Offshore Wind Net Zero Investment Roadmap

Leading the way to net zero

March 2023

HM Government

GREAT
BRITAIN & NORTHERN IRELAND

The UK is leading the charge towards a net zero, nature-positive future

Access to cheap, abundant and reliable energy provides the foundation for a thriving economy with our homes and businesses relying on it to deliver our future prosperity. Already home to the 1st, 2nd, 3rd and 4th largest operational offshore wind farm projects in the world, we are cementing our position as amongst the most attractive places in the world for investing in offshore wind.

Rt Hon Grant Shapps MP – Secretary of State for Department for Energy Security and Net Zero

- Offshore wind is an established and proven part of the UK energy mix and is set to become even more important in the future. It will play a key role in decarbonising our power system by 2035 and helping the UK achieve net zero by 2050.
- With the highest deployment in Europe, we have proved that offshore wind can be delivered at ever increasing scale whilst decreasing the costs to consumers.
- The UK has a world-leading ambition to deploy up to 50GW by 2030, with up to 5GW coming from floating offshore wind.
- Investors from all over the world are already benefitting from the certainty that the UK offshore wind market offers. Our long-term ambitions mean significant, new investment opportunities for private capital in windfarms, transmission infrastructure, port infrastructure, new manufacturing, and services.

The UK has one of the world's most attractive business and investment environments

c. 50%
of all European offshore wind installed capacity (2010-2020)

1st
in Europe for value of start–up & scale–up ecosystem[1]

1st for installed offshore wind capacity in Europe, **2nd** globally

2nd
in Europe for FDI attractiveness[2]

£1bn
Funding for Net Zero Innovation Portfolio

£22bn
committed to raise R&D to 2.4% of GDP[7]

1st
Ranked best global green finance centre[3]

1st
in G20 as a globally connected economy[4]

Engineering employs **5.6mn** people[6]

5th
Largest economy[5]

- Open, liberal economy
- Stable regulatory regime with independent legal system
- Globally competitive and transparent tax regime
- Generous R&D and patent tax relief
- The UK-EU Trade and Cooperation Agreement allows zero tariff market access with the EU
- Flexible labour market
- World class professional services sector supporting businesses with insurance and finance

References: [1]Dealroom, [2]EY Attractiveness Survey June 2022Attractiveness , [3]Z/Yen Global Green Finance Index 2022 (GGFI 10), [4]DHL Global Connectedness Index 2021,[5]Official statistics converted at market exchange rates as a source; [6]Workforce trends (2022); [7]UK Innovation Strategy (2021)

Why invest in UK offshore wind?

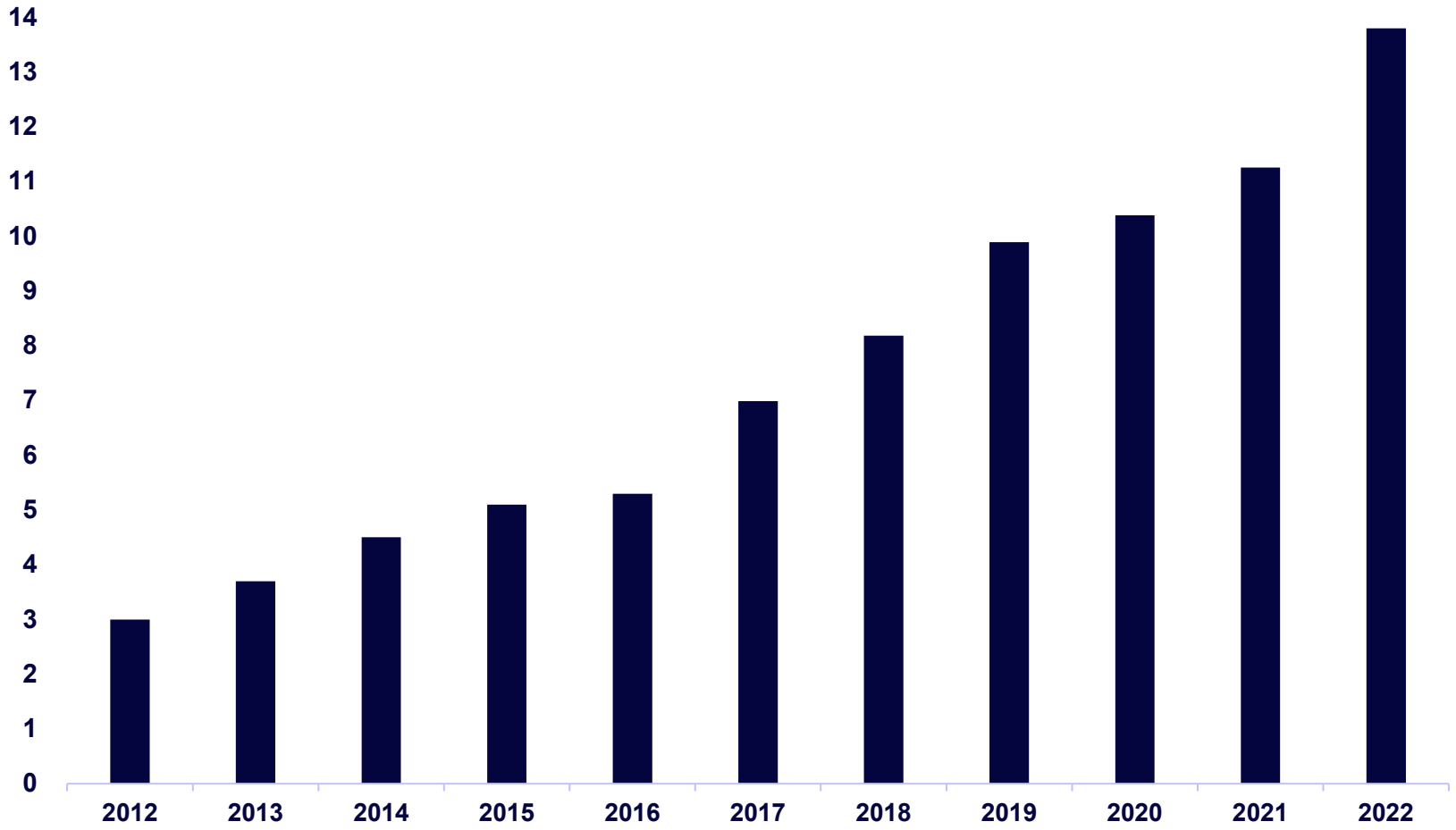
A sector with ambitious targets and major opportunities for growth

