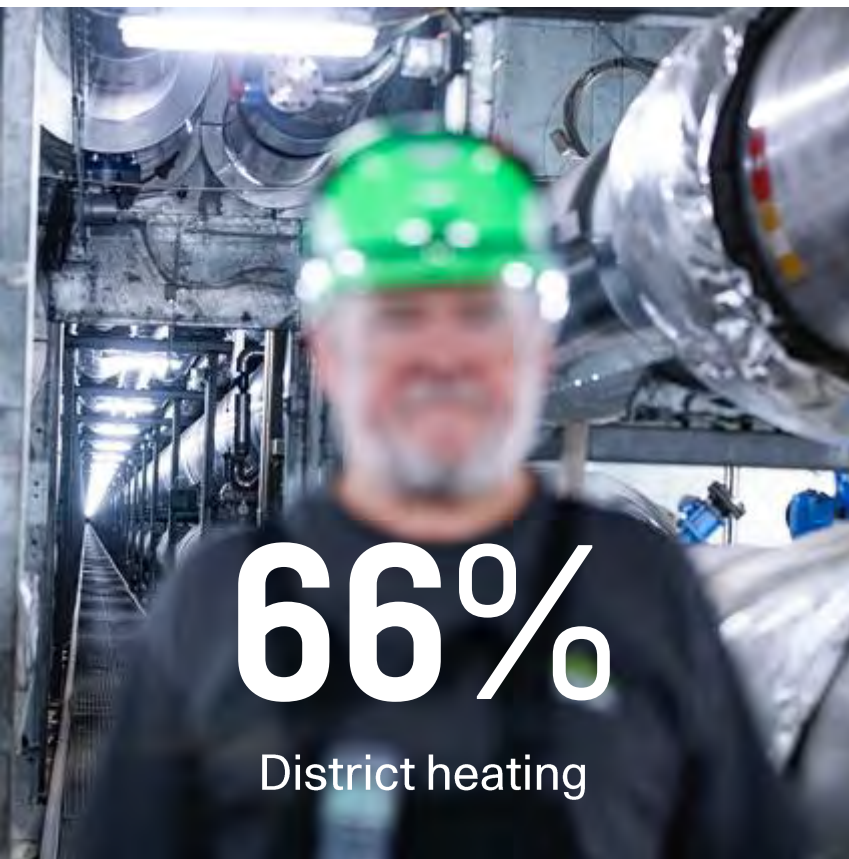
- Clean air
- Smart cities
- Urban planning
- Urban mobility

