

# DANISH DECARBONISATION

Status summer 2020

*Torben Brabo, CEO Energinet Gas TSO*

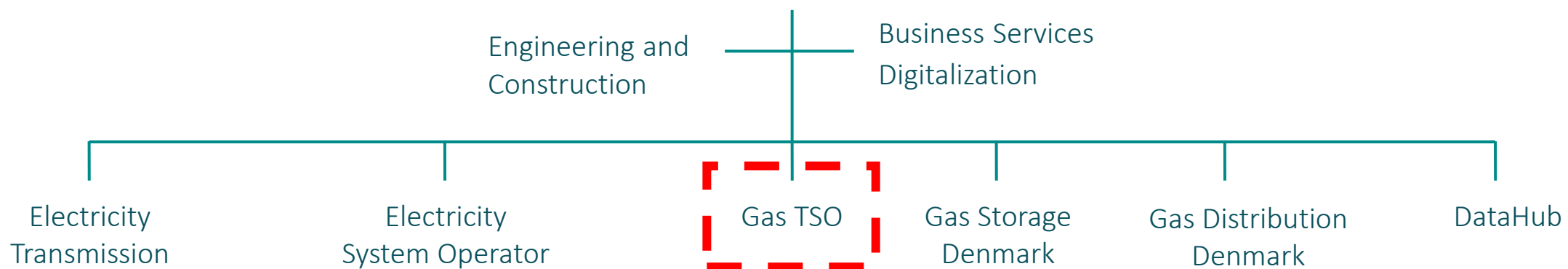
*GIE CEE WS, 9.7.2020*



# STATE-OWNED ENERGY INFRASTRUCTURE

The Gas-TSO is a subsidiary of the independent public enterprise Energinet

## ENERGINET

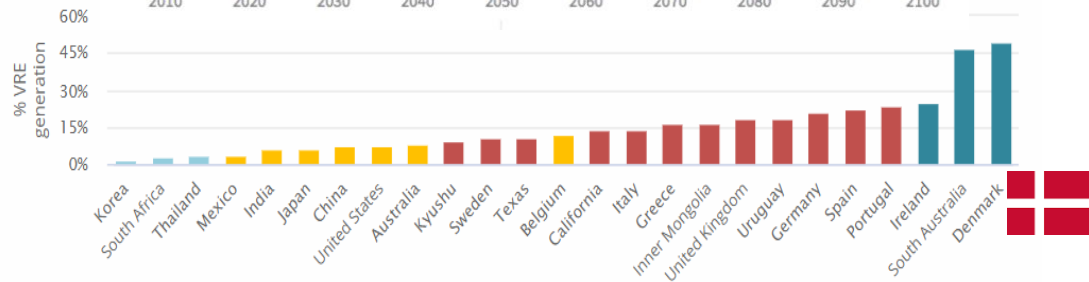
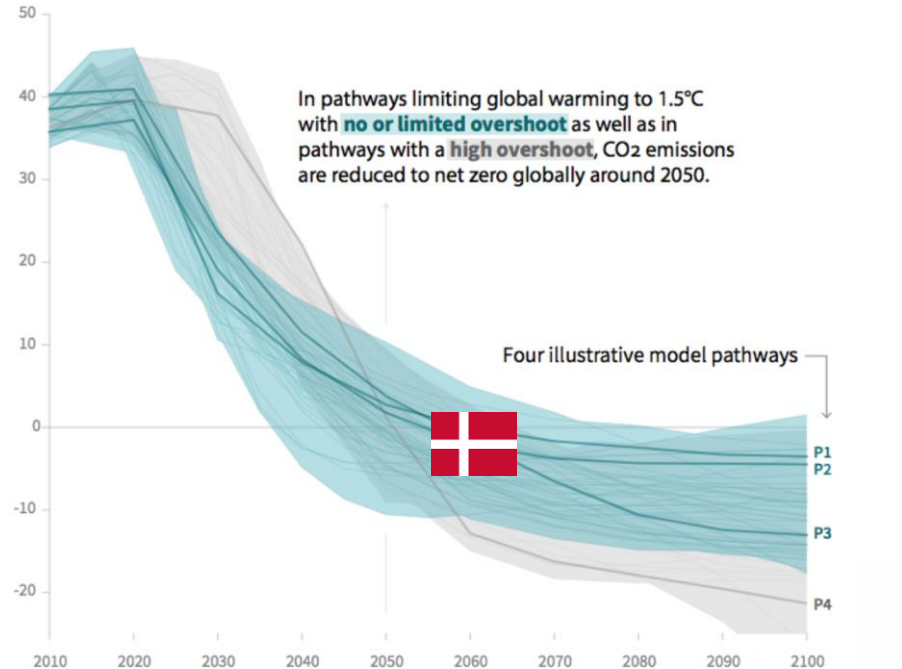