- **Long term vision** with an ambition of up to 50GW offshore wind capacity by 2030, including up to 5GW of floating offshore wind, and a commitment to shorten development timescales for future projects.
- **UK geography** well suited to offshore wind deployment.
- **Successful track record of Government and industry** working in partnership to build the sector through the Offshore Wind Industry Council, a joint government-industry forum.
- **Established and experienced regulatory regime** covering the whole offshore wind project life cycle, from leasing, to consenting, to operation and decommissioning – with actions underway to accelerate the pipeline and meet our ambitions.
- **Clear, bankable support regime** offering reliable and legally secure income for new developments through 15-year Contracts for Difference with a government-owned counterparty awarded through competitive annual auctions.
- **Commercial PPAs:** offshore wind projects are beginning to proceed on the merchant market.
- **Stable, regulated returns** for investments in offshore transmission.
- **Enabling infrastructure** such as grid, supply chain and ports investment, with supportive government schemes.
- **Leading UK-based companies,** including two of the world's leading turbine original equipment manufacturers, plus hundreds of other companies, to anchor a growing supply chain.

[1] Climate Change Committee (2020), *The Sixth Carbon Budget: The UK's path to Net Zero*

UK offshore wind capacity has grown significantly over the last decade

UK operational offshore wind capacity (GW)

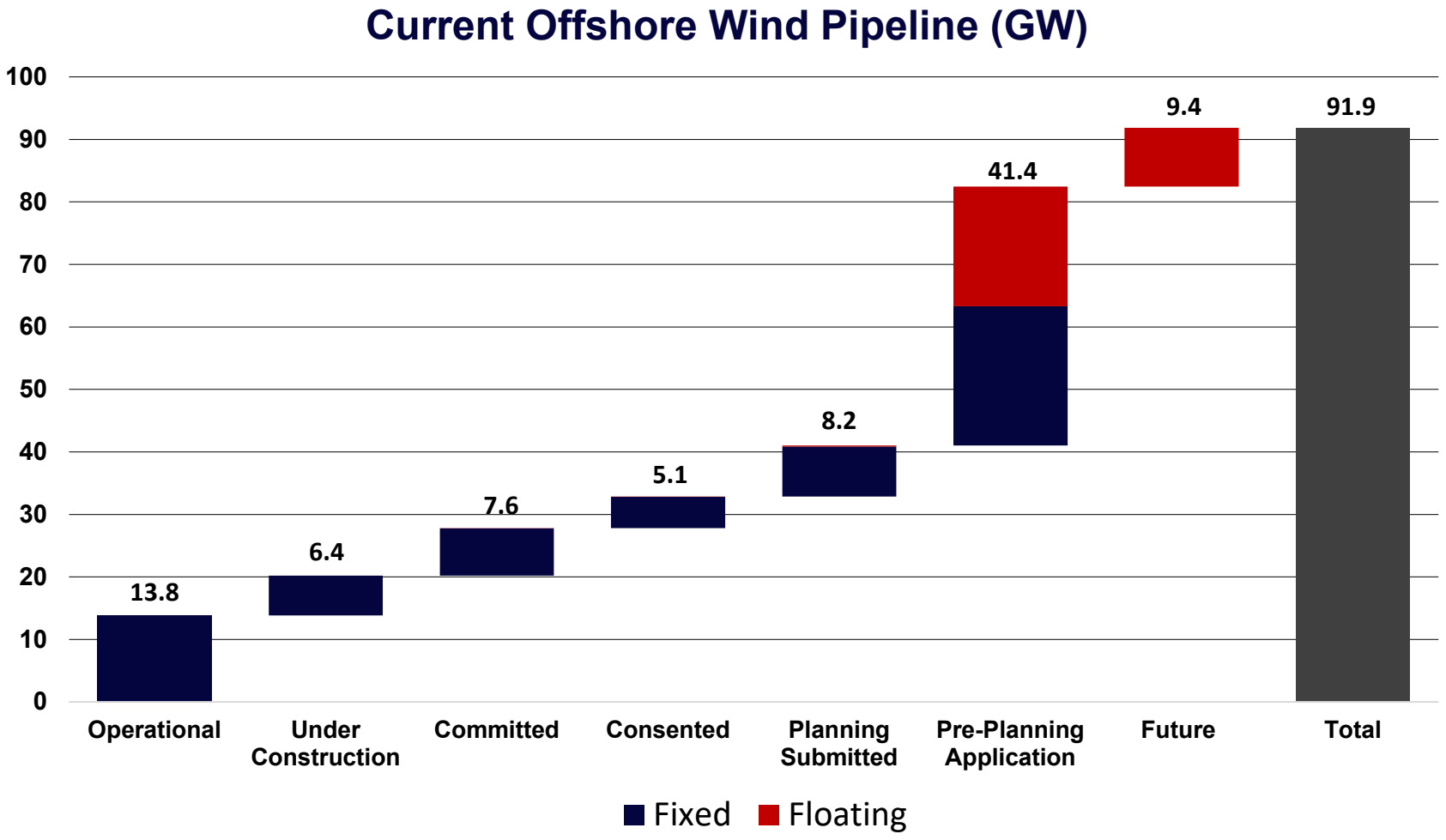


Source: Energy Trends: Renewable electricity capacity and generation (ET 6.1 - quarterly), up to date as of Q3 2022.

- The UK's installed capacity has increased rapidly over the last decade.
- There is 13.8GW of offshore wind capacity already in the UK, enough to power over 10 million homes.
- Current deployment is over 4 times higher than the capacity installed in 2012.
- The cost per unit of offshore wind has fallen by almost 70% from £119.89 to £37.35/MWh since the first Contracts for Difference allocation round in 2015.[1]
- The UK currently has 78MW floating offshore wind operational – the Hywind Scotland (30MW) and Kincardine (48MW) projects.

