# A snapshot of the Danish Energy Transition

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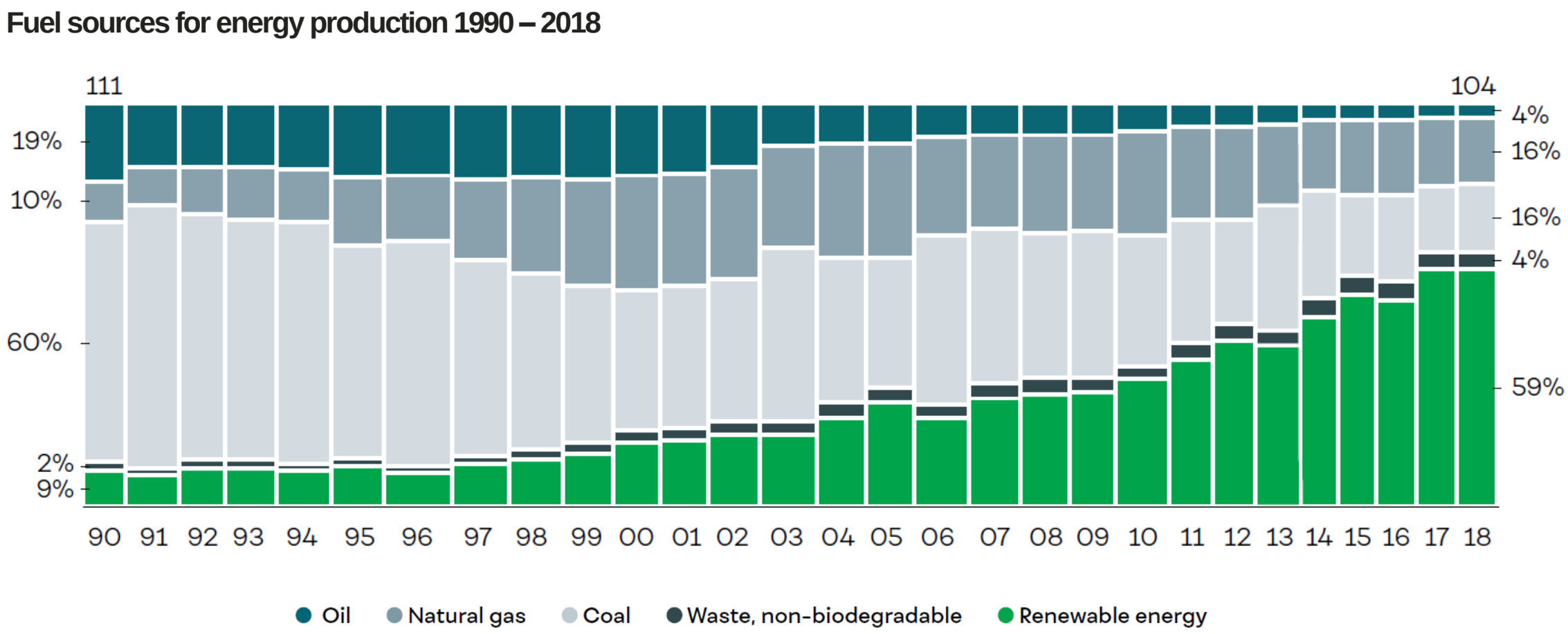
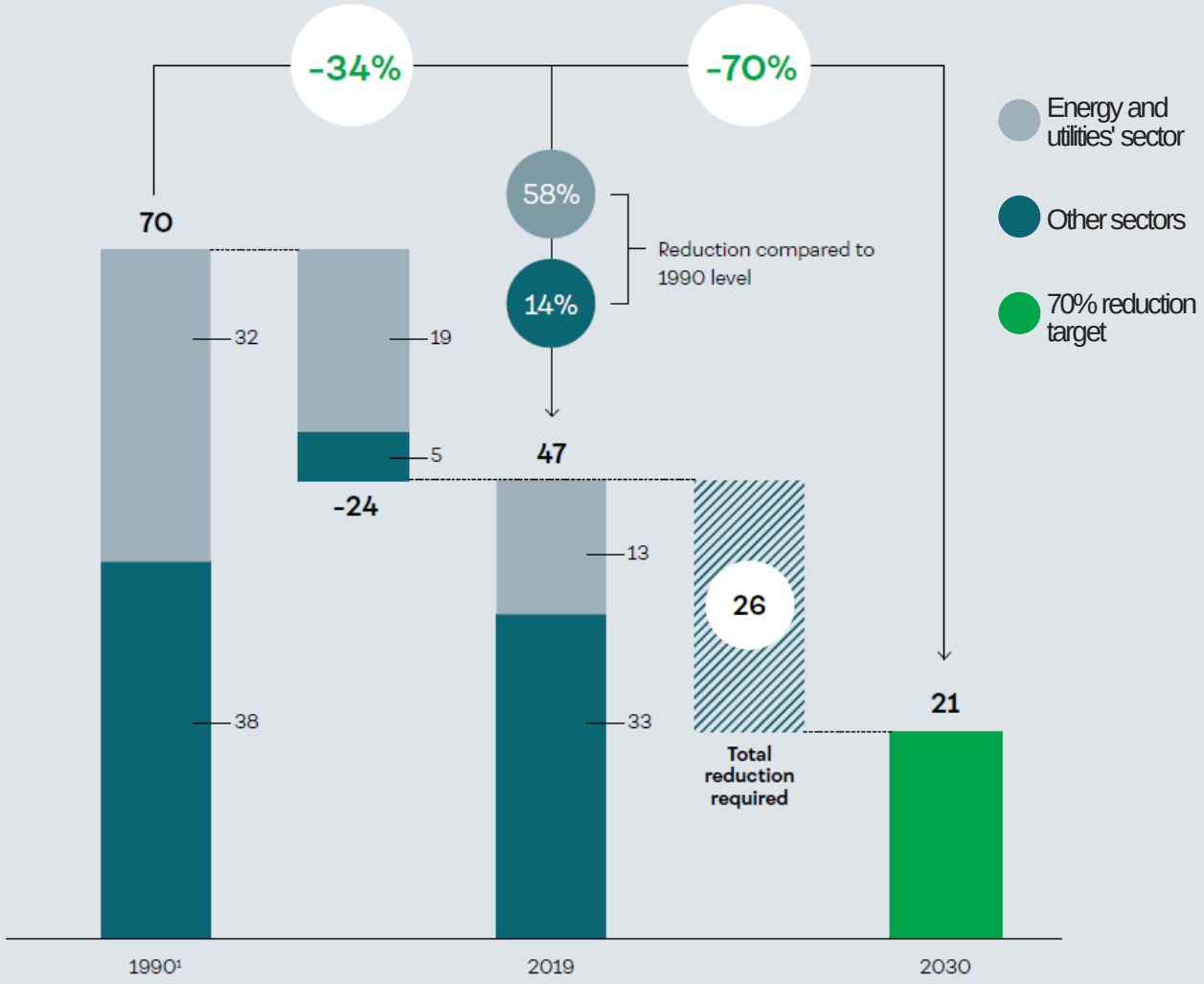
DANSK ENERGI

