

Clean Fuels 2035

Linking Hydrogen + CO₂ Utilisation to Regional Hub Delivery

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Technology Principal - Hydrogen, Alternative Fuels, and CCUS

OEUK North Sea CCS and Hydrogen Summit 2026

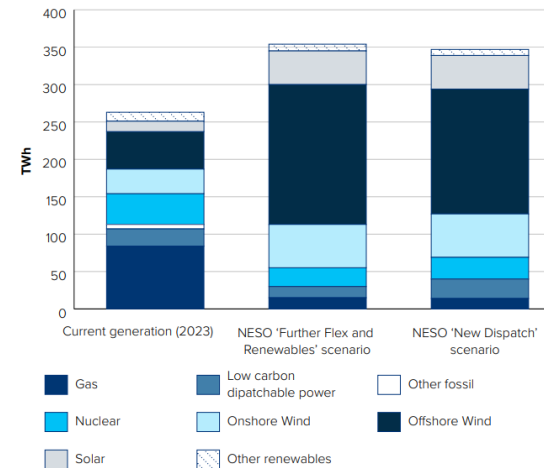


Out of the bubble

Clean Power 2030 is changing the landscape

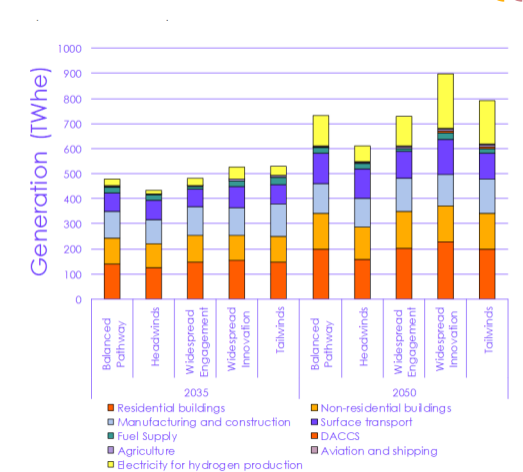


Figure 7: Generation in 2030 in the NESO 'Further Flex and Renewables' and 'New Dispatch' scenarios, compared to current generation (TWh)



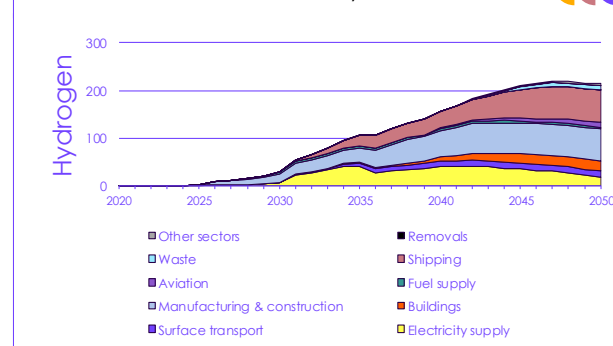
Source: NESO (2024), 'Clean Power 2030'

Figure M5.7 Electricity demand from sectors (2035 and 2050)

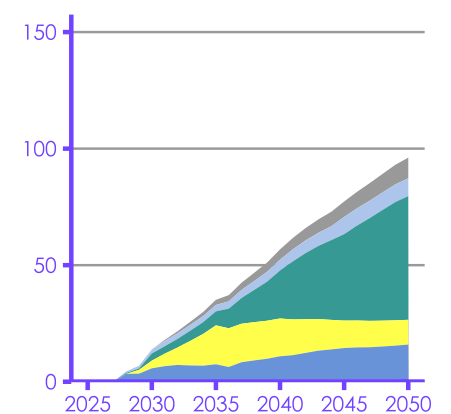


Source: CCC analysis.

