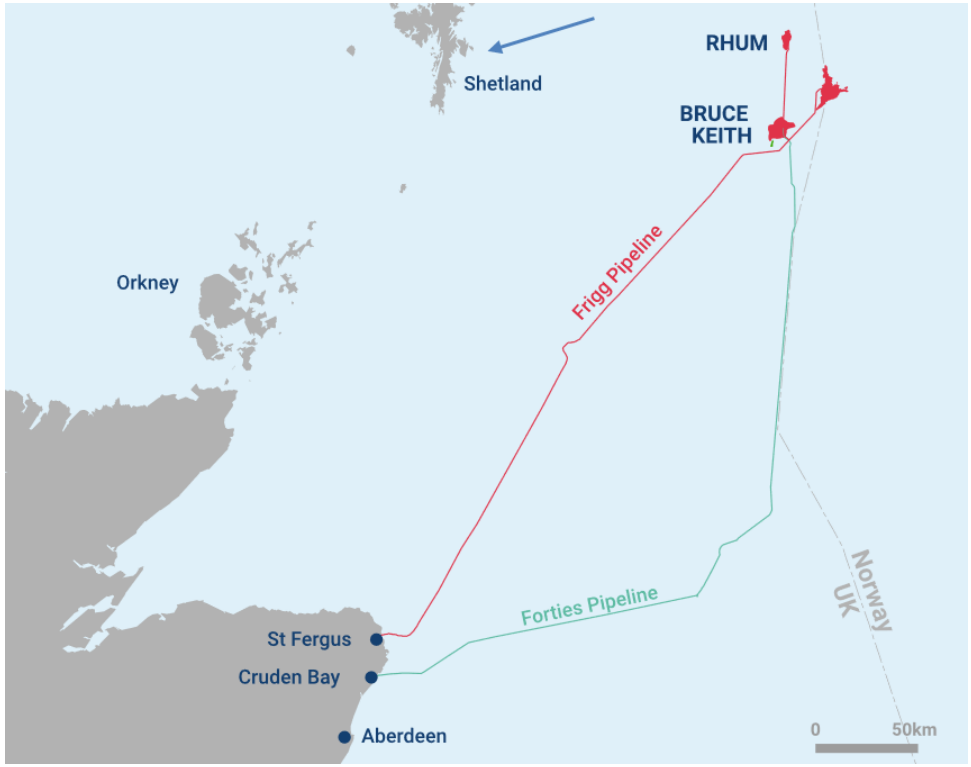
# ESG in a UK independent oil and gas company

