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# Energy Integration in Action

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From Oil & Gas to Energy Integration

Scott Robertson, Operations Director

5<sup>th</sup> October 2021

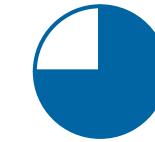
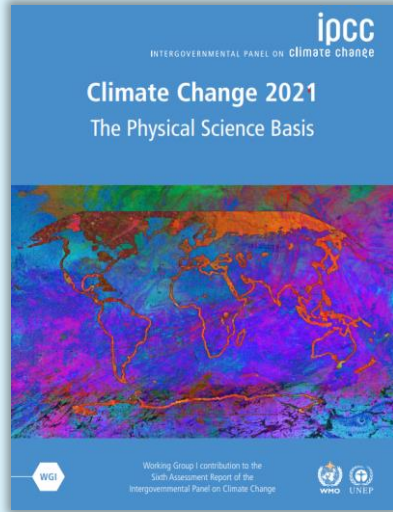
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# Oil and gas under the spotlight



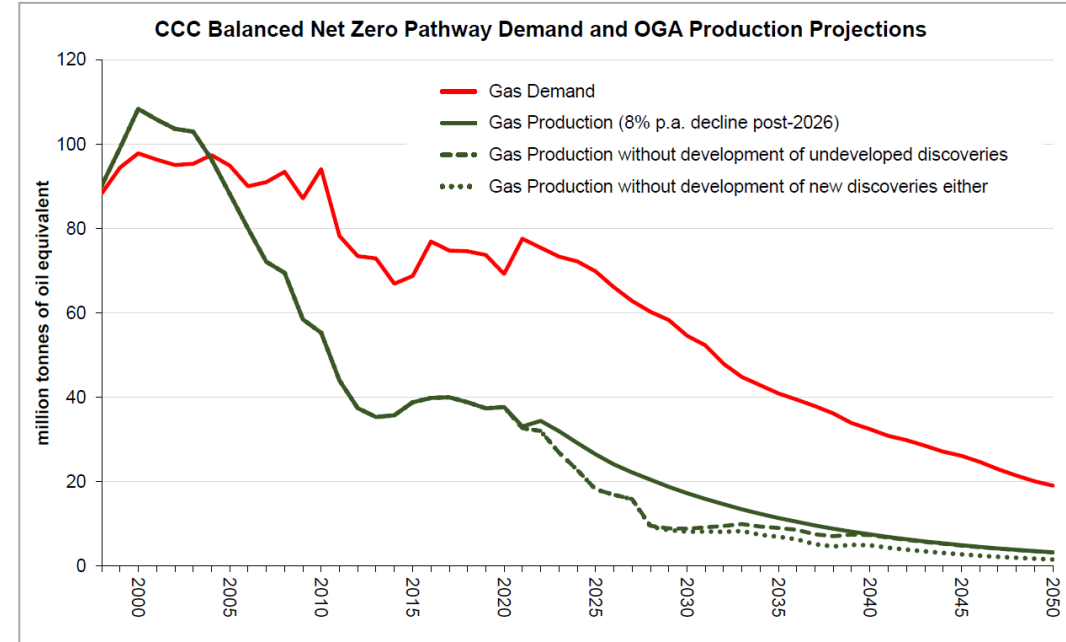
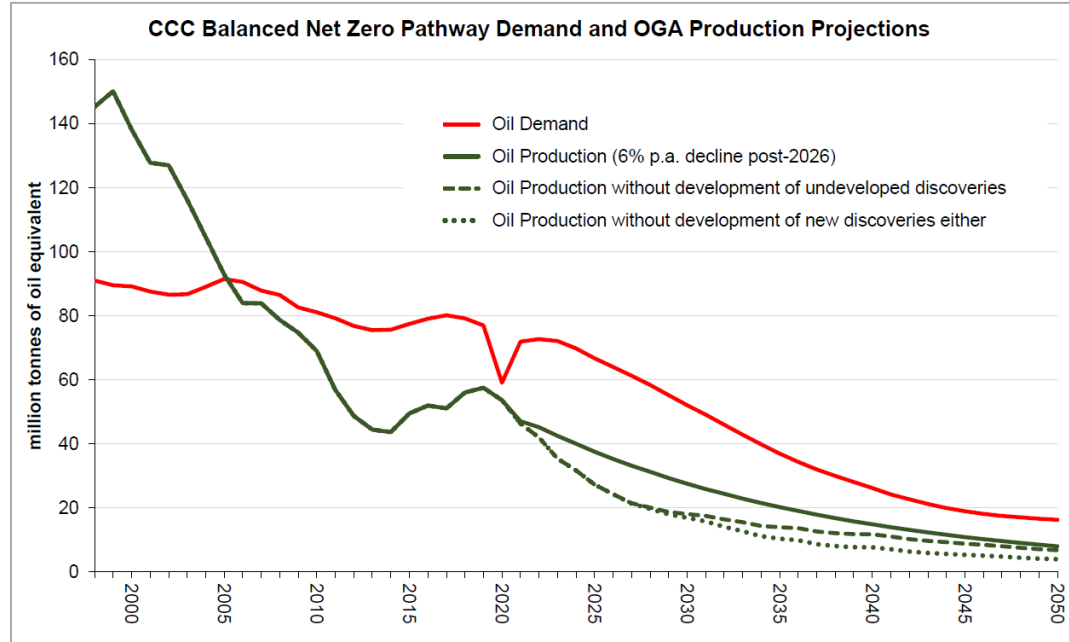
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Oil & gas meets  
c.  $\frac{3}{4}$   
UK energy demand