# “Saving the planet” changes the need and use of energy infrastructure



## Global total net CO<sub>2</sub> emissions

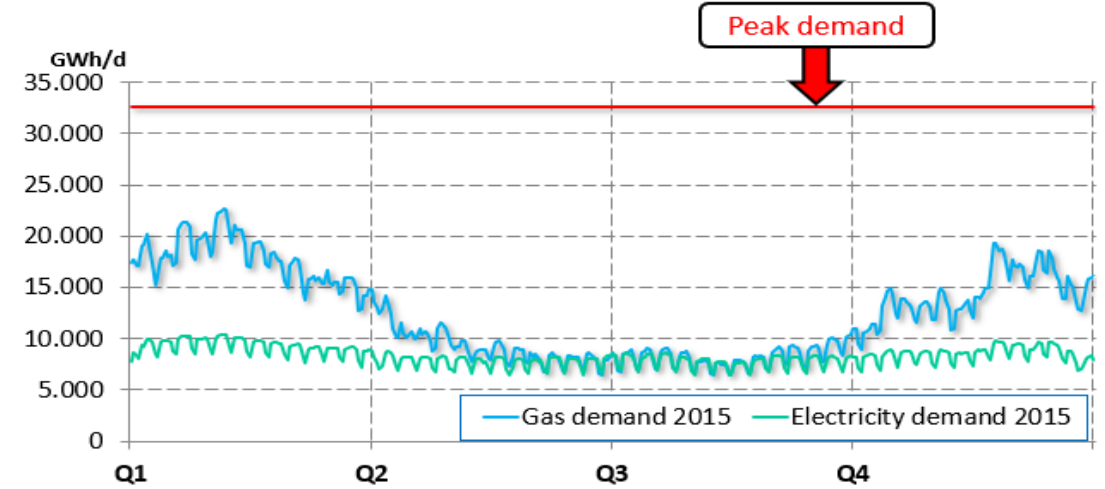
Billion tonnes of CO<sub>2</sub>/yr



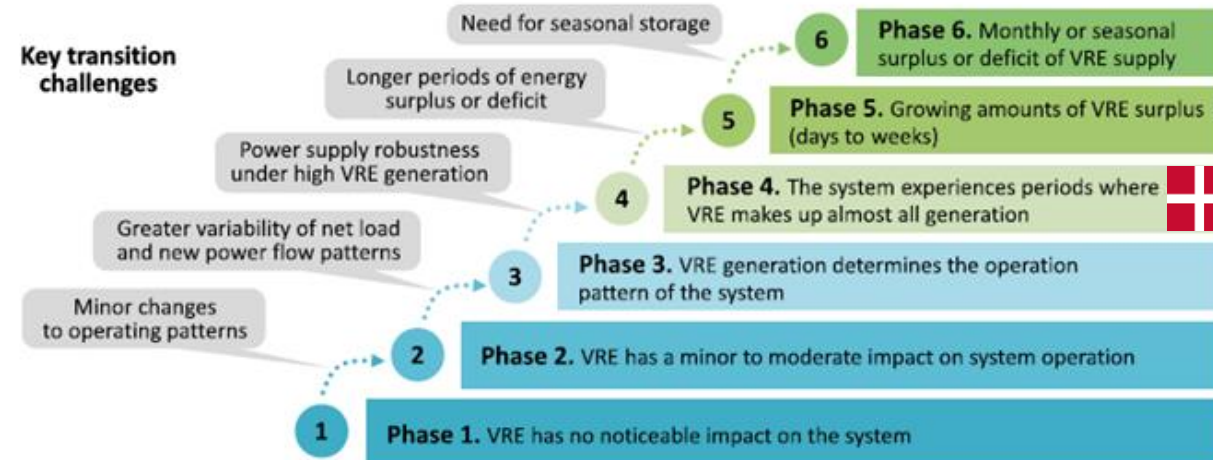
- Phase 1 - No relevant impact on system integration
- Phase 2 - Drawing on existing system flexibility
- Phase 3 - Investing in flexibility
- Phase 4 - Requiring advanced technologies to ensure reliability