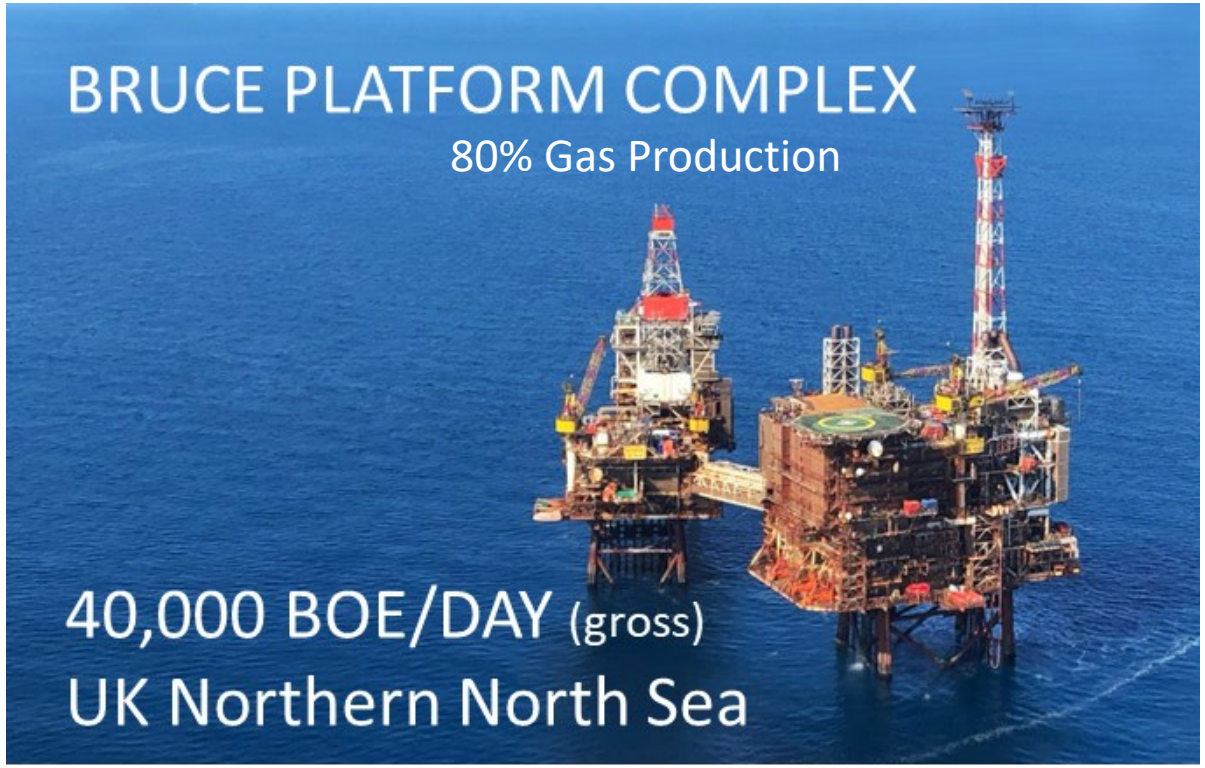


## Clara Altobell

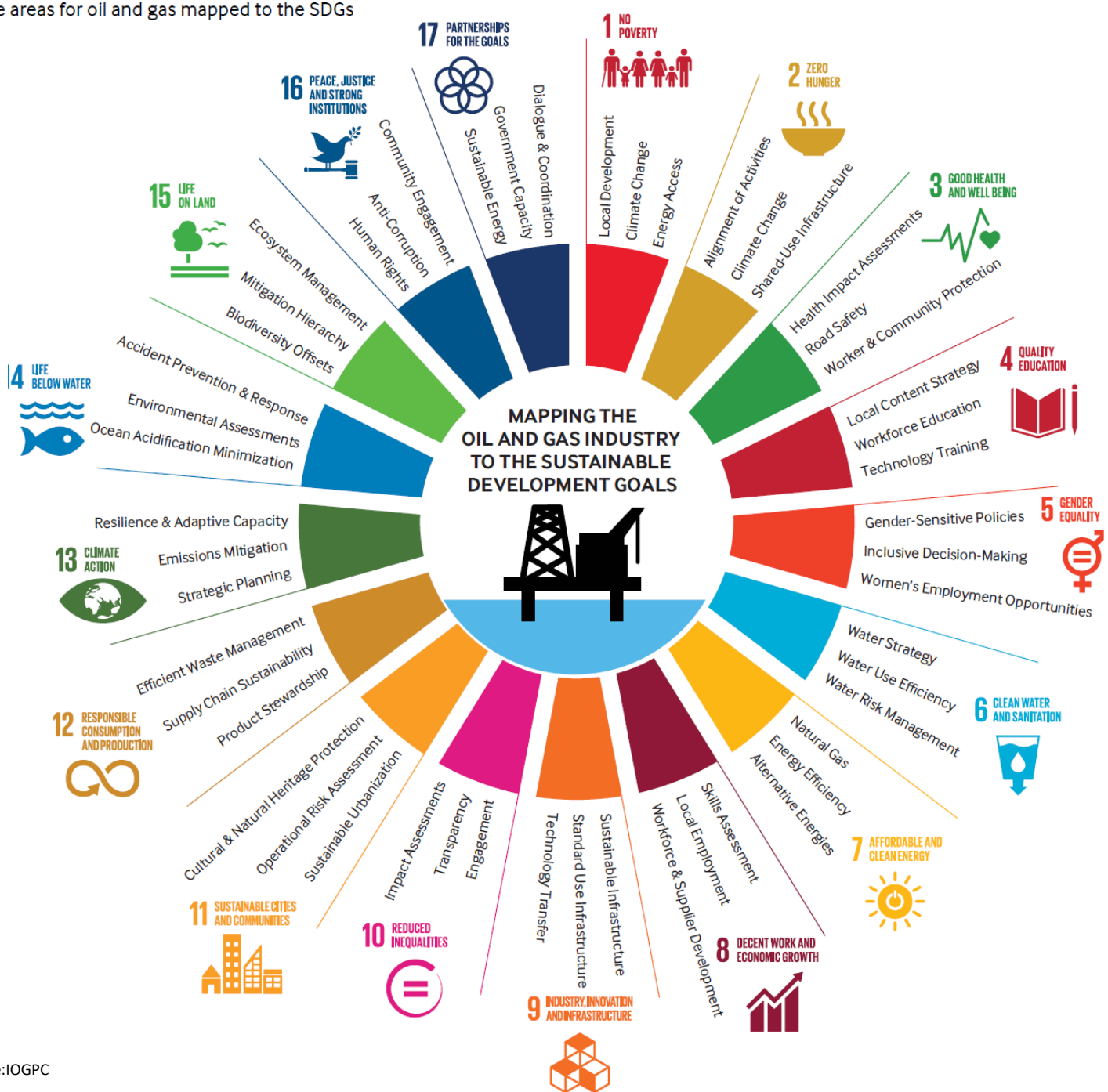
VP ESG and Business Innovation

# Context: Serica's main asset



Key issue areas for oil and gas mapped to the SDGs




Source:IOGPC




GRI Empowering Sustainable Decisions

UN GLOBAL COMPACT

SASB SUSTAINABILITY ACCOUNTING STANDARDS BOARD

TCFD TASK FORCE ON CLIMATE-RELATED FINANCIAL DISCLOSURES

# Changing company mindset

Education

Emissions Reduction

Charities & Fundraising

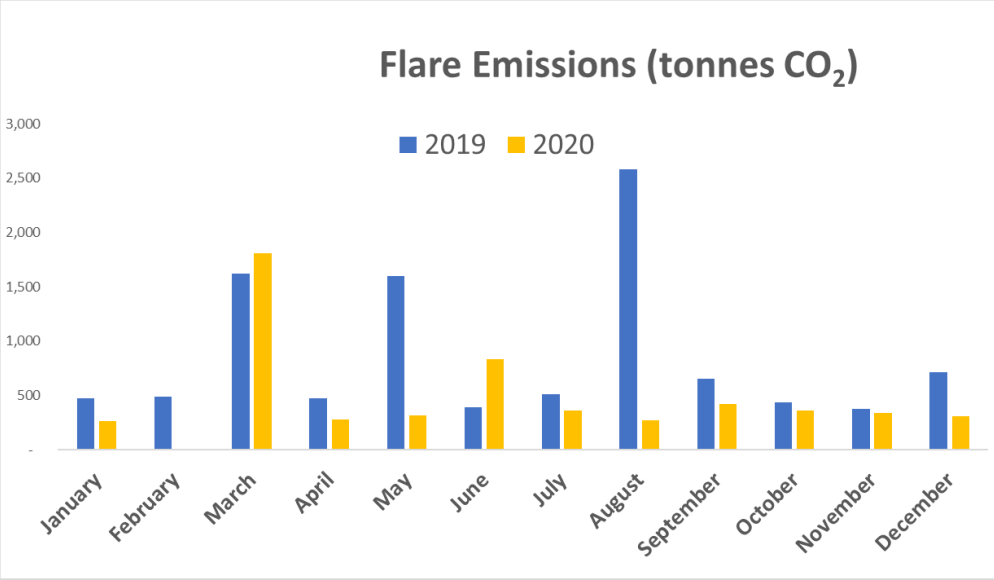
Diversity & Inclusion

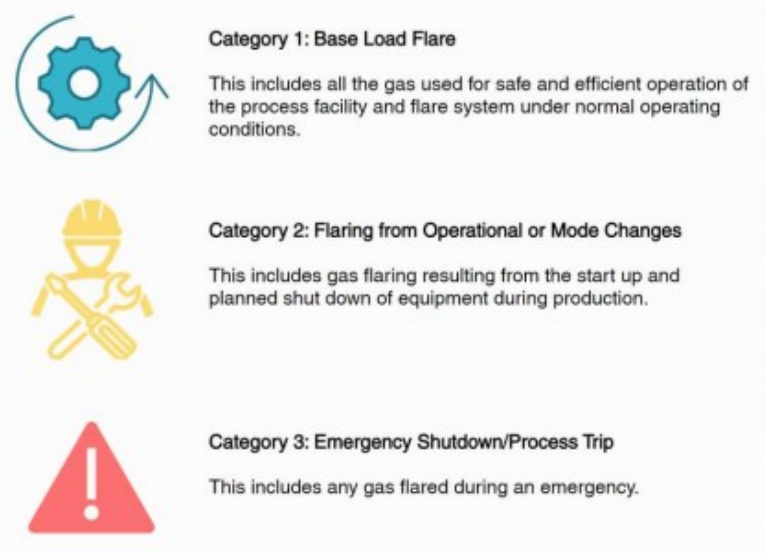
*Bruce Platform ESG Champions*

**ESG Key Performance Indicators: Targets Linked to Remuneration**

1. Carbon intensity
2. Cat 1 Flaring
3. Total waste on Bruce
4. Number of ESG initiatives advanced
5. Female proportion of workforce

# Emissions reduction: Flaring



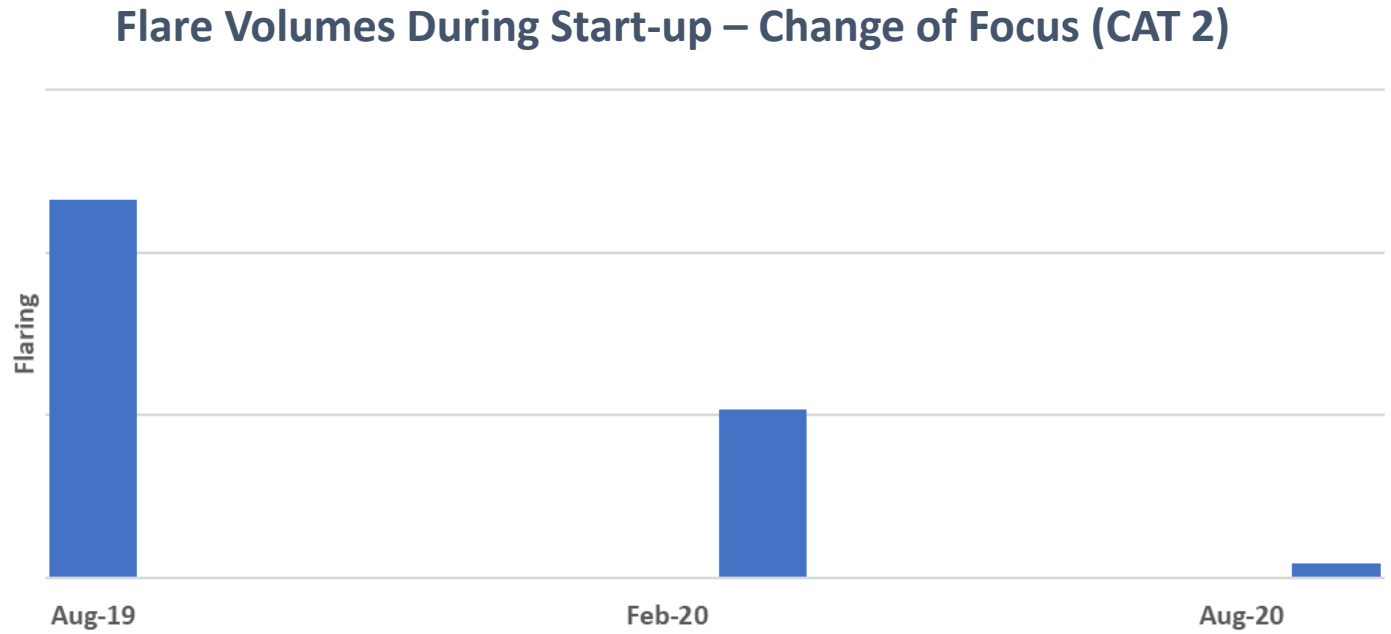




Flaring philosophy – best practice

Detailed procedures

Onshore/offshore collaborative approach

Greater visibility of flaring performance – lower targets




https://vimeo.com/492048361

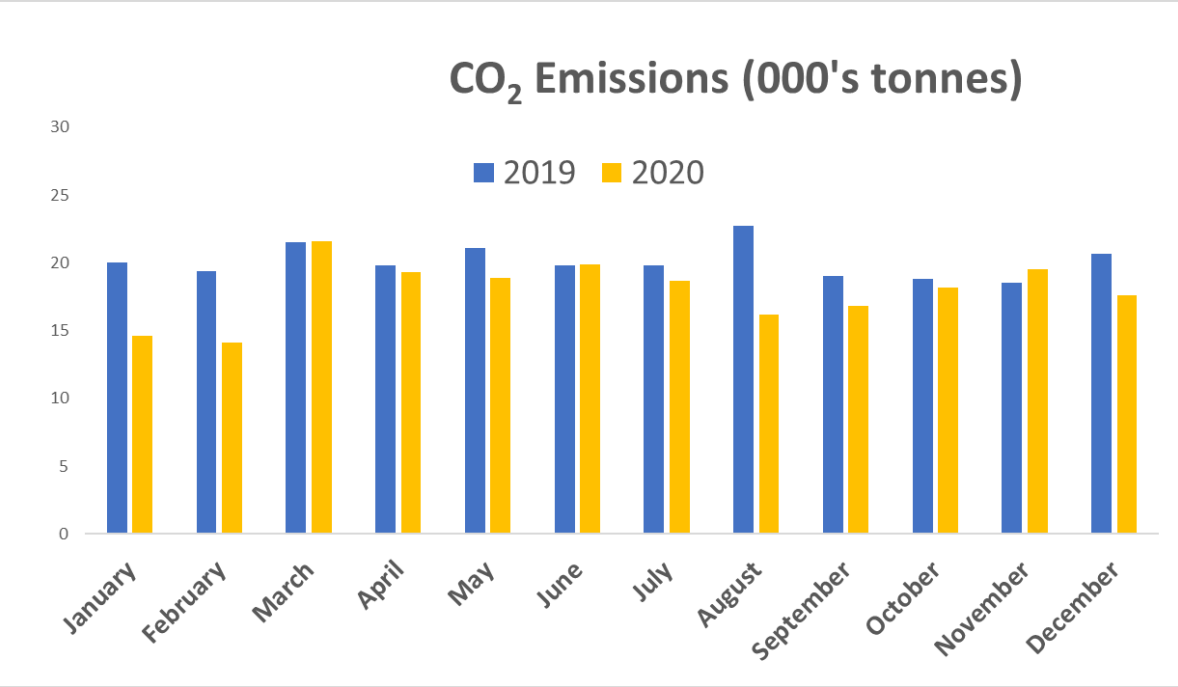
# $CO_2$ emissions reduction on Bruce Platform