Moving towards a circular economy



- Waste
- Building circular
- Circular business models

Sustainable energy



66%

District heating



+80%

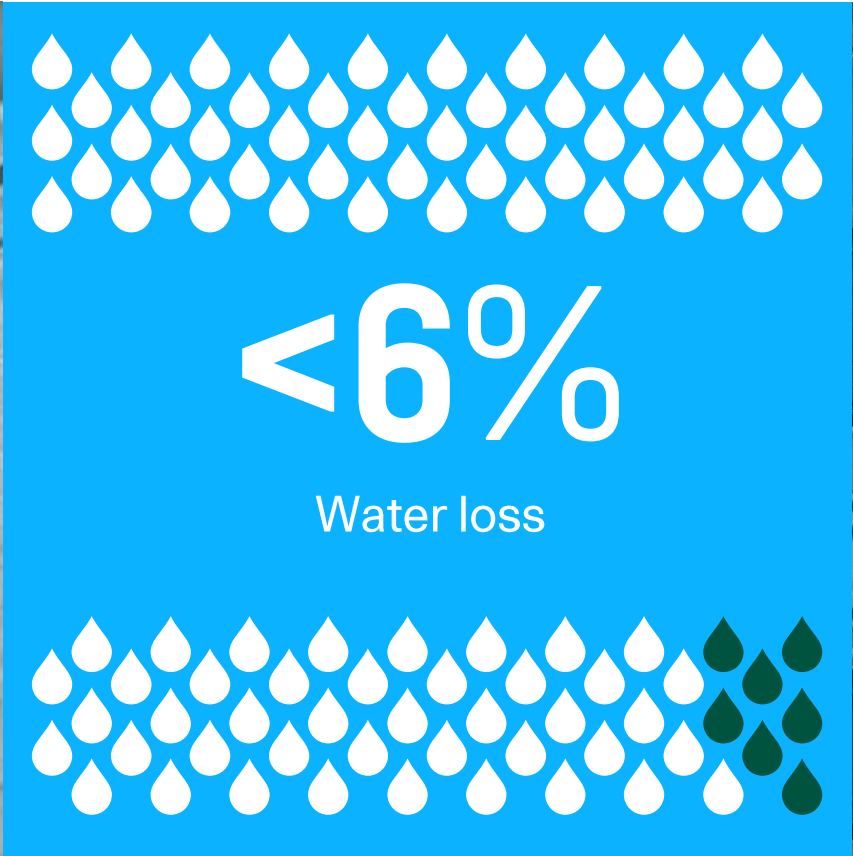
Renewable share of electricity



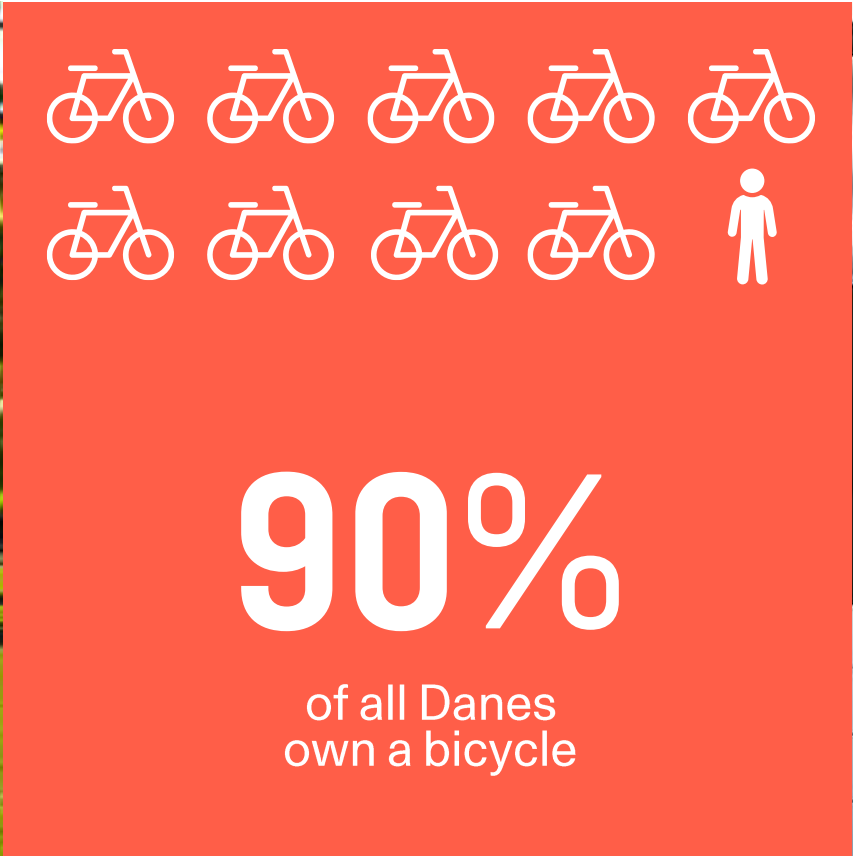
99.99%

Security of supply

Water



Liveable cities



90%
of all Danes own a bicycle



Circular economy

10

Danes must sort their waste in 10 fractions

9/10

bottles and cans are returned and recycled



Waste free



Green business is good business (2022)

