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Authority

# The UK Continental Shelf in Transition

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Delivering net zero

Andy Samuel - Chief Executive

7 December 2021

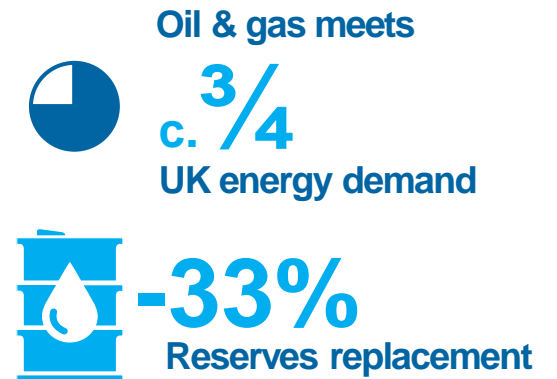
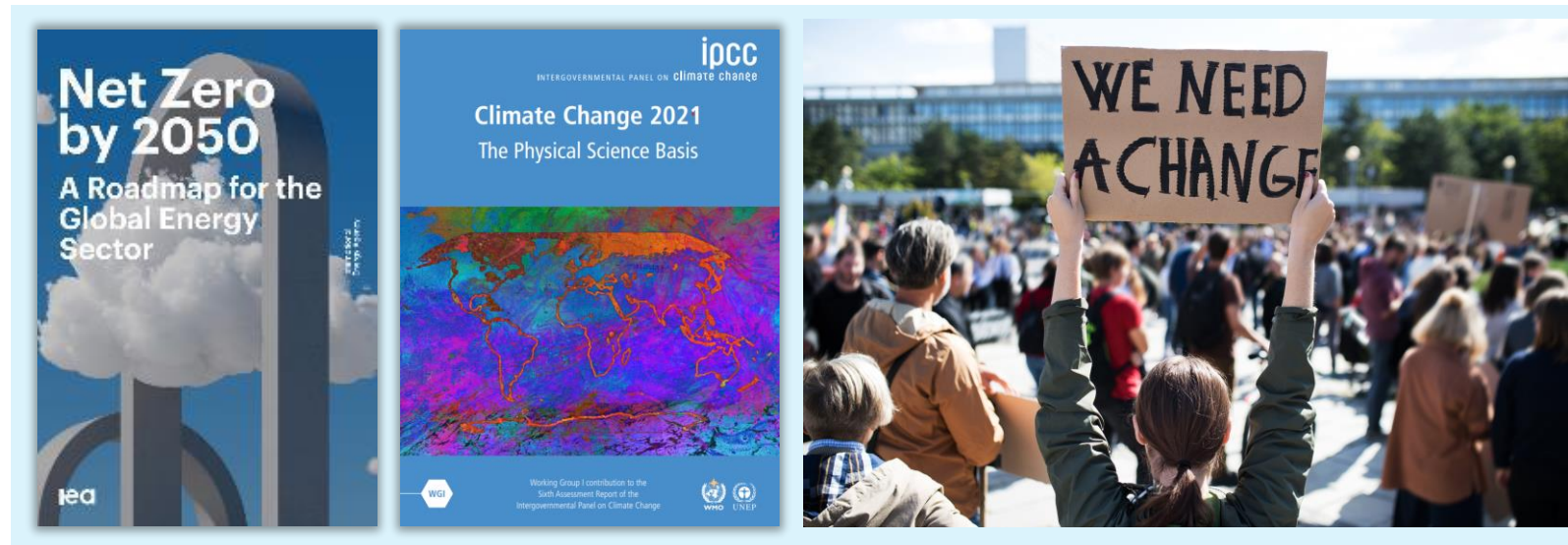
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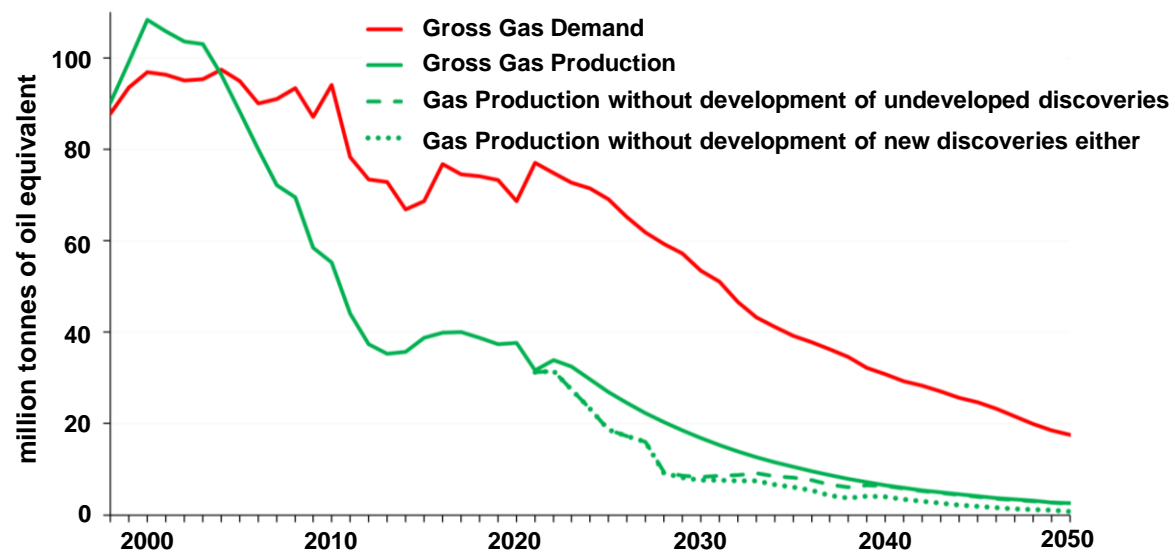
# Oil and gas under the spotlight