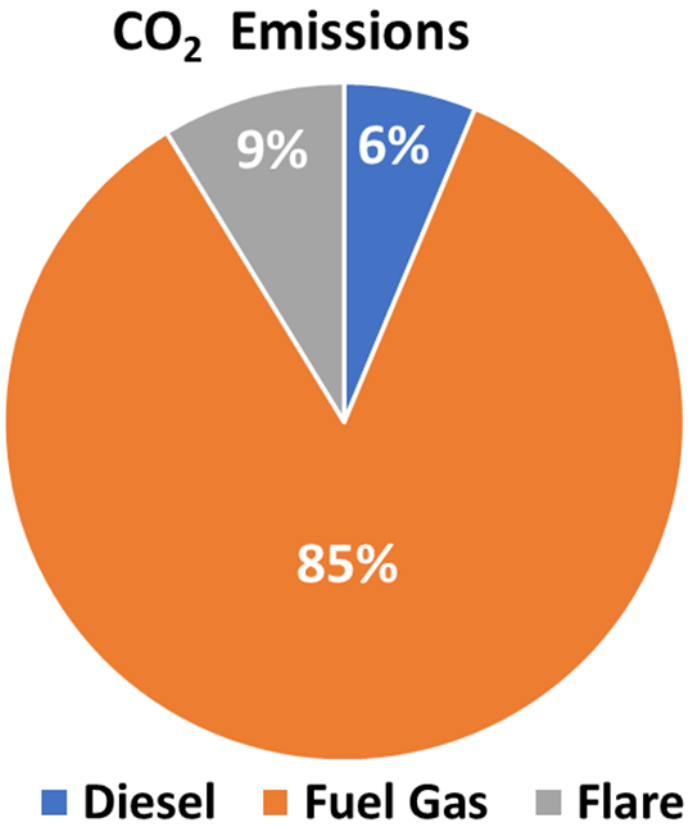
Majority of emissions from fuel gas for power and compression

