



The North Sea in Transition – A new future emerging

Michael Tholen – Director of Sustainability

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- 1 Energy outlook
- 2 Integrated energy opportunities
- 3 Decarbonising UKCS
- 4 Role of CCS and Hydrogen
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Global energy systems reorientating to a net-zero future

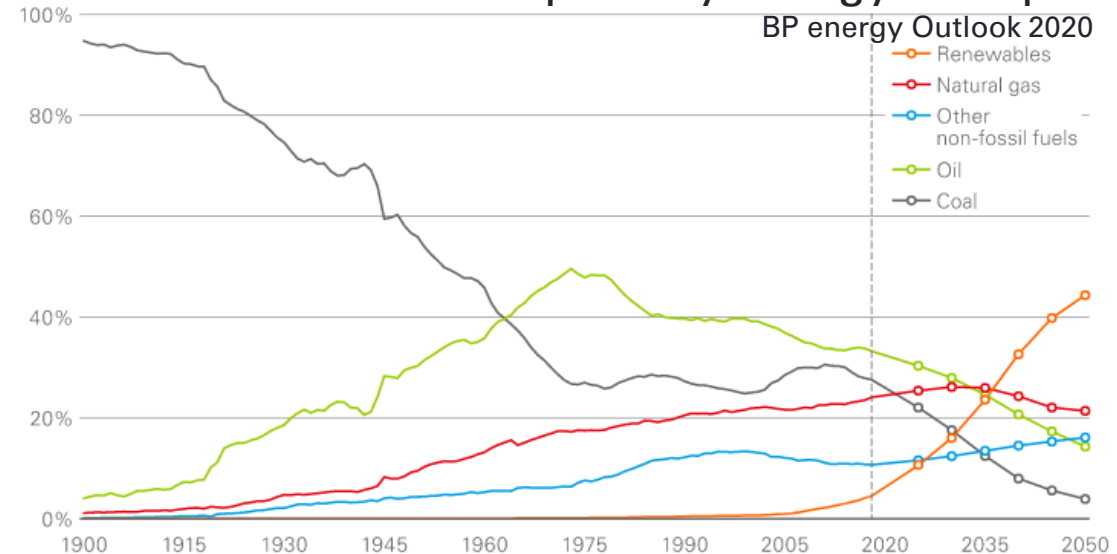
BP warns of oil demand peak by early 2020s

Coronavirus pandemic ushers in an earlier than anticipated decline for the fossil fuel era