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CCC Balanced Net Zero Pathway Demand and OGA Production projections

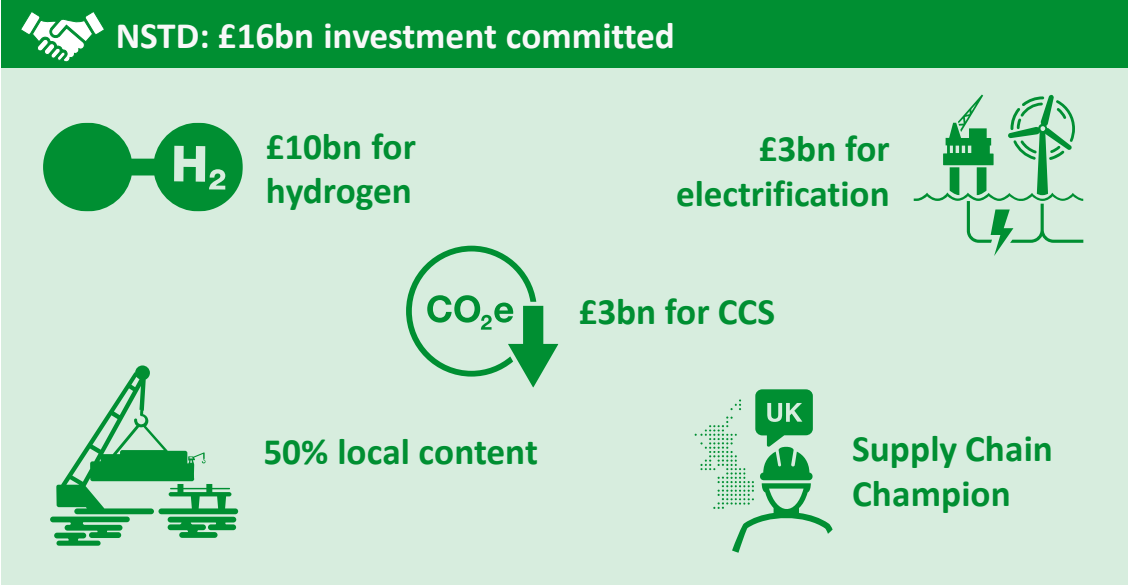


UK Gas Spot Price (UK GBP)

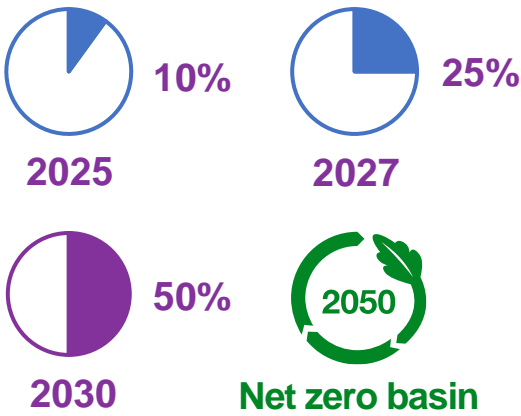


# North Sea Transition Deal

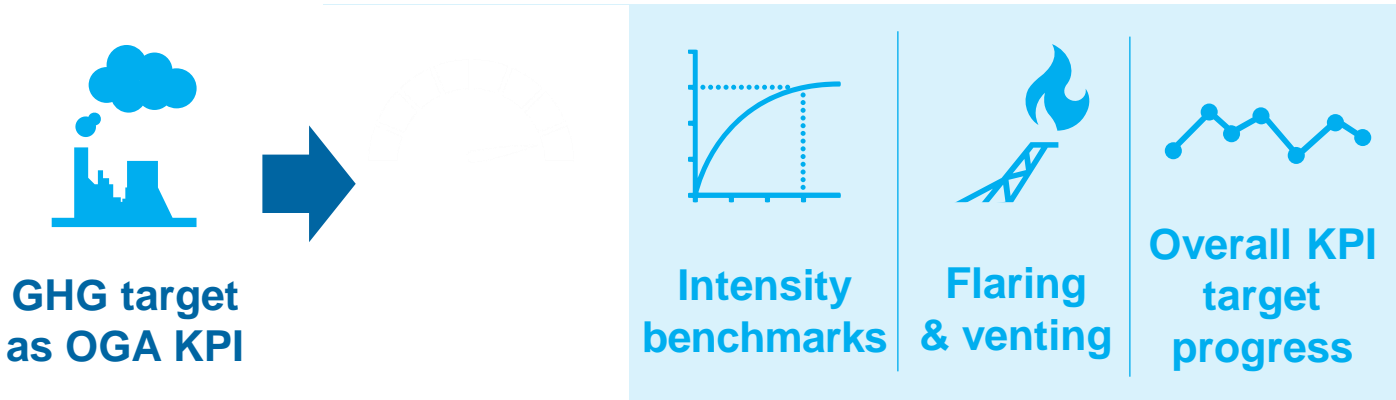
- Govt & industry commitment to transition
- First of kind for G7 country
- Future licensing climate checkpoint
- Quid pro quo