Improve maintenance to improve emissions

Increased focus and transparency – energy audits

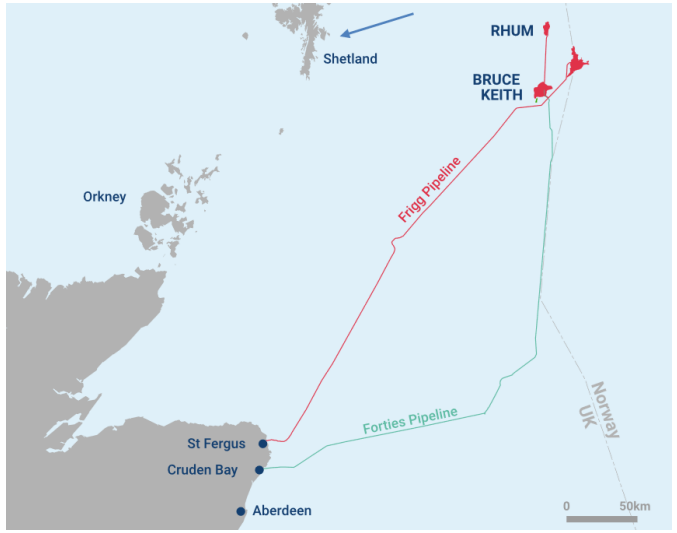
Onshore/offshore collaborative approach



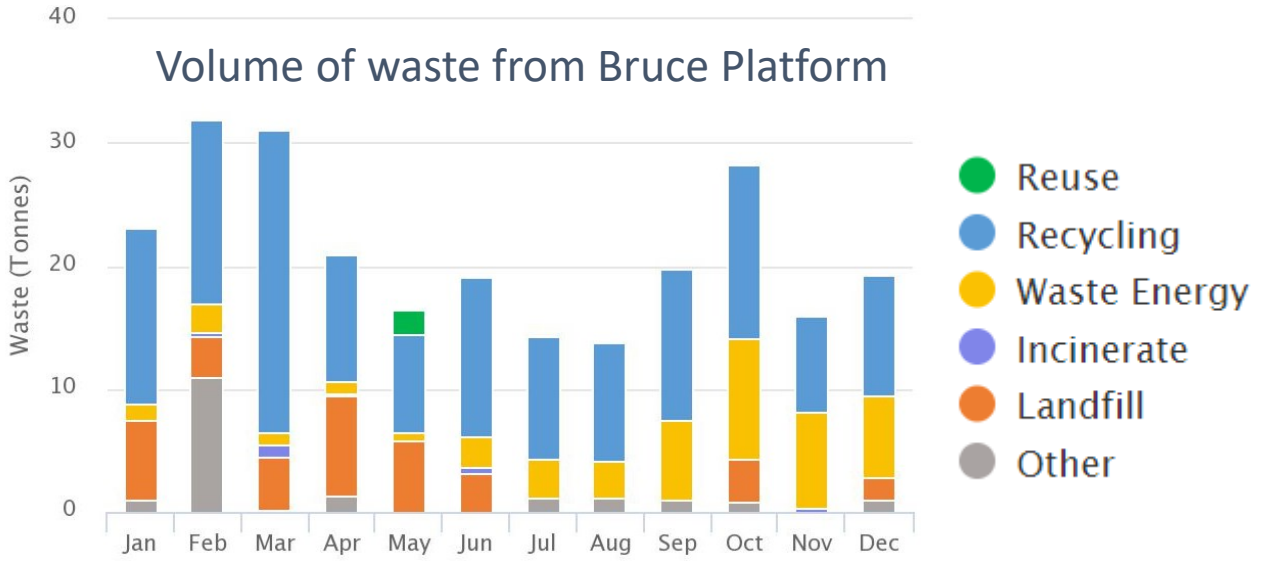



# Waste and supply chain initiatives










Front loading packaging pods

# $CO_2$ emissions reduction into the future

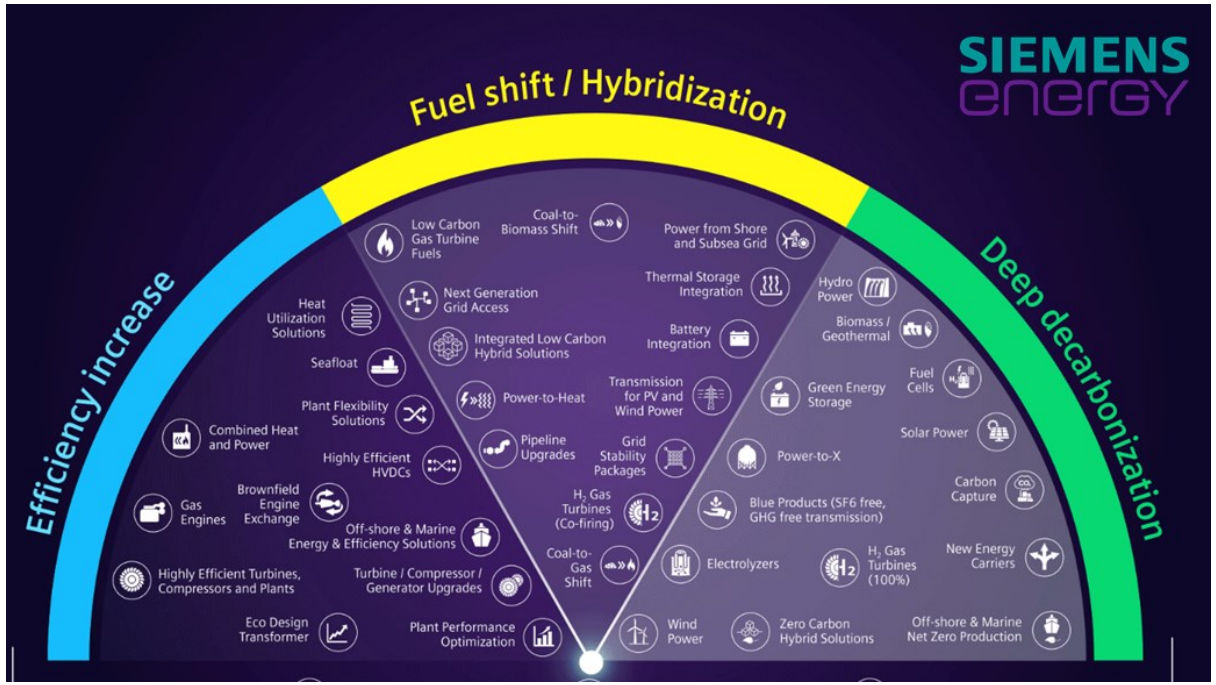
Look at longer term power options

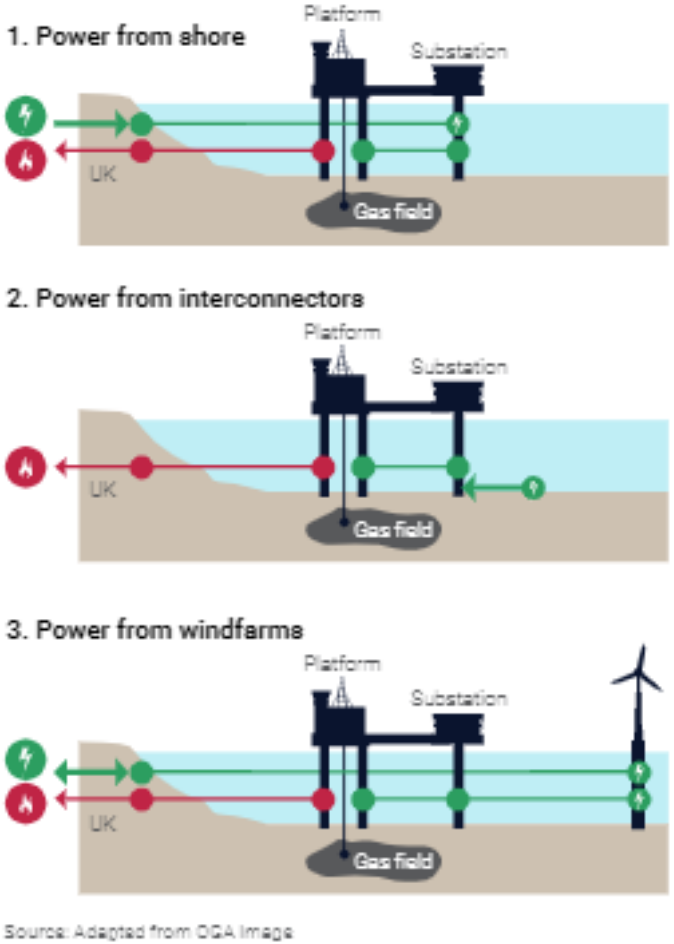
Incorporate technology in new development plans

Look to lower emissions in drilling

Collaborate with CCUS, hydrogen and power providers

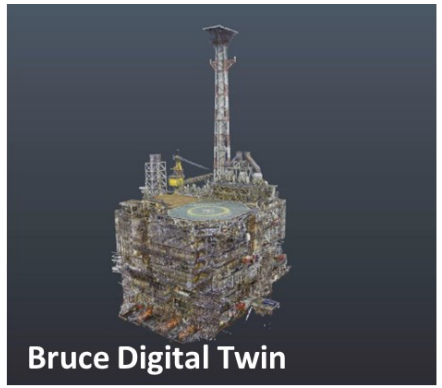
Factor cost of carbon in investment decisions