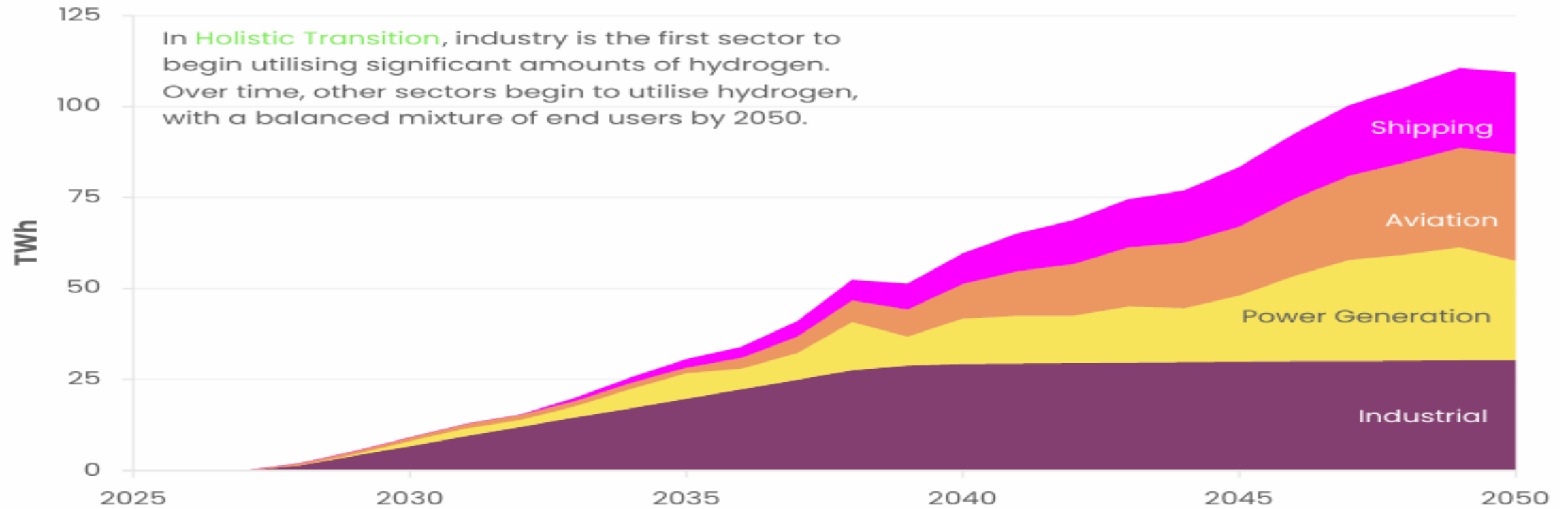
Figure 2.7 Energy demand (TWh) by sector in The Balanced Net Zero Pathway