00%

of total Danish exports come from energy technologies alone

76,000

green jobs

3.4%

of GDP

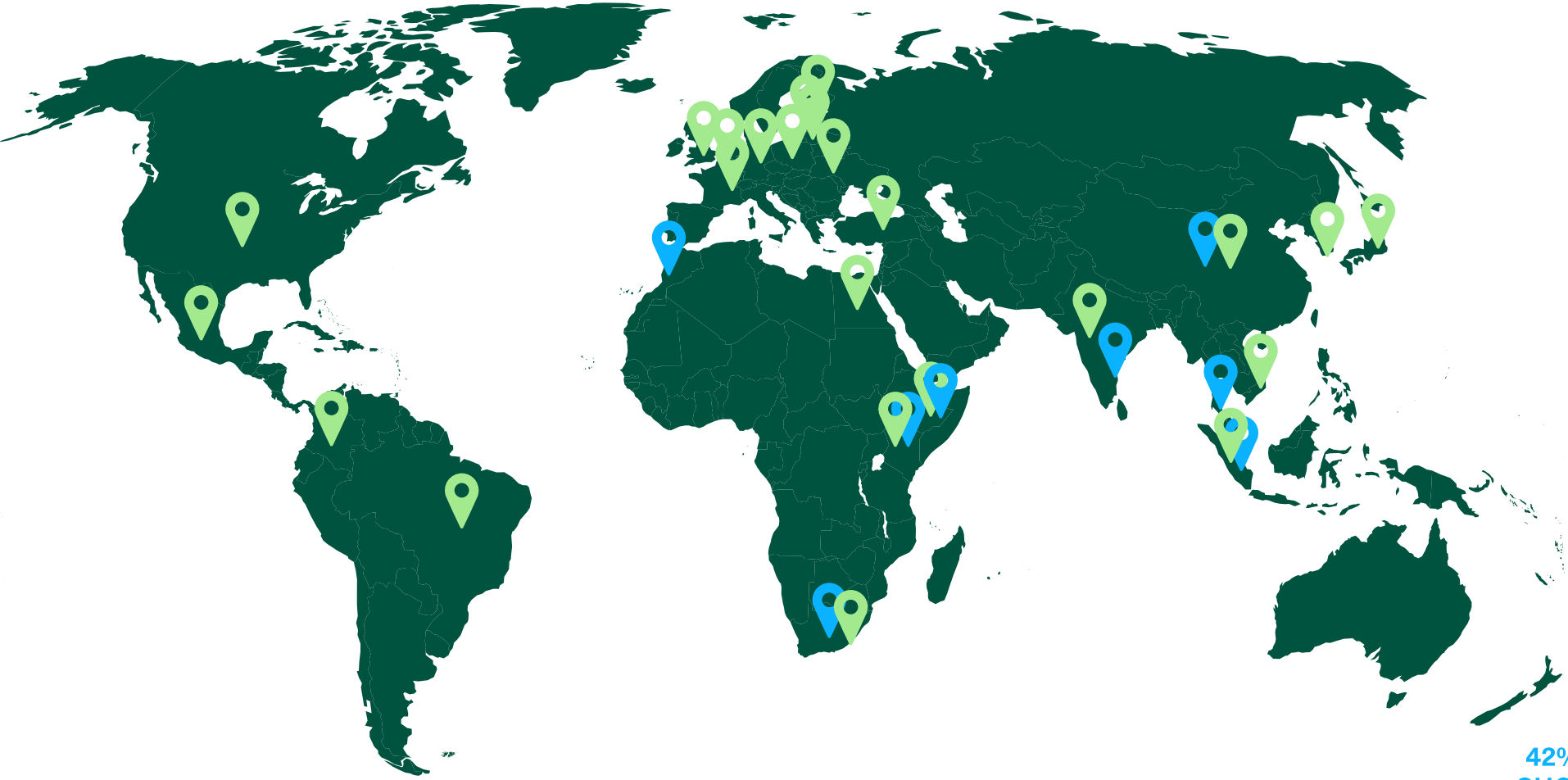
33 billion

euro in turnover

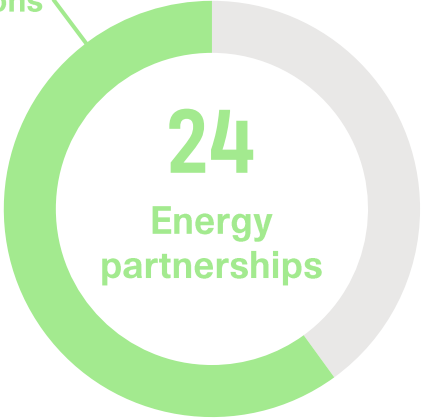
An aerial photograph of a city at sunset. A wide river flows through the center, with a bridge crossing it. The sky is a mix of orange, yellow, and blue. In the background, industrial buildings with smokestacks are visible. The foreground shows a multi-lane road with cars and a yellow taxi. The overall scene is a blend of urban infrastructure and natural light.

