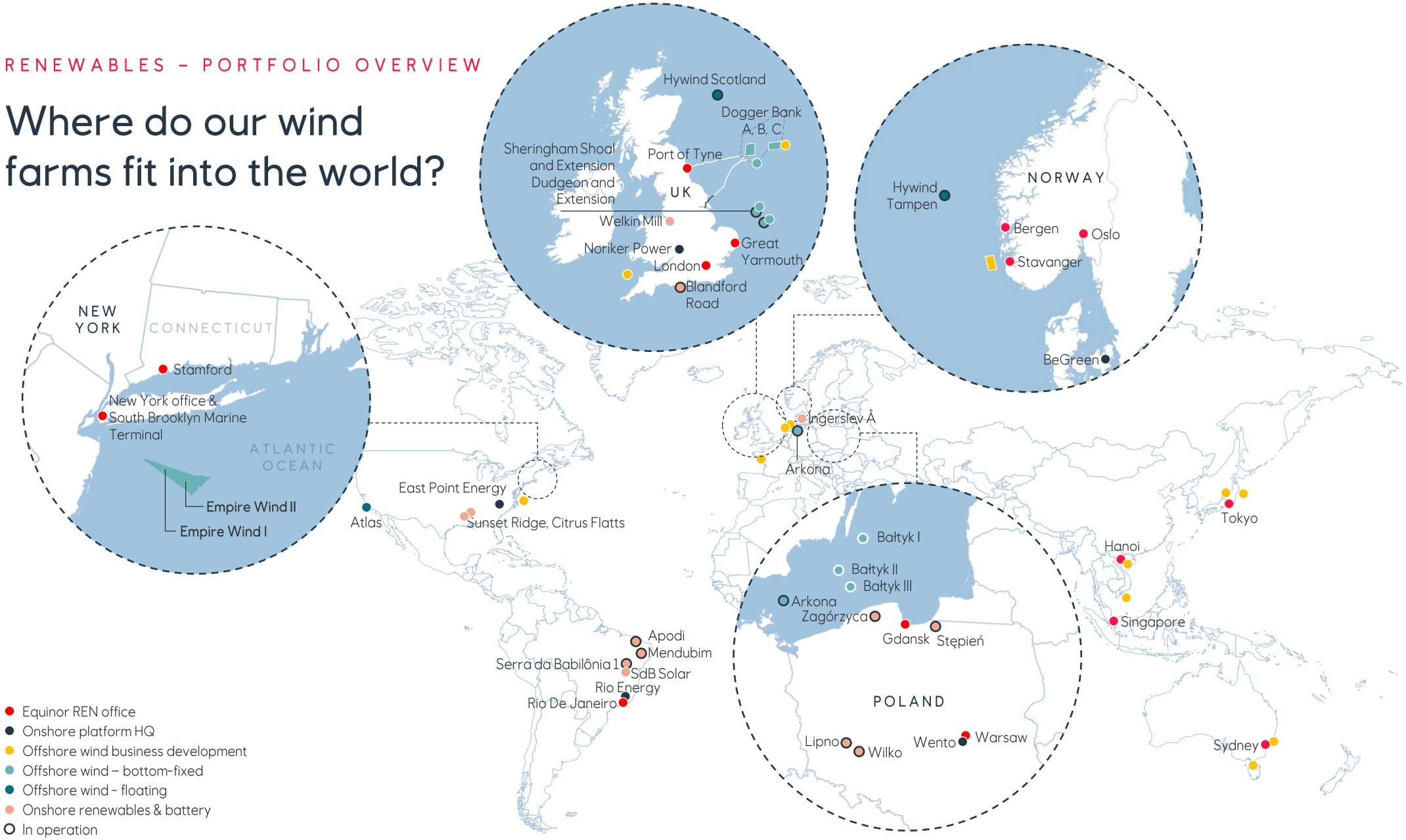
Skills for the Future – Offshore Engineering

Susan Falch-Lovesey, UK Head Social Value, Equinor

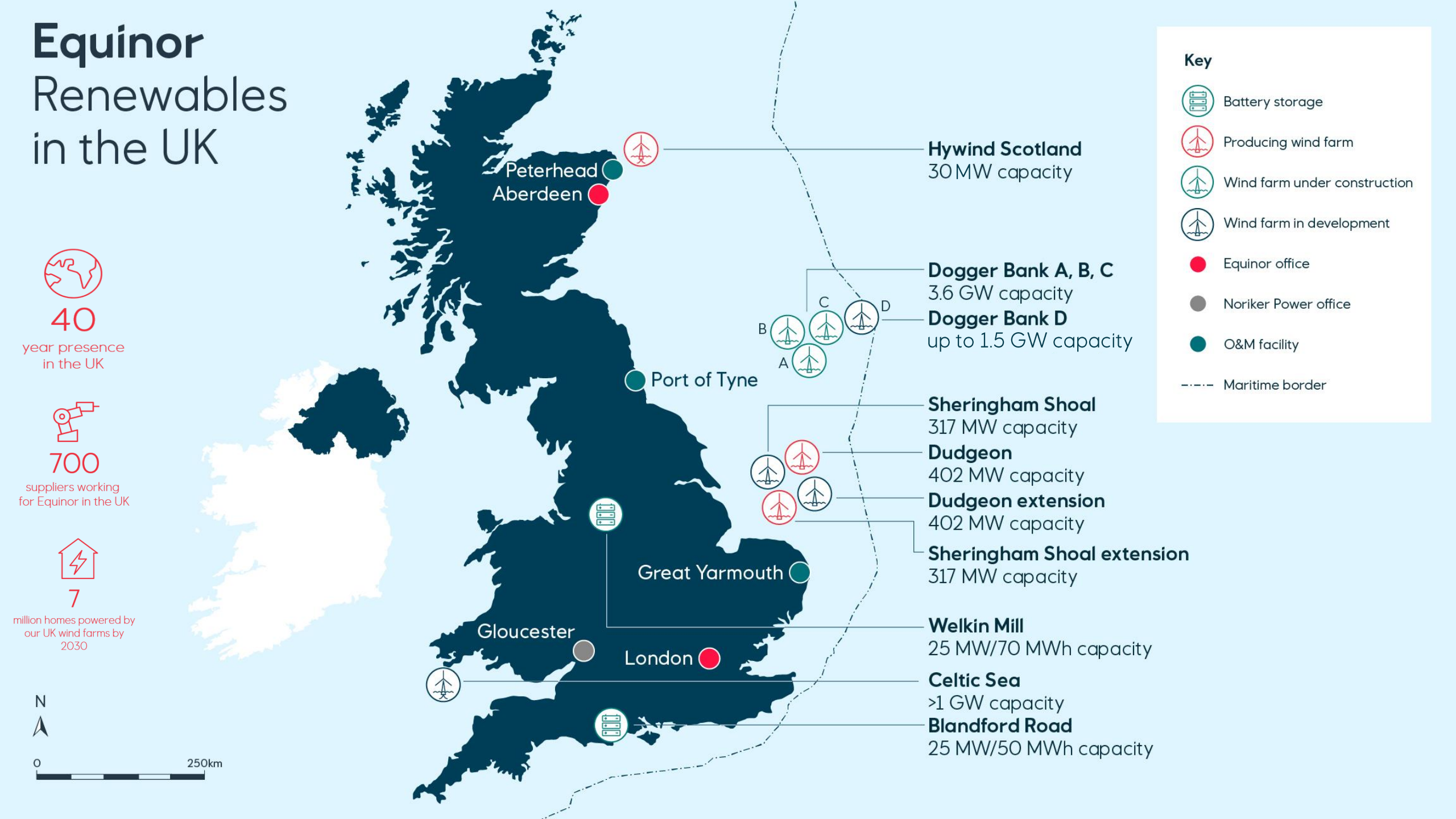
Plan

1. Geography and Technology
2. Skills and Jobs
3. Training
4. Case studies
5. Resources

Where do our wind farms fit into the world?