## Industry commitment to reducing upstream GHG emissions



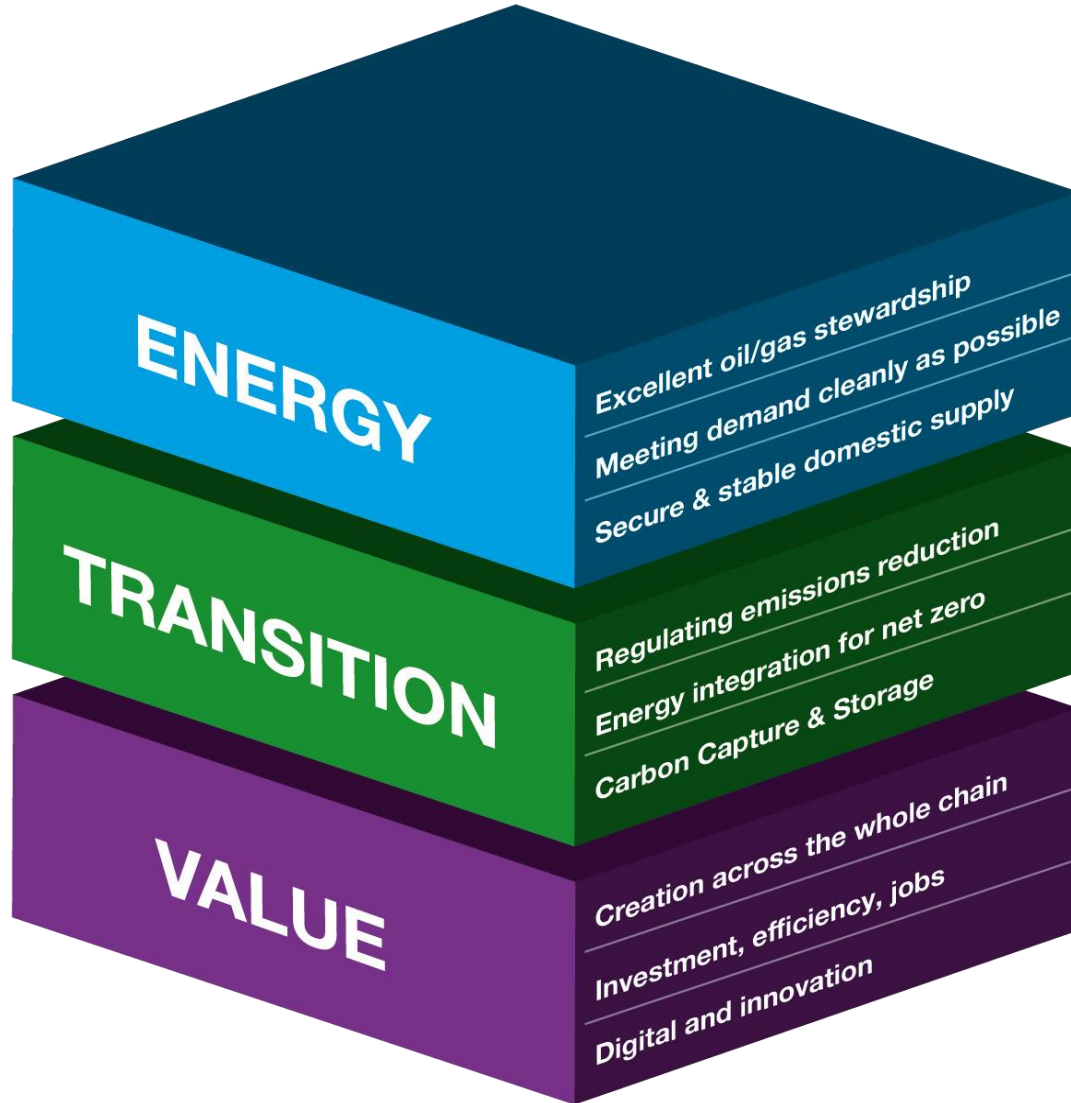
## OGA tracking and monitoring progress



# Our mission



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We regulate and influence the oil, gas and carbon storage industries. We help **drive North Sea energy transition**, realising the significant potential of the UK Continental Shelf as a critical energy and carbon abatement resource. We hold industry to account on **halving upstream emissions by 2030**.

We work with government, industry and other regulators to **accelerate the move to net zero** while meeting the UK's **energy demand and security**. We perform an effective net zero test and will not approve developments unless they pass it.

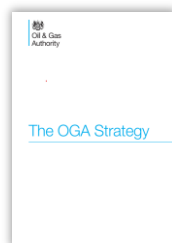
We aim to be a **value creator** in everything we do, encouraging and enabling economic benefit and **job creation** across the UK. We drive greater efficiency through **inclusive leadership**, data, analysis, stewardship and the use of our powers.