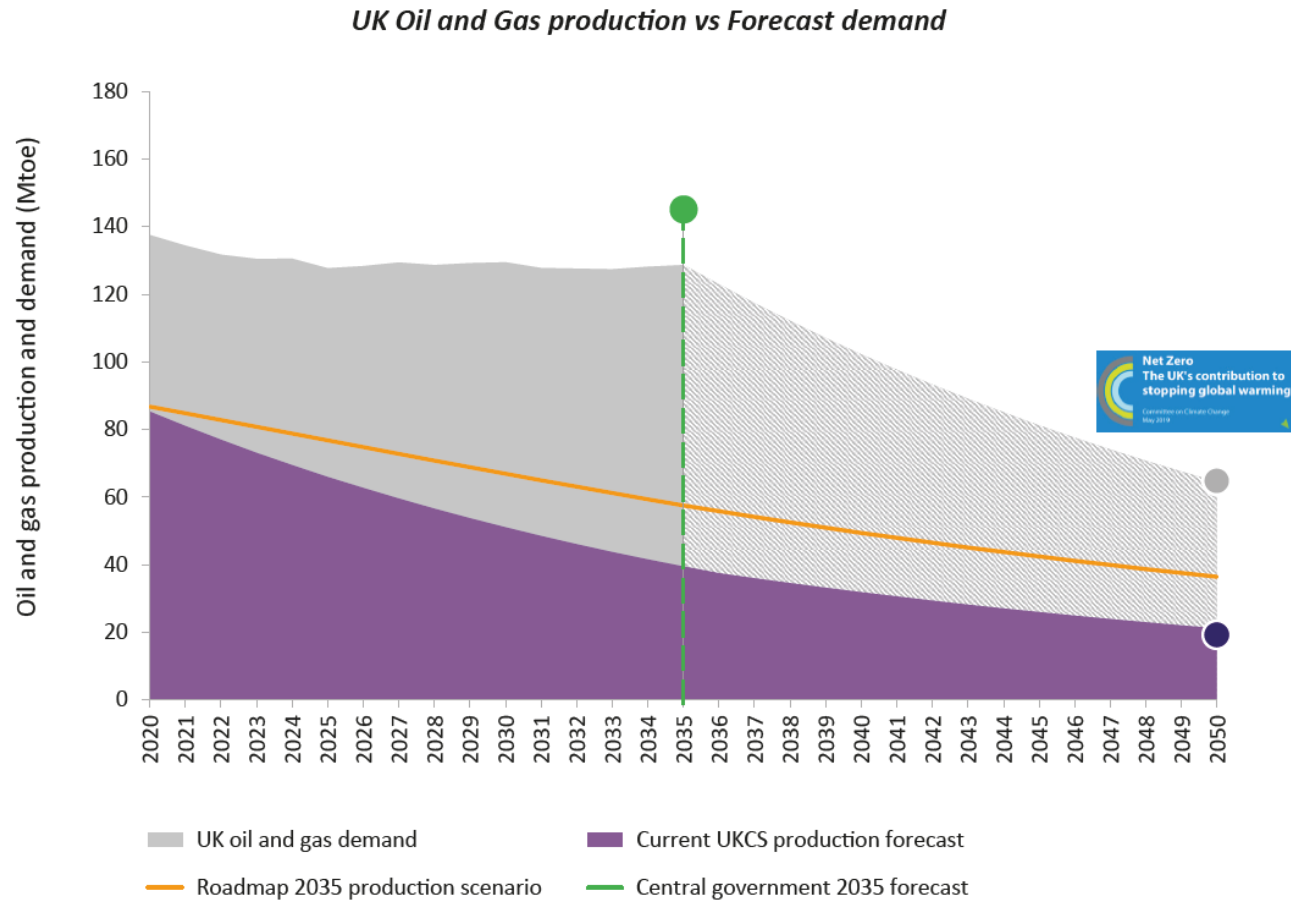
Two BP scenarios suggest 2019 levels of 100m barrels a day will be the peak for consumption © Stuart Conway

Shares of primary energy in Rapid



- Economic recovery post- COVID unclear in terms of size and timing
- Changes to consumer behaviour: flying, commuting,
- Global birth rates falling
- Continued decarbonisation ambition from governments
- Reducing cost of alternative technologies