Equinor Renewables in the UK



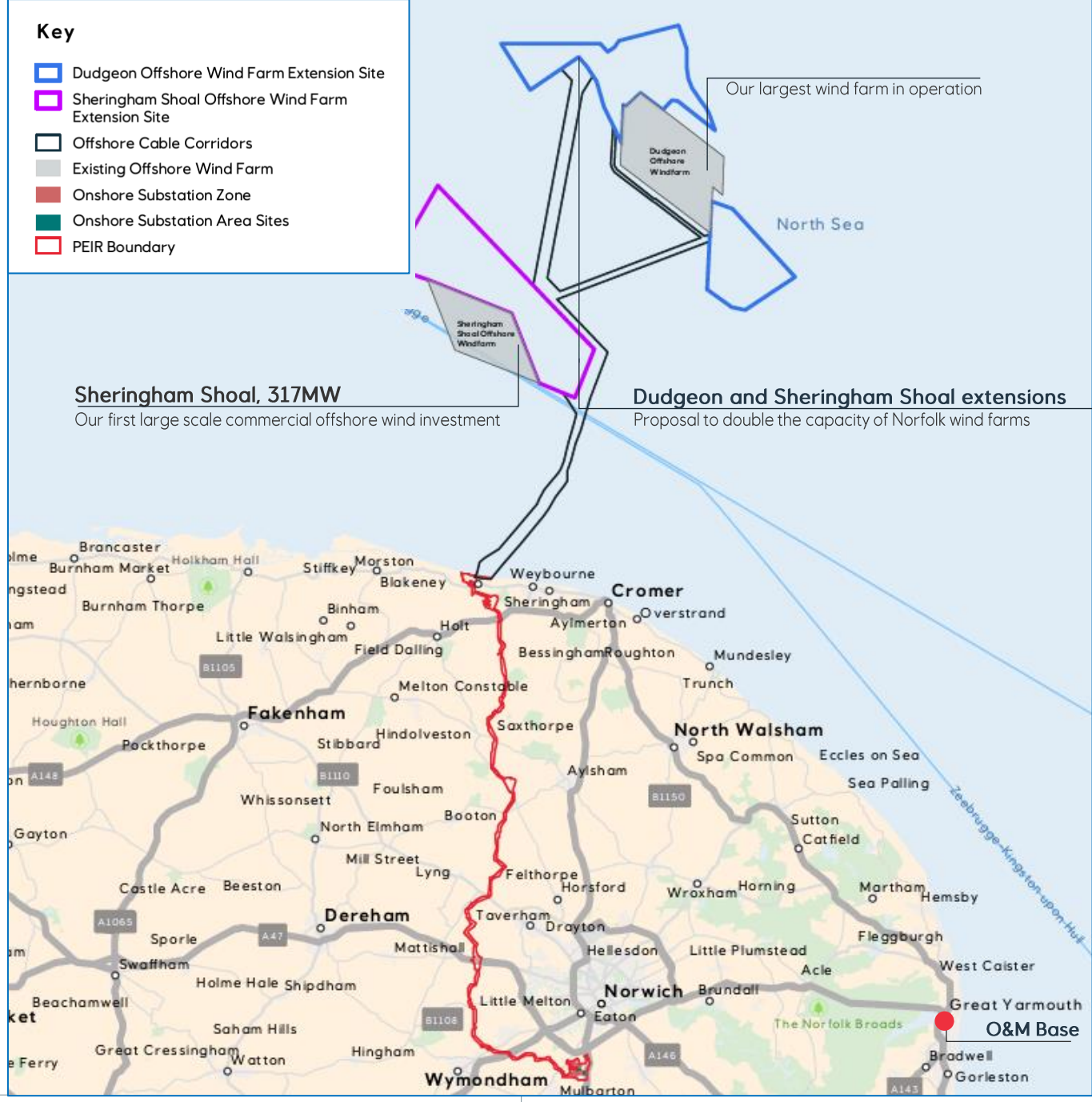
40
year presence in the UK

700
suppliers working for Equinor in the UK

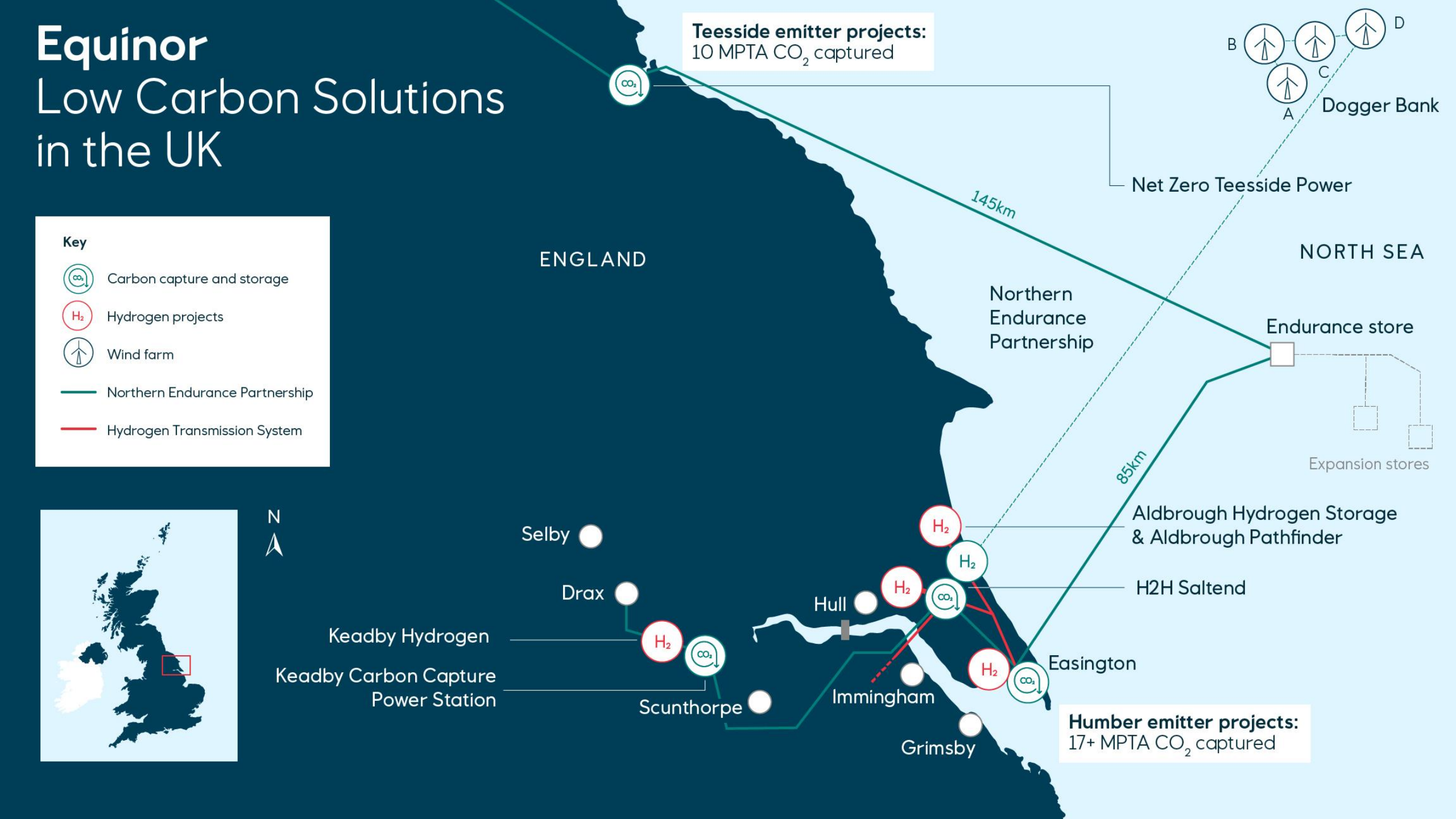
7
million homes powered by our UK wind farms by 2030

