

Ocean Winds

Driving Ambitious Supply
Chain Transformation
Across Scotland and UK



EXECUTIVE SUMMARY

Ocean Winds develops, finances, builds and operates offshore wind farms around the world, delivering clean, secure energy to millions of homes, driving significant investment and economic prosperity, and fostering meaningful industrial growth, capability and opportunity.

Our ambition is to cement a global leadership position in offshore wind energy. We have achieved this in the UK by leveraging proven experience and innovation, cutting the costs of offshore wind by more than 50% while pushing into deeper water, embracing next-generation technologies and expanding and developing world-leading supply chains. In the UK, our track record of achievement in offshore wind includes the operational 950MW Moray East, the under-construction 882MW Moray West and our planned 2GW Caledonia – in the north of Scotland – and the 2.3GW Arven floating wind project east of the Shetland Islands.

Ocean Winds has to date directly awarded major contracts to more than 80 UK companies, of which nearly two-thirds are in Scotland, with many more contracts awarded to UK suppliers indirectly in our supply chains. We actively support the development of new UK manufacturing capabilities through engagement with leading companies including Smulders and Siemens Gamesa, and play a proactive role in supply chain initiatives such as the Offshore Wind Growth Partnership.

The benefits are tangible. Independent analysis shows that developing and constructing the Moray West project created over 2,800 full time equivalent (FTE) years in the UK and contributed over £370m in gross value added (GVA) to the UK economy. Over the lifetime of the project we will invest more than £1 billion in the UK. Across the planned operational lifetime of the Moray East project over 6,000 FTE years and £550 million of GVA will be created in the UK, with similar values predicted for the operational phase of Moray West. We have committed to spend £46 million in early support of Caledonia supply chains as part of the planned overall potential investment in the UK totalling over £3.5 billion. The employment opportunities created are for all. Ocean Winds supports a Just Transition with proactive recruitment from the oil and gas sector, has committed to targeted outreach through our Armed Forces Covenant, and has a proud track record of supporting young people through academia, apprenticeships, internships and graduate programmes.

The UK's port and harbour facilities are a crucial offshore wind enabler, and for Ocean Winds that includes our operations and maintenance (O&M) bases in Buckie and Fraserburgh alongside long-term engagement with Nigg, Invergordon and the Cromarty Firth Green Freeport.

There is more to do. Ocean Winds has the vision, appetite and experience to translate ambitious UK offshore wind targets into reality – with all that means for a successful and just energy transition, tangible economic impacts, and significant global opportunities both now and into the future.



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£350M

of **GVA to the UK economy** from the development & construction of Moray East offshore wind farm

>£1B

invested in the UK across the lifetime of Moray West offshore wind farm

£46M

of **enabling investment for the UK supply chain** from Caledonia offshore wind farm

>£3.5B

potential investment in the UK across all stages of Caledonia offshore wind farm

INTRODUCTION

Ocean Winds' offshore wind farm portfolio is providing the UK with secure, clean energy, fostering renewables-focused businesses and creating local jobs in manufacturing, engineering and allied sectors.

Ocean Winds, born out of a strategic alliance between EDP Renewables and ENGIE, develops, finances, builds and operates offshore wind farms worldwide. With a global portfolio of 16 secured projects totalling around 18GW, Ocean Winds has grown a strong pipeline of projects, generating clean energy for millions of homes while reducing greenhouse gas emissions.

We have a proud track record of delivery in the UK. The dedicated Ocean Winds team in our Edinburgh office worked alongside our supply chain partners to deliver our first operational UK wind farm in 2022, the 950MW Moray East in the north of Scotland.

And Ocean Winds continues to stride forward with our ambitions for the UK's offshore wind energy market. Within the Moray Firth, Ocean Winds is currently developing two further projects: Moray West (882MW), which is under construction and will start generating in 2024, and Caledonia (2GW), which is due to be connected in 2030. Farther north, the Arven floating offshore wind project to the east of the Shetland Islands – in partnership with Mainstream Renewable Power – is Ocean Winds' largest floating project in development at 2.3GW. We are also continually working to expand our pipeline and expect to add to our project totals in future seabed allocation rounds.