Indigenous production can help support UK transition to a Net-Zero future



Source: OGUK, BEIS, CCC

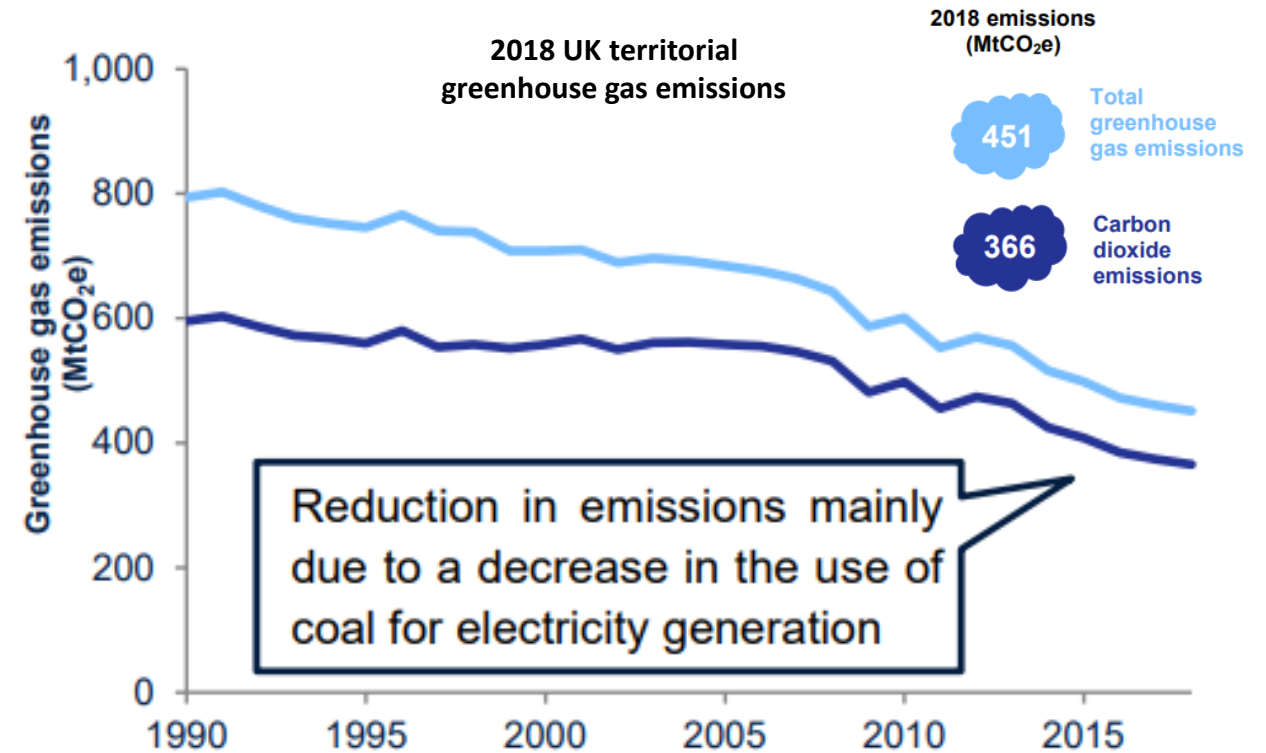
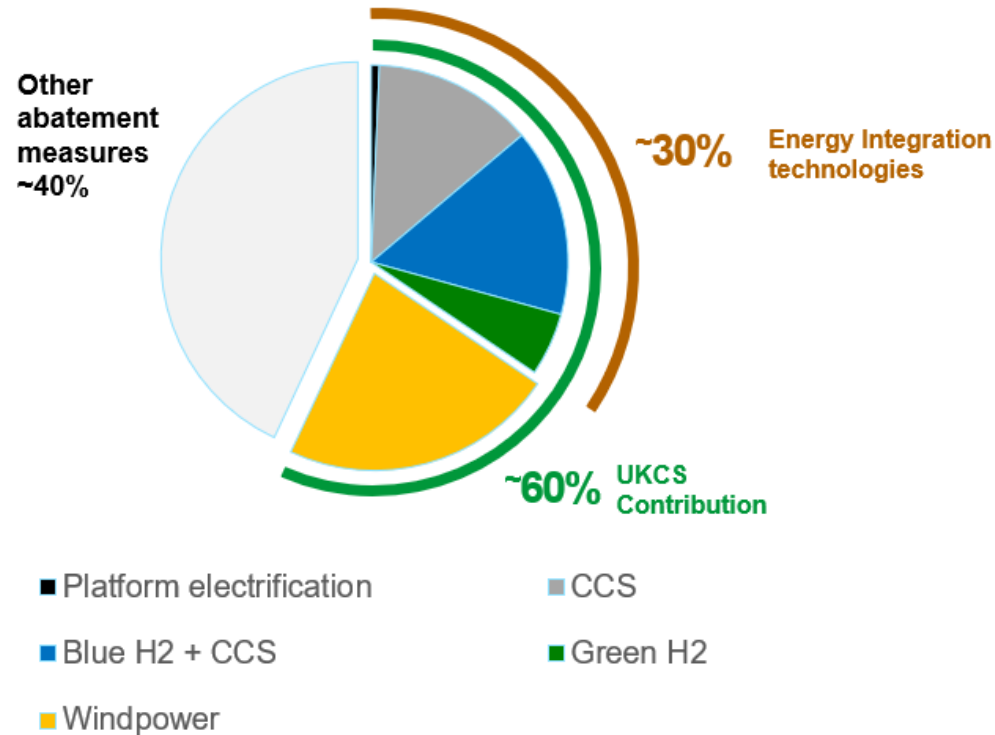
- Clear economic and energy security advantages
- Localised lower carbon production – UKCS emission targets
- New investment will need to be “best in class”
- Enabler to net zero by maintaining supply chain and expertise