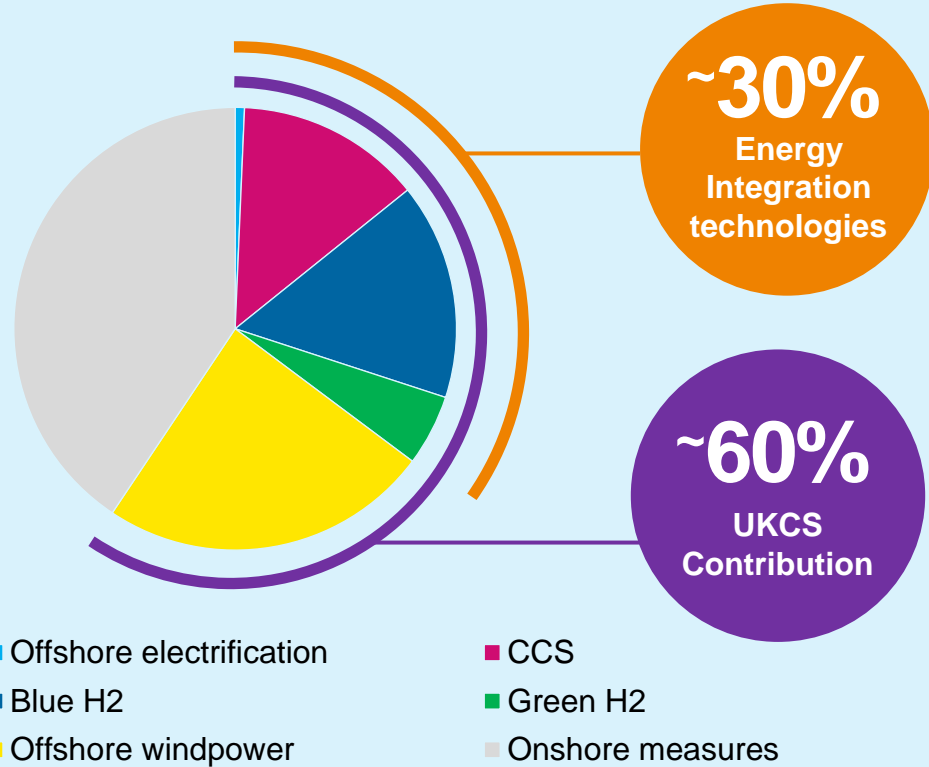
-33%  
Reserves replacement



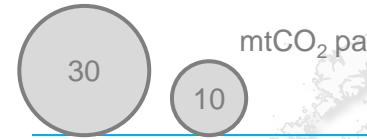
# Offshore contribution to UK net zero



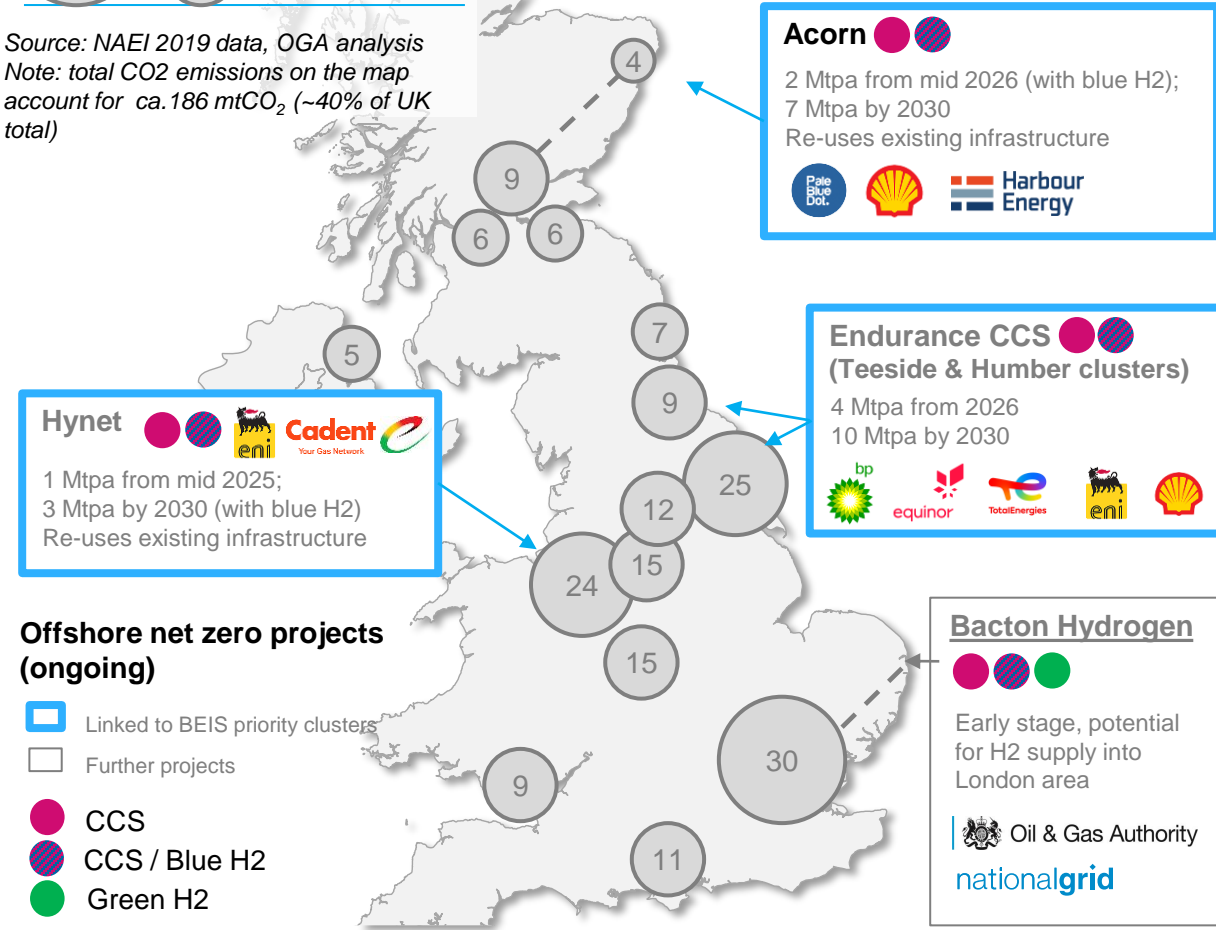
## 2050 net zero emission abatement from 2018 baseline



## Onshore CO<sub>2</sub> emissions 15 largest UK emitters (areas with 30km radius)



Source: NAEI 2019 data, OGA analysis  
Note: total CO<sub>2</sub> emissions on the map account for ca. 186 mtCO<sub>2</sub> (~40% of UK total)