UK Wind Farms

Roles for offshore engineering are on and offshore

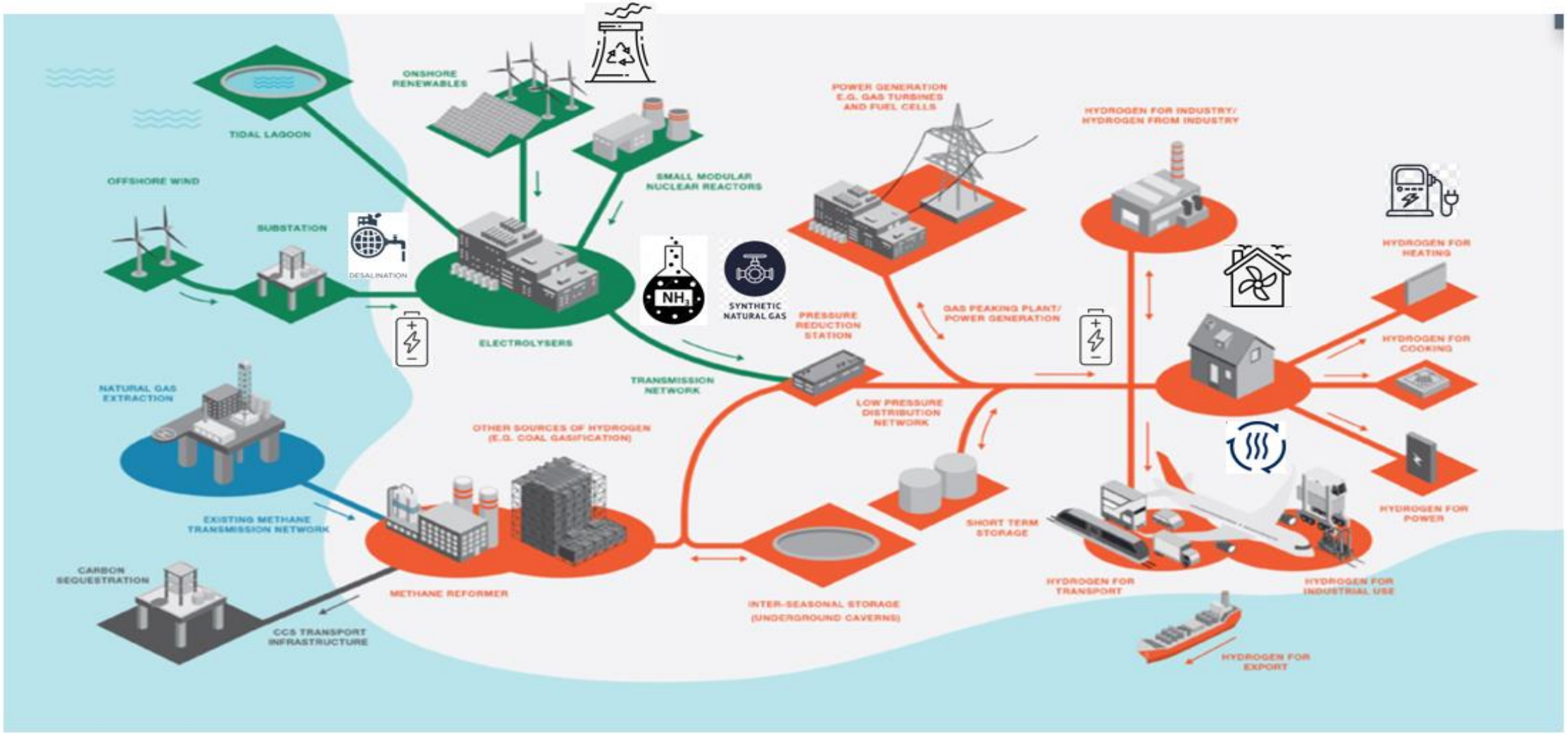


Equinor
Low Carbon Solutions in the UK



System Integration

Decarbonisation Pathway & An Integrated Energy System

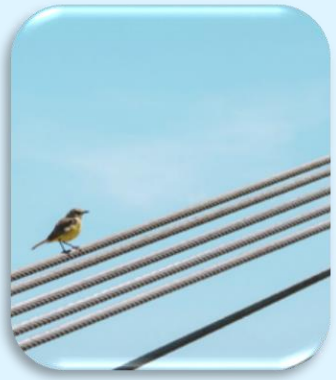


Research Portfolio I Offshore Wind Sustainability

Improved understanding of bird displacement and collision risk for offshore wind farms

Reducing consenting risk related to underwater noise of offshore wind farms

Offshore wind farms and the marine environment - impact and dependencies



Solutions for offshore wind to support the biodiversity net-positive approach

Offshore wind farm coexistence and just transition

Solutions for circular offshore wind farms to conserve natural resources

Improved sustainability performance by development of digitized data and tools

Ecosystem impact and risk

Coexistence

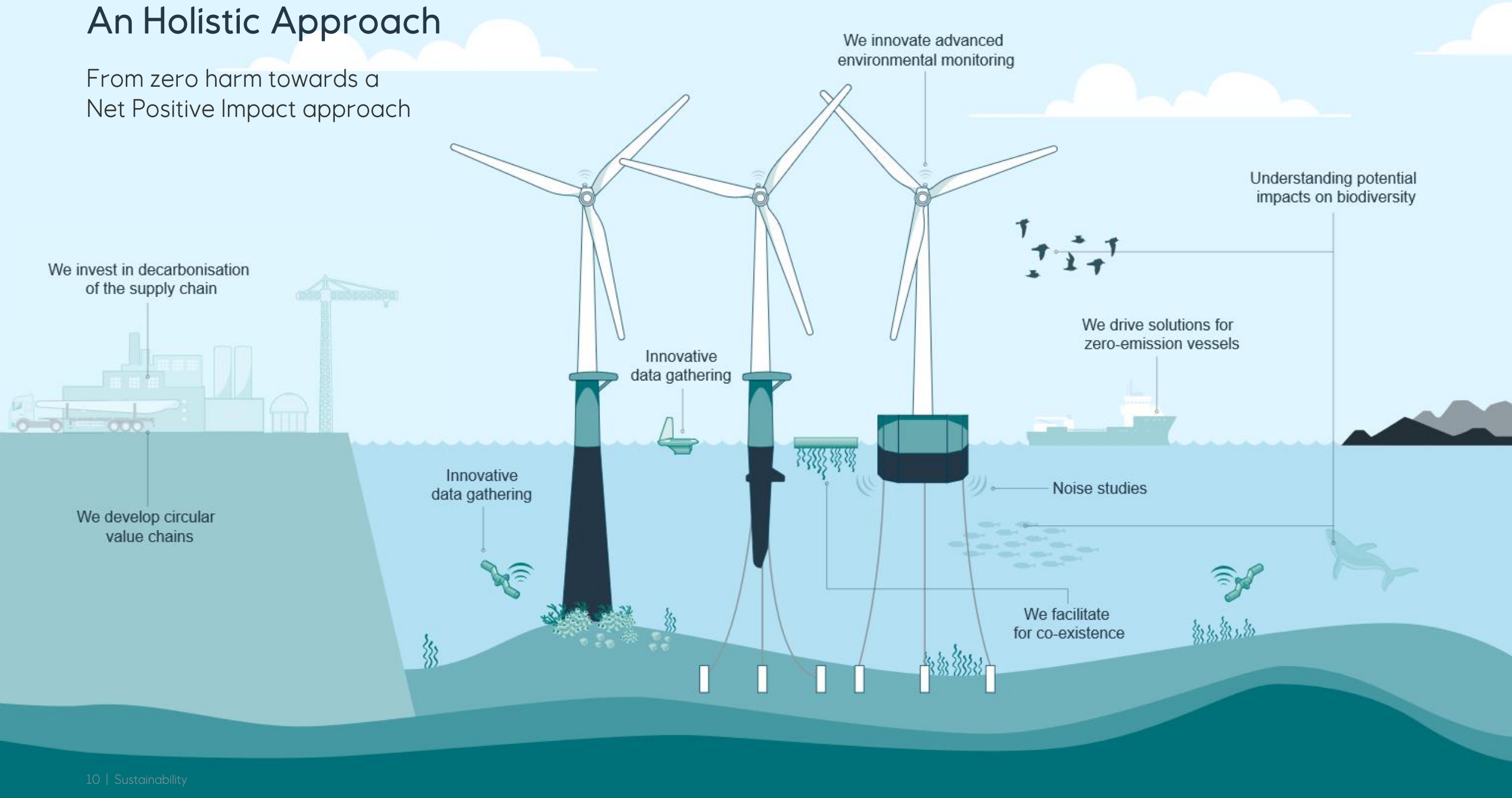
Circularity

Sustainability data quantification and analysis

Pictures: Equinor media bank

An Holistic Approach

From zero harm towards a
Net Positive Impact approach



UNDERSTANDING THE SCALE OF THE PROBLEM

Skills and a Sustainable Workforce

20%

Retiring in the next 5 Years **(at least)**

1/3rd

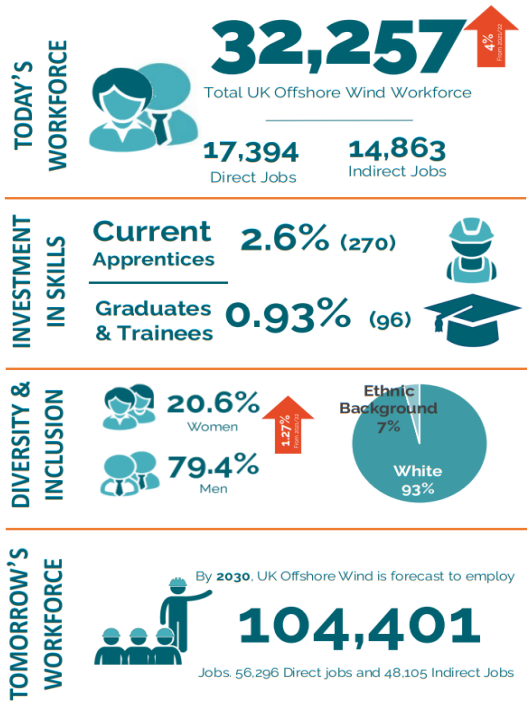
of the global workforce are Gen Z **(13-28 yrs)**