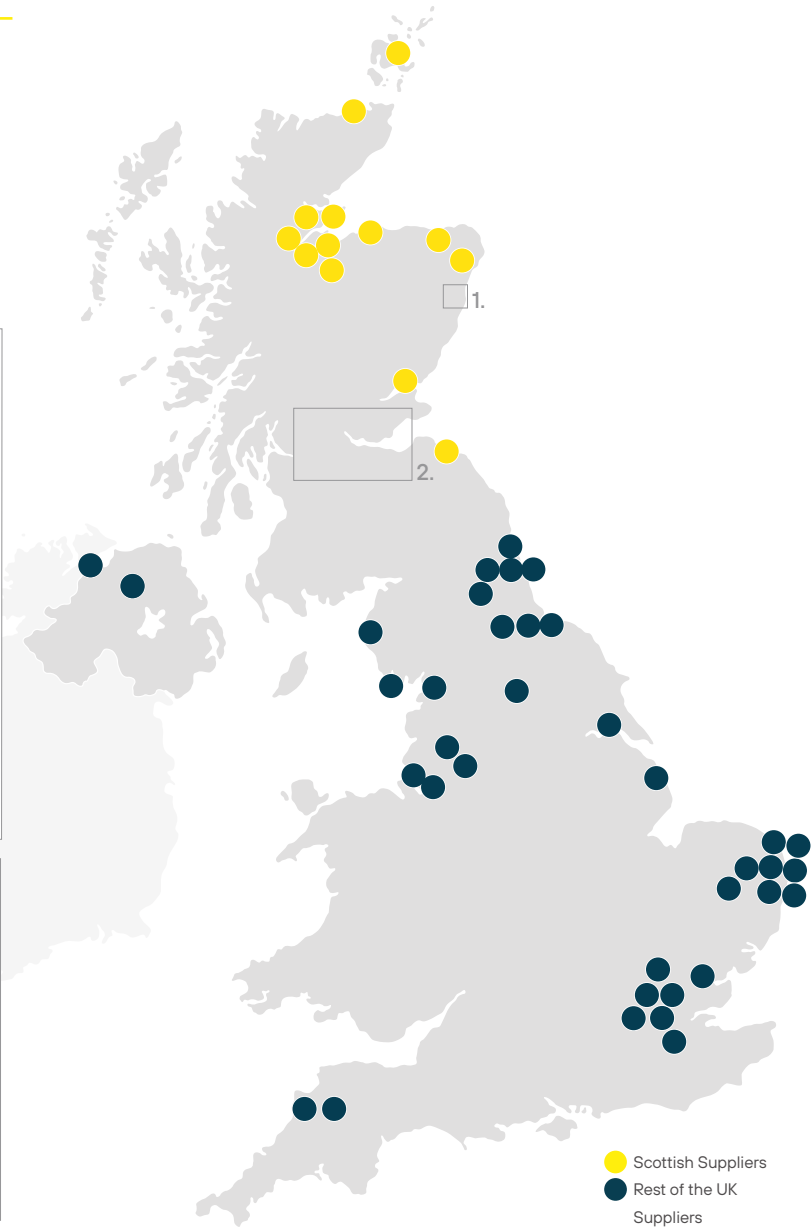
Our ambitions are built from a global leadership position in offshore wind and represent nothing less than a step-change both in the UK's renewable power plans and the worldwide offshore wind industry, growing a new sector in Scotland and innovating foundations for deeper water (>50m) while also reducing the cost of offshore wind power by more than 50%.

Adam Morrison

Ocean Winds UK Country Manager

OUR UK SUPPLY CHAIN

A growing and competitive UK supply chain supporting Ocean Winds' offshore wind farms in the UK.