1. Quoted in 2012 prices.

The known pipeline of offshore wind farm projects shows significant potential for growth and investment



Source: Department for Energy Security & Net Zero Analysis
Footnotes: Operational & under construction up to date as of Q3 2022, committed -> pre-planning application up to date as of Q1 2023, future up to date as of Q3 2023. Future capacity is based on potential seabed to be leased via The Crown Estate Celtic Sea and INTOG leasing rounds.

Fixed-bottom and floating offshore wind pipeline

- There is around 78GW of offshore wind capacity in the UK pipeline.
- Around 60% of this pipeline is fixed bottom and 40% is floating.
- We have 6.4GW in construction, due to come online by the mid-2020s, and a further 7.6GW is now finalising procurement and preparing for construction.
- Crown Estate Scotland awarded rights for 27.6GW of new capacity through the ScotWind leasing round. The Innovation and Targeted Oil and Gas Round (INTOG) could add a further 5.4GW of floating wind capacity.
- A further 4GW are expected to come through the Celtic Sea floating wind leasing round.

Supportive policy and regulatory environment

World leading policy and regulations

- **Increased our ambition for offshore wind deployment** to up to 50GW by 2030, including up to 5GW of floating offshore wind.
- **World leading market policy and market framework**, running four Contracts for Difference (CfD) auctions in 7 years to support low-carbon electricity generation.
- **Annual CfD auctions** from 2023 onwards starting with Allocation Round 5 opening in March 2023.
- **Considering the use of Non-Price Factors** as a reform to the CfD scheme.
- **Radar mitigation** – Working with the Offshore Wind Industry Council and Ministry of Defence to put in place suitable mitigation that addresses challenges with radar interference from offshore wind turbines.
- **Leasing rounds** delivered by The Crown Estate and Crown Estate Scotland giving opportunities to new entrants, with further **seabed leasing rounds** planned including for floating wind in the Celtic Sea.

Regulatory reform for our network

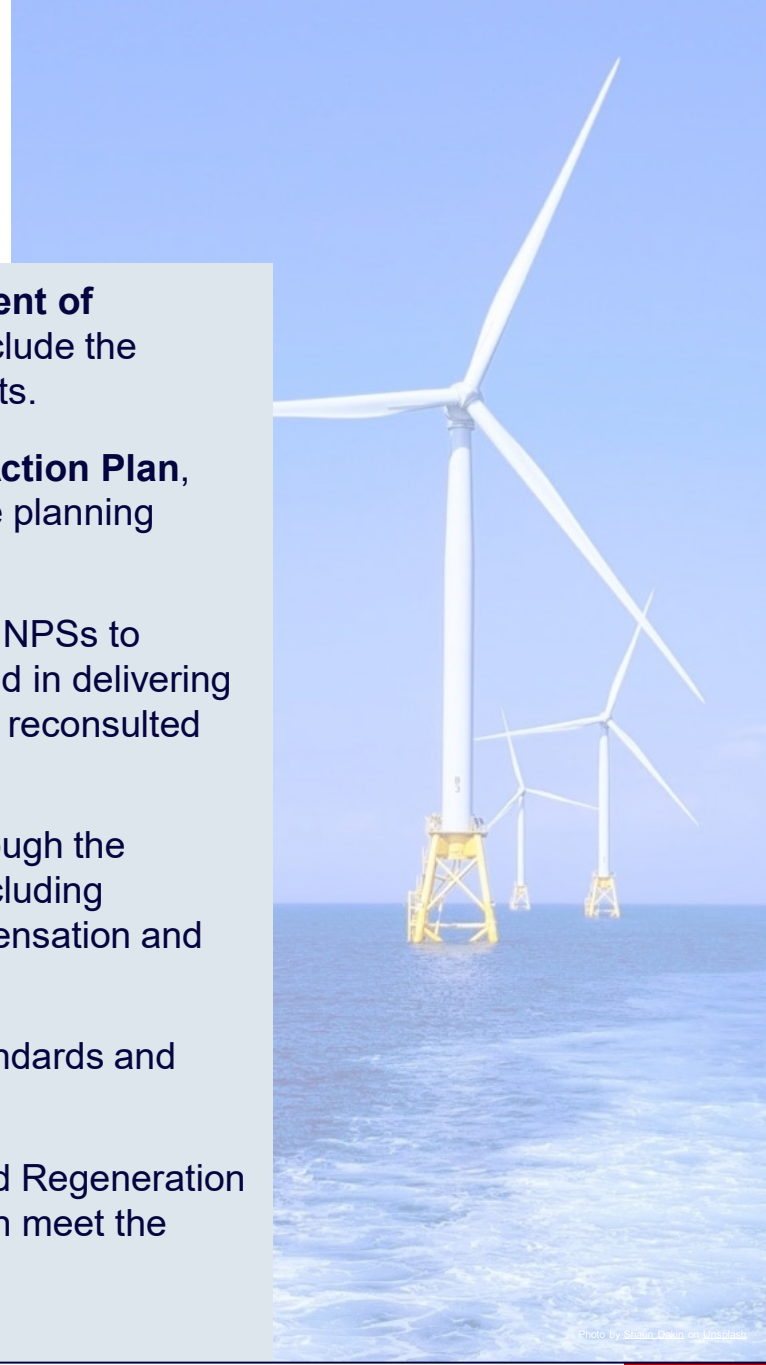
Delivering a strategic network

- **Launched the Offshore Transmission Network Review** in 2020 to review the way that the offshore transmission network is designed and delivered, consistent with the ambition to deliver net zero emissions by 2050.
- **Published a recommended design for the connection of offshore in scope wind farms to 2030** (Holistic Network Design), outlining a single, integrated network connecting 23GW of offshore wind projects, the first step towards more centralised, strategic network planning.
- **Preparing a Holistic Network Design Follow Up Exercise**, outlining a single, integrated network connecting a further 21GW of offshore wind projects.
- **Ofgem published its decision on accelerating onshore transmission investment**. This decision streamlines regulatory and funding approvals and will initially apply to £20billion of investment.