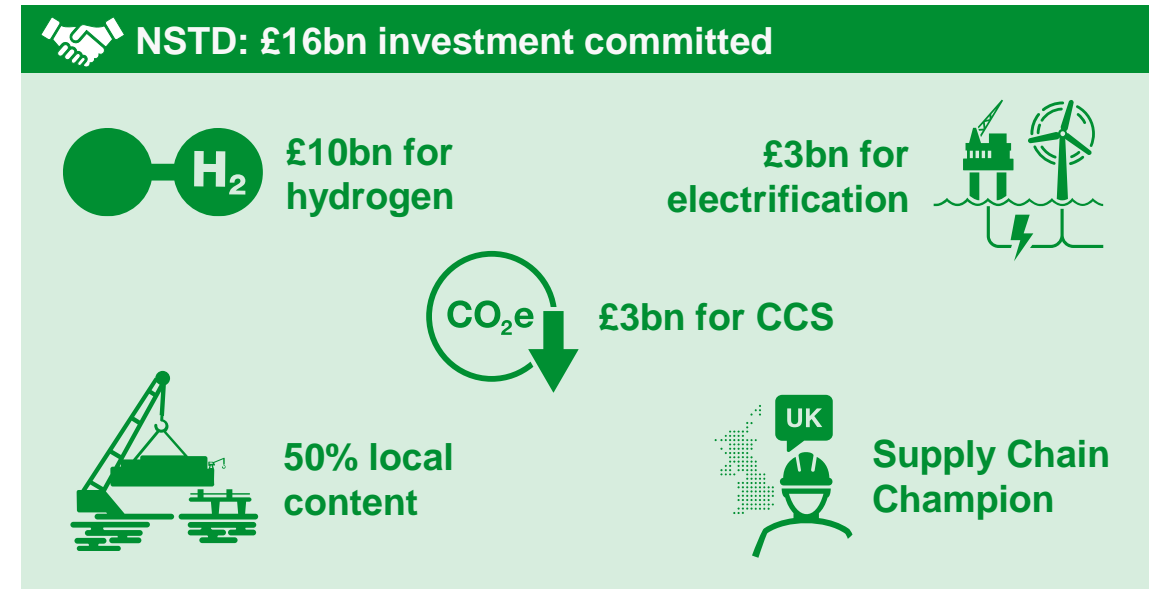


## Offshore net zero projects (ongoing)

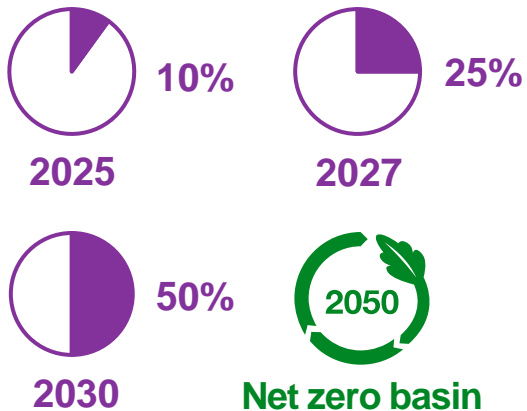
- Linked to BEIS priority clusters
- Further projects
- CCS
- CCS / Blue H<sub>2</sub>
- Green H<sub>2</sub>

# North Sea Transition Deal

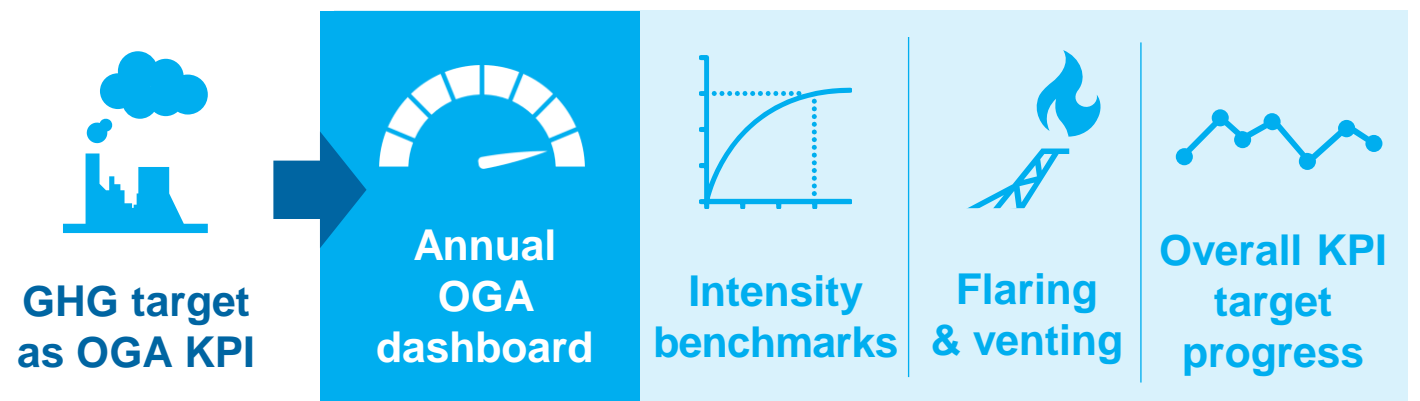
- Govt & industry commitment to transition
- First of kind for G7 country
- Future licensing climate checkpoint
- Quid pro quo