SCOTLAND

Anatec
Arch Henderson
Arup Engineering (Scotland Office)
Balmoral Offshore
Briggs Marine Contractors
CHAP
Clarksons Port Services
Dangle
Deeptune
Donut International
Empire Engineering
Eodex
Foundocean
FPP Scotland
G&A Barrie Group
Gael Force Engineering
Global Energy Group
Gobe Consultants
Greencat Renewables
Helix Robotics Solutions
HiDef
Highland Stoneways
ITP Energised/Energised Environments
JDR Cable Systems
JGC, Thurso
JKR (Scottish & Regional)
John Lawrie Metals
Kraken Robotics Services UK
Leask Marine
Lubbers UK
Moray First Marine
Natural Power
Nicol of Skene
Niras
Ocean Infinity Group
Ocean Science Consulting
Outreach Offshore
Pinsent Masons
PJ Carey Contractors
PMK (Scottish)
Quoceant
Renewable Energy Systems
Riggall and Associates
Roavr Group
Robertson Group
Ross-Shire Engineering
Royal Haskoning/RHDHV
Sarens PSG
Seaway 7
Senergy Wells
Shepherd & Wedderburn
SLR
Stork Technical Services UK

Stowen Clean Energy Limited
Ternan Energy
TerraOcean
TNEI
The University of Aberdeen
Utility ROV Services
Vysus
Windcat Workboats
Wood Group UK
Xodus Group
Young Planning & Energy Consenting

REST OF UK

6 Alpha Associates
AECOM
Albion Manufacturing
Apem
Aurora
Balltec Engineering Solutions
Barrier
Brown & May Marine
Cable Consulting International
Cathie Associates
Claxton Engineering Services
DMJ Drainage (UK)
FB Taylor (UK)
Fern Communications
Gardline
Glenturas (UK)
Global Marine Group
Global Maritime Consultancy
Harlyn Solutions
HiDef Aerial Surveying
James Fisher Marine Services
LCP
LMR Drilling UK
LOC
Mammoth Offshore Services
Marinespace
McGill
Ordek
Osbit
Peter McCormack (UK)
RCG
Sarens UK
Seajacks UK
Seiche
Siemens Energy
Siemens Gamesa Renewable Energy (SGRE)
Smulders Projects |UK
Tekmar Energy
Volkerinfra
WSP UK

INVESTING IN THE UK

Ocean Winds has driven significant economic impact through its Moray East and Moray West projects, providing high quality jobs in multiple sectors across the development, fabrication, installation and operational phases of both offshore wind farms.

Independent analysis has provided an accurate picture of the socio-economic benefits of the projects. This modelling work, carried out by BVG Associates, suggested that development and construction of both Moray East and Moray West created over **8,000 full-time employment (FTE) years** and contributed over **£700 million in GVA to the UK economy**. Additionally, our cost forecasts suggest that over its lifetime, the Moray West wind farm will directly contribute **£800 million of expenditure** within the Scottish economy.

As part of this positive impact, our projects have led the way in supporting and developing new UK manufacturing capabilities, providing funding through contracts towards upgrades to the Smulders Projects UK Yard in Wallsend in North Tyneside, the new quayside at the Port of Cromarty Firth in the Highlands, and the expansion of Siemens Gamesa's Alexander Dock manufacturing facility in Hull.

In addition to these considerable existing investments, the Caledonia offshore wind project has committed **£46 million of supply chain enabling investment** to be directed towards building critical competencies that are competitive and supported by the necessary skills.

OFFSHORE WIND GROWTH PARTNERSHIP & OTHER INDUSTRY INITIATIVES

As well as these direct investments, Ocean Winds has played a significant role in helping to develop the overall growth of the country's offshore wind capabilities.

Through OW's membership of OWIC and linked to the CfD awards to Moray East and Moray West, funding is contributed to the Offshore Wind Growth Partnership (OWGP), which increases productivity and boosts the competitiveness of UK companies, targeting the UK offshore wind market and a rapidly growing global sector.

OWGP achieves this through direct support to supply chain companies and strategic capability assessment, advisory services and grant funding. Recipients include:

- **Cognitive Business**, a specialist in machine learning which is developing predictive maintenance solutions for offshore wind O&M applications
- **Sennen Techa**, a full package asset management platform for offshore wind operations that uses data to inform O&M strategies;
- **W3G Marine**, an Aberdeen-based engineering company using OWGP funding to assess the feasibility of automated robotic welding of their foundation packers for rapid, low cost, mass production.