Working in collaboration with industry

- **Appointed Electricity Networks Commissioner** to advise by June 2023 on how the development process for transmission infrastructure can be reduced, initially by three years but ultimately by a half.
- **Offshore Wind Sector Deal** – industry and government collaboration to drive low-cost, low-carbon energy, and the productivity and competitiveness of the UK supply chain. Developed and delivered in partnership with the Offshore Wind Sector Council.
- **Established the Offshore Wind Acceleration Taskforce** and appointed the UK's Offshore Wind Champion to spearhead the work to accelerate new offshore wind projects.

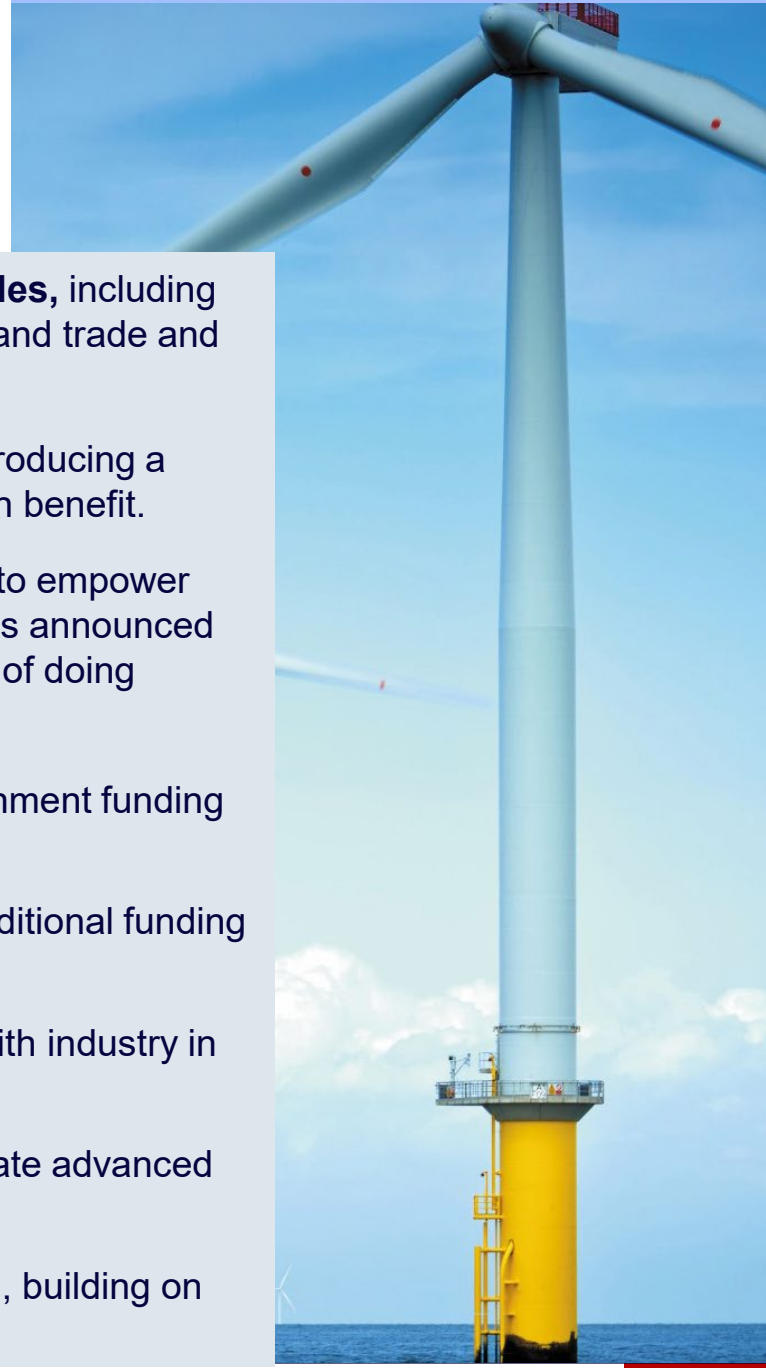
A planning system that supports deployment



Streamlining the planning process

- Taking forward measures to **streamline the planning process and accelerate deployment of offshore wind** as previously announced in the British Energy Security Strategy. These include the creation of a Fast Track consenting process for Nationally Significant Infrastructure Projects.
- **Published a cross-government Nationally Significant Infrastructure Project (NSIP) Action Plan**, which sets out how the government will reform the NSIP consenting process to ensure the planning system can deliver for the future, which offshore wind projects will benefit from.
- **Updating the Energy National Policy Statements** (NPS): work is ongoing to amend the NPSs to ensure they reflect the importance of energy security and net zero, the role of offshore wind in delivering them and strengthen the priority of renewable energy infrastructure. Revised NPSs will be reconsulted upon and published in due course.
- **Putting legislation in place to streamline the offshore wind consenting process**: through the Energy Bill, we will introduce the Offshore Wind Environmental Improvement Package, including regulations to adapt environmental assessments for offshore wind, enable strategic compensation and introduce Marine Recovery Funds.
- **Non legislative changes** involving the development of Offshore Wind Environmental Standards and strategic monitoring.
- **Implementing a new Fast Track consenting process** via powers in the Levelling Up and Regeneration Bill, as reforms set out in the NSIP Reform Action Plan, which offshore wind projects which meet the necessary quality criteria will be able to benefit from.

Government support for offshore wind investment



Supported infrastructure

- **Eight freeports in England, two green freeports in Scotland and two freeports in Wales,** including measures such as: tax relief, business rates retention, customs, regeneration, innovation and trade and investment support.