100k

16-24 yr old NEETs

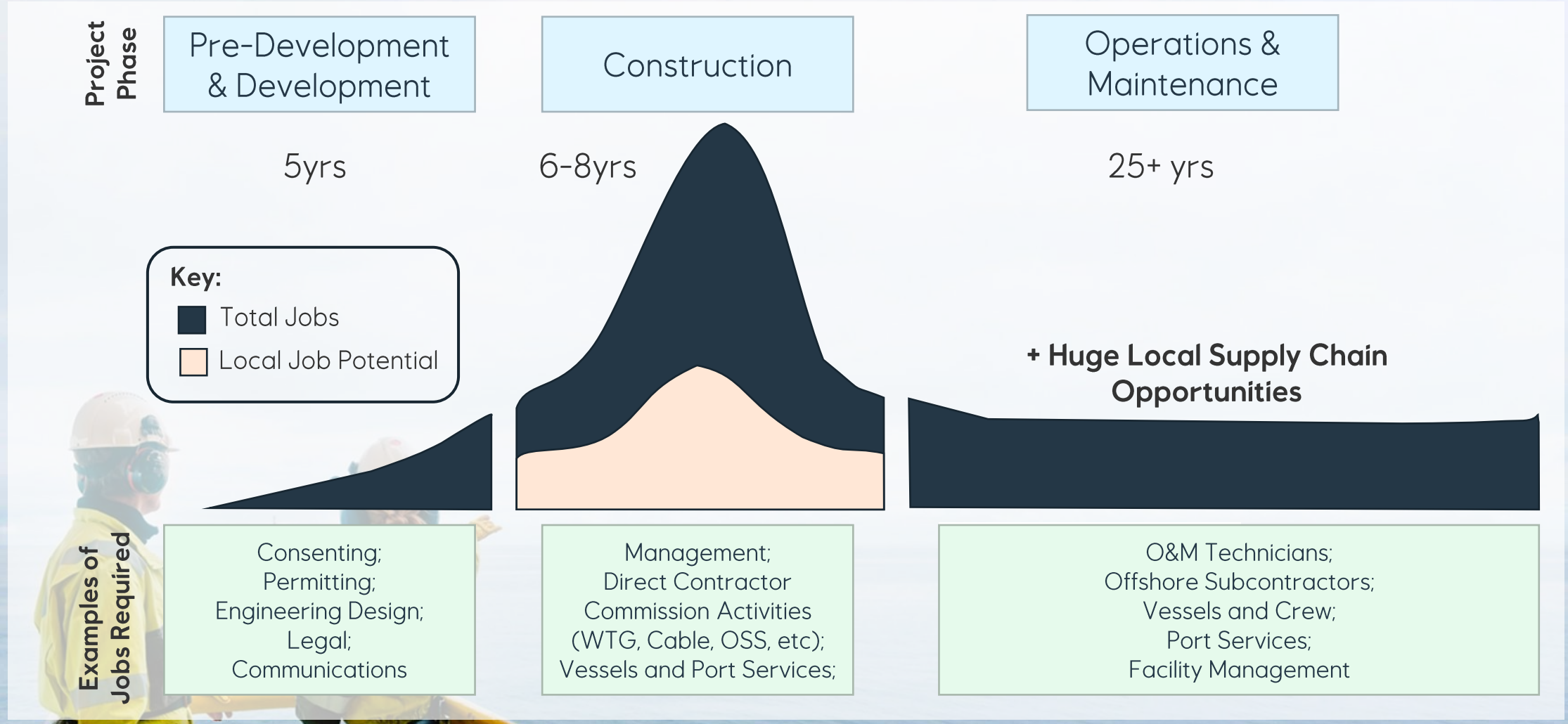
UK: **12.5%**

(Highest since 2014)

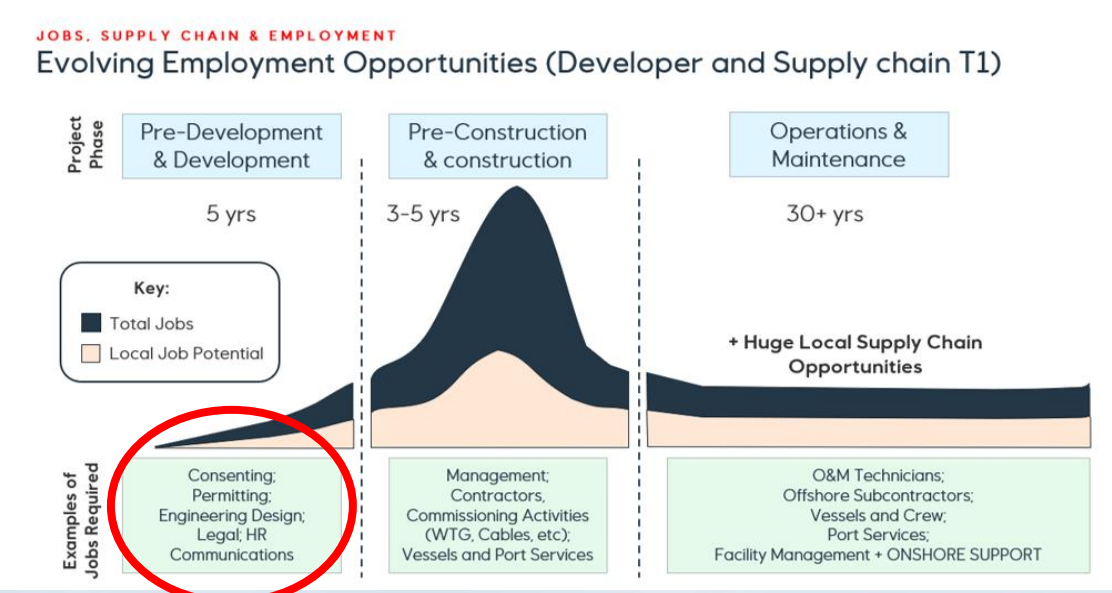


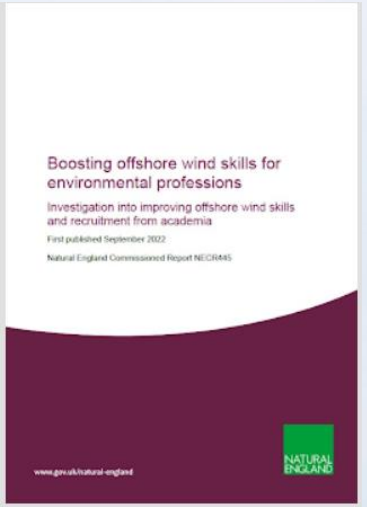
JOBS, SUPPLY CHAIN & EMPLOYMENT

Evolving Employment Opportunities



The right training programmes for what you are interested in





Higher level skills programme intro & information by OWIC/ Natural England

Offshore wind consenting e-learning modules

AND knowing where the likelihood of good jobs will be in the future is useful

Occupational profiles

Senior Authorised Person	High Voltage Technician
High Voltage Cable Engineer	Commissioning Engineer
Electrical Project Engineer	Control Room Engineer
SCADA Engineer	Environmental Consenting Specialist
Marine Ecologist	Wind Turbine Technician (O&M)
Wind Turbine Technician (Installation)	Wind Turbine Troubleshooter
Seafarer	QHSE Manager
Regulatory Advisor	Subsea ROV Operator

OWIC and EU Skills - Occupational mapping and pathways of the 16 most scarce and critical offshore wind profiles .

Occupational mapping for offshore wind

Northern Endurance Partnership and Net Zero Teesside – Industry Scholarships CCS)

The scholarship is open to individuals aged 16 and above, with 141 places

- Welding
- Instrumentation
- Pipefitting
- Electrical Engineering
- Civil Operations

NZT Power

Northern Endurance Partnership

Do you want to become an offshore technician?