As well as Ocean Winds' funding commitment to OWGP, our engineers and technical staff have provided subject matter expertise and further support through the OWGP Developers Reference Group and a number of Offshore Renewable Energy Catapult programmes, including the Fit 4 Offshore Renewables business improvement programme and the Floating Offshore Wind Centre of Excellence.

CREATING LOCAL JOBS

The employment benefits of Ocean Winds' pipeline of delivered projects are spread across the UK but are particularly impactful within the north-east of Scotland in operational roles which will continue across the lifespan of each of the three projects in the Moray Firth.

Moray East directly employs more than 70 in long term roles at the Fraserburgh harbour base for O&M. The Moray West base at Buckie harbour will employ similar numbers once fully operational in 2025. Together with the O&M team planned for Caledonia, Ocean Winds' offshore footprint in the Moray Firth is projected to directly create and support **more than 200 long-term skilled operational roles in the north-east of Scotland**, with many other supported in the O&M supply chain.

In addition, our Edinburgh office houses **over 150 staff** supporting development, construction support and asset management services across the entire Ocean Winds UK portfolio. Established in 2010, the Edinburgh office is a global centre of excellence for the industry.



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SKILLS FOR A JUST TRANSITION



Ocean Winds has led the way in supporting and developing new UK capabilities across the ports, fabrication and high-tech supply chains required by the UK's ambitious green energy programme.

In the UK, and in line with the Ocean Winds Skills Development Strategy, we have paid particular attention to opportunities to transition skilled oil and gas (O&G) workers into the sector. Our projects have supported several local education and training programmes in addition to Armed Forces outreach, all with a focus on the north-east of Scotland. As a result of these efforts, more than half of our O&M employees come from O&G backgrounds.



Ocean Winds' commitment to services personnel and their families has been formalised through our Armed Forces Covenant, and our former services staff regularly participate in outreach and careers fairs hosted at Scottish and other UK military bases. This approach seeks to enable service leavers and their families to harness their skills and find meaningful, long-term employment that aligns with the wealth of experience and expertise they have gained through their service.

As part of the Skills Development Strategy, Ocean Winds also has agreements in place with a number of education sector organisations including Scottish Schools Education Research Centre and the Wood Foundation for STEM programmes, Energy Skills Partnership for Scottish college support, several Scottish universities and is working closely with the National Energy Skills Accelerator. These collectively maximise the synergy between education and training programmes and the requirements of offshore wind farms like Moray East, Moray West, Caledonia and Arven.

Ocean Winds is particularly proud of our award-winning efforts to foster young talent through both traditional academia and apprentice-based learning. This has included PhD sponsorships and a scholarship programme to support students from the north of Scotland through their undergraduate degrees. Students also have the opportunity to start their early careers in offshore wind through applications to our internship or graduate programmes.

SUPPORTING SUPPLY CHAIN DEVELOPMENT

Ocean Winds is incredibly proud to have included more than 100 UK-based companies in our supply chain.

This achievement was made possible by working with suppliers small and large, encouraging British sub-suppliers in our procurement, taking a proactive approach and financially supporting new and existing companies through our contracts, and other support programmes.

This commitment has enabled our business to deliver our projects at a sustainable, low cost while helping to develop supply capacity and capability in the UK. With this proactive approach to supporting the UK supply chain we have fostered leading-edge UK businesses which are primed for offshore wind's rapidly growing global market.

“Through Ocean Winds projects, Smulders was given the opportunity to showcase that we can be a reliable partner in delivering one-off substations and serial foundations projects for offshore wind out of the UK.”

Jan De Rycker

Director, Smulders Projects



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1. Siemens Gamesa

Wind turbine supplier

Siemens Gamesa is a global engineering business and one of the world's largest wind turbine suppliers, manufacturing and providing both onshore and offshore wind turbines. The company is part of Siemens Energy, which owns and operates the only purpose-built offshore wind blade manufacturing facility in the UK at Alexander Dock in Hull. The site employs over 1300 people.