e) Hydrogen



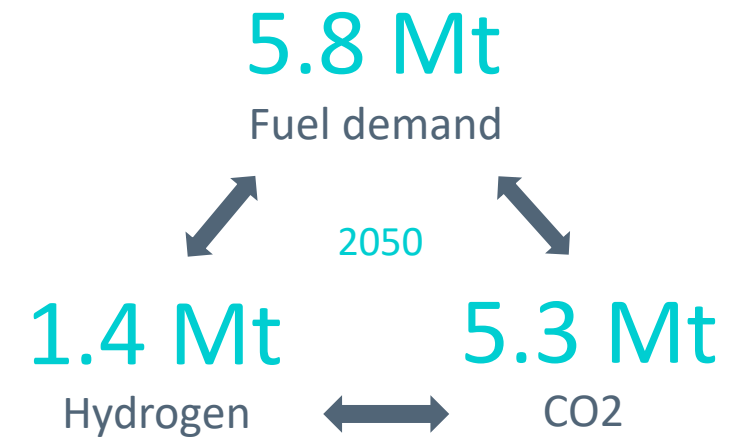
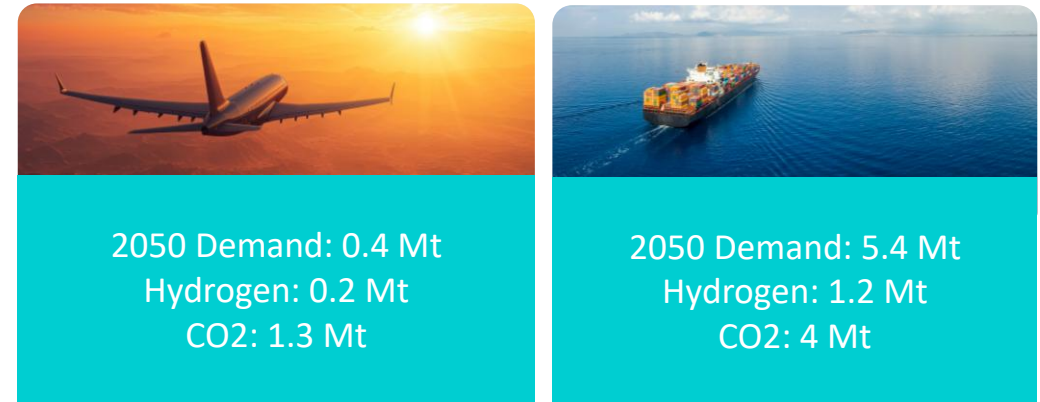
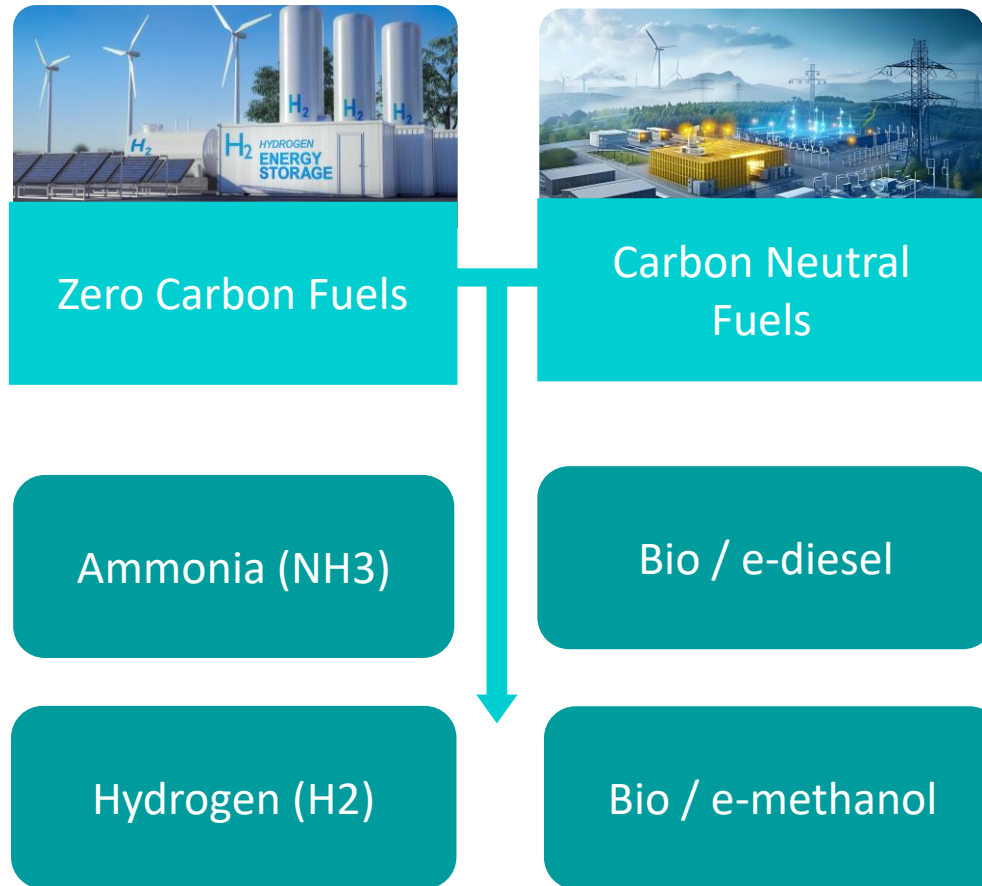
What about other fuels?



A New Era in Fuel Development: Alternative Fuels



Combining net zero solutions and industrial opportunity...