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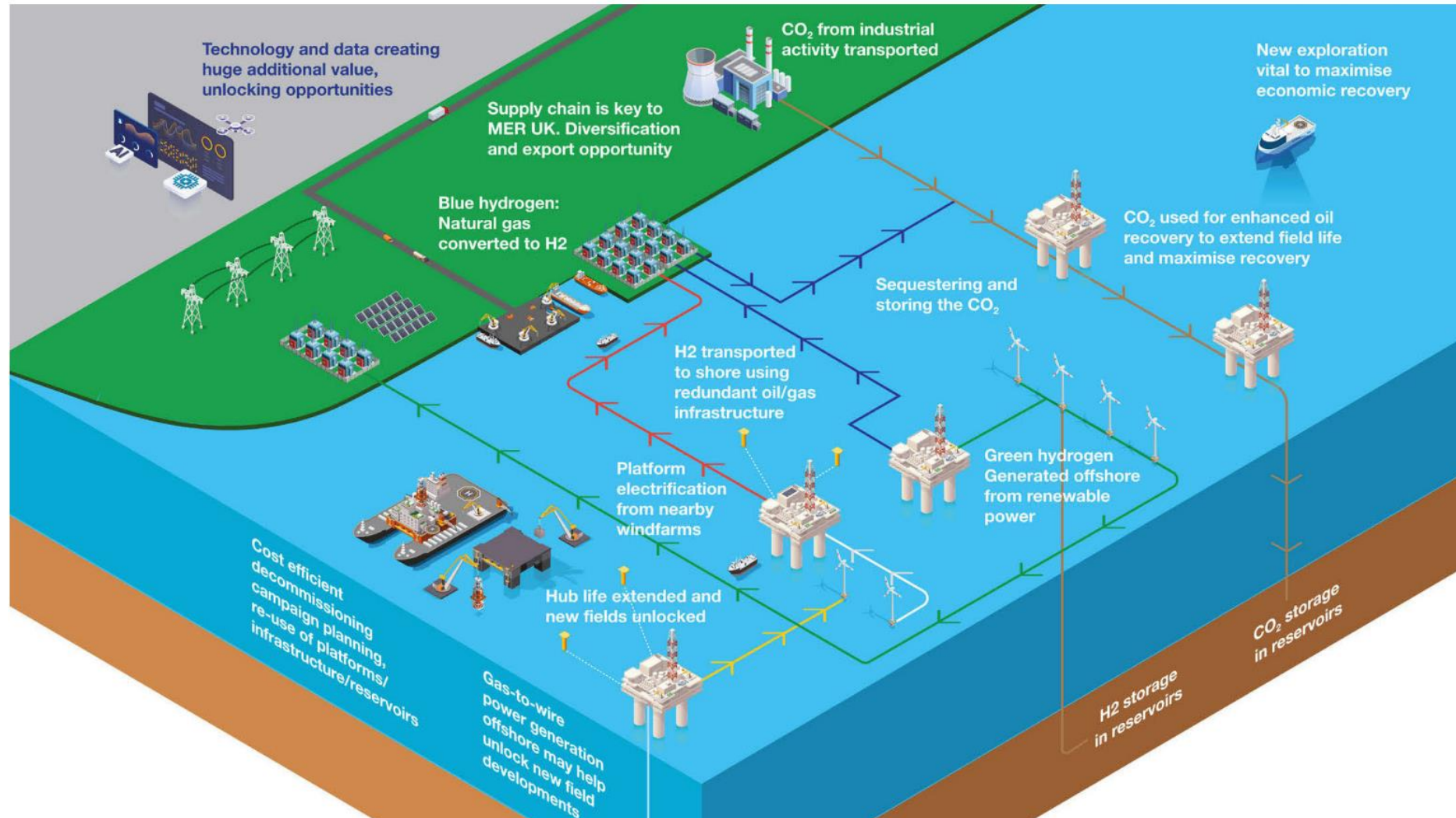
UKCS is fundamental to unlocking a Net-Zero UK