In 2016, Siemens Gamesa and Associated British Ports invested an initial £310 million to build the state-of-the-art, 36,000 square meter factory, assembly, and service facility.

In 2022, a further £186m was invested to upgrade and expand the site by 41,600 square meters, enabling it to manufacture next-generation turbine blades in Hull.

Siemens Gamesa will supply 60 of their latest turbines for the Moray West project, the SG 14-222 DD with power boost, resulting in capacity of 14.7MW per turbine. Due to early investment, all 180 of the B108 blades for the project are being manufactured from the Hull facility.

In total, the site has produced over 2,300 blades for the offshore wind industry.



2. Smulders Projects UK

Steel production facility in Wallsend, North Tyneside

Smulders specialises in steel construction, providing engineering, production and assembly to large-scale projects.

Smulders Projects UK is a subsidiary of Smulders and was established in 2016 with the group's entry into the UK market. Its 32 hectare site in Wallsend has been developed to take advantage of the rise of the UK's offshore wind sector and specialises in the production and assembly of foundations and substations for offshore wind farms.

Since purchasing the site, Smulders has invested heavily in Wallsend, including securing £70 million of UK government funding in 2021 to add capability for transition piece manufacturing to the yard. The track record of supplying Ocean Winds projects assisted the case for the government funding.

Ocean Winds has been one of the yard's key clients; 55 jacket foundations for Moray East were manufactured in Wallsend through a contract worth more than £200 million that doubled the workforce supporting 450 jobs.

As part of a consortium with Siemens Energy, Smulders UK also fabricated the two offshore substations for Moray West, returning substation topside fabrication to the UK after a gap of several years.



Load-out of completed offshore substation, destined for Moray West



Jacket foundations for Moray East being loaded out of Smulders UK

< Celebrating first B108 blades fabricated at Hull.
R to L: Greg Gorski, OW COO; Exchequer Secretary to the Treasury,
Gareth Davies MP; Clark MacFarlane MD UK SGRE

3. JDR

Array cables

Ocean Winds selected JDR for the successful supply of inter-array cables (IACs) to several projects. All the IACs for Moray East and WindFloat Atlantic, off Portugal, were supplied by JDR in Hartlepool in north-east England and JDR is now delivering the array cables for Seaway7 to install for Moray West.

The Moray West contract, won against stiff international competition, supported the decision by JDR's parent company TFK to confirm investment in a new state-of-the-art subsea export cable manufacturing facility in Cambois, near Blyth in Northumberland.

The IACs for Moray West are manufactured at JDR's recently expanded facility in Hartlepool and utilise the newly upgraded vertical layup machine. These significant investments are at the core of JDR's plans to expand its product portfolio to support the growing UK and global renewable energy market, adding high voltage export and long-length array cables to its existing capacity and product capabilities.



Completed cable at JDR Hartlepool (Image credit:JDR)

4. Seaway7

Offshore renewables energy services

Seaway7 leverages technical excellence to support developers to bring sustainable, renewable energy to the world through the construction of offshore wind farms.

As a global leader in the delivery of fixed offshore wind projects, Seaway7 offers specialist foundation, offshore substation, submarine cable and wind turbine installation services and heavy transportation for the renewables sector.

The business operates internationally as part of the Subsea7 Group. This includes a large presence in the UK through its Aberdeen offices. Seaway7 has the contract to install the JDR manufactured array cables on Moray West.

Management of most aspects of this contract is being undertaken from the Aberdeen office, supporting transition of skills in the north-east of Scotland within the traditionally O&G-focussed Subsea7 group.

“The Moray West project has enabled us to secure even more jobs based in our Aberdeen office, from where the project is managed. The commitment of our clients is vital for the sustained growth of the UK market and our journey to net zero. Through its commitment, Ocean Winds is seizing the world-leading experience that the UK offers and in so doing is securing the future of UK suppliers and the work force. We are proud to be contributing to that.”