Recommendations

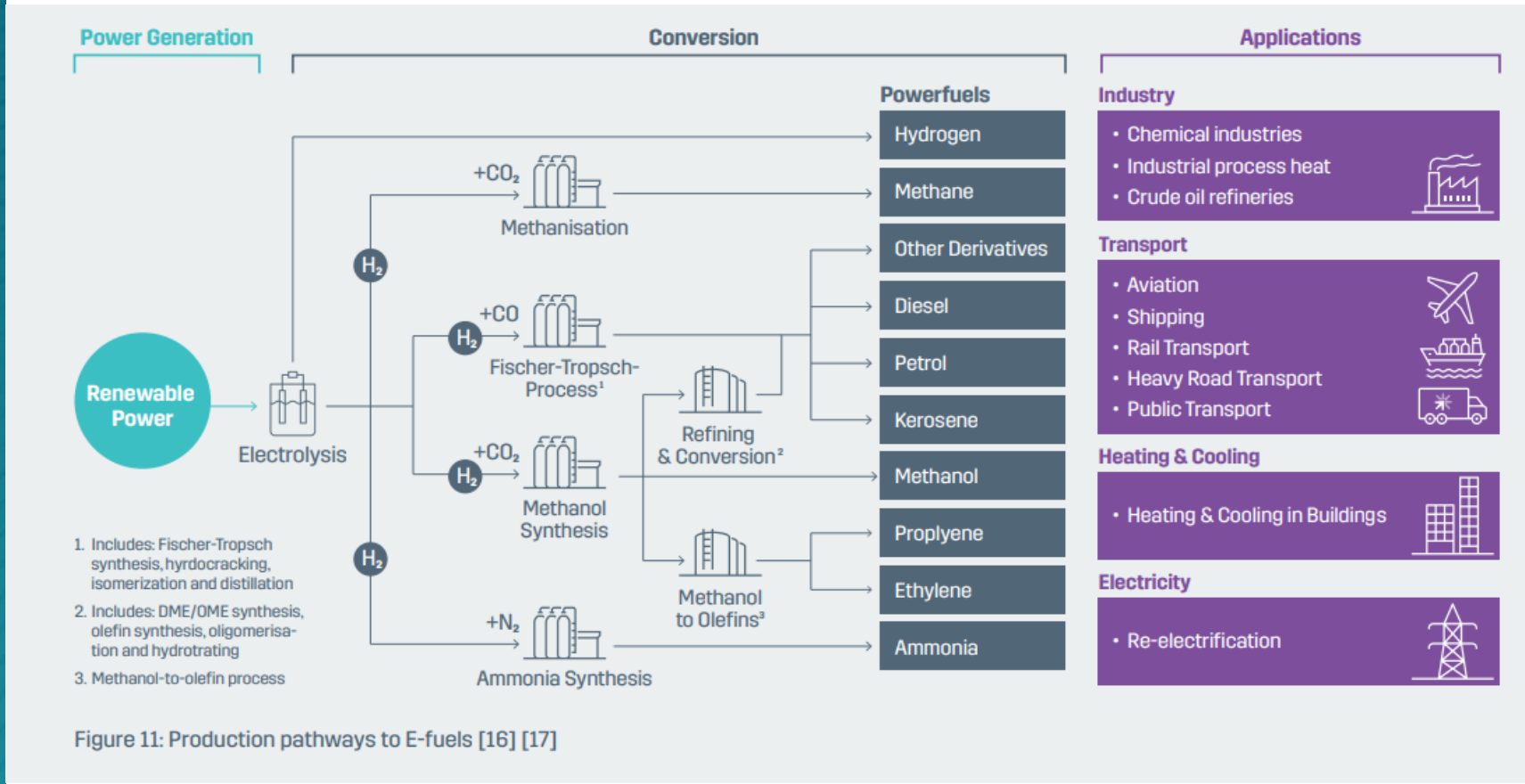
To fully realise the alternative fuel opportunity, action is required across four key areas:

- Incentivise carbon utilisation over storage
- Invest in integrated alternative fuels infrastructure
- Accelerate innovation and reduce costs for synthetic fuels
- Enhance regulatory frameworks for sustainable fuels