## Industry commitment to reducing upstream GHG emissions



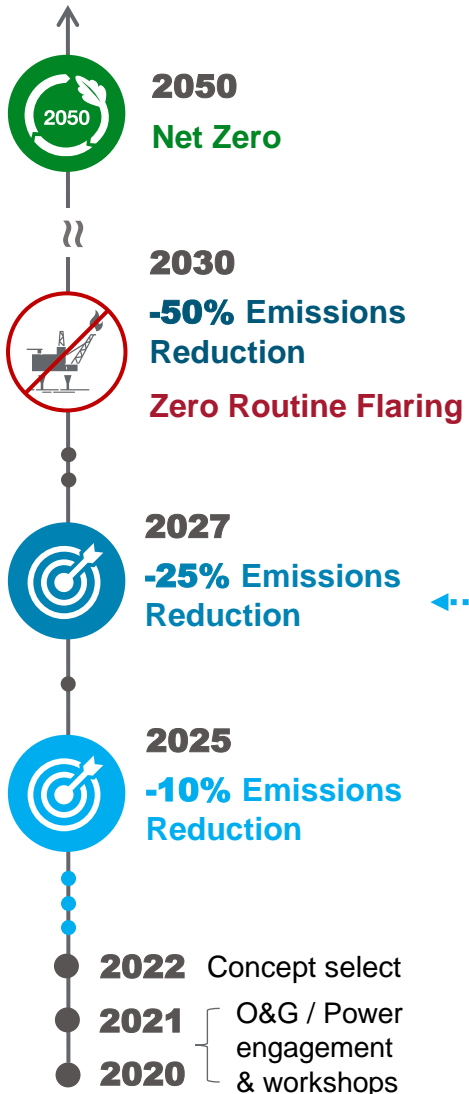
## OGA tracking and monitoring progress



# Electrification is crucial

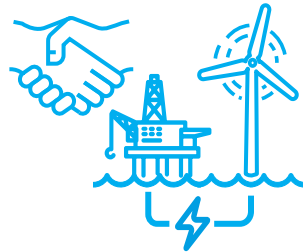


## Expected Timeline



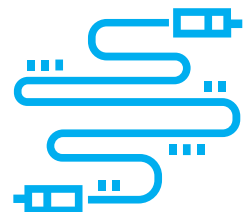
## Hitting emissions reduction targets

**Critical** to 25% emissions reduction target by 2027



## More collaboration required, at pace

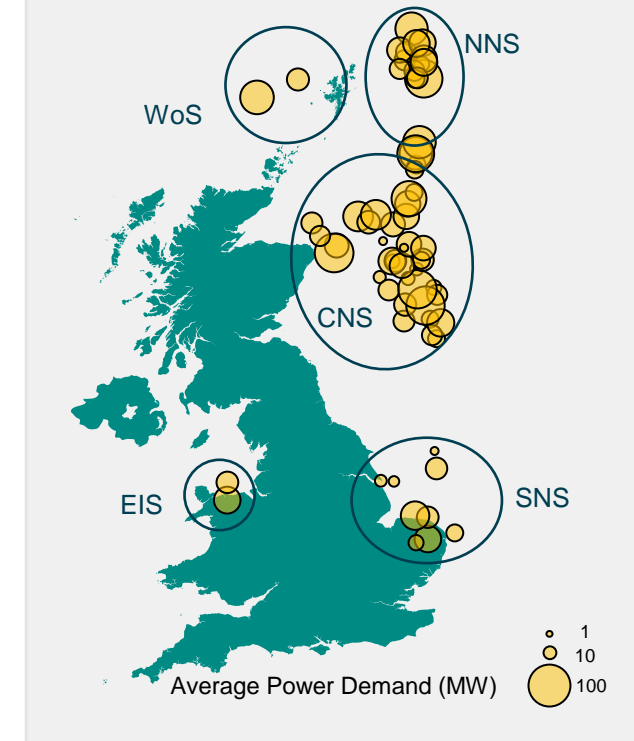
- Alignment between partners, governments and other sectors
- Regional schemes in CNS & WoS