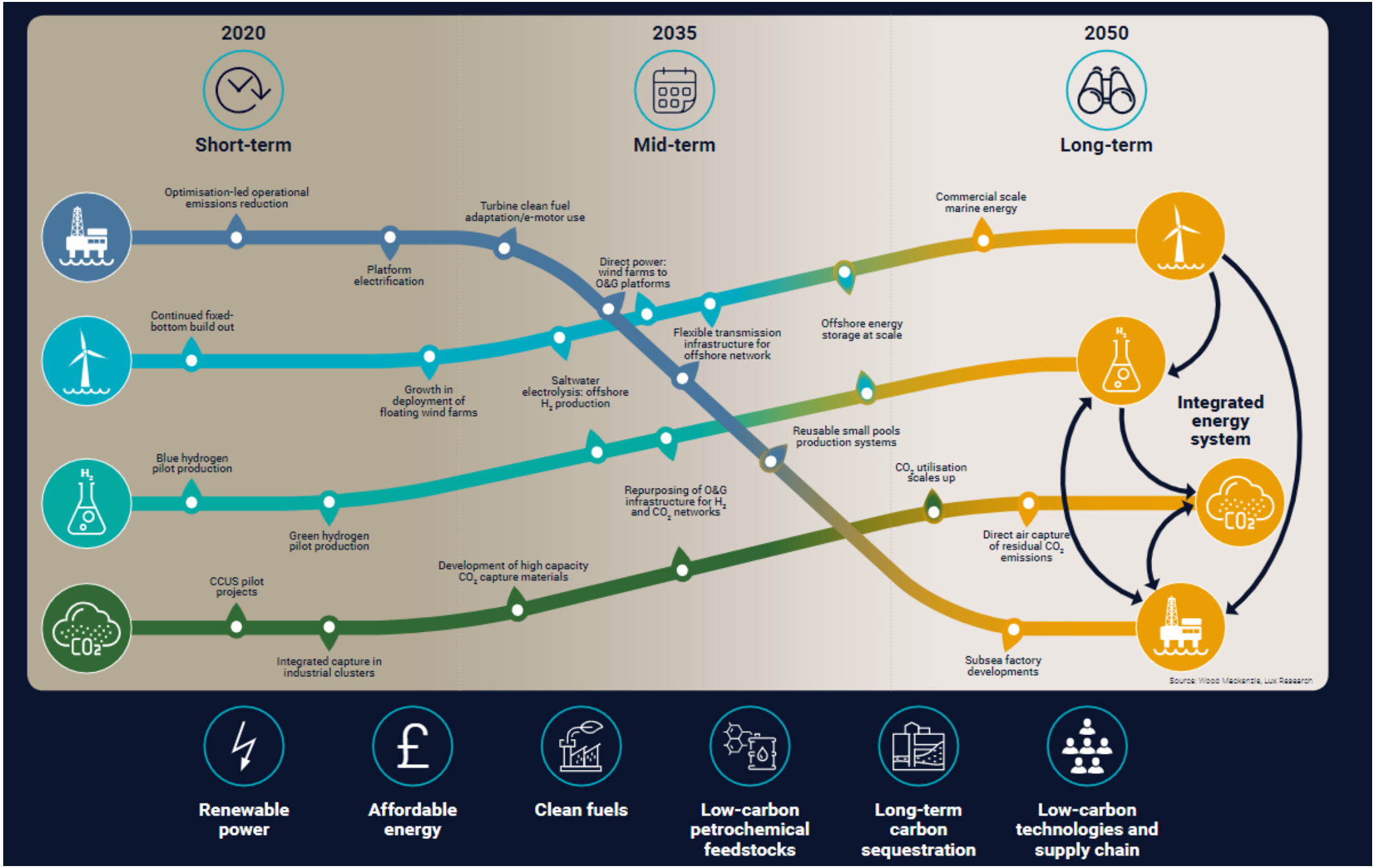



Source: Adapted from OGA image

The Oil & Gas Technology Centre
Your Innovation Partner

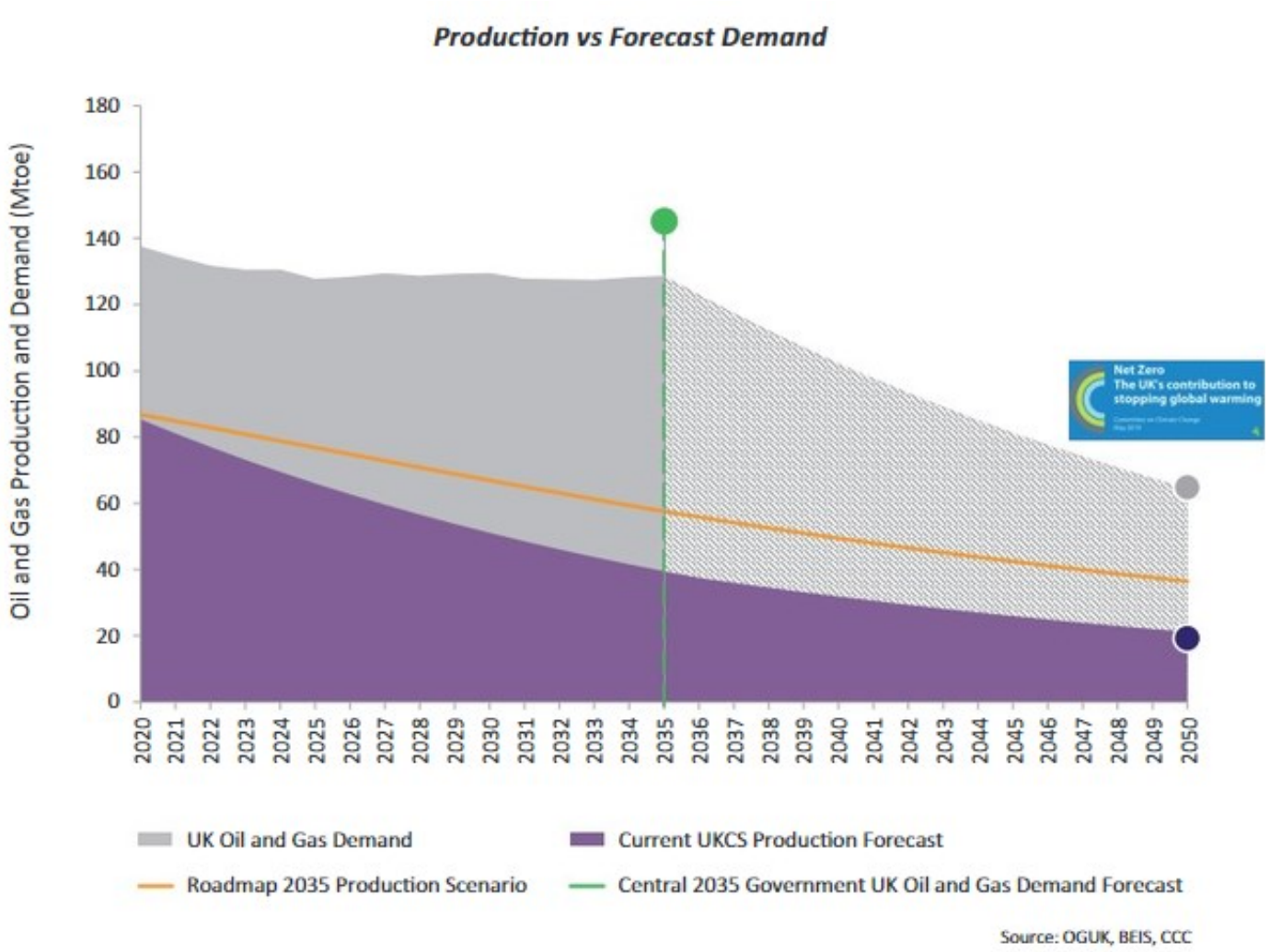


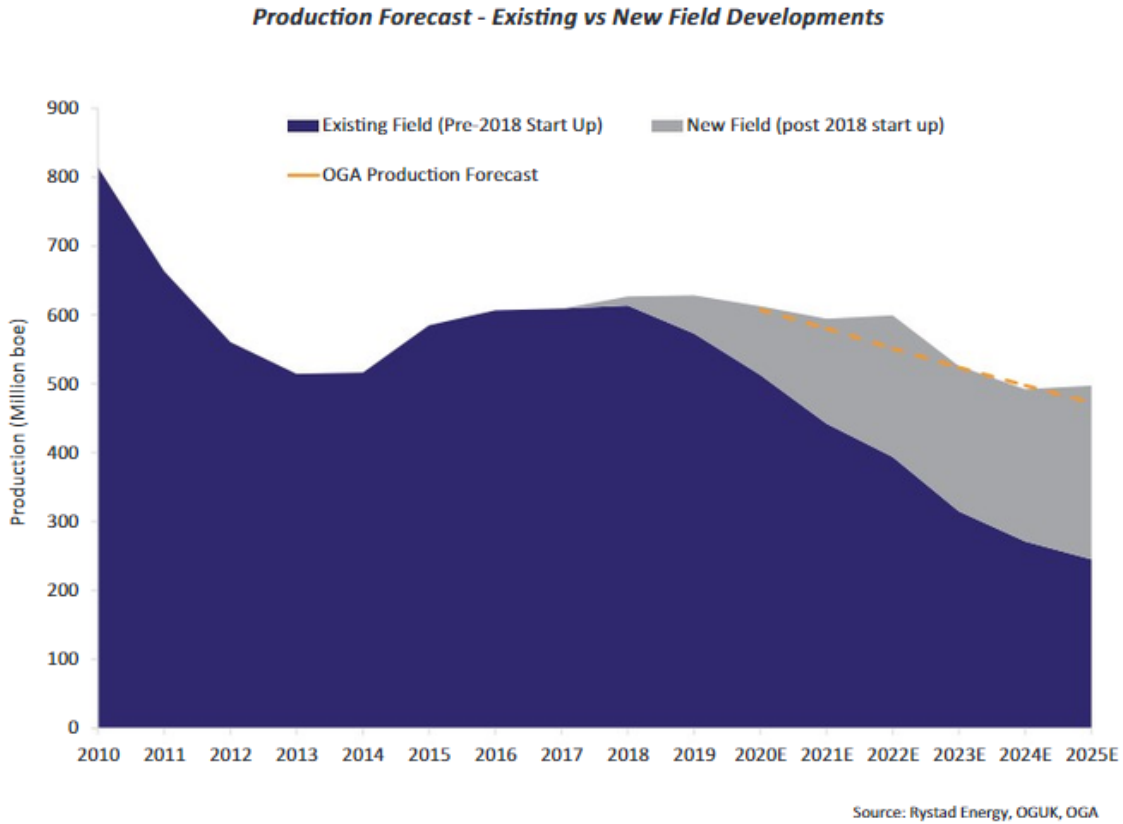



The Oil & Gas Technology Centre
Your Innovation Partner

**OGTC – Closing the gap – Technology for a Net Zero North Sea**

# The UK transition landscape: *UK oil and gas demand vs supply*

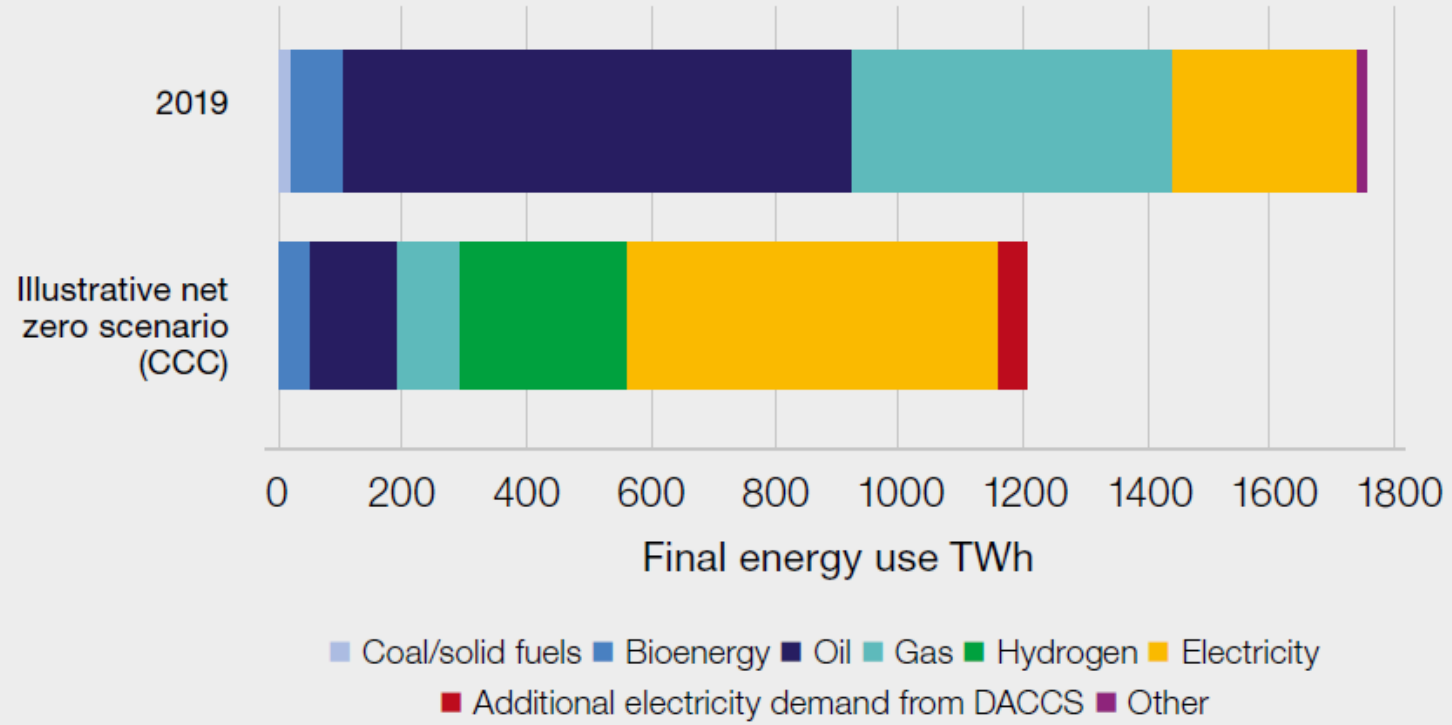



Domestic oil and gas currently provide only 45% of UK total demand

# The UK transition landscape : *'Build Back Greener'*

## FIGURE 1.4 – ILLUSTRATIVE UK FINAL ENERGY USE IN 2050




Source: Energy Trends table 1.2; CCC Net Zero Report

DACCS: Direct Air Capture with CCS

# The UK transition landscape: *major policy changes*

**UK Government: Net Zero by 2050 – 10 Point Plan**

**BEIS – Energy White Paper**

**BEIS – OGUK North Sea Transition Deal**

**OGUK – *Pathway to a Net Zero Basin***

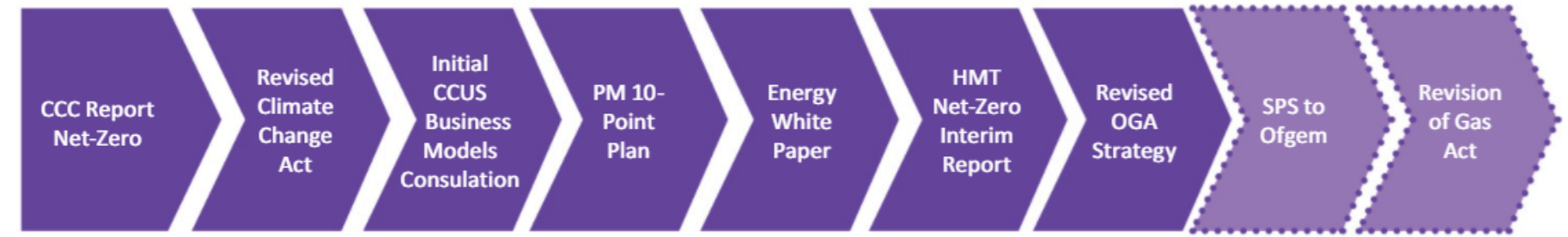
**OGUK – *Vision 2035 Roadmap***

**CCC – Sixth Carbon Budget**

**OGA – Strategy and Stewardship Expectations**

**OGA – ESG Reporting Task Force**

**OGA – Flaring and Venting Report**



# The UK transition landscape : *'Build Back Greener'*

## The Ten Point Plan

**Point 1**
Advancing Offshore Wind


**Point 2**
Driving the Growth of Low Carbon Hydrogen

**Point 3**
Delivering New and Advanced Nuclear Power

**Point 4**
Accelerating the Shift to Zero Emission Vehicles

**Point 5**
Green Public Transport, Cycling and Walking

**Point 6**
Jet Zero and Green Ships

**Point 7**
Greener Buildings

**Point 8**
Investing in Carbon Capture, Usage and Storage

**Point 9**
Protecting Our Natural Environment

**Point 10**
Green Finance and Innovation

# The UK transition landscape : *Energy White Paper/UK Transition Deal*

## Our key commitments

- Working with the regulators, we will **make the UK continental shelf a net zero basin** by 2050.
- We will **commit the UK to the World Bank's 'Zero Routine Flaring by 2030'.**
- We will **support the UK oil and gas sector to repurpose its existing infrastructure** in support of clean energy technologies.
- We will **undertake a review of the Offshore Petroleum Regulator for Environment and Decommissioning** to drive up environmental standards in its regulatory role, and support the sector's progress towards net zero emissions.
- We aim to **lay a new strategy for the Oil & Gas Authority before the end of 2020** to bolster the regulator's ability to focus the sector on helping deliver net zero emissions.
- To **ensure that licensing continues to be compatible with our climate change ambitions** over the coming decades, we are considering **formalising aspects of our existing process.**