# Good business – not business as usual

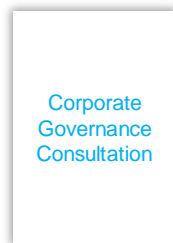


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## Framework



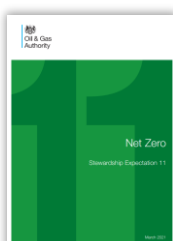
**OGA  
Strategy**



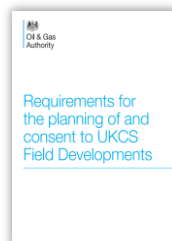
**Corporate  
Governance**



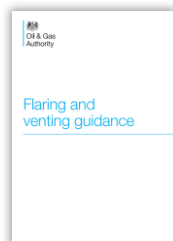
**ESG**



**Net zero  
expectation**



**New  
fields**



**Flaring &  
venting**

## OGA interventions & industry effort



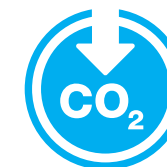
**22%**

Annual reduction  
in flaring volume



**10%**

Annual reduction  
in CO2 emissions



**983,000**

tonnes CO2  
avoided YTD



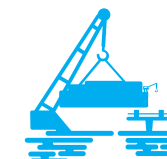
**80%**

OGA PE target  
retained



**11.2/boe**

Unit operating  
cost

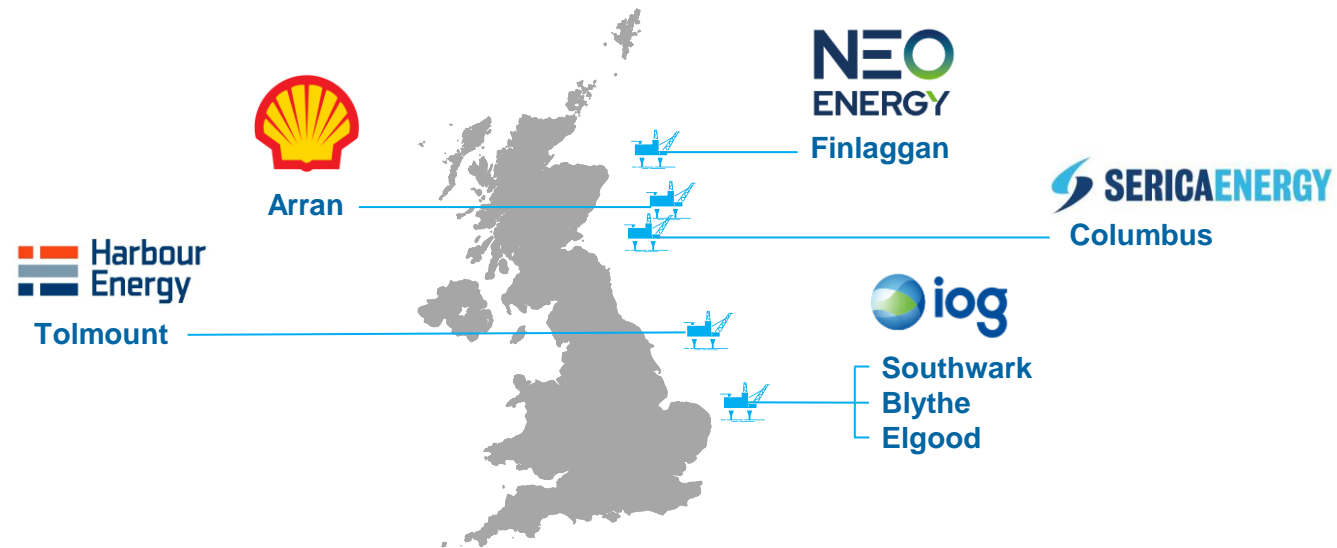