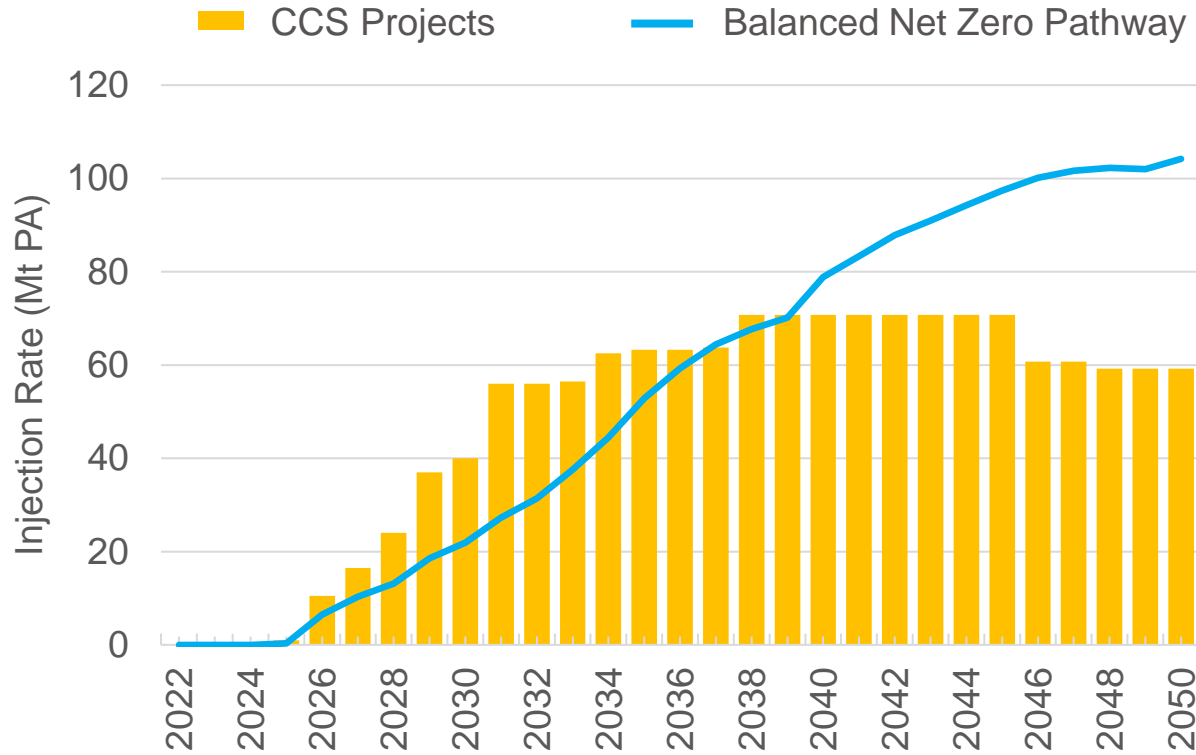
## Infrastructure legacy

- Investment in offshore transmission
- Grid capacity expansion
- Supporting offshore wind growth (+30GW by 2030, and 1GW floating wind)

UKCS emission abatement opportunity (OGA, EIP)

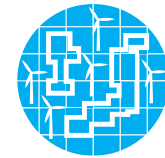


# CCS – the time is now



**78**  
GtCO<sub>2</sub>

Total UKCS CO<sub>2</sub> storage resource estimate

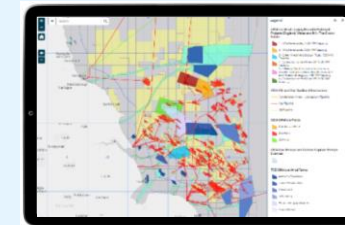


Spatial planning to high-grade future sites

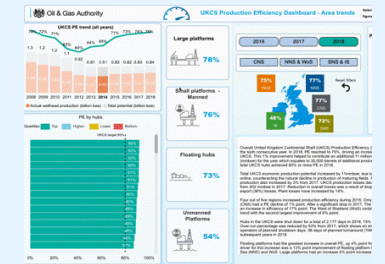
## Unlocking value through data & digital



### National Data Repository



### Geographic Information Systems (GIS)



### Insights & analysis



Northern Endurance Partnership, Teesside



HyNet, North West England



Acorn, St Fergus

**3**

carbon storage licences being stewarded towards permit application and first CO<sub>2</sub> injection