UKCS net zero emission abatement potential



An Integrated Offshore Energy Vision

Oil & Gas is a platform to the solution

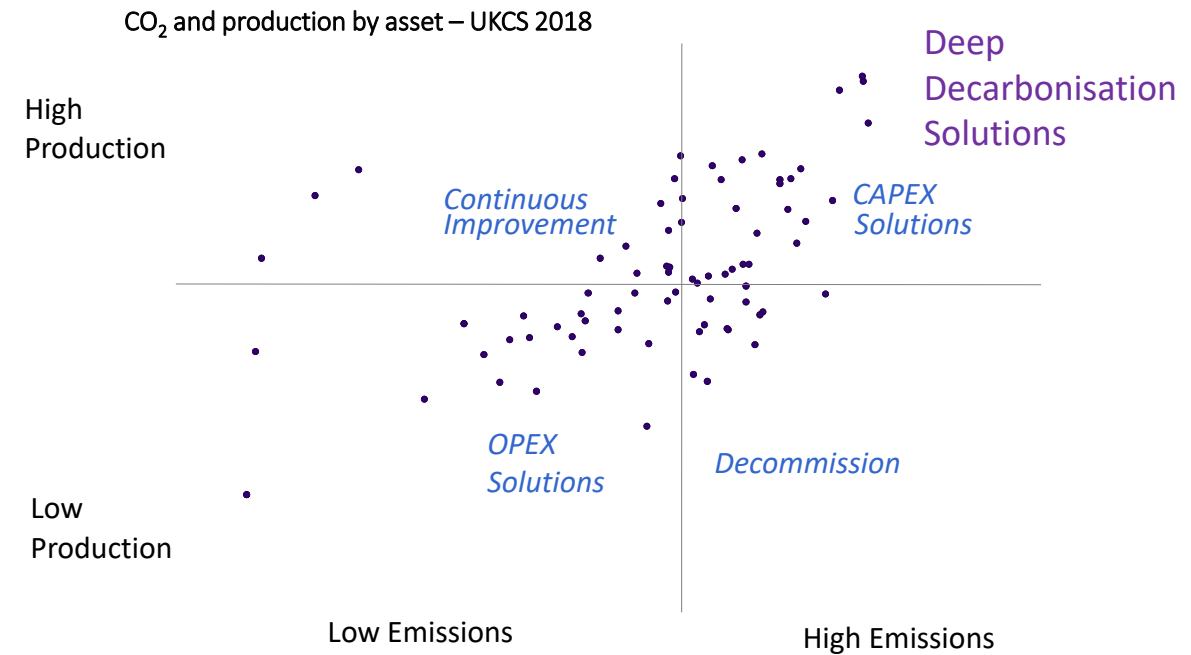
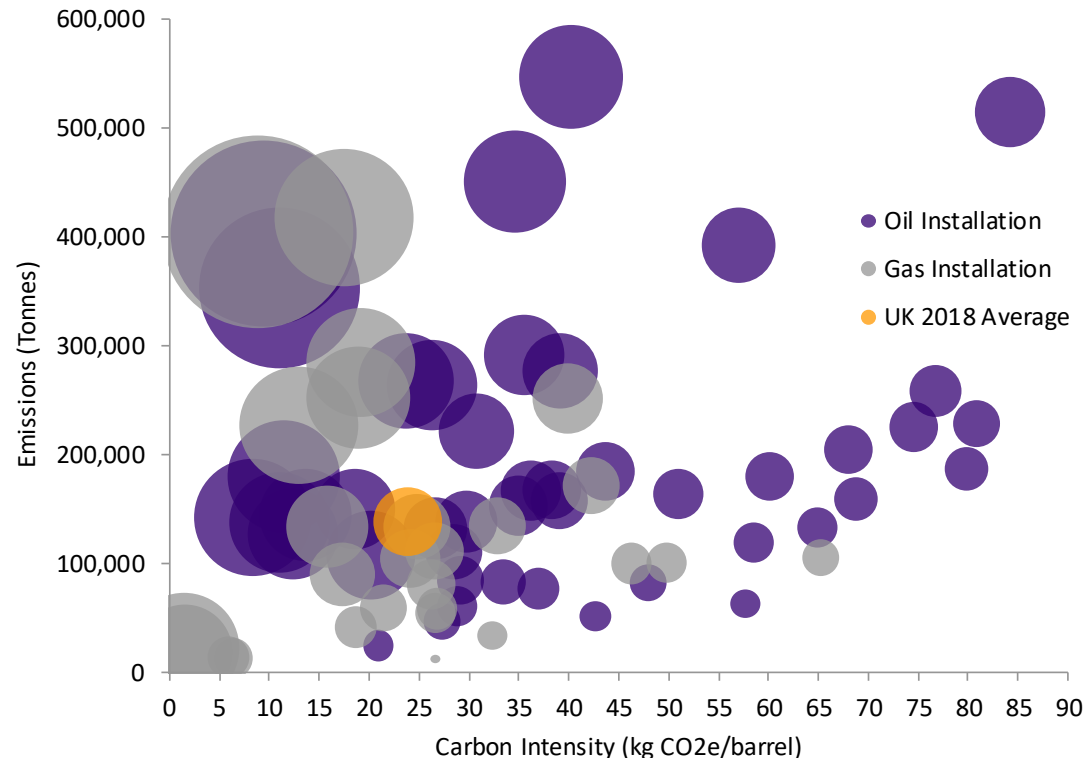