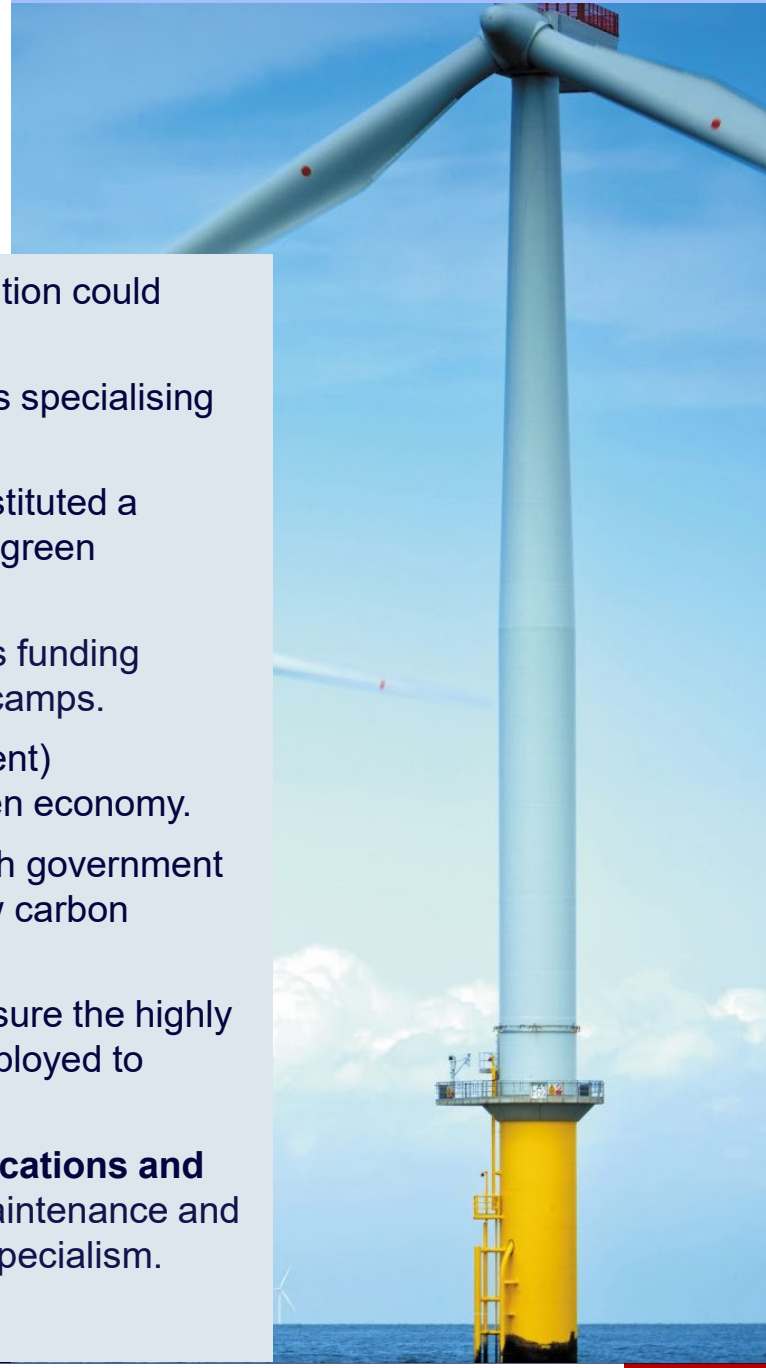
Financial support

- **Capital allowance support**: As announced in the 2023 Spring Budget, Government is introducing a series of economy-wide capital allowance measures from which offshore wind projects can benefit.
- **Investment zones** extended across the UK. The Investment Zone programme, designed to empower local places and grow the economy, will further benefit from a new package of tax reliefs as announced in Spring Budget. These tax reliefs will bring forward new investment by reducing the cost of doing business.

Innovation support

- **Innovative floating offshore wind demonstration programme** – with £31 million government funding and £30 million of industry match funding.
- **Supporting the Floating Offshore Wind Centre of Excellence** – providing £2 million additional funding over 4 years.
- **Offshore Renewable Energy Catapult (OREC**). OREC delivers products and services with industry in research, innovation, testing innovation and supply chain growth.
- **Joule programme** – £5 million to OREC and the National Composites Centre to incorporate advanced composites into next generation wind turbine components.
- **Windfarm Mitigation for UK Air Defence radar competition** – £14.15 million in Phase 3, building on £5.9 million in Phases 1 & 2.

Government support for offshore wind investment



Skills & capability

- Our policies and proposals for growing the offshore wind sector in line with our 50GW ambition could support up to **90,000 direct and indirect jobs.**
- We are supporting **Institutes of Technology** across England with £120 million for institutes specialising in delivering high technical education and developing green skills.
- We are reforming the skills system through **Local Skills Improvement Plans**. We have instituted a **Lifetime Skills Guarantee** supporting workers gain the skills they need to transition to the green economy, including through targeted support for retraining.
- In England, **DfE is investing an additional £3.8 billion in skills** by 2024-25. This includes funding for programmes to support green skills, including apprenticeships, T levels and Skills Bootcamps.
- **Free Courses for Jobs** supports eligible adults to gain high value Level 3 (A level-equivalent) qualifications, many of which can help them to transition to or specialise in roles in the green economy.
- The **Green Jobs Delivery Group** has been established as the central forum through which government and industry are working together to accelerate the supply of a skilled workforce for our low carbon sectors and hydrogen is included as part of the group's workplan.
- **The North Sea Transition Deal** has developed an integrated People and Skills Plan to ensure the highly skilled oil and gas workforce with skills transferability to adjacent energy sectors can be deployed to develop our offshore wind industry.
- Provisions such as **Skills Bootcamps, Free Courses for Jobs, Higher Technical Qualifications and apprenticeships** will upskill more workers to lower carbon emissions. For example, the Maintenance and Operations Engineering Technician, which offers a Wind Turbine Technician occupational specialism.

Government support for offshore wind investment

Strengthened the supply chain

- **Offshore Wind Manufacturing Investment Scheme** made funding available to support investment in major port and manufacturing infrastructure. Through the scheme, we have been able to announce major investments that help deliver economic growth, supply chain development and energy security.
- **Supply Chain Plan policy** requires projects over 300MW and all floating offshore wind projects to commit to a series of actions to strengthen the renewable energy supply chain in the UK and Europe before they can compete in a CfD auction.