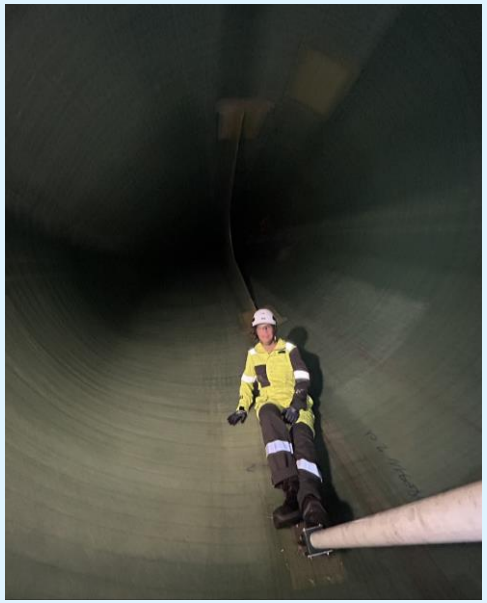
Training and Certificates

Mandatory Training

- Sea survival (GWO or BOSIET)
- GWO Transfer Training
- Working at Heights – GWO climbing & rescue
- First Aid – GWO or BOSIET
- Manual Handling – GWO
- Fire Awareness – GWO or BOSIET

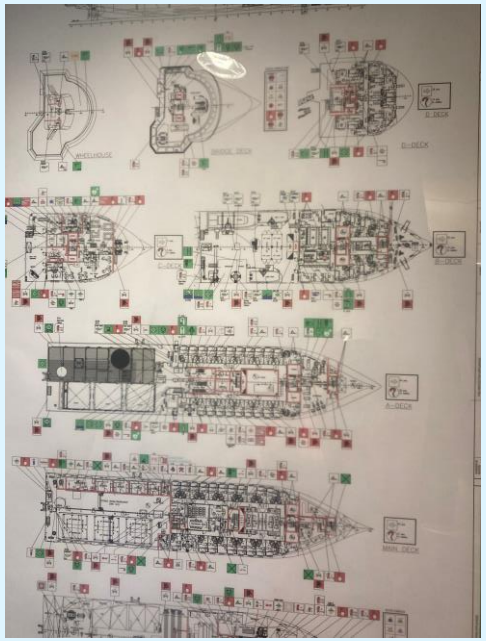
Fitness to work

- Renewable UK or OGUK Medical with Drug & alcohol screening (incl. aerobic capacity assessment)



A HOME,
TWO WEEKS AT A TIME

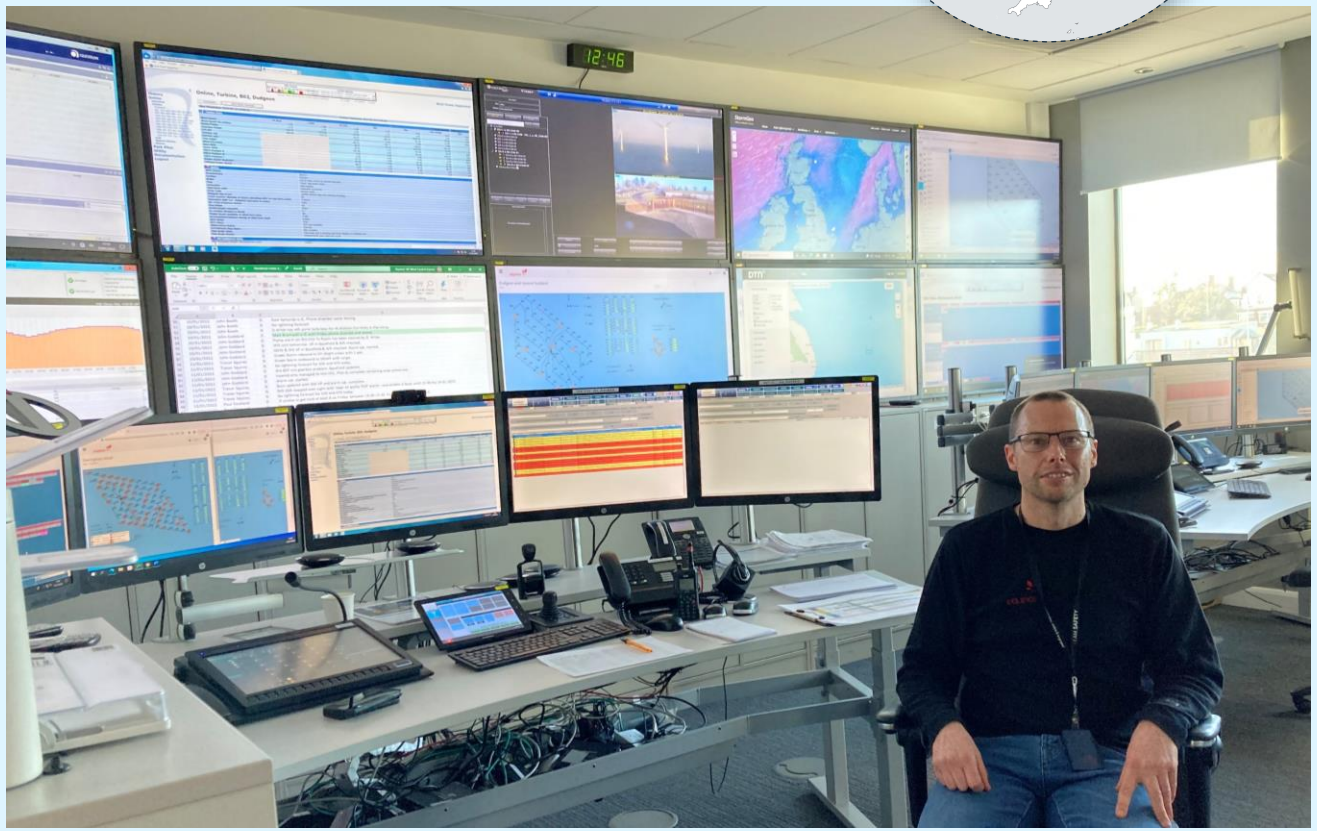
The Service Operations Vessel (SOV)



GREAT YARMOUTH

Greater Wash O&M Base

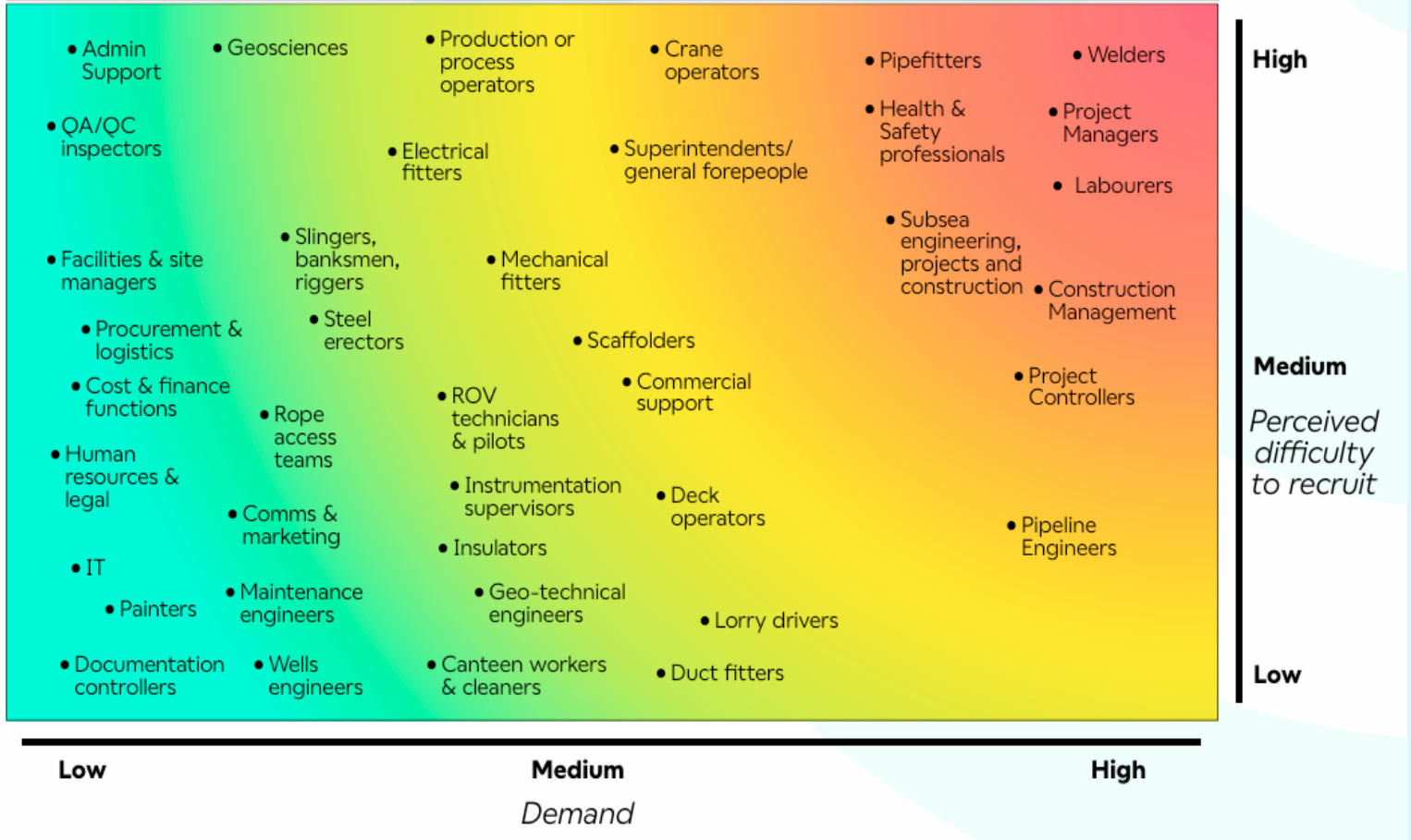
Equinor's **Global Digital and O&M Program** base, developing best-in-class digital tools and methodologies.