OGA EIP - 2019

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Improving the Emissions Intensity of Oil and Gas Exploration and Production in the UK



UKCS has set itself challenging targets for emission reduction



Achieving the Emission Reduction Targets

1

Operational Improvement

2

Reduced Flaring & Venting

3

Step-Change Action

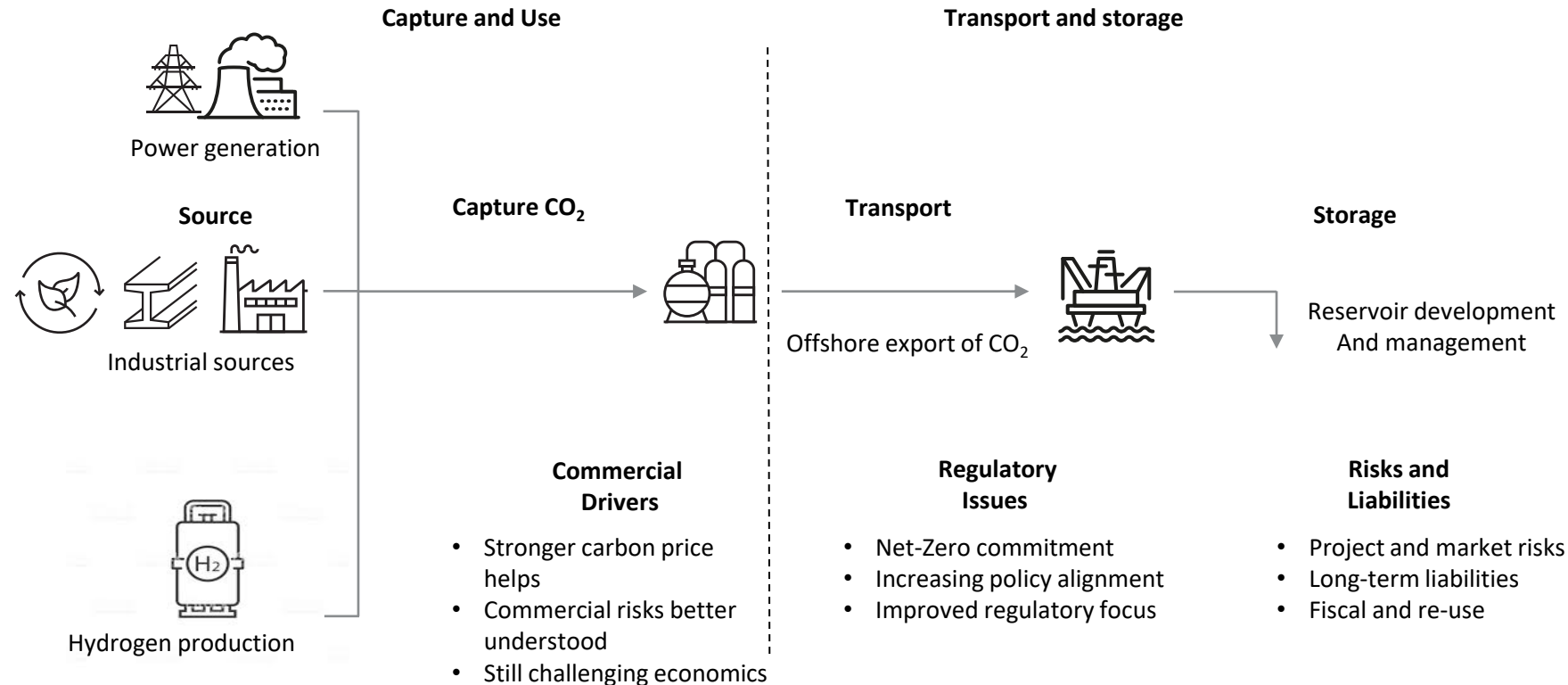


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Providing T&S capacity for carbon capture will be a key contribution from our sector