Supporting more infrastructure

- **Up to £160 million Floating Offshore Wind Manufacturing Investment Scheme** to support investment in the infrastructure needed for commercial scale deployment of floating offshore wind.
- **The UK Infrastructure Bank** can invest across the capital structure (senior debt, mezzanine, first loss, debt guarantees and equity) to help crowd private finance into net zero infrastructure. The Bank has identified ports and floating offshore wind as investment opportunities and is interested to hear from enabling infrastructure projects in particular.
- **UK Export Finance** provides enhanced support for supply chain investment through the Export Development Guarantee and offers a range of finance products to grow exports once established in the UK.

Government support for offshore wind investment

Expanding our export support

- **International Trade Advisors**: once established in the UK there is the potential for one-to-one support on developing your export strategy.
- **Export Support Service**: once established in the UK, you can ask any question for your business on exports to encourage growth, for example on exporting to new markets, paperwork you need to sell your goods abroad and rules for a specific country where you want to sell services.

Collaborated with industry

- **Established a Supply Chain and Infrastructure Working Group** as part of the Offshore Wind Acceleration Taskforce to identify and develop actions to address barriers to investment and build resilience in the supply chain.
- **Established the Floating Wind Taskforce** to tackle barriers to deployment and enable collaboration in floating offshore wind, creating the right environment for investment and building the UK's expertise in this sector.

Offshore wind farm project investment

Over
£50bn*

in construction capital expenditure needed to build offshore windfarms in the UK by 2030[1]

Investment opportunities:

- Project conception to acquiring a seabed lease for development
- Site development to consent and permitting
- Construction
- Operation (resale and refinancing)
- Decommissioning
- Throughout the life cycle opportunities will exist for debt and equity finance to enter
- Opportunity for secondary investment in developed projects

Examples of projects:

Hornsea 2

Ørsted has signed an agreement to divest a 50% ownership stake in its 1.3GW Hornsea 2 Offshore Wind Farm in the UK to a consortium comprising AXA IM Alts, acting on behalf of clients, and Crédit Agricole Assurances.

Details here

Dogger Bank A, B and C

Dogger Bank A and B is a joint venture between SSE Renewables (40%), Equinor (40%) and Vårgrønn (20%). On 2 November 2021 SSE and Equinor announced the sell down of a combined 20% share in Dogger Bank C to Vårgrønn (10% each) for a total consideration of £140 million.

Details here

Moray East

Moray East is an offshore wind project located in the outer Moray Firth, off the north-east coast of Scotland, and is a joint venture owned by Diamond Green Limited and CTG and Ocean Winds.

Details here

1. See appendix A for further details. Does not include offshore transmission capital expenditure, operational expenditure, decommissioning, development costs or any associated investment in supply chains and infrastructure. Quoted in 2021 prices.; *£50 billion includes inward and outward investment

Manufacturing supply chain investment

Offshore Wind Investment Opportunities

- Inter-array and export power cable
- Towers
- Monopile foundations
- Transition pieces
- Transformers
- Blades
- Nacelles
- Specialist offshore logistics and installation vessels
- Tier two plus supply chain manufacturing

Floating Offshore Wind Investment Opportunities

- Floating substructure assembly and manufacturing
- Mooring and anchoring systems
- Dynamic inter-array power cables
- Specialist floating operations and maintenance vessels

See more on high-potential opportunities for manufacturing investment

Examples of projects:

SeAH Wind

South Korea's SeAH Wind have announced their investment of over £400 million into a XXL monopile foundation manufacturing facility in Teesside. This will be one of the world's largest monopile manufacturing facilities with the potential to supply circa 150 monopiles annually and create up to 800 jobs by 2030.

Details here

JDR Cable Systems

JDR Cable Systems are investing £130 million in a world-class high voltage submarine cable manufacturing facility, which will be fully operational by 2024. The project will create 170 jobs in Blyth, as well as safeguarding a further 270 jobs at JDR's existing facility in Hartlepool.

Details here

Siemens Gamesa Renewable Energy

Siemens Gamesa Renewable Energy have invested £186 million to expand their blade manufacturing facility in Hull to enable the manufacturing of the next generation of wind turbine blades. The project will create and safeguard around 1080 jobs.

Details here

Enabling infrastructure investment

Investment opportunities:

- Portside infrastructure to support the manufacturing, installation, operation and maintenance of fixed foundation offshore wind turbines.
- Large-scale, deepwater ports for the fabrication, assembly, storage and deployment of floating offshore wind turbines.
- Operations and maintenance bases and related infrastructure.
- High voltage power cable manufacturing for interconnection.
- Future Offshore Transmission Owner (OFTO) Tender Rounds to bid for newly built and commissioned OFTO assets, which connect an offshore wind farm to the UK onshore transmission system.

See more on high-potential opportunities for infrastructure investment

Examples of projects:

Teesworks

Teesworks is constructing a large-scale site for manufacturing infrastructure. The site is more than 200ha in size with phase 1 delivering a quay that is over 450m in length. The site has already secured manufacturing investment from SeAH Wind which will build its new monopile factory at the site.

Details here

Operations & Maintenance Base on Port of Tyne

The 3.6GW Dogger Bank Wind Farm is a joint venture between SSE Renewables, Equinor and Vårgrønn. Equinor and the Port of Tyne have invested in a new quay and Operations & Maintenance Base for the project, on the site of a disused oil & gas fabrication yard. This will directly create up to 400 skilled jobs, with over 2,000 jobs created or supported throughout the project. North Star Renewables will provide four Service Operation Vessels that will operate out of the port.

Details here

Investment Journey in the UK and UK Government Support

Strengthening supply chain capability across both fixed bottom and floating offshore wind, attracting new investment and facilitating export opportunities.

1. Early engagement

- Sector teams in Department for Business and Trade (DBT) and Department for Energy Security and Net Zero (DESNZ) liaise with potential investors to highlight unique opportunities in the UK.
- International engagement from DBT and FCDO network ensures global businesses can invest successfully in the UK. Their global reach covers more than 100 markets throughout the world.