- We will **agree a transformational North Sea Transition Deal** with the industry during the first half of 2021.
- We will use our North Sea Transition Deal to **support the UK-based oil and gas supply chain to secure new low-carbon export opportunities** in overseas markets.
- We will take powers to **ensure we maintain a secure and resilient supply of fossil fuels during the transition** to net zero emissions.

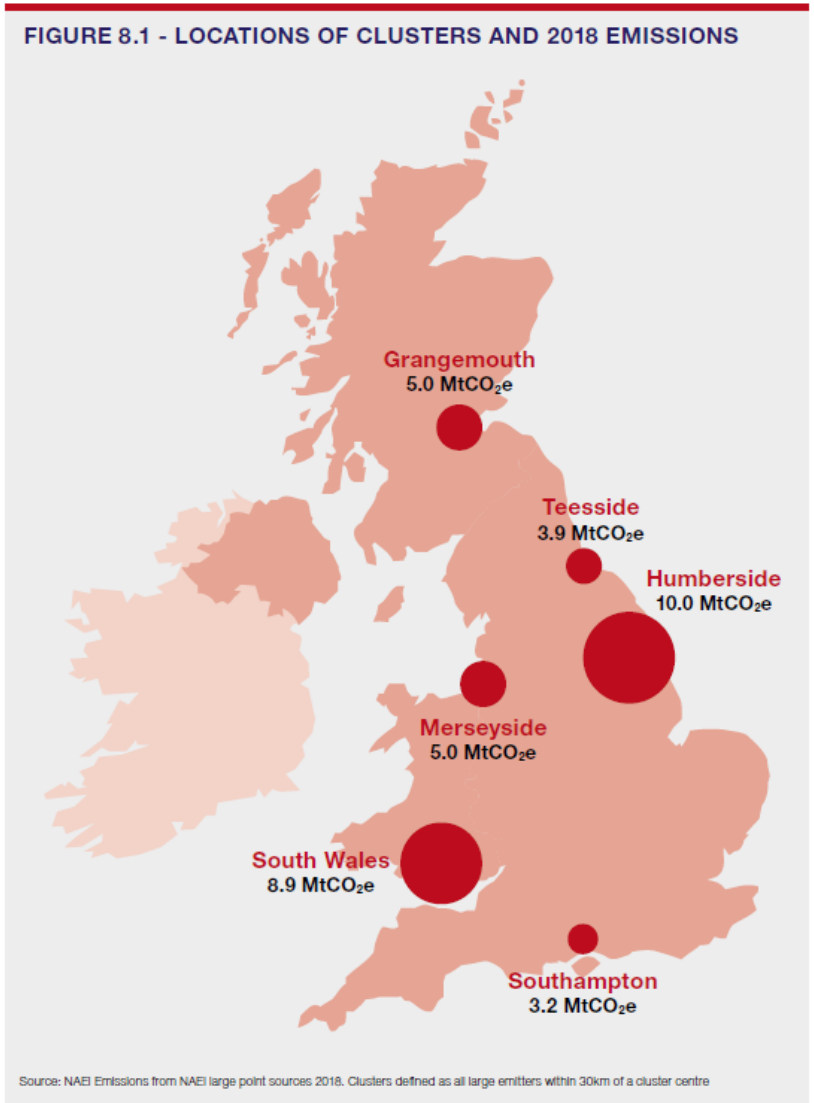
## Our key commitments

- We will **target 40GW of offshore wind by 2030**, including 1GW floating wind, alongside the expansion of other low-cost renewable technologies.
- We will **support the deployment of at least one power CCUS project**, to be operational by 2030, and put in place the commercial frameworks required to help stimulate the market to deliver a future pipeline of power CCUS projects.
- We will consult on steps to **ensure that new thermal plants can convert to low-carbon alternatives.**
- We will **aim to bring at least one large-scale nuclear project to the point of FID** by the end of this Parliament, subject to clear value for money and all relevant approvals.
- We will **provide up to £385 million in an Advanced Nuclear Fund** for the next generation of nuclear technology aiming, by the early 2030s, to develop a SMR design and to build an AMR demonstrator.
- We aim to **build a commercially viable fusion power plant** by 2040.
- By 2022, we will **establish the role which BECCS can play in reducing carbon emissions across the economy** and, as part of a wider biomass strategy, set out how the technology could be deployed.
- We will **complete a review of the existing energy NPS** and designate updated NPS by the end of 2021.
- We will **support the delivery of the sector's target of 60 per cent UK content in offshore wind projects by 2030**, through more stringent requirements for the CfD supply chain plan process.
- We have announced a £160 million scheme and launched a competitive process in early December to **support the development of offshore wind manufacturing infrastructure.**



BECCS: Bioenergy with CCS
NPS – National policy statements
CfD – contract for difference

# The UK transition landscape : *Energy White Paper/UK Transition Deal*




## NORTH SEA TRANSITION SECTOR DEAL

**Key deliverables**

- **Cleaner energy production** through rigorous emissions reductions;
- Supporting the **delivery of CCUS;**
- **Diversification of the oil and gas supply chain** into new energies;
- Supporting the **development of hydrogen production;** and
- **Safeguarding existing jobs and establishing tens of thousands of new high-quality jobs** across the sector in diversified energy technologies.

