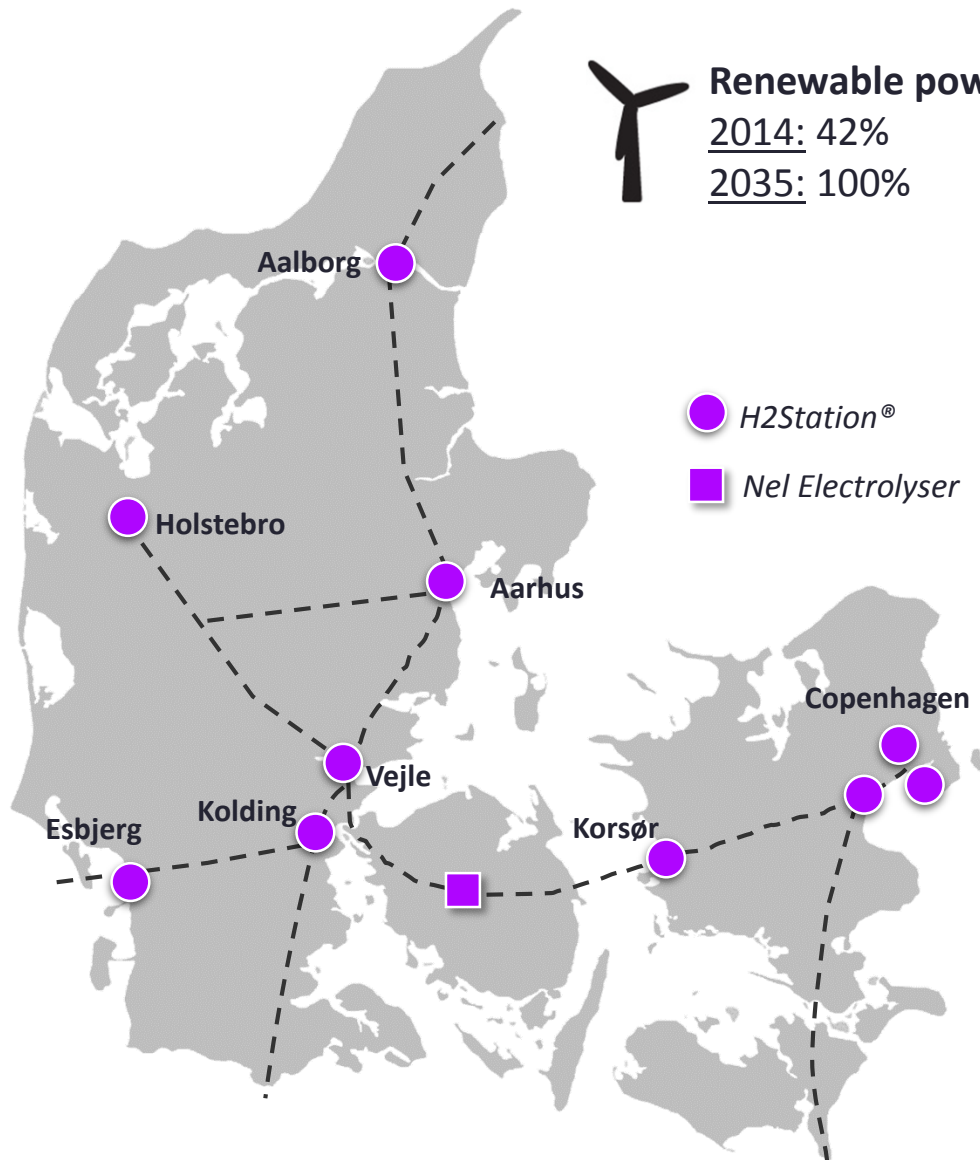


A Hydrogen Adventure in Denmark.

By

Sanne Østergaard Nielsen

Showcase Denmark: world's first countrywide network



The world's first country wide network in daily operation

- 10 stations in operation – additional stations planned.
- 50% of population within 15 km to nearest station.

Collaboration with leading oil, energy and gas companies

- Joint ventures investments with oil & gas companies.
- H2Station® fueling equipment and handling of O&M.