**23%**

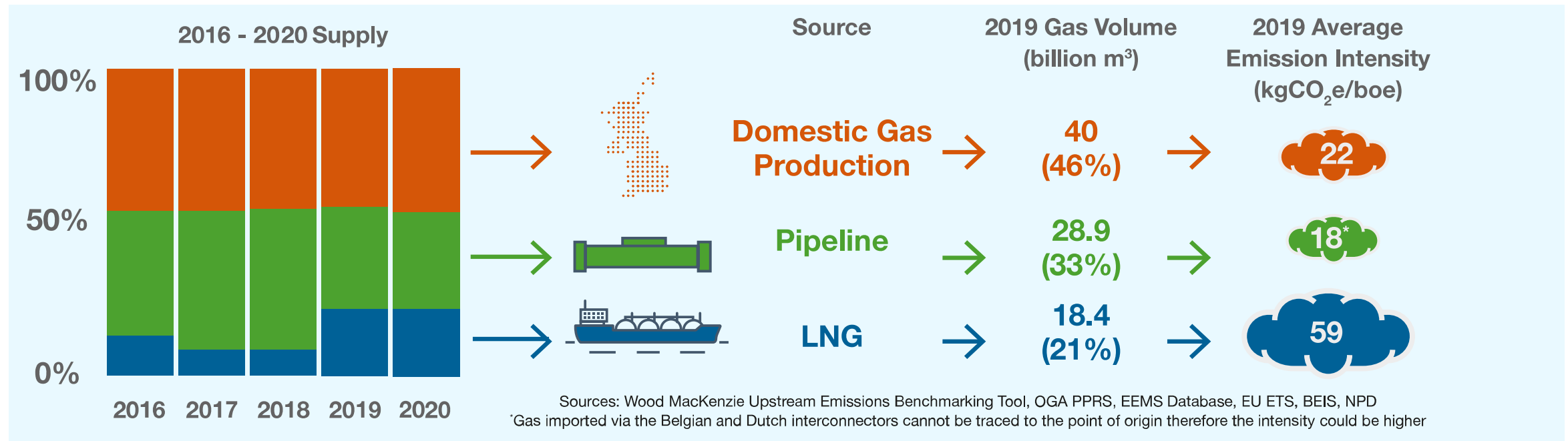
Decom cost reduction  
since 2017

# Importance of UK domestic gas supply

**7** New gas/condensate fields expected/ onstream in near future



## UK's gas supply by origin



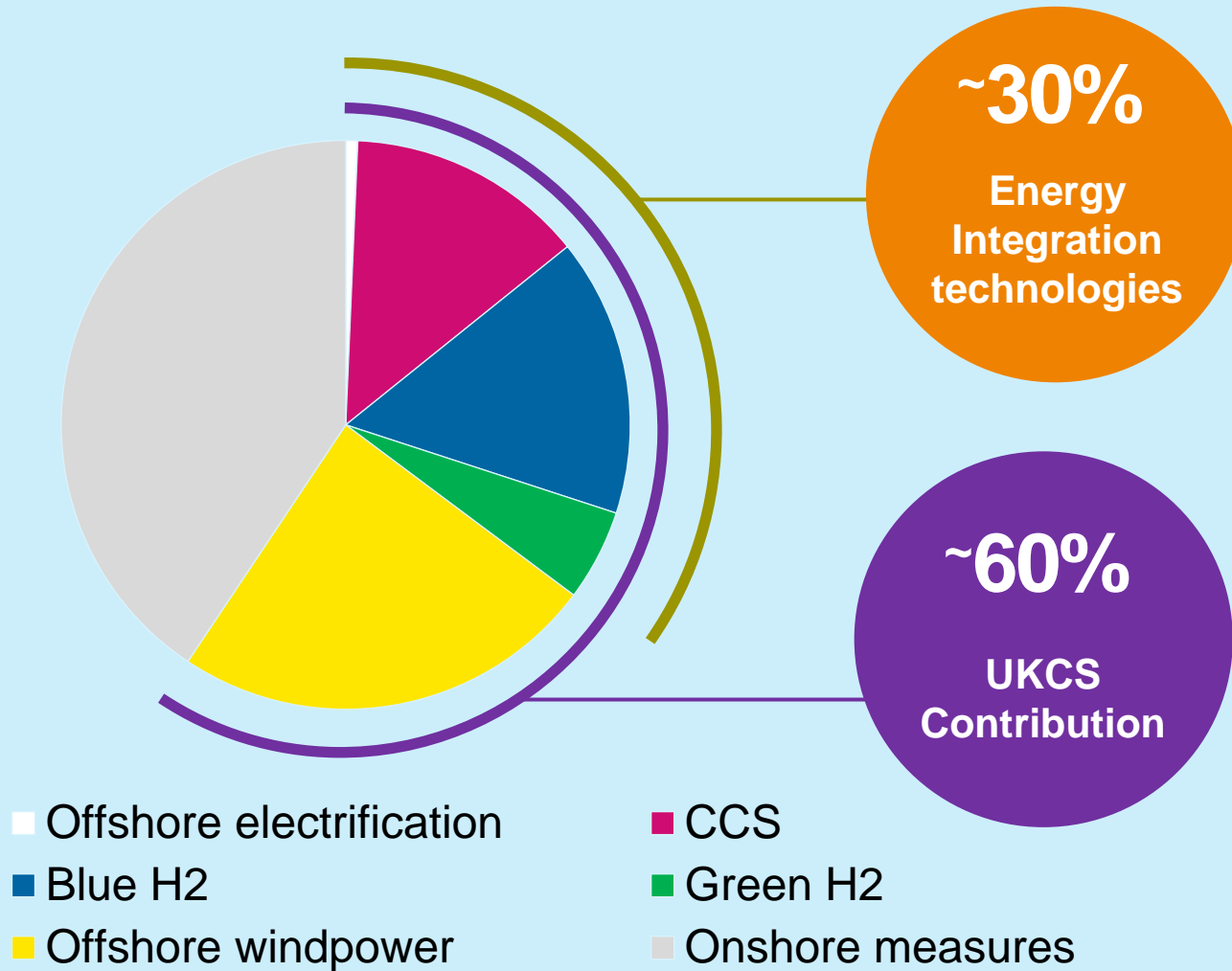


# Offshore contribution to UK net zero



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## 2050 net zero emission abatement from 2018 baseline



## UKCS Energy Integration Final report



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Department for  
Business, Energy  
& Industrial Strategy

ofgem



Crown Estate  
Scotland  
Oighreachd a' Chrùin Alba

THE CROWN  
ESTATE

# Growing number of energy integration projects

## Onshore CO<sub>2</sub> emissions

15 largest UK emitters (areas with 30km radius)