33 000 GWh/d

Peak demand  
the gas infra is prepared to cope with



## Key transition challenges





## Climate law

Defines goal for 2030+2050:

- REN power  
From 50% in 2020  
to 100% in 2030
- PEC CO2 reduction  
From 40 % in 2020  
to 70 % in 2030  
and 100% in 2050

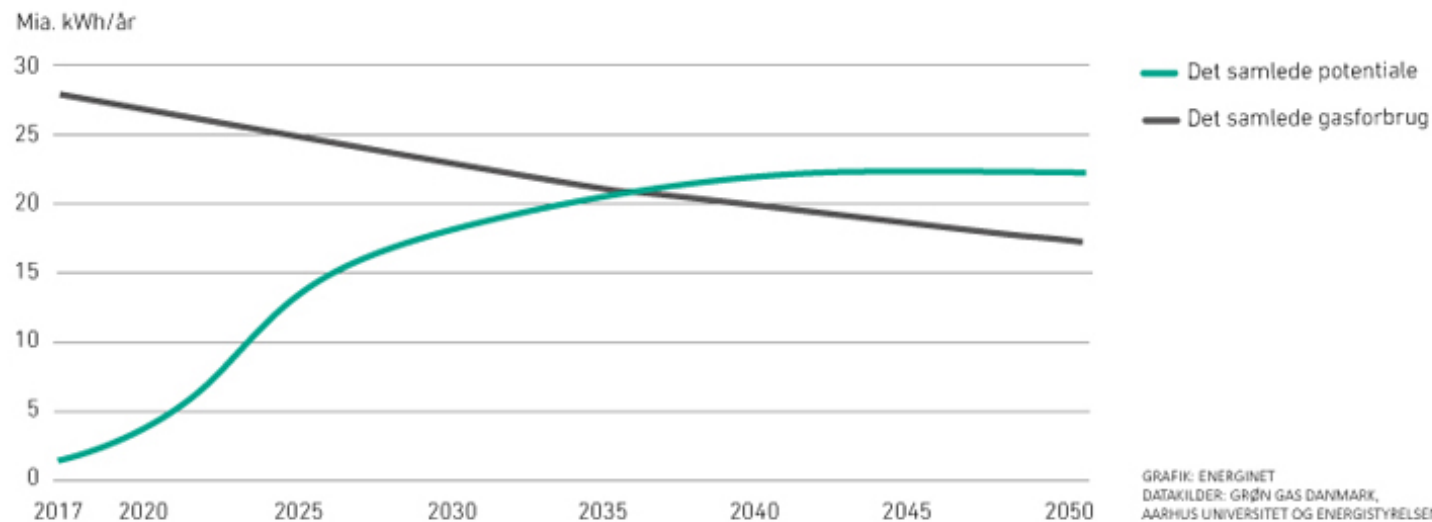
# 🇩🇰 BIOMETHANE AT 20%

- Subsidy scheme phase 2
- Costs are coming down
- Next phase in via tender
- GO's in ERGAR with GER+AUS

## Larger biomethane plants



## Biomethane could cover 100% in 2035



# NEW FOCUS: CCUS, PTX AND H2

- Climate Action Plan on energy (step1)
- 6 GW Wind + 2 Energy islands
- PtX for aviation / maritime / HDV
- Biomethane for industry

Energy Islands  
(North Sea + Bornholm)