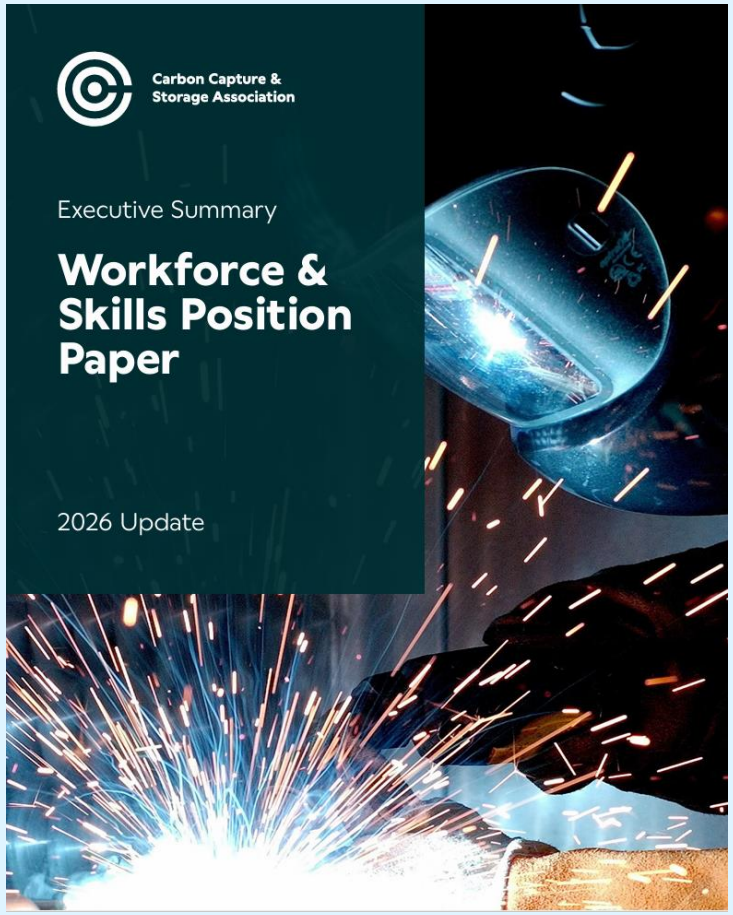
ANTICIPATING THE REGIONAL NEEDS AND OPORTUNITIES

AND knowing where the likelihood of good jobs will be in the future is useful

Occupational heat mapping analysis demonstrating the perceived difficulty to recruit specific roles required by CCUS projects against the level of demand for those roles.

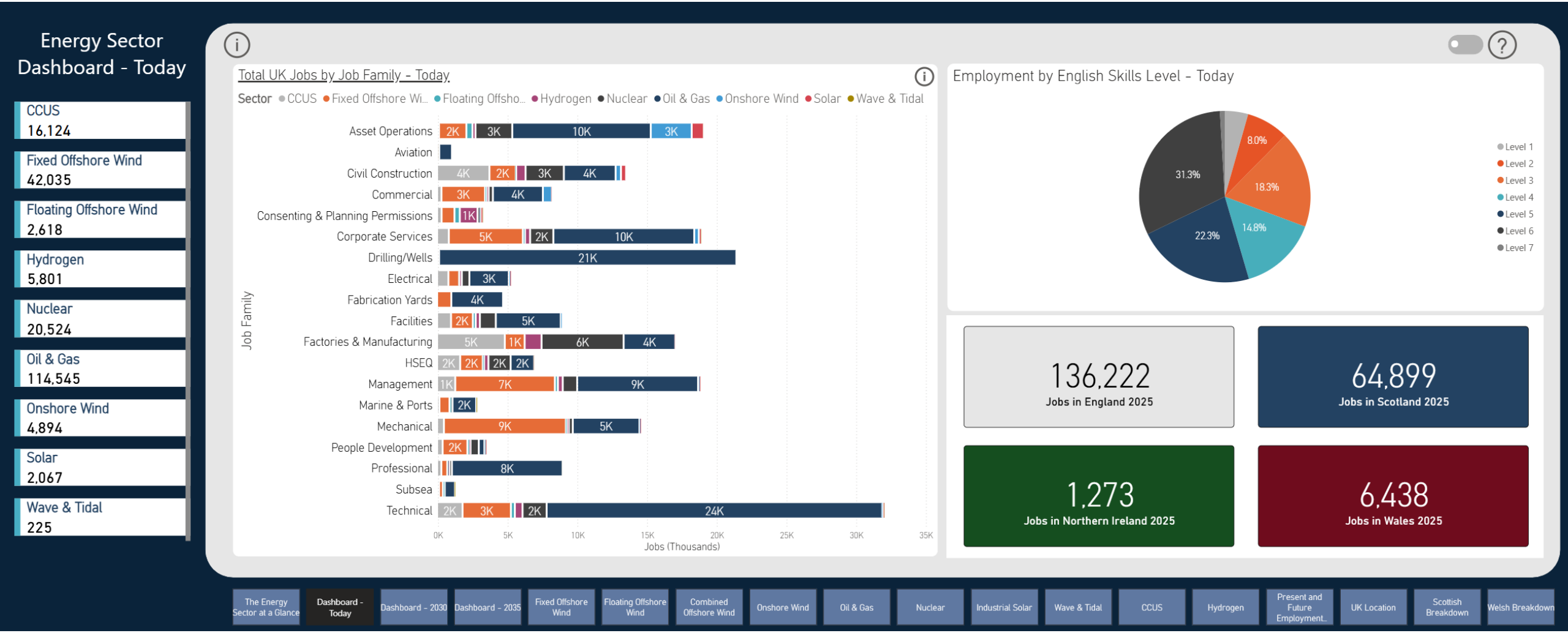


Skills Paper - Executive Summary



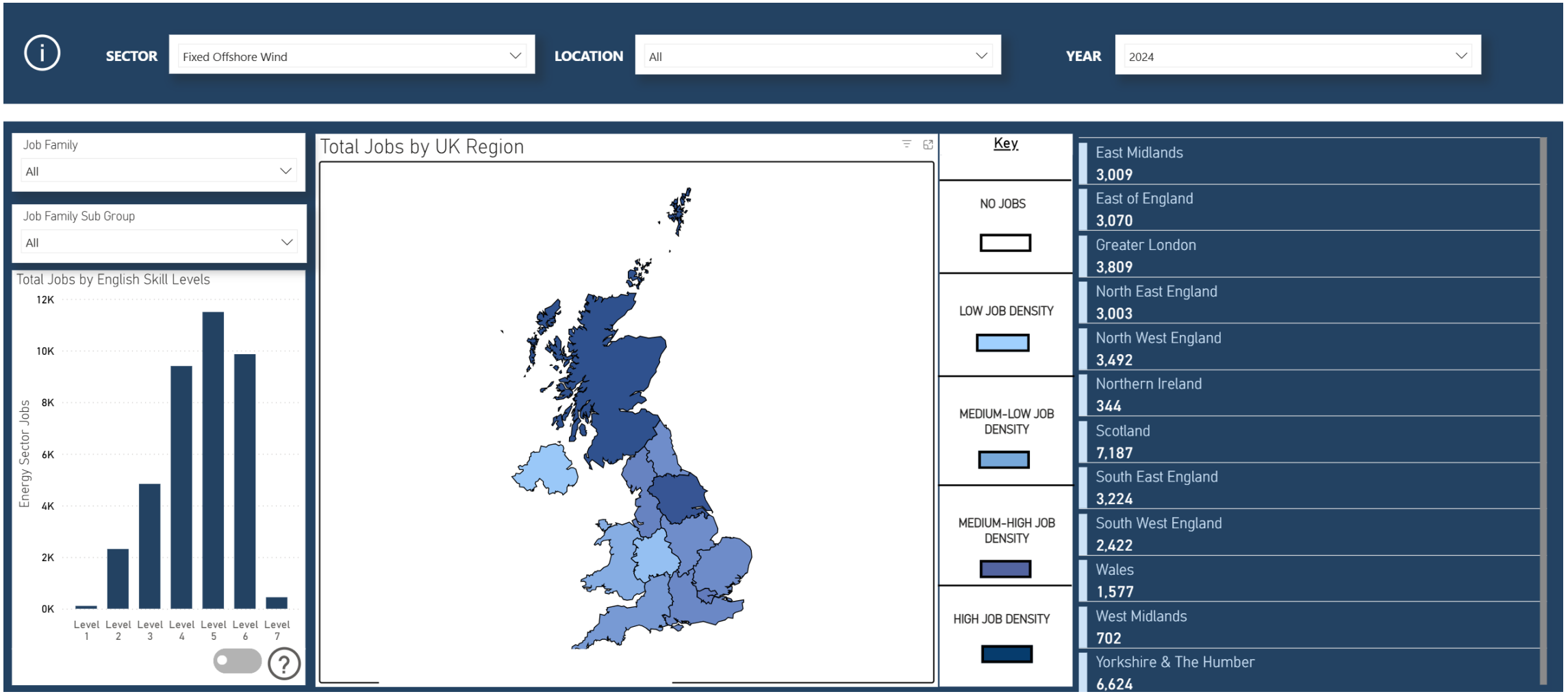
Roles Available and % interesting figures