## GeoNetZero CDT

The Centre for Doctoral Training (CDT) in Geoscience and the Low Carbon Energy Transition

- Industry-academic partnership:
- 9 operators*, 12 universities** led by John Underhill at Heriot-Watt University
- 48 PhD students funded (£7.4 million) 16 enrolled – 32 being hired 2021/22
- PhD projects: Low-Carbon Energy Transition plus 20-week training course
- Government to review potential funding
- J.R.Underhill@hw.ac.uk
- https://geo-net-zero.hw.ac.uk

**BP, Cairn Energy, Chrysaor, CNOOC, Equinor, ExxonMobil, NEO Energy, Shell and Total.*

***Aberdeen, Birmingham, Dundee, Durham, Exeter (Camborne), Heriot-Watt, Keele, Newcastle, Nottingham, Plymouth, Royal Holloway (RHUL) and Strathclyde*

# UK low carbon BEIS investment commitments

**Humber and Zero Carbon Humber**

- £34 million of government funding

**Net Zero Teeside and Northern Endurance Partnership**

- £52 million

**Aberdeen**

- £31 million committed by BEIS

**North West England/Wales**

- £33 million

**South Wales Industrial Cluster**

- £20 million

***BEIS Press Release – 17 March 2021***

*£171 million from the Industrial Decarbonisation Challenge has been allocated to 9 green tech projects in Scotland, South Wales and North West, Humber and Teesside in England, to undertake engineering and design studies for the rollout of decarbonisation infrastructure, such as carbon capture, usage and storage (CCUS) and hydrogen.*

https://www.gov.uk/government/news/major-blueprint-to-create-green-jobs-and-slash-emissions-from-industry-schools-and-hospitals

# OGA Strategy and Stewardship Expectations

## OGA Strategy Central Obligation

- Achieve MER (Maximising Economic Recovery)
- Reduce Greenhouse Gases
  - Flaring, venting, power generation
- Support CCS

## OGA Supporting Obligations

- Apply Good Governance
- Balance – economic benefit vs confidence of investor vs market conditions
- Consider net zero target and CCS in development plans
- Maintain good ESG in plans and daily operations
- Deploy new and existing technologies to optimum effect
- Consider CCS before decommissioning, collaborate and negotiate access to infrastructure
- Permit access to CCS projects

# Stewardship Expectation 11

**What?**

Reduce Greenhouse Gas Emissions (GHG) as far as reasonable

Development of new projects

Existing Production

Abandonment and Decomissioning

**How?**

Create a culture of GHG reduction in flaring, venting and power generation

Improved energy efficiency, maintenance and production efficiency

Collaboration – electrification, CCS, Hydrogen for emissions abatement

**Why?**

Achieve net zero targets by 2050

Recover maximum value of economically recoverable petroleum of UK reservoirs

Maintain social licence to operate

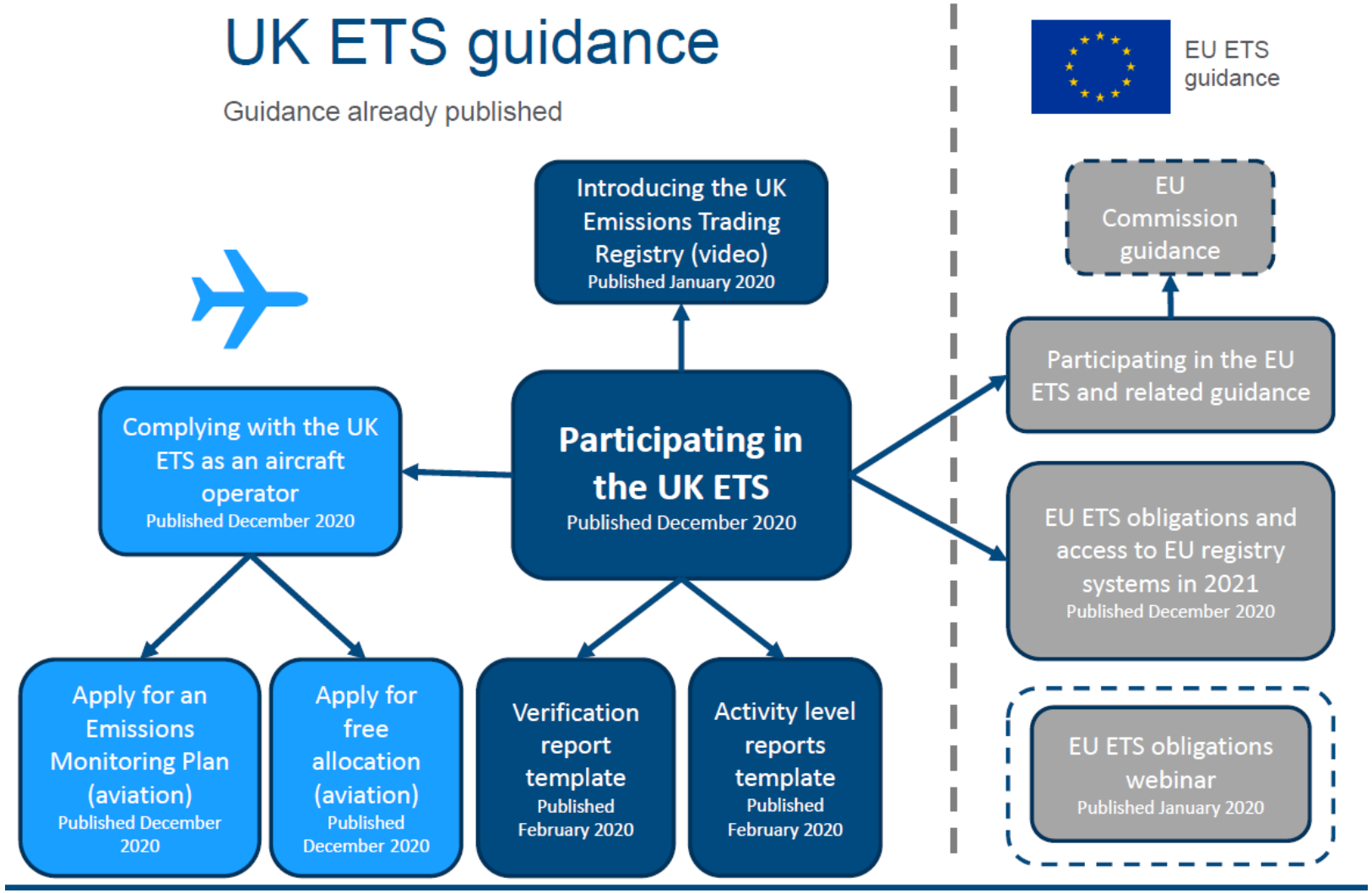
# Stewardship Expectation 11: Delivering the expectation

- **Measuring, reporting and tracking emissions**
  - Embed throughout the organisation
  - KPIs on emissions and intensity
  - Align with OGA targets
  - Deploy technologies
- **Corporate Behaviours**
  - KPI's into remuneration conditions
  - Consider societal costs of GHG emissions into decision making
  - Continuous improvement
- **General**
  - Implement and update 'net zero' action plans for assets and hubs
  - Collaborate with peers on GHG reduction plans
  - Invest in digitalisation and machine learning
  - Assess and deploy abatement technologies

# OGA Enforcement Powers

- **Consents**
- **Concept select**
- **Field Development Plans**
- **WONS (Wells Operations and Notifications System)**
- **Licence assignments/change of control**
- **Operator approval**
- **Cessation of Production approval**

# The UK transition landscape : *New carbon trading scheme*




**Free Allocation Review – call for evidence**

- Setting an emissions cap
- Methodology
- Carbon leakage
- Incentivisation

# OGA/Industry ESG reporting task force recommendations

SERICAENERGY

## Tier 1 Quantitative

- Key health and safety stats & metrics
- Fugitive Methane Emissions - (Tonne CO2)
- Gas handling – venting & flaring & solutions
- Scope 1 and 2 emissions (CO2e/boe)
- Air and water pollution risks
- Waste management and disposal
- Carbon Intensity (Metric Tonnes CO2e, kgCO2e/boe)

## Tier 1 Qualitative

- Board oversight of governance and climate change risks and opportunities
- Action plan to support a low emission economy
- Description of targets / Methods used to drive investment in emissions reduction activities (Compliance with regulatory requirements/standards)
- Stated environmental / HSE policy – adopted by the board and/or senior management