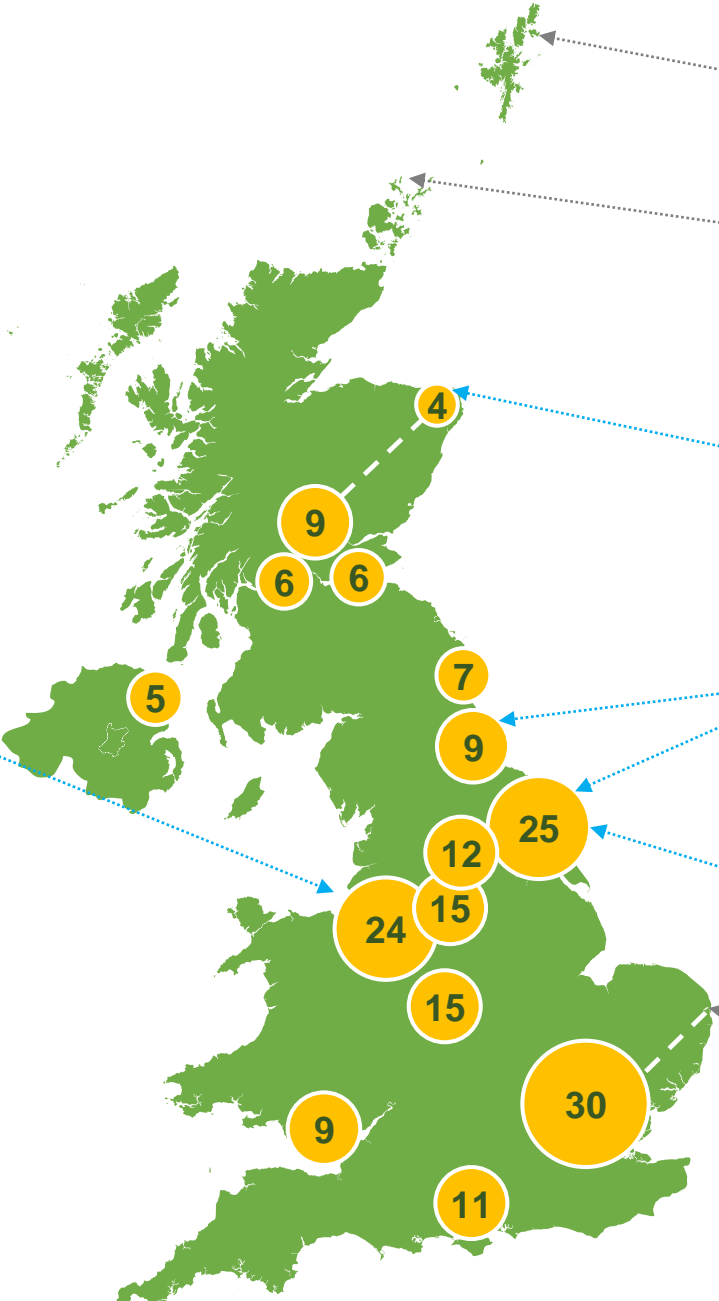
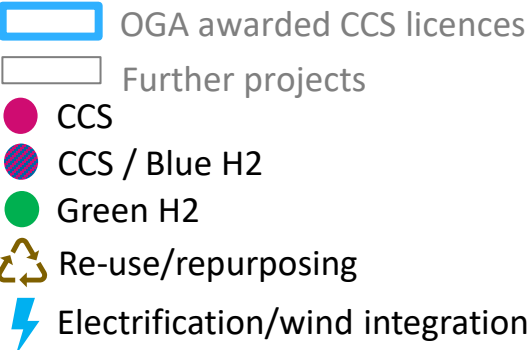


Source: NAEI 2019 data, OGA analysis  
 Note: total CO<sub>2</sub> emissions on the map account for ca.186 mtCO<sub>2</sub> (~40% of UK total)