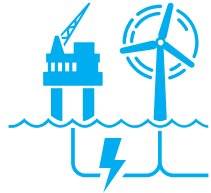
**3**

carbon storage licences applications being assessed

# UKCS is "prime real estate"



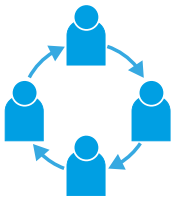
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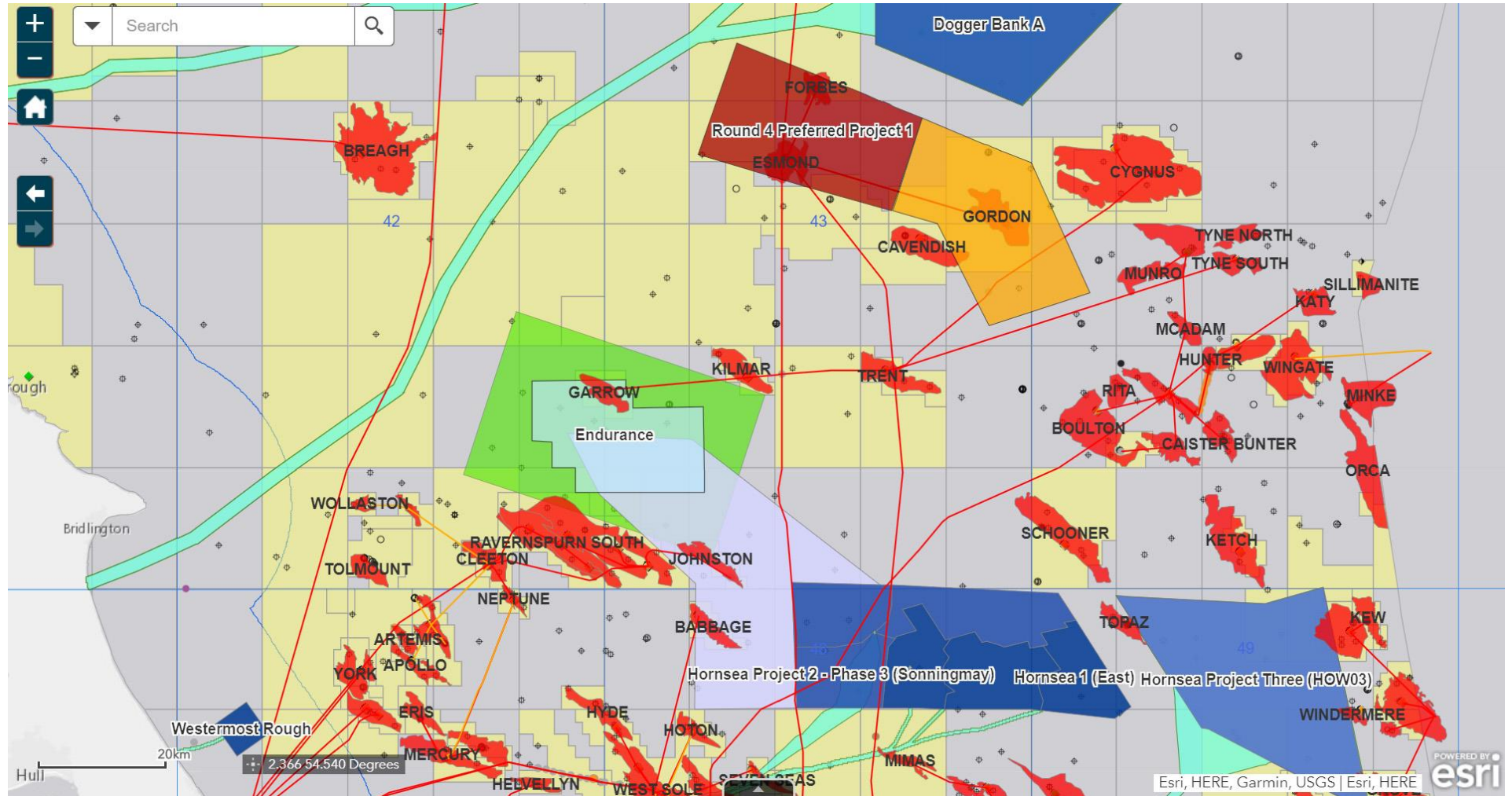
North Sea, East Irish Sea becoming a crowded space for energy



Spatial planning for energy integration is critical



Close interactions across regulators





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Thank you

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