100% green hydrogen supply in Denmark

- 6 stations with onsite electrolysis production.
- 4 stations with central production from Nel electrolyser.
- 42% wind power share in 2014 – target of 100% by 2035.

OK

STRANDMØLLEN

AIR LIQUIDE

Danish Hydrogen Fuel A/S

50%

Copenhagen Hydrogen Network A/S

10%

nel
nel

FCEV fleet and outlook for Denmark

Total 64 FCEVs in Denmark allocated on more than 12 cities across the country.

Target of at least 500 FCEVs in Denmark by 2018 – requires annual sales growth.

- FCEVs are exempted for taxes in Denmark – normally up to 150% of the vehicle price.
- An FCEV price of €40.000 will be fully competitive with gasoline in Denmark.



Hyundai iX35: 55 units



Toyota Mirai: 9 units



Honda Clarity: From 2016

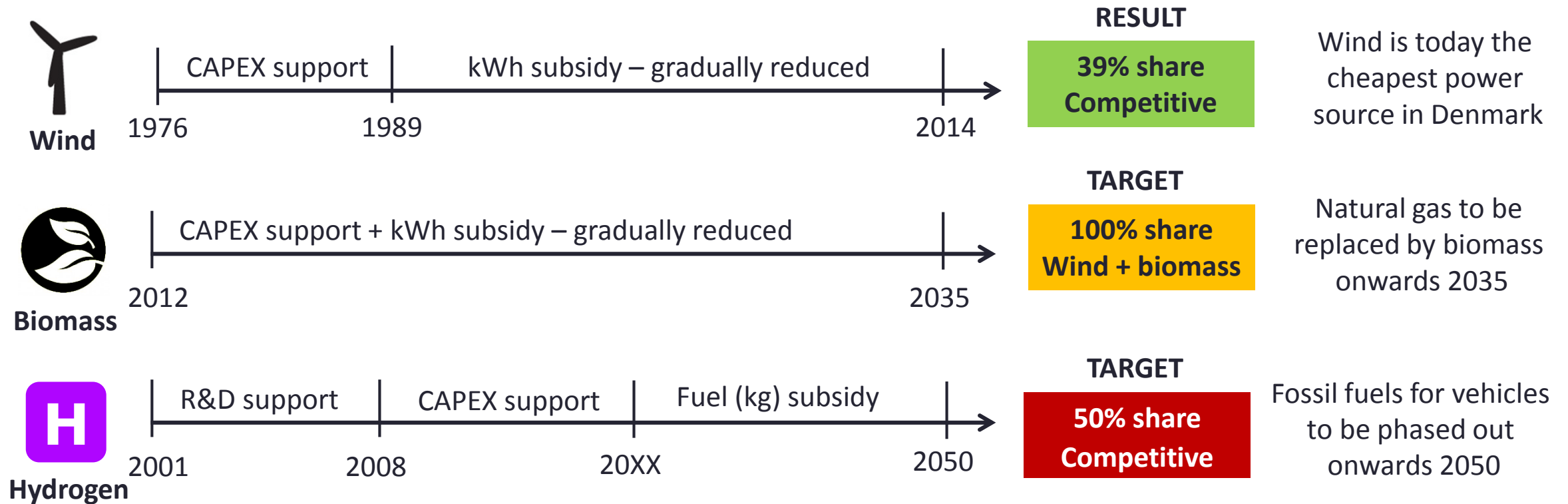
Status: June 2016

- Present fleet
- Required annual sales
- Target fleet (end of year)