Targeting 10m tonnes capacity by 2030

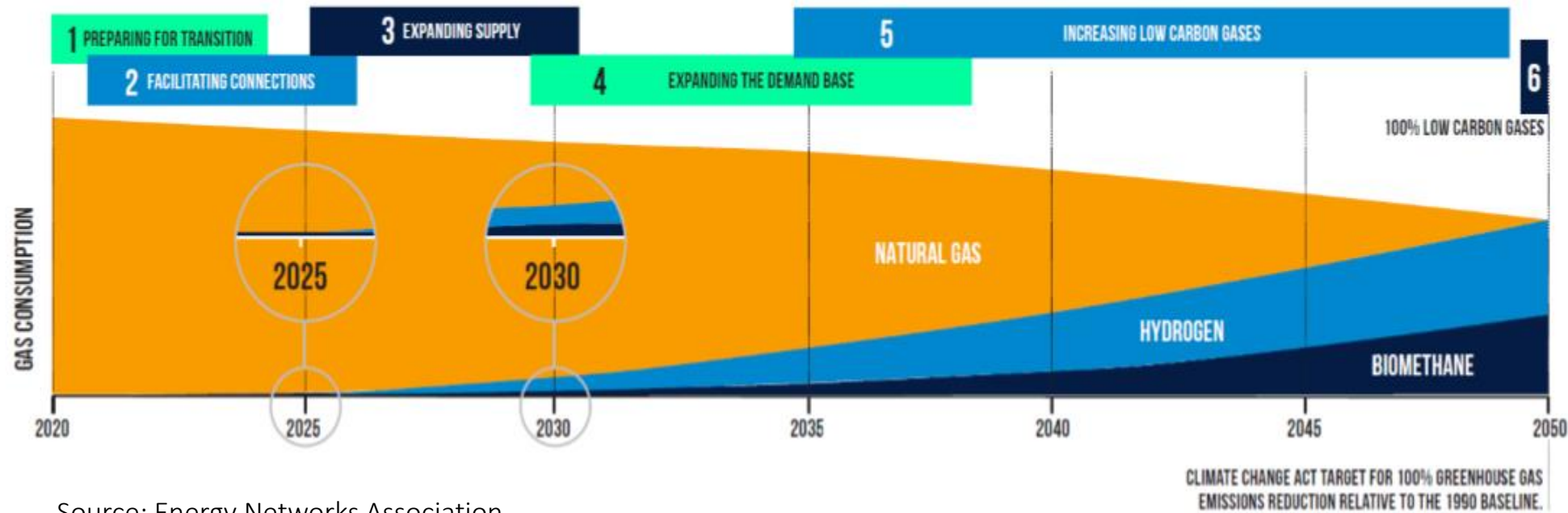


Higher CO₂ prices
CfD-type incentive mechanisms

Economic regulation RAB models
Address liability questions

Gas goes green: the Hydrogen value chain is also a key area of opportunity

Targeting 50 TWh production by 2030



Source: Energy Networks Association

- Increasing consensus of the role of hydrogen across a range of applications building on UK expertise and customer base
- Rapid development at scale will require all types of Hydrogen production i.e. “Blue” and “Green”
- Infrastructure and storage is a key requirement

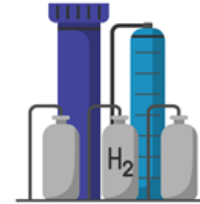
Our supply chain provides the foundation for the transition to net-zero