How do we accelerate the global green transition?

Denmark has significant global impact



70% of global GHG emissions



42% of global GHG emissions



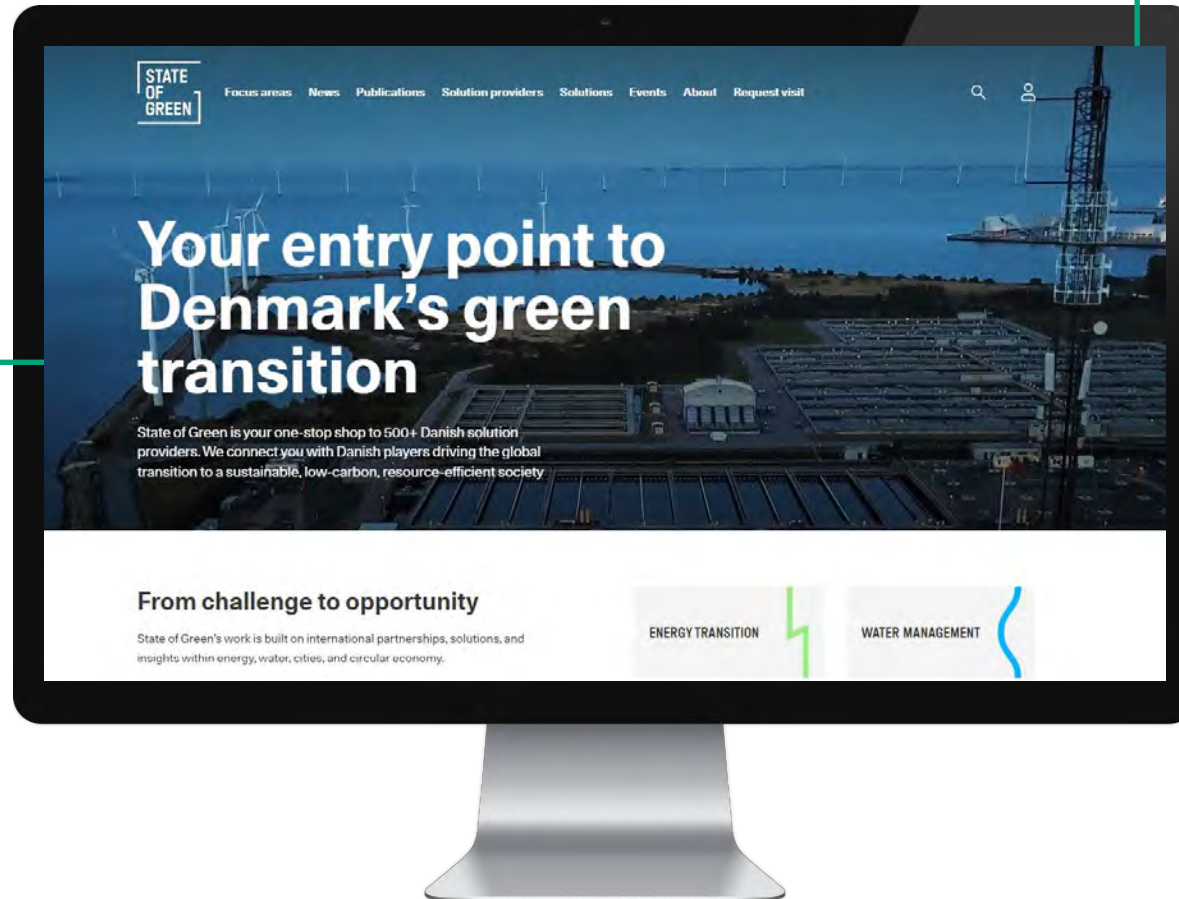
An aerial, top-down view of two construction workers on the white deck of a ship. Both workers are wearing bright orange safety vests and orange hard hats. They are standing on the deck, which is bordered by black metal railings. The ship is moving through dark blue, choppy water, as evidenced by the white wake behind it. The text "The journey starts here" is overlaid in white, sans-serif font across the center of the image.