Lloyd Duthie

Vice President UK, Ireland and Asia, Seaway7



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5. Siemens Energy

Energy technology company

Siemens Energy is one of the world's leading energy technology companies. With its portfolio of products, solutions and services, Siemens Energy covers almost the entire energy value chain – from power and heat generation and transmission to storage. An estimated one-sixth of the electricity generated worldwide is based on technologies from Siemens Energy.

Siemens Energy has a strong presence in the United Kingdom, employing more than 6,000 people across the country. Moray West commissioned a consortium of Siemens Energy and Smulders for the two offshore substations. The design flexibility Siemens Energy proven Offshore Transformer Module (OTM™) technology was adapted from the three OTMs delivered for Moray East.

Siemens Energy is also independently responsible for the design and construction of the Moray West onshore substation. This major contract also follows from a similar contract to deliver the onshore substation for Moray East. Both projects have relied on the extensive high voltage expertise of the Siemens UK HQ in Manchester, a global centre of excellence.



Moray West onshore substation during construction near Keith, Moray

6. Global Energy Group

Energy construction and services company

Global Energy Group (GEG) employs more than 1,500 people and is the largest private employer in the Highlands and Islands of Scotland, in addition to being a significant employer in Aberdeen and Edinburgh.

Founded in 2005, Global Energy Group is a leading energy construction, service and contracting business operating across the renewables, O&G, hydro and nuclear sectors. Its port operations are a linchpin of the UK's renewable energy build-out business.

The group is headquartered in Inverness with strategic bases in Aberdeen and Edinburgh, and it operates the Port of Nigg and port facilities at Invergordon.

GEG has secured the contract for manufacturing the two complex J-tube cages for the OSP foundations, which have been fabricated at the Port of Nigg's fabrication centre, supporting an additional 50 local jobs. Ocean Winds involvement with GEG for the use of the wider port area is detailed in the ports section below.



J-tube cages in GEG's fabrication shop at Port of Nigg

7. Balmoral

Renewables portfolio backed by comprehensive services

The Balmoral Group is an independent design and manufacturing company operating across water storage, manufacturing solutions, business locations and offshore engineering. At Group HQ in Aberdeen the company has created an industry-leading product design and manufacturing facility with laboratory, design engineering, production and testing facilities.

Balmoral Offshore Engineering provides buoyancy, insulation and protection solutions. The business has historically serviced O&G but is transitioning towards a clean energy revenue model, enabled by the success of North Sea offshore wind.

This includes contract awards for Moray West with cable protection supplied for both the offshore export cables and the inter array cables. Balmoral already employs more than 700 staff and in 2022 the company announced it was investing in a new manufacturing facility in the quayside at Montrose Port.

“Balmoral was delighted to support both Seaway7 and Ocean Winds on the Moray West project with the supply of our patented cable protection system, FibreFlex®. As we embrace the energy transition, this project helped us maintain local employment opportunities and support the indigenous supply chain for the future.”

Balmoral

8. Utility ROV Services (URS)

Remote Operational Vehicle (ROV) service provider

Utility ROV Services designs, builds and operates remote operational vehicle systems (ROVs) to support subsea operations including seabed clearance, re-burial and salvage work for offshore wind, interconnectors and O&G decommissioning.

URS is based in Glenrothes, Fife, employing a team of 24 including operational technicians, engineers, and ROV pilots. The business was initially founded in 2013 to service the offshore wind sector, which remains the business's key focus. Contracts have included several projects for Ocean Winds, with URS providing clearance operations across several phases of both Moray East and Moray West, where it has provided boulder and debris relocation along the routes for export and array cables.

URS makes use of bespoke engineering tools, which have undergone several generations of development up to the current self-propelled UTROV Gen 5, with applications for boulder replacement, cable burial and trenching support, survey and inspection work. This integrated cross-capable system – designed, built and operated in-house – enables URS to improve cost performance and safely operate in harsh environments.