2. Landing in the UK

- Sector teams from DBT in the UK and globally and DESNZ provide reliable industry insights in a rapidly evolving market.
- We support investors to take Final Investment Decision (FID) in the UK, facilitating introductions and advice on potential locations for investment.
- Investment Services Team (IST) in DBT directly delivers and connects investors to a wide range of support services – from tax advice to bespoke market research.

Department for Business & Trade

Department for Energy Security & Net Zero

3. Benefit from pioneering centres of excellence and supportive industry clusters

- Access to an ecosystem of industry clusters that encourage collaboration and connectivity to the UK and rest of the world.
- Access to leading research centres, such as the Offshore Renewable Energy Catapult (OREC). Investors can benefit from OREC, who deliver products and services with industry in research, innovation, testing innovation and supply chain growth.

4. Explore export opportunities: UK Export Finance (UKEF)

- UK Export Finance, the UK's export credit agency, has enhanced its support to attract investment into fixed-bottom and floating offshore wind supply chains and export capability.
- Through its overseas network and working alongside DBT and FCDO, UKEF is building a pipeline of export opportunities for UK supply chains.

UK Export Finance

5. Going global: International Trade Advisers (ITAs)

- Expert, first hand support to develop a first-class export strategy to successfully enter overseas markets or expand and diversify into new markets.
- Bespoke advice on suitability for specific international markets, route to market, business vision and goals.

Questions about your investment journey or how the UK government will support you?

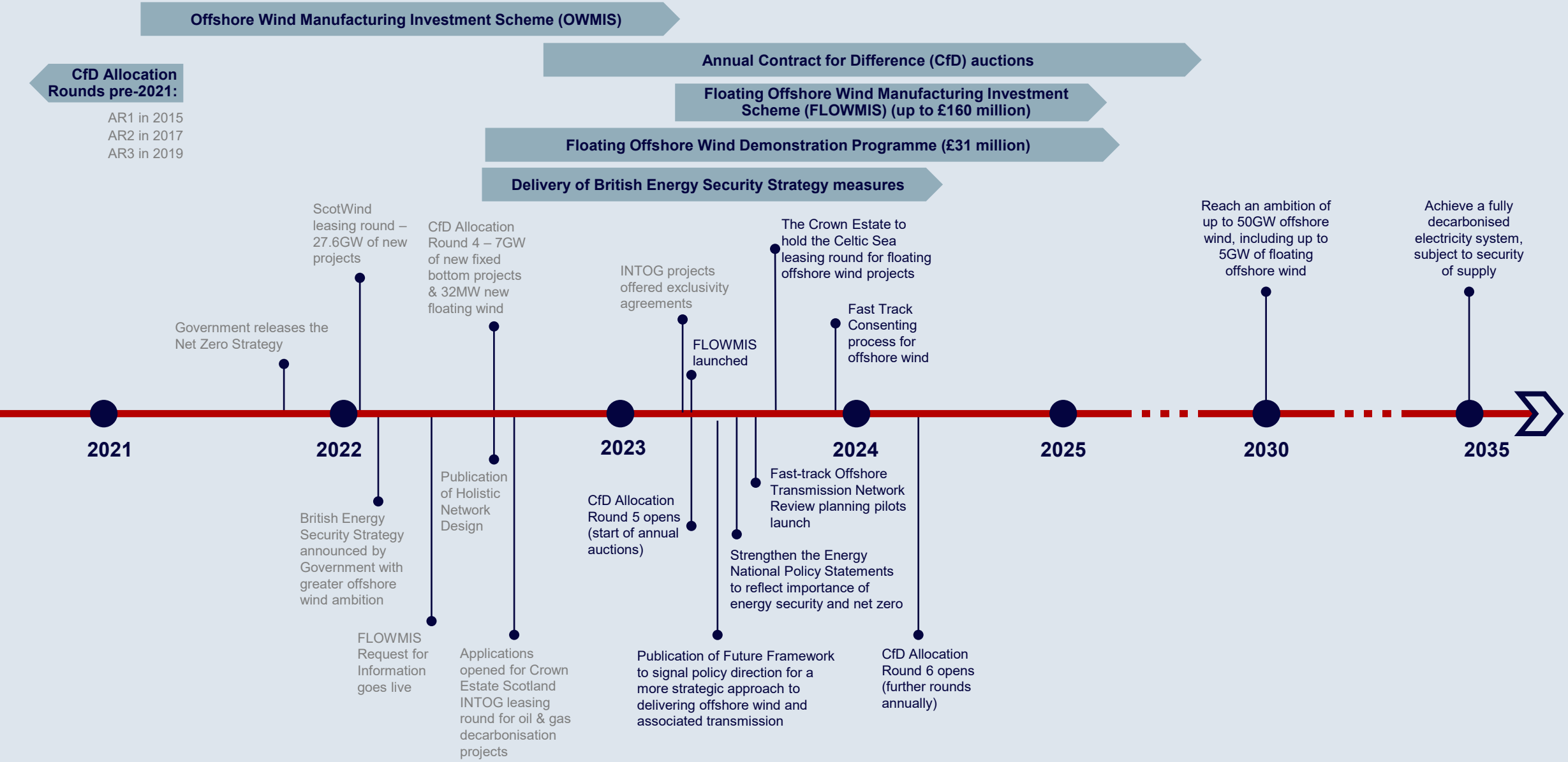
- ✓ UK businesses can contact us here.
- ✓ International businesses can contact us here.