Energy Hubs

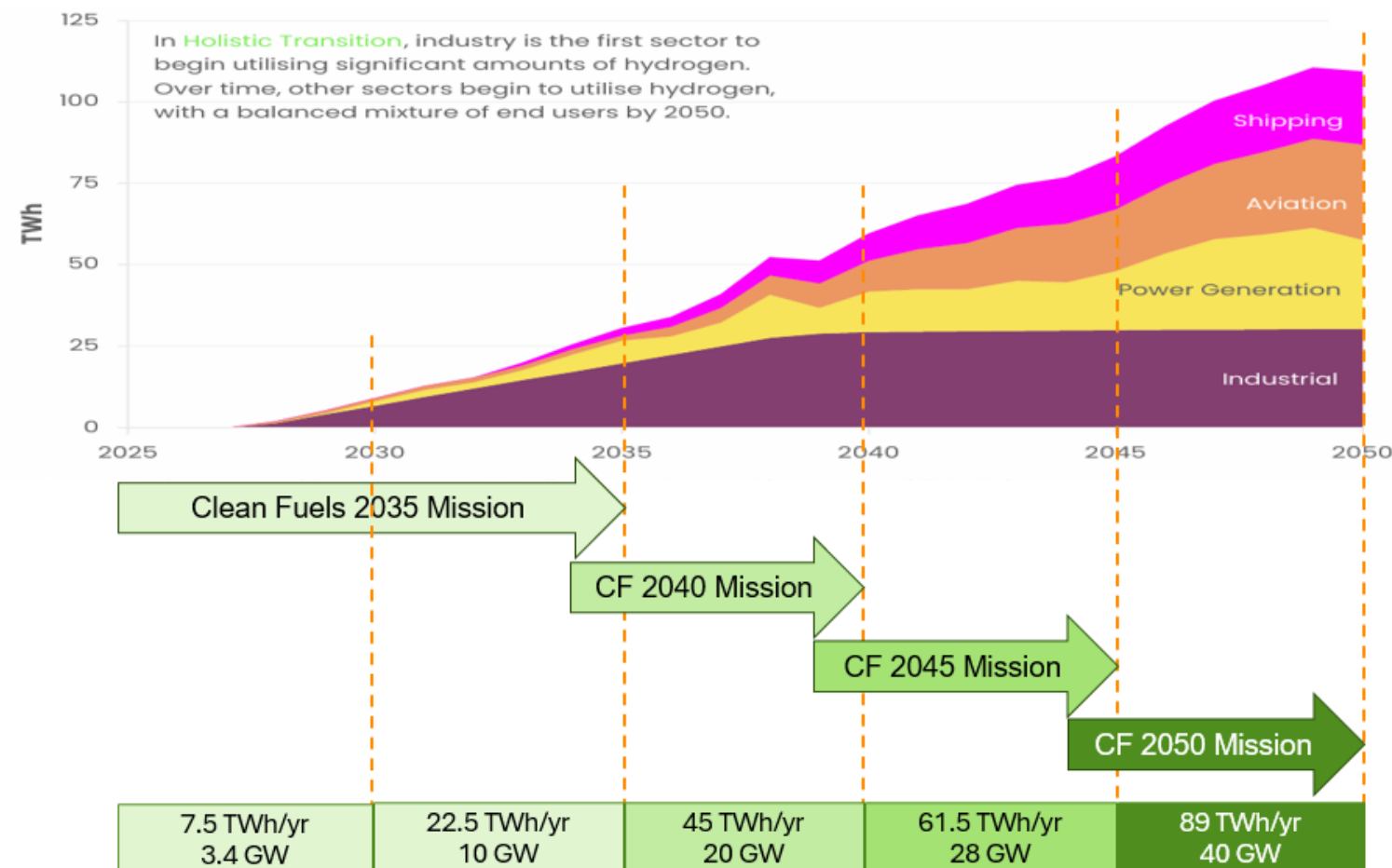
Onshore hydrogen and derivatives production from onshore and offshore wind





Clean Fuel 2035 Mission

- FES25 Holistic Transition outlines a need for 40GW+ of wind power coupled to 40GW+ of electrolysis for clean fuels, half in liquid form and half gaseous.



- O&G SC competency and skills across can enable UK energy security by turning wind into molecules for clean power and fuels through distributed Energy Hubs.
- A centrally planned framework to deliver 40GW+ of distributed clean fuel production across Scotland.
- A Just Transition of existing industries into new industries to service a bright, clean future.

Burst or strengthened?

Critical for feedstocks

Clean Power 2030?

We are not in an “OR” situation

Multi-vector challenges need multi-vector solutions

H₂