Energy Skills Intelligence Hub (energyskillshub.co.uk)



Focus in on Offshore Wind (Fixed and Floating)

Focus in on Offshore Wind by Region



EVEN ONE WEEK HELPS

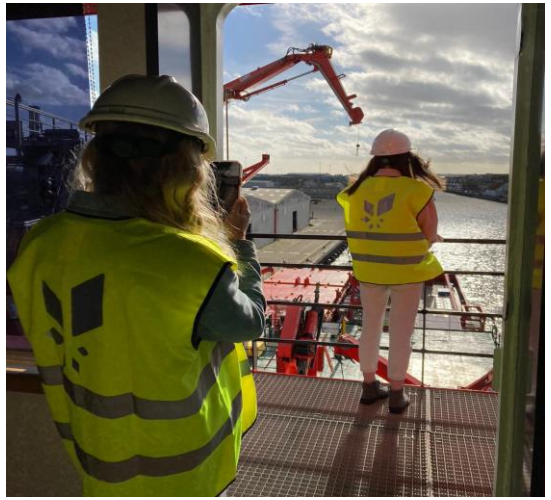
Work Experience

"We have each taken so much away that is already helping us to map out our future."

"Amazing"

"We really appreciate the effort put into this week and will never forget it. We are looking forward to any future events!"

- Kate, Martha and Daisy



CLOSING OFFSHORE WIND SKILL GAPS TOGETHER

Apprenticeship Levy Transfer

3 Level 3 Metal Fabricator Apprentices

1 Level 4 Engineering Manufacturing Apprentice

Each will study at East Coast College for 42 months (Equinor will sponsor all training)

Training in a skills gap area

- Supported by a local college
- A local, Great Yarmouth business

Metal Fabrication with Armultra

DOGGER BANK, 2023 INTAKE

Equinor's Apprentices

3 Apprentices, gaining:

Key career skills and recognised professional qualifications:

- L3 Maintenance Operations Engineering Technician
- L4 Engineering Foundation Degree

Various roles & skills areas, including:

- Electrical engineering,
- Warehouse logistics,
- Wind farm logistics,
- High voltage training,
- Full O&M immersion

A WIN-WIN: BUILDING SUPPORT & ADDRESSING A FUTURE SKILLS GAP

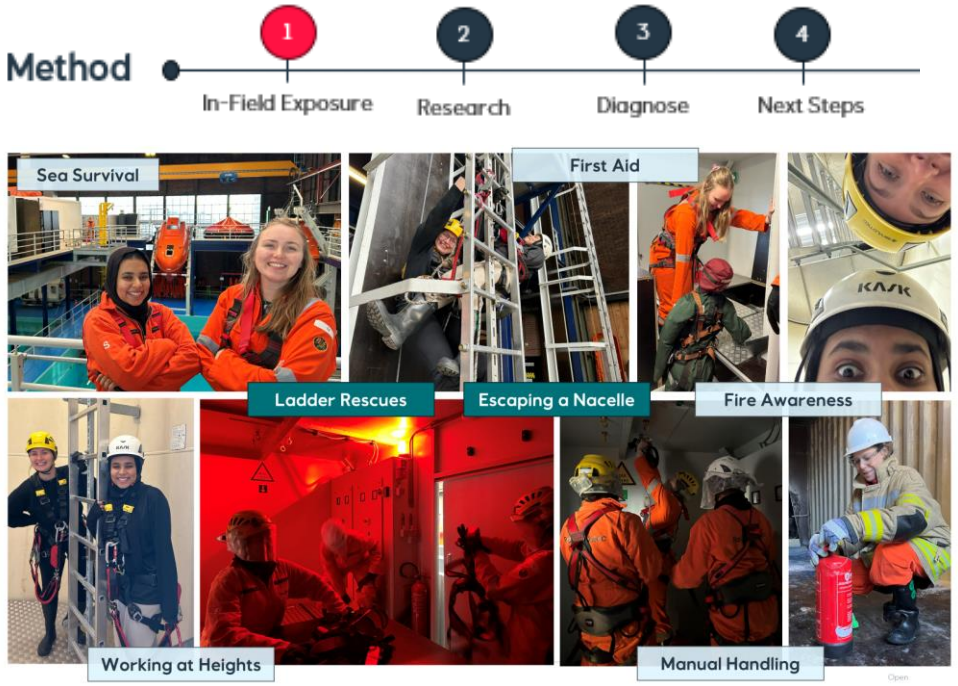
A RESEARCH PROJECT

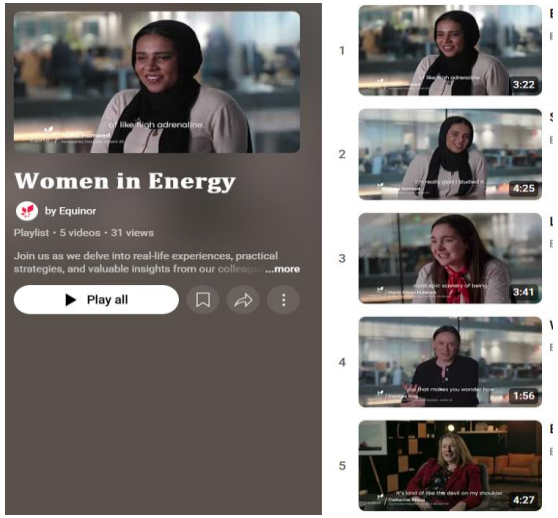
Diversity & Inclusion in Offshore Wind

Preparing to go Offshore:

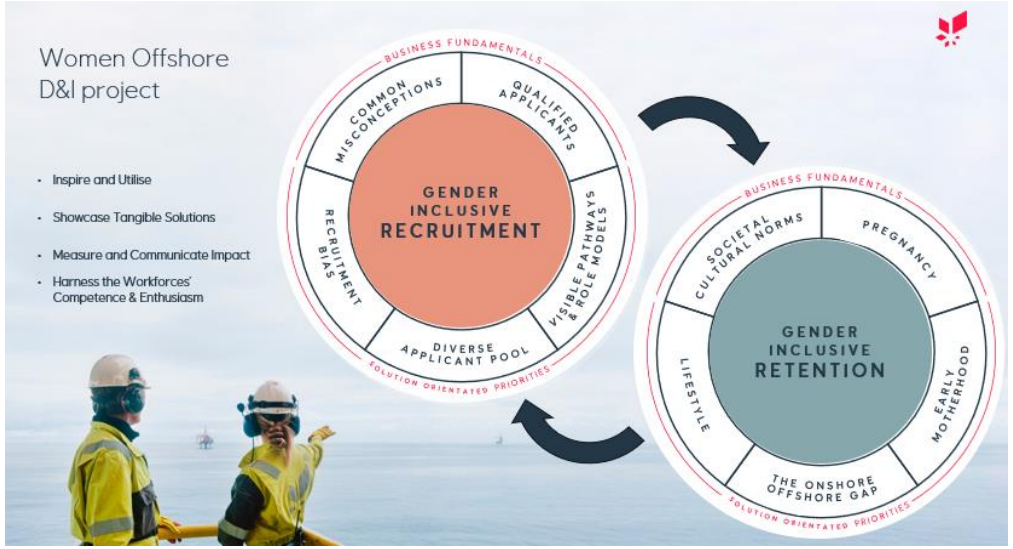
- ✓ GWO Training
- ✓ Medical
- ✓ Induction

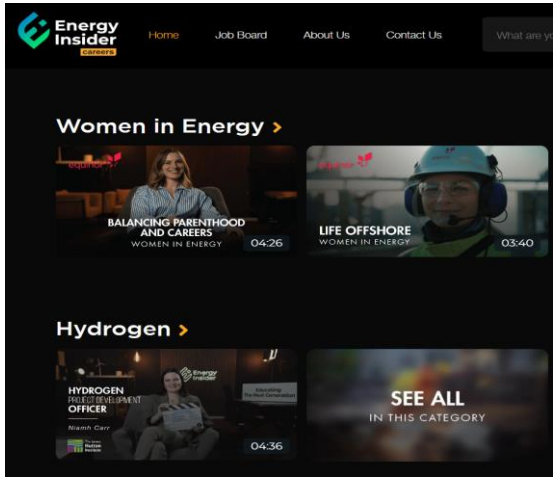
"With the support of an excellent team, we're now excited to start exploring how we can enhance diversity offshore"