Lifecycle of an offshore wind farm and investment opportunities[1]

	Early stage	Development	Construction and Installation	Operations and Maintenance	Decommission
Cost	Around £50 million for 1GW farm	Around £50 million for 1GW farm	Around £2.5-3 billion for 1GW farm	Around £75 million per annum for 1GW farm	Around £300 million for 1GW farm
Packages of work	• Energy sector assessment • Environmental assessment • Marine space • Surveys • Consenting • Finance • Legal • Insurance • Engineering	Covers activities up to point of financial close, including: • Securing planning • Consents • Environmental impact assessments • Infrastructure assessment And activities required to define: • Design • Engineering • Procurement	• Turbine and foundation type and fabrication • Array power cable and export cable fabrication • Offshore substation fabrication • Transport and installation of components • Assembly port and commissioning	• Supporting the ongoing operation of the wind turbines, balance of plant and associated transmission assets • Ensuring safe operations, maintaining physical integrity of wind farm and optimising electricity generation	• Removal or making safe of offshore infrastructure at the end of its useful life, plus disposal of equipment • Properly financed decommissioning plans typically are required as part of gaining planning approval to construct the windfarm
Examples of suppliers	• Consultancies: e.g. ABPmer, Arup, Xodus, Wood, Everoze, OWC • Law firms: e.g. Clifford Chance, Linklaters, Evershed Sutherland • Banks and credit agencies: e.g. UK Export Finance, Standard Chartered, M&G, HSBC • Insurance companies: e.g. Aon, Beazley, Gcube • Environmental assessment: e.g. Atkins, ERM, Everoze	• Project and procurement management, specialist engineering companies: e.g. Atkins, Arup, Everoze, OWC, Xodus, ITP Energised, Osbit, Turner and Townsend • Survey companies: e.g. Venterra Group, OWC, Acteon • Naval architecture and marine management: e.g. SMC, Chartwell, ABPmer	• Blade manufacturers: e.g. Siemens Gamesa and Vestas • Cables: e.g. JDR Cable Systems • Monopiles: e.g. SeAH Wind • Transition pieces: e.g. Smulders • Installation: e.g. Subsea7 and Seajacks • Fabrication and assembly port: e.g. Hull Greenport, Port of Nigg	• Asset management companies: e.g. Atkins, Onyx, Synaptic, EDS, Xceco • Wind farm inspection maintenance and repair companies: e.g. James Fisher, Global Energy Group, Correll Group • Marine companies: e.g. North Star, Bibby, HST, Sea Cat	• Combination of asset managers, marine, specialist engineering and installation companies

1. Costs sourced from ORE Catapult: Guide to an offshore wind farm (2019): https://guidetoanoffshorewindfarm.com/wind-farm-costs. Based on a typical 1GW project using 10MW turbines with first operation date of 2022, quoted in 2018 prices.

Our 2035 delivery plan



Further ways we help you invest and develop in the UK

The UK's commitment to support global investment is unparalleled

The Department for Business and Trade (DBT)
DBT supports businesses to invest, grow and export, creating jobs and opportunities across the country.

Office for Investment (OFI)
OfI is a joint DBT and No.10 team that provides a single front door to Government for high-value and high-impact investors, facilitating with access and insights through a concierge offer. The OfI works across departments to drive increased investment in line with the Government's net zero agenda.

UK Export Finance (UKEF)

The UK's export credit agency, has enhanced its support to attract investment into supply chains and building export capability.

UK infrastructure Bank (UKIB)
The UKIB can invest across the capital structure (senior debt, mezzanine, first loss, debt guarantees and equity) to help crowd private finance into net zero infrastructure. The Bank has identified CCUS as an investment opportunity, and projects are encouraged to contact UKIB about their financing needs

Support moving a tech business
The Global Entrepreneur Programme (GEP) helps high-growth overseas companies relocate to the UK.

Economic development agencies
There are a number of organisations with significant experience in delivering public sector investment packages. For example, Scottish National Investment Bank is a mission-led development bank that provides patient capital to build a stronger, fairer, more sustainable Scotland.

Helpful guides
Guidance on expanding to the UK, including visas and migration; tax and incentives; regulatory and business planning; staff recruitment, retention and training; and immigration.

Links to key organisations
In addition to centres of excellence and industry clusters, we will facilitate introductions to universities, Local Enterprise Partnerships (LEPS) and Enterprise Zones.

Find a UK specialist
The UK Investment Support Directory allows you to find companies with skills and experience in helping overseas businesses set up or expand in the UK.

Visit great.gov.uk

Appendix A – Notes and definitions (for slide 14)

Investment needs are defined as the total sum of capital contributions required to deliver the necessary projects to achieve the deployment pathways shown in the Net Zero Growth Plan. The £50 billion quoted is from the low electrification scenario from The Department for Energy Security & Net Zero's Dynamic Dispatch Model (DDM).

The estimate of offshore wind capital expenditure is based on data from the Electricity Generation Costs Report and applied to the low electrification deployment trajectories. Figures are undiscounted, non-annualised and are in 2021 real terms rounded to the nearest £10 billion. Figures include imports where inputs are purchased from overseas.

Only capital expenditure associated with the construction of offshore wind turbines have been included. This means that capital expenditure associated with the offshore transmission infrastructure has not been included in this estimate. Inclusion of capital expenditure on transmission infrastructure would increase the number provided in slide 14. Data from the ORE Catapult guide to an offshore wind farm indicates that this could lead to an increase of up to 30%, however, to ensure consistency of source data and underlying assumptions this approximation has been omitted from slide 14.

The costs associated with operational expenditure, decommissioning, development costs or any associated investment in supply chains and infrastructure which is required to deliver the assumed deployment pathway are also excluded.

This provides an estimate of how much capital spend could be required to construct offshore windfarms in the UK by 2030. It is framed as 'at least' as it is based on the low electrification scenarios and excludes transmission capital expenditure which could increase this estimate.

Disclaimer

The Department for Energy Security and Net Zero is the department for delivering security of energy supply, ensuring properly functioning markets, greater energy efficiency and seizing the opportunities of net zero to lead the world in new green industries. **The Department for Business and Trade is** the department for economic growth. We support businesses to invest, grow and export, creating jobs and opportunities across the country.

Legal disclaimer

Whereas every effort has been made to ensure that the information in this document is accurate, the Department for Business and Trade and Department for Energy Security and Net Zero do not accept liability for any errors, omissions or misleading statements, and no warranty is given, or responsibility accepted as to the standing of any individual, firm, company or other organisation mentioned.

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