# The Danish Energy Transition until today




Full report, sources and more info at: www.climatepartnership.dk

# The way forward – 70 % by 2030




**"Over the next ten years, Denmark must reduce carbon emissions by almost the same amount as in the past 30 years**

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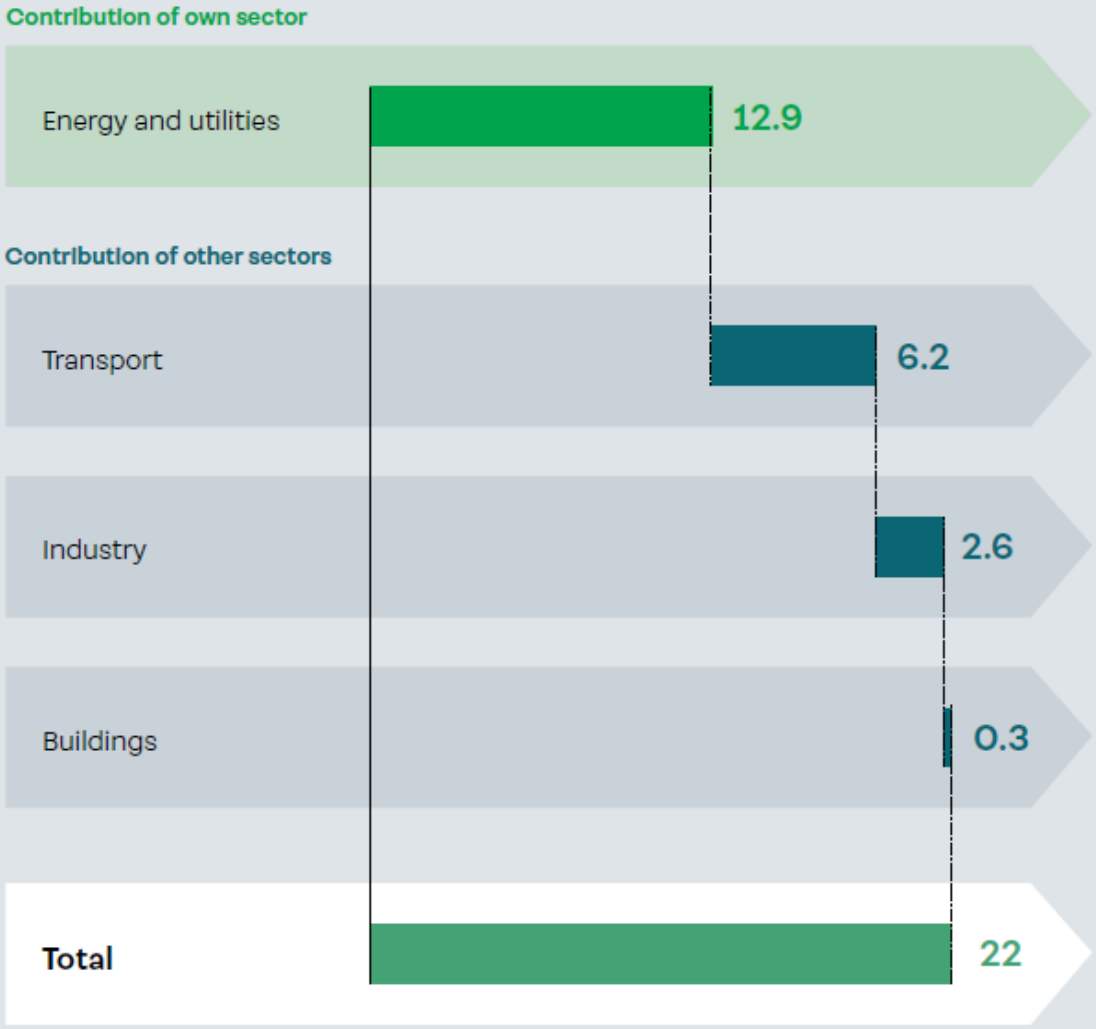
# Estimated reductions across sectors




| | | | | |
|---|---|---|---|---|
| 6.9 Renewable energy in power and district heating | 2.8 Oil and natural gas phased out of individual heating systems | 1.3 Carbon capture and storage | 0.8 Separation of plastics in waste-to-energy | 1.1 Optimisation and electrification of North Sea prod |
| 0.6 Adjustment of baseline projection | 2.1 1.5 million electric or hybrid vehicles | 1.9 Power-to-X in heavy transport | 0.9 Electric commercial vehicles, electric buses and electric lorries | 0.8 Biofuel e.g. biogas and biodiesel |
| -0.2 Adjustment of baseline projection | 1.5 Heat pumps in process heat[1] | 0.6 Energy efficiency improvements | 0.6 Internal transport | 0.1 Biogas and biodiesel for process |
| – Adjustment of baseline projection[2] | 0.2 Building installations[3] | 0.1 Building insulation[4] | | |