**Hynet**       

1 Mtpa from mid 2025;  
 3+ Mtpa by 2030 (with blue H2)  
 Re-uses existing infrastructure

## Offshore net zero projects (ongoing)









**Northern Horizons**        

10GW floating wind  
 Green hydrogen, synthetic fuel, ammonia


**ORION**          

Shetland renewable energy hub




**Flotta H2 Hub**       

**Acorn**      

2 Mtpa mid 2026 (with blue H2);  
 7 Mtpa by 2030  
 Re-uses existing infrastructure

**East Coast Cluster (Teesside, Humber and NEP)**         

4 Mtpa from 2026  
 10+ Mtpa by 2030  
 3.3GWe hydrogen production capacity

**V Net Zero (Humber)**    

3.6 Mtpa from 2027  
 11 Mtpa by 2030  
 Re-uses existing infrastructure

**Bacton Hub**    

Early stage, potential for H2 supply into London area

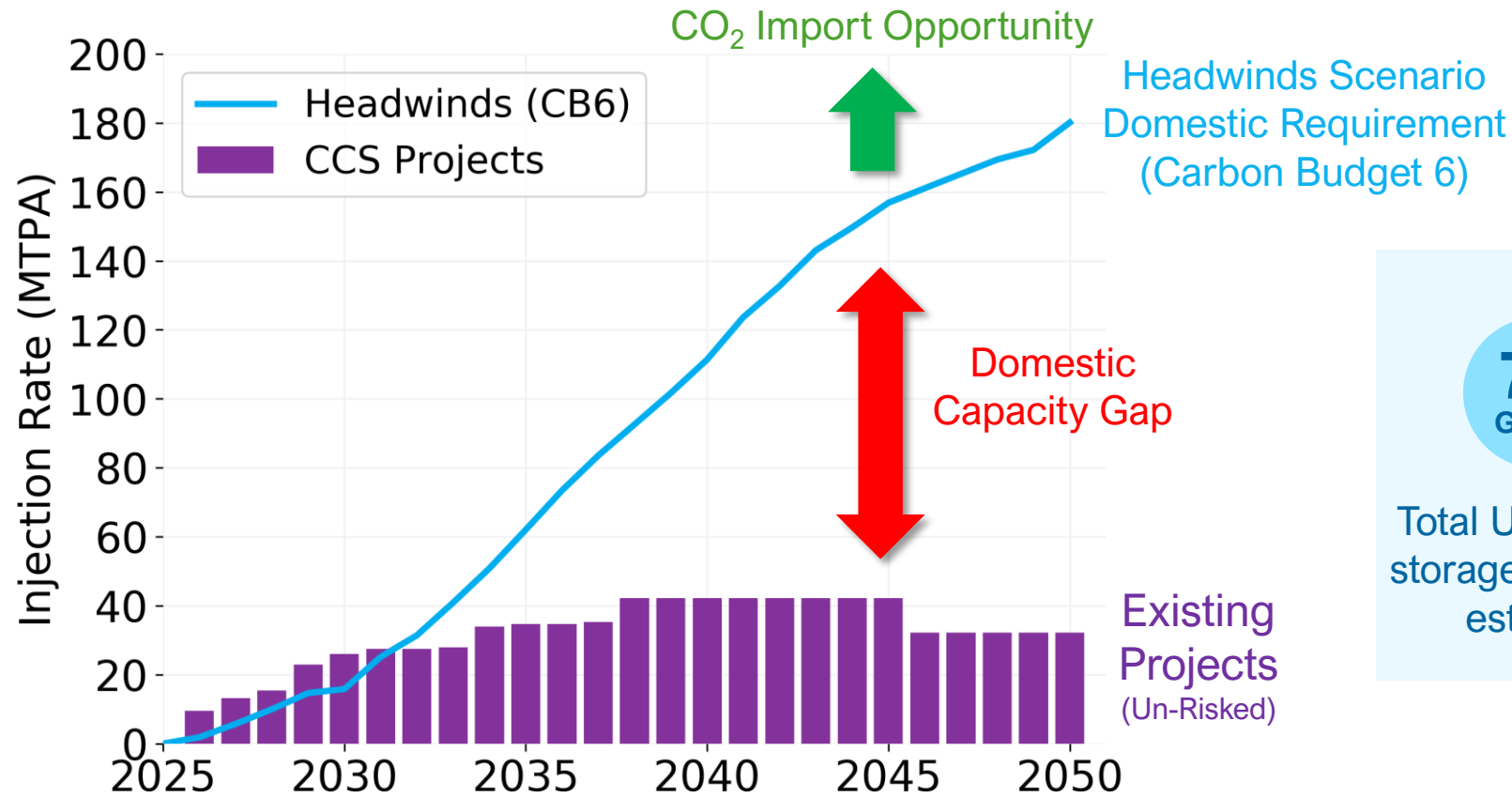
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# CCS – the time is now



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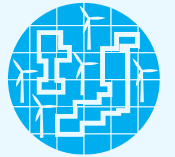


78  
GtCO<sub>2</sub>

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

75-175  
MtCO<sub>2</sub>

CCC estimate  
requirement  
in 2050



Spatial planning  
to high-grade  
future sites

Northern Endurance  
Partnership, Teesside



HyNet, North West England



Acorn, St Fergus

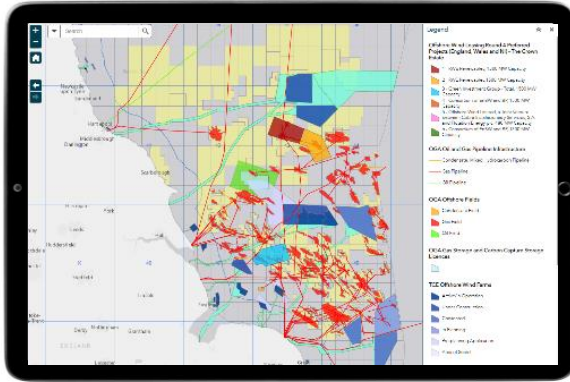


V Net 0, Immingham



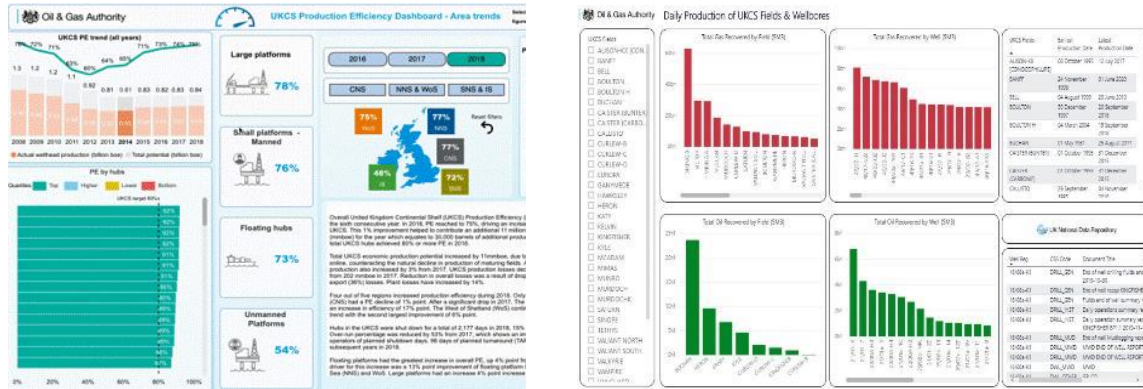
# Power of data and digital

# Geographic Information Systems

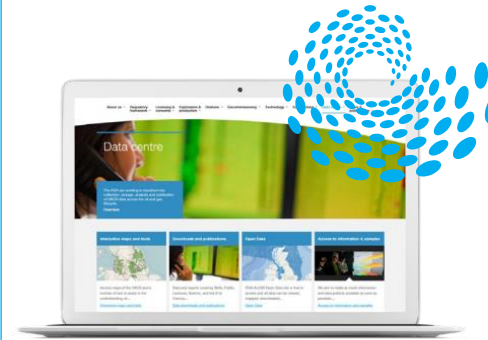


## Insights

## Data collected, analysed and disclosed to encourage action



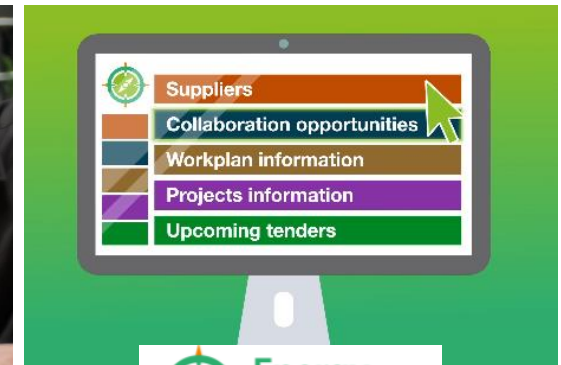
# Digital Energy Platform



- Open to all
- Cloud based
- View & download data
- Integrated with other data sources
- Authoritative