Women in Energy - YouTube

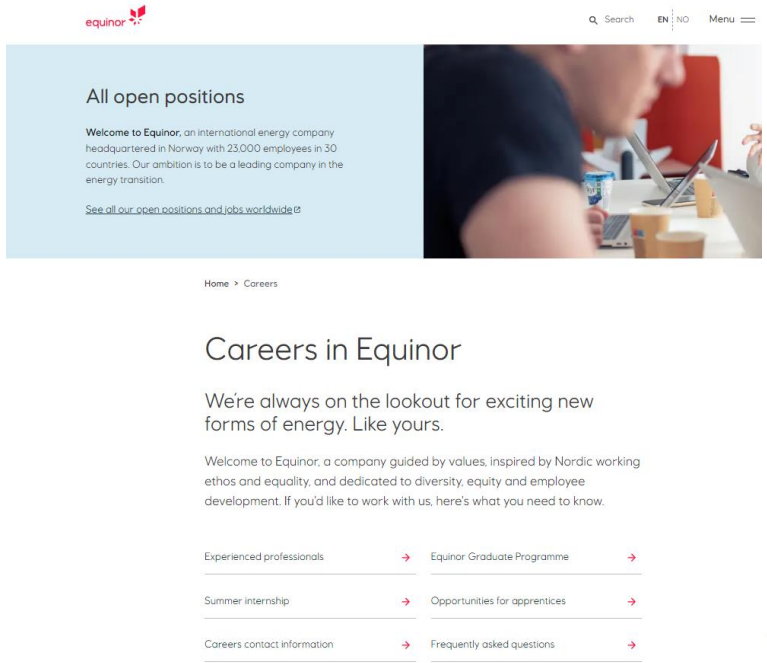




Energy Insider Careers

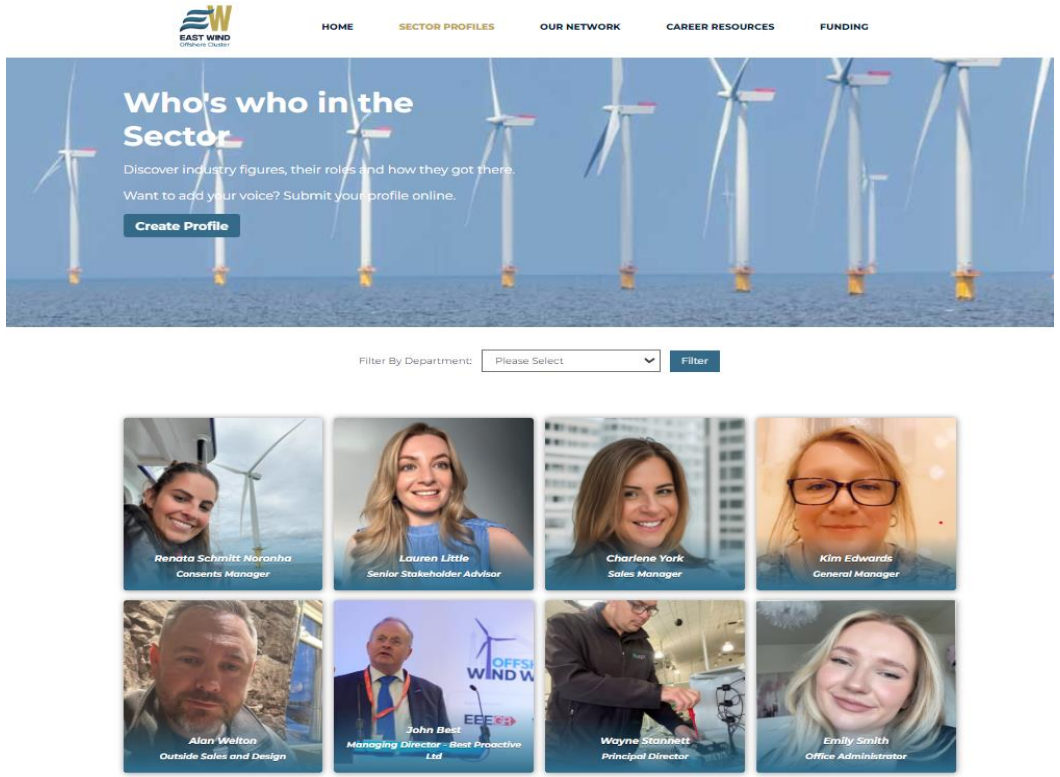
Career website links (i)

Exciting career opportunities in Equinor - Equinor



Hywind Tampen | DOF People and Project | Floating Wind Turbine Installation

Sector Profiles – EastWind (ewoc.co.uk)



Career website links (ii)

Tomorrow's Engineers (tomorrowsengineers.org.uk)

all-routes-booklet_final_ccedit.pdf (tomorrowsengineers.org.uk)

Guide to an offshore windfarm

Home | Offshore Wind Learning

Free Trial | Offshore Wind Learning

Unifrog - The universal destinations platform. And LINK

Gain Virtual Work Experience. Earn certificates - 100% free! | Springpod

EEEGR - Be part of something bigger

Energy Insider – Educating the Next Generation of Energy Professionals

icanbea... (Careers & Ideas in Norfolk & Suffolk) | icanbea...

Planit : Job Profiles : Geoscientist Subsurface Scientists

Homepage - My Energy Future

Explore Career Pathways | Offshore Wind Training New York (ny.gov)

Hydrogen Training Links

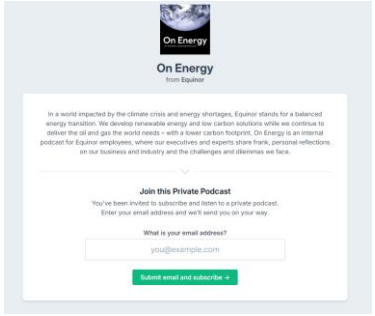
Hydrogen can be used to generate electricity, heat our homes and businesses and power vehicles. It could make a significant difference to our carbon emissions and will be critical in achieving Net Zero.

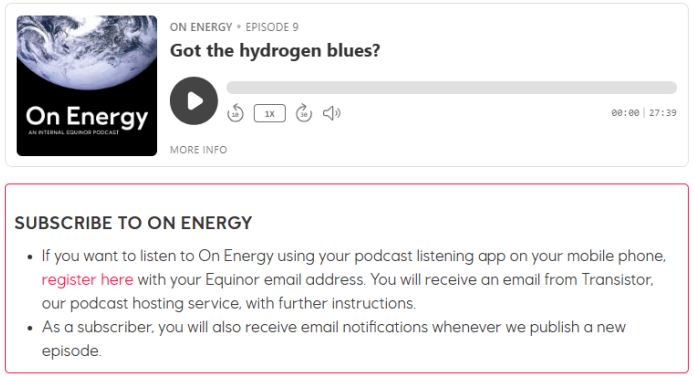
We need to ensure the UK has the right skills, at the right time and in the right place to maximise the opportunity that hydrogen presents as a key enabler for decarbonisation.

The seven centres that make up the High Value Manufacturing Catapult (HVM Catapult) have come together to create '**Hydrogen awareness: make it; move it; use it**', a series of open access online modules for all manufacturing sectors.

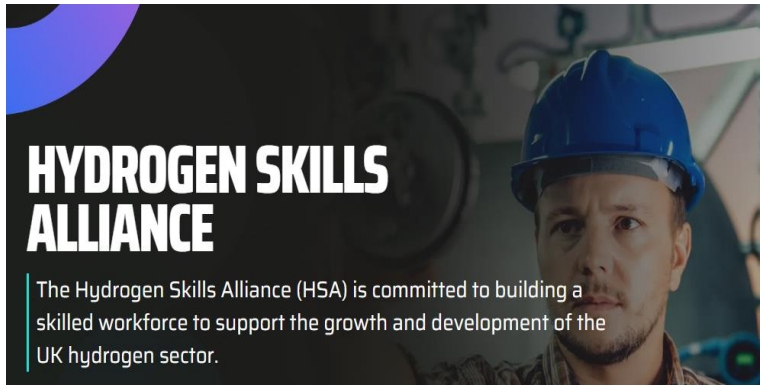
Access Hydrogen Awareness Modules Now →

[Hydrogen Awareness Modules | National Composites Centre]





[Join a private podcast: On Energy – Transistor.fm]



Hydrogen Skills Alliance

CATAPULT High Value Manufacturing

[Hydrogen - Cogent Skills]

Cogent Skills for science and technology

Skills for the Future

Susan Falch-Lovesey