**All circled initiatives require renewable energy**

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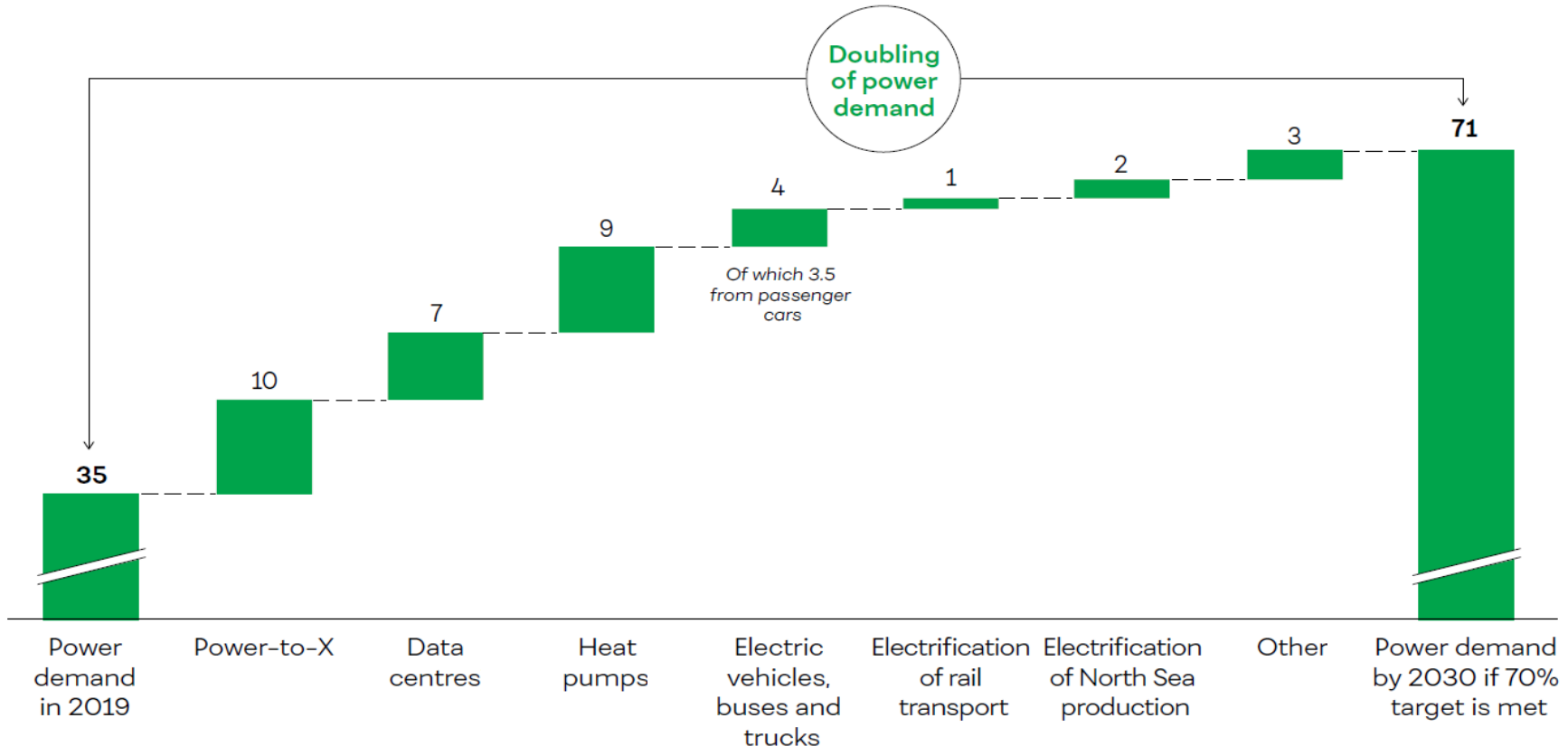
# 70 % by 2030 – driven by electrification'
## - 80% of CO2-reductions 2030 - related to electrification

**Estimated increase in power demand towards 2030 (TWh)**

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# A snapshot of the necessary Energy Transition Mindset taking on 2030…

- Demand-side response and smart solutions must be developed further
- Ambitious build-out of renewable energy with new thinking in terms of energy islands and transmission
- Overall strengthening of infrastructure is imperative to support electrification
- Support for new technologies: e.g. Carbon Capture and Power-to-X
- An affordable transition can only be done with deep and extensive digitalization

# Some specific EU-recommendations

**Electrification and sector integration:**

- Sector specific targets for electrification at EU-level
- The Primary Energy Factor for electricity must be revised downwards reflecting the growth of renewable based electricity generation
- Revise CO2-standards for cars and vans to promote electrification of transport
- Increase the targets for the use of renewables in transport and buildings

**Infrastructure - Preparing the grid for the future:**

- TEN-E should aim at assuring a timely implementation of PCIs, reducing the frequency of delays and reducing the duration of permit granting
- The Commission should develop “best practice” for the regulatory framework of DSOs, ensuring a higher use of flexibility measures over traditional grid reinforcements
- The Commission should identify and remove barriers to the utilization of data for the purpose of grid optimization and sector integration