## Tier 2 and 3

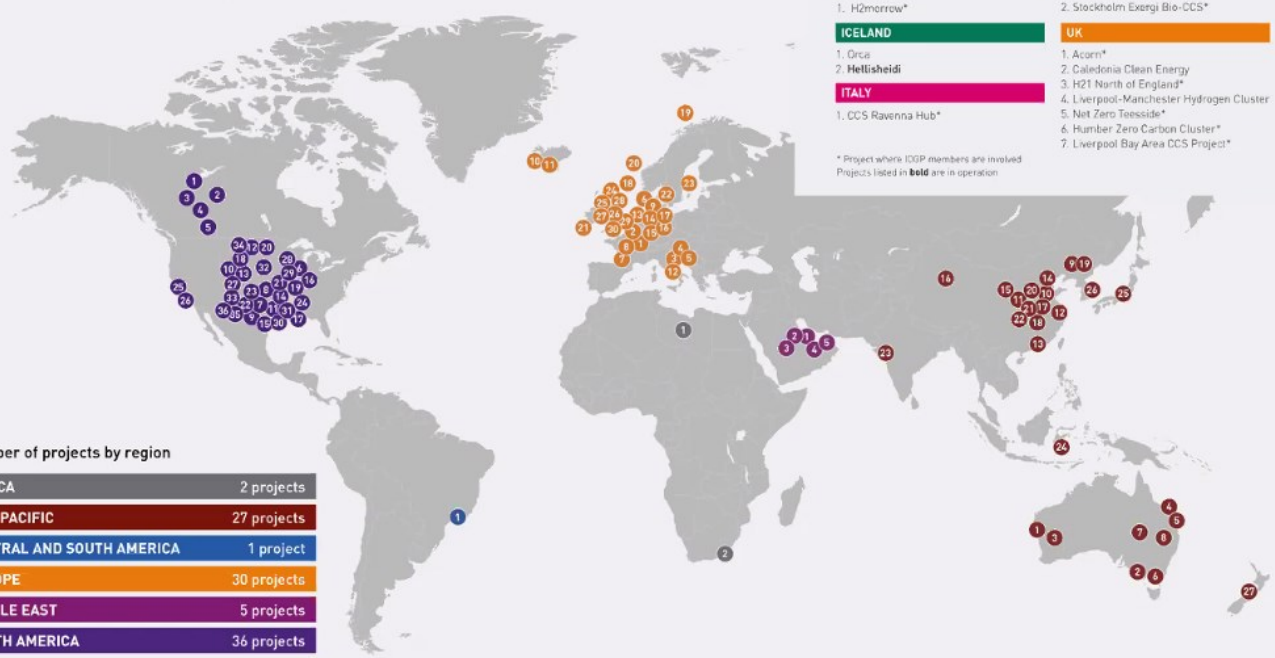
- GHG management / emission targets linked to top management KPIs
- Increased requirement to align reporting with TCFD
- Relevant Scope 3 emissions (Tonnes CO2e)
- **Renewables** – Strategy (or explanation of key hurdles preventing investment), cost, tons CO2e saved
- Ensuring that board or senior leadership positions are dedicated to the company's climate and environmental challenges (robust transparent and consistent audit process)

https://www.ogauthority.co.uk/media/7145/oga-esg-taskforce-report.pdf

# Energy Transition – What's on the horizon?

## Global CCS Projects

### Overview of existing and planned CCUS facilities



**Number of projects by region**

| | |
|---|---|
| AFRICA | 2 projects |
| ASIA PACIFIC | 27 projects |
| CENTRAL AND SOUTH AMERICA | 1 project |
| EUROPE | 30 projects |
| MIDDLE EAST | 5 projects |
| NORTH AMERICA | 36 projects |

### Overview of existing and planned CCUS facilities

**BELGIUM**
1. Leilac (pilot capture only)
2. Antwerp@C (Port of Antwerp)*
3. Carbon Connect Delta (Port of Ghent)

**CROATIA**
1. iCORD*
2. **$CO_2$ EOR Project Croatia***
3. Bio-Refinery Project*

**DENMARK**
1. Greensand*

**FRANCE**
1. Lacq*
2. DMX Demonstration in Dunkirk*

**GERMANY**
1. H2morrow*

**ICELAND**
1. Orca
2. **Hellisheidi**

**ITALY**
1. CCS Ravenna Hub*

**THE NETHERLANDS**
1. Porthos (Port of Rotterdam)*
2. Athos (Ijmond)
3. Aramis (Den Helder)
4. Magnum (Eemshaven)*
5. Carbon Connect Delta (ports of Terneuzen and Vlissingen)

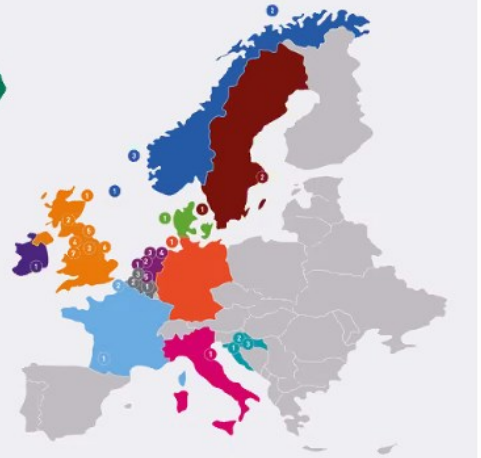
**NORWAY**
1. **Sleipner $CO_2$ Storage***
2. **Snøhvit $CO_2$ Storage***
3. Longship (including Northern Lights)*

**REPUBLIC OF IRELAND**
1. ERVIA

**SWEDEN**
1. Preem CCS*
2. Stockholm Exergi Bio-CCS*

**UK**
1. Acorn*
2. Caledonia Clean Energy
3. H21 North of England*
4. Liverpool-Manchester Hydrogen Cluster
5. Net Zero Teesside*
6. Humber Zero Carbon Cluster*
7. Liverpool Bay Area CCS Project*

* Project where IOGP members are involved
Projects listed in **bold** are in operation



Total number of projects: **30**
Around 50 $MtCO_2$/yr stored by 2030

https://www.iogp.org/bookstore/product/map-of-global-ccs-projects/

International Association of Oil & Gas Producers

# ESG for UK independents: Summary

Start measuring and reporting ESG metrics

Select one or more reporting frameworks

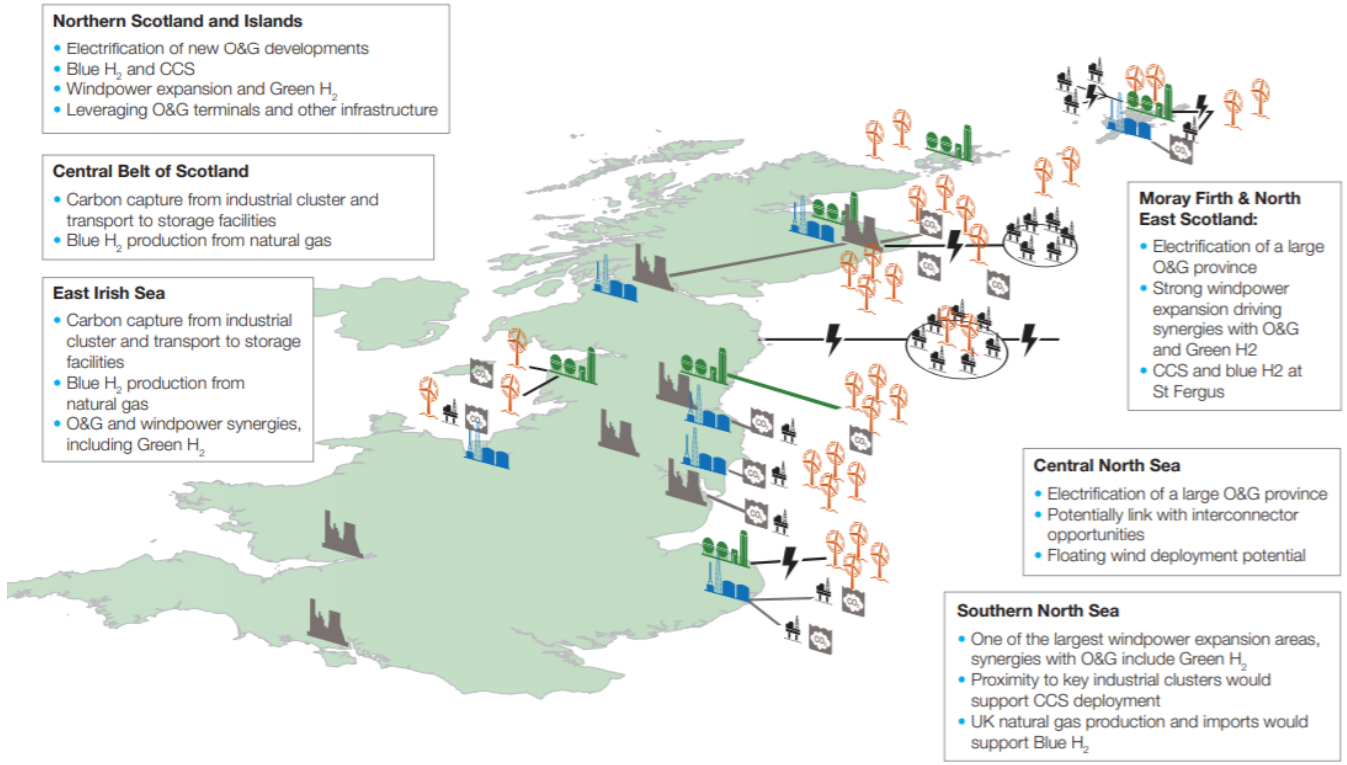
Get engagement from front line staff up to board level

Get finance involved – introduce TCFD

Collaborate with industry bodies, peers and investors/analysts

Keep up with government directions

Look for opportunities




OGA UKCS Energy Integration Report - 2020