Oil & Gas



CCUS



Hydrogen



Wind

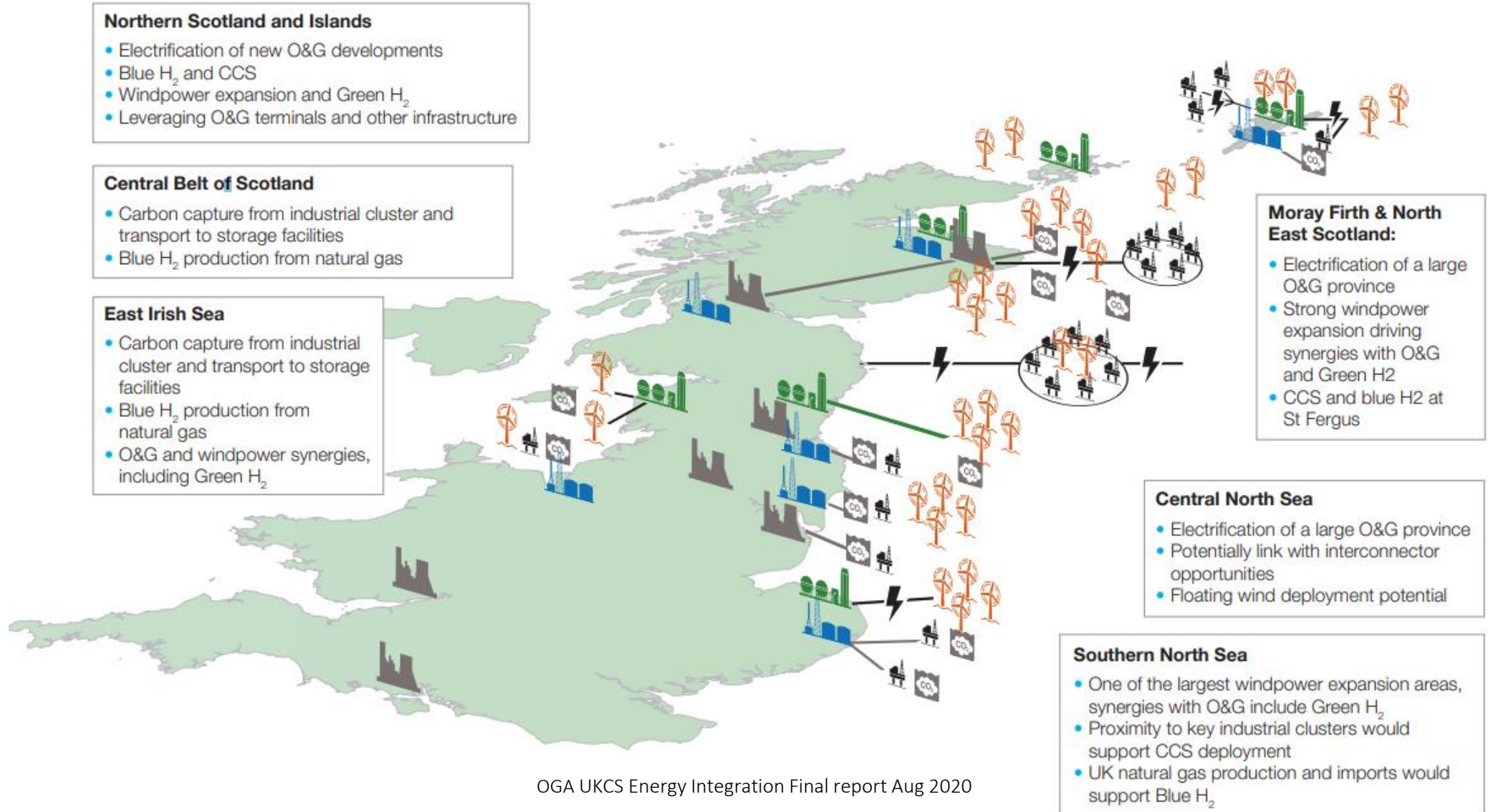
Reservoirs & Subsurface	✓	✓	?	✗
Drilling & Wells	✓	✓	?	✗
Facilities & Infrastructure	✓	✓	✓	✓
Marine & Subsea	✓	✓	✓	✓
Cross-sector Services	✓	✓	✓	✓

Equipping the UK with the skills, expertise and technologies to unlock key low-carbon industries

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A North Sea in Transition - Enabling a low carbon future



**We need to act now
To deliver a net zero UK**