## Advancing the energy transition

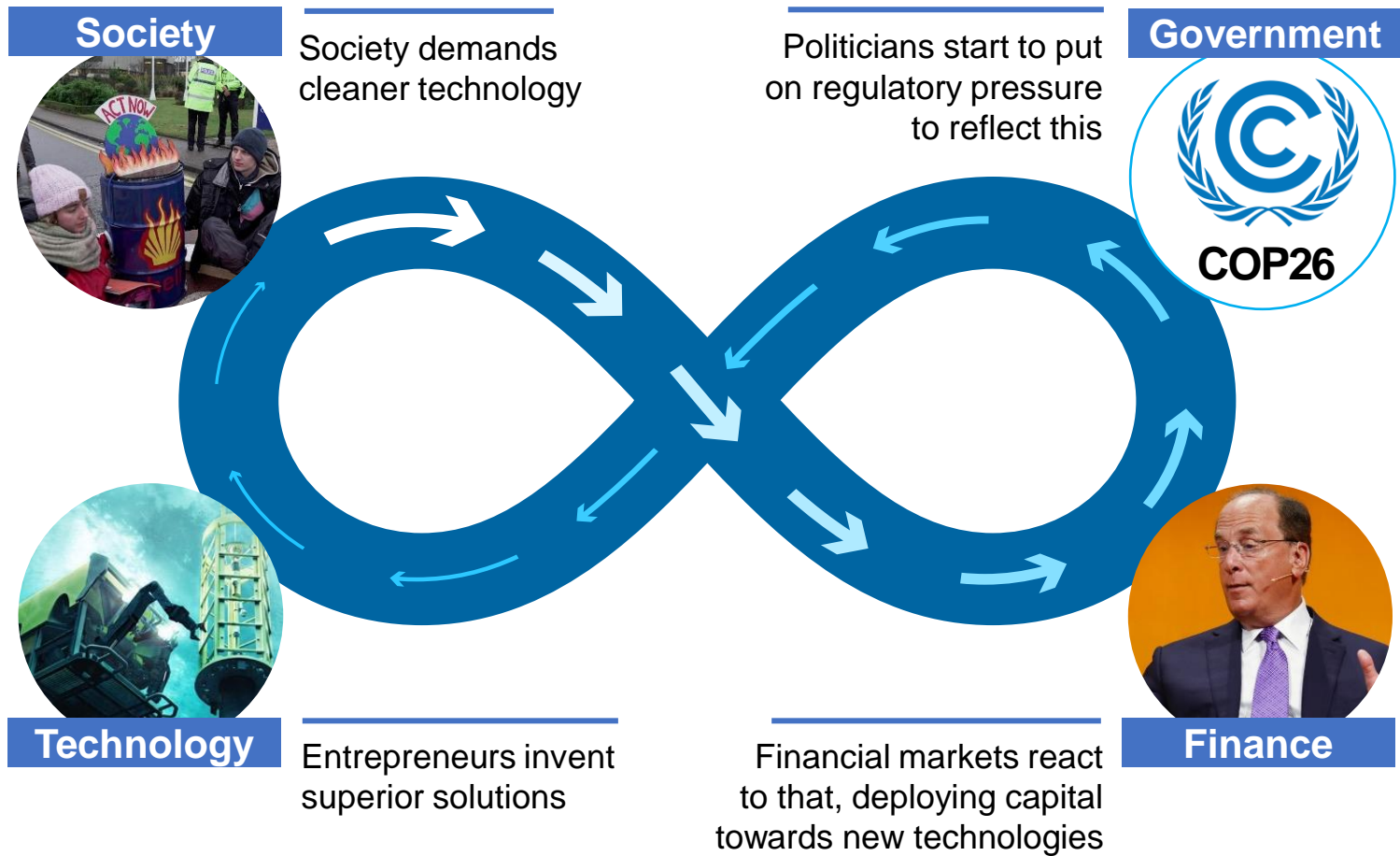
## NDR and Energy Pathfinder providing transparency and visibility to unlock energy transition opportunities



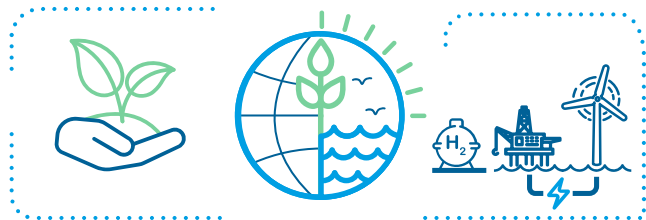
# Leading with purpose



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Climate change – Loss of Biodiversity –  
Social inequality



Unique opportunity post pandemic green  
and just recovery



Requires whole systems approach  
and down to all of us

Modified from: World Economic Forum: The Speed of the Energy Transition



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# Thank you

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