Energinet in Parliament

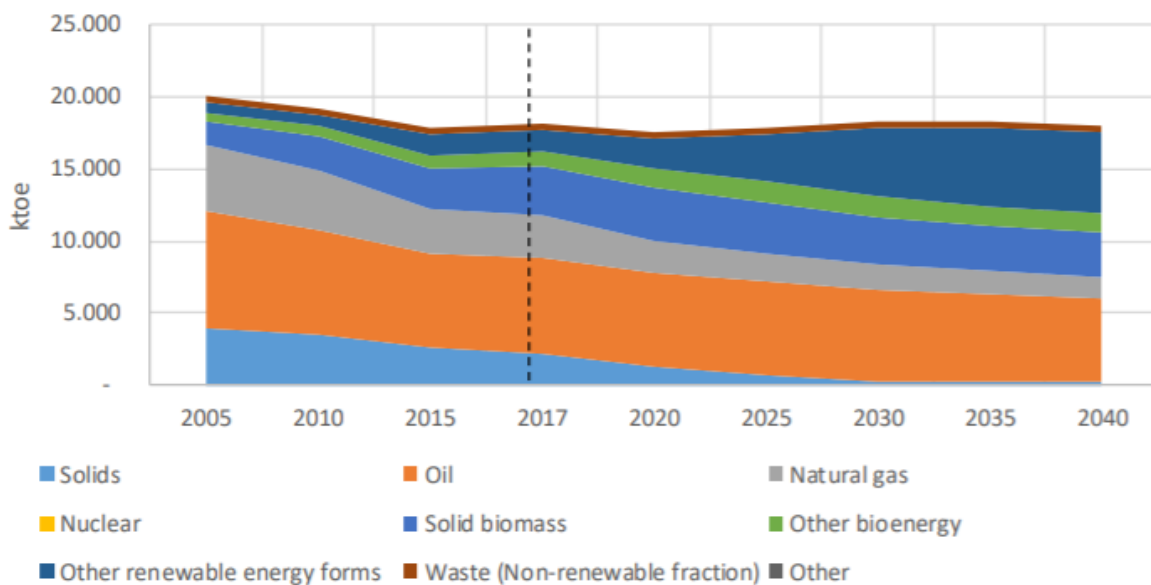
FNB

# HFO AND COAL TO ELECTRICITY AND GAS

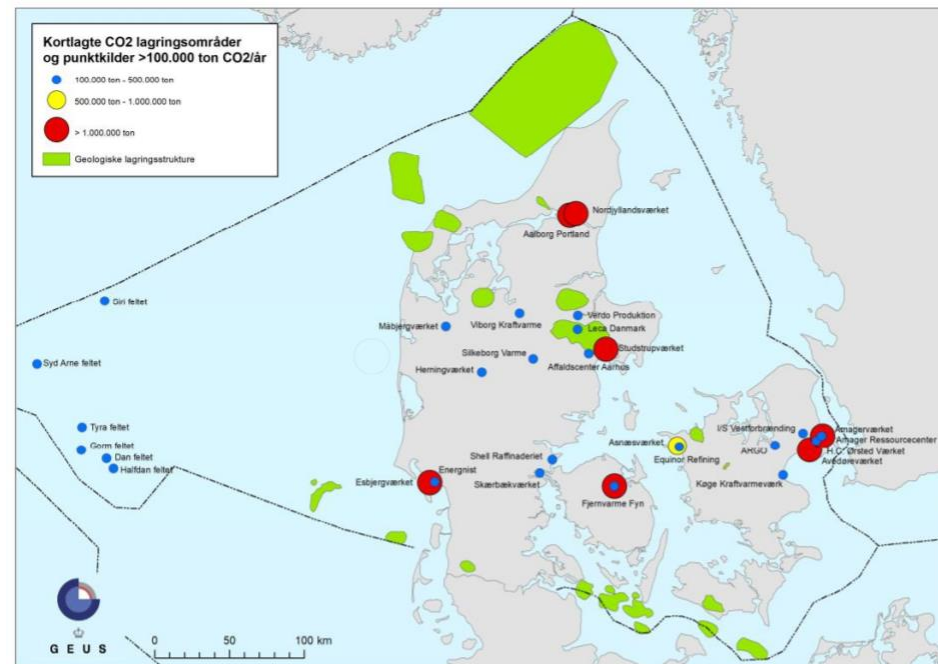
- Hard to reduce sectors
- Might need new NG infrastructure
- Must be future-proof

Coal and oil still at play

Figure 36. Gross inland energy consumption by energy source 2005-2040 [ktoe].



Largest CO2 emitters



# 10 BCM PIPELINE CONNECTS EU GAS MARKETS

2 BEUR Baltic Pipe aims at linking Norwegian gas supply and Polish / CEE gas demand while helping to control Danish gas transmission costs.

- **BENEFITS TO POLISH PLAYERS:** Increased security of supply and gas market competition. 20-70 mton CO2 reduction.
- **BENEFITS TO NORWEGIAN PLAYERS:** Direct access to new Central and Eastern European markets
- **BENEFITS TO DANISH PLAYERS:** Maintain low gas transmission tariffs as national Danish gas production and consumptions drops
- **EU BENEFITS:** Supporting the goal of an EU Energy Union





# THANK YOU

For future contacts.

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