The journey starts here

Your one-point entry to Danish green solutions

+600
solution providers

+1,700
sustainable solutions



White papers for a green transition



Sound of Green

Interested in learning more Denmark's green transition?



LISTEN



The podcast 'Sound of Green'

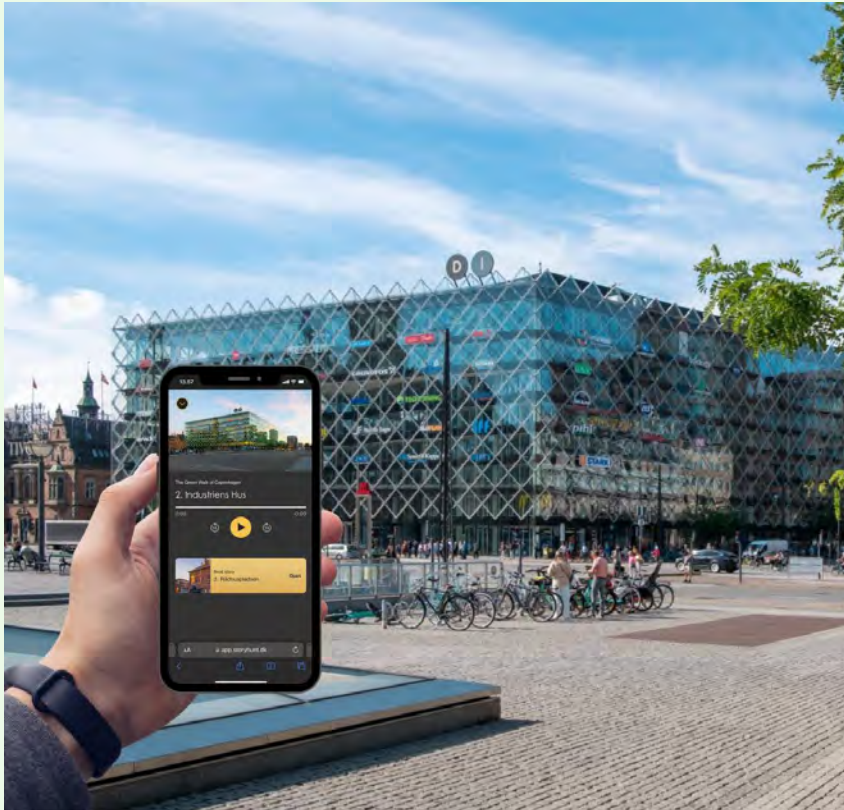
Sound of Green offers insights and perspective on the green global challenges and promotes sustainable development the Danish way.



Listen to State of Green's podcast [here](#)

Green Walk: Discover Copenhagen's green buildings and Denmark's climate ambitions

While in Copenhagen, seize the opportunity to do some green sightseeing with State of Green.



DISCOVER



The interactive audiowalk 'Green Walk'

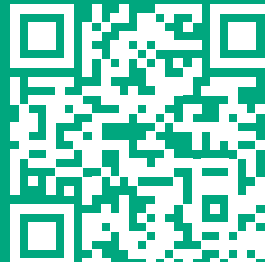
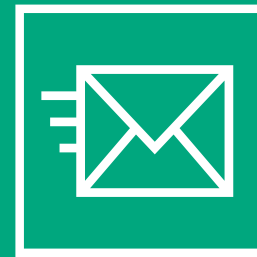
'Green Walk' takes you around inner Copenhagen presenting energy efficient buildings and the climate ambitions driving the Danish green transition.



Listen to the audiowalk
and try the **'Green Walk'**

Thank you!

Connect. Inspire. Share. Think Denmark



Thank you!
Connect. Inspire. Share. Think Denmark



Scan the QR code and let us
know how we did