The history of supporting renewables – Denmark

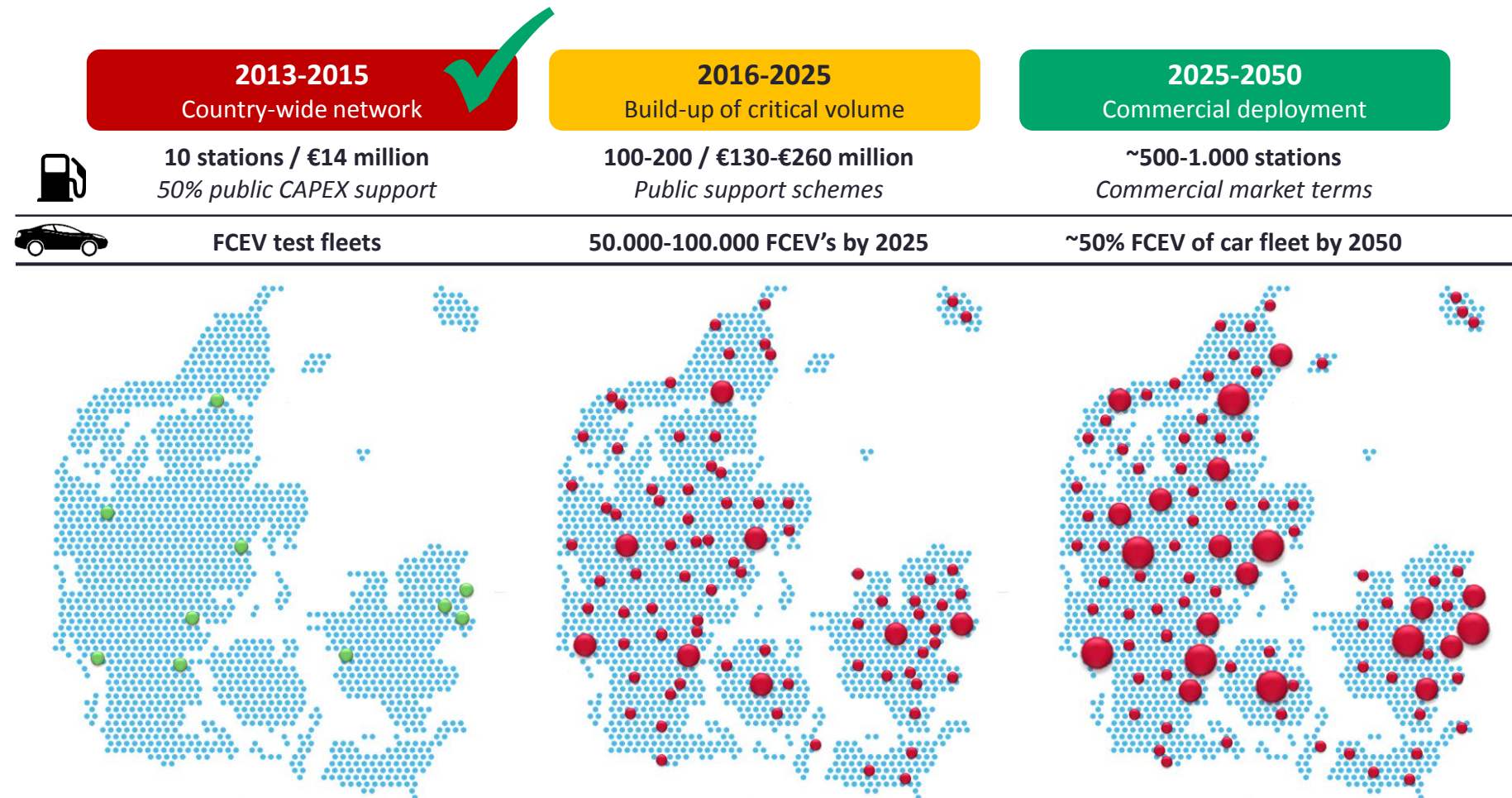
Gradual change from CAPEX to OPEX support – creating the business case.
Has successfully commercialized wind power – next is biomass & hydrogen.



Denmark to be 100% renewable by 2050 – all sectors

Danish political target of 100% fossil independence by 2050 across all energy sectors.

Power and heat to reach 100% renewables by 2035 and transport to be zero emission by 2050.



100% renewable by 2050 | Denmark

Danish political target of 100% fossil independence by 2050 in all energy sectors.
Power & heat to reach 100% renewables by 2035 | 100% ZEV in transport by 2050.