URS equipment deployed on Moray West for boulder relocation

9. EODEX

Unexploded Ordinance (UXO) removal company

EODEX has pioneered the development and deployment of conservation-friendly UXO disposal technology. Since 2018, the business has been in partnership with the UK defence and security exports business, Alford Technologies, leading to the world's first commercial deployment of specialist military low-order deflagration technology.

Unlike high-order detonation, which releases munitions to their original capacity, EODEX's commercially exclusive technology burns out UXOs without detonating their explosives. This protects marine mammals from the underwater blasts and explosive noise created by traditional detonations.

EODEX makes use of highly skilled former Royal Navy specialists, employing more than 50 staff across the UK. The business is headquartered in London and its main operating base is in Portsmouth. EODEX has recently expanded its footprint in Aberdeen and now employs staff at its expanded Bridge of Don office space which is dedicated to North Sea and Scottish waters operations.

For Moray West, the EODEX team of specialist ex-Royal Navy contractors worked alongside technicians from the Helix Energy Solutions team in Aberdeen to clear 82 UXOs across the site in a campaign that employed more than 80 staff.

The Moray West project was the first commercial entity anywhere in the world to deploy low-order deflagration for a campaign of multi-UXO clearance work and EODEX rapidly leveraged this experience to create a global export business. EODEX has begun work for the United States offshore wind market, serviced through its newly established base in Rhode Island, in addition to clearance for O&G projects in Europe.



WWII shells recovered from the seabed at Moray West following successful deflagration by EODEX

“The clearance campaign our team undertook for Moray West was the first time EODEX was able to deploy our cutting-edge technology on multi-ordnances. We are delighted with the success of this campaign, which has been incredibly environmentally positive and marked a step-change in UXO clearance. No other commercial company has applied low-order deflagration on this scale anywhere in the world, and with the proven track record of Moray West we are deploying our pioneering technology across American offshore renewable and European O&G projects.”

Bernie Morrison

Chief Commercial Officer, EODEX

10. Shepherd and Wedderburn LLP

Leading Scottish law firm

Shepherd and Wedderburn is a Scottish-headquartered UK law firm. Its offices across Edinburgh, Glasgow, Aberdeen, and the City of London deliver comprehensive multi-jurisdictional legal advice to the business sector and private clients.

With more than 80 partners and over 400 staff, Shepherd and Wedderburn has the expertise and depth of resource to deliver to a wide range of clients. The business is a shining example of the UK service sector's export prowess, bringing its legal expertise to more than 92 jurisdictions.

Regarded by many as the go-to firm for specialist advice on energy and natural resources, Shepherd and Wedderburn has been at the forefront of the energy sector for more than 30 years. Its Clean Energy Group comprises more than 110 specialist solicitors drawn from the full spectrum of legal disciplines, advising on every aspect of energy projects from early-stage planning through financial close and into operation.

The firm's specialist team of consent lawyers began providing legal advice for the consenting process of Moray East in 2014. Since then, the team has advised Ocean Winds on all land and consenting aspects of the Moray East, Moray West and Caledonia projects, and has provided additional support on financing, grid connection and construction aspects across Ocean Winds' developing portfolio. The long term commitment of Ocean Winds has supported the growth of Shepherd and Wedderburn to support the renewables sector.

11. Vysus

Engineering and technical consultancy

Vysus Group is a leading engineering and technical consultancy offering specialist asset performance, risk management and project management expertise across complex industrial assets, energy assets (O&G, nuclear, renewables) and the energy transition.

The firm employs over 400 staff, deploying technical knowledge and data science analytics to enable energy assets like Moray West to manage risk and maximise performance, providing services across power system analysis, grid management systems, risk governance, geo-engineering and surveys and engineering dynamics. The company has a long history in the energy sector, having been established as part of Lloyd's Register in 1930 before standalone operations began in 2019. Vysus is transitioning its commercial focus away from O&G towards renewables and has made significant strides in this direction, announcing in August 2023 that 60% of its consulting business now comes from this sector.

The Vysus office in Aberdeen acts as a base of operations and hub for 22 satellite offices across the globe, including further offices in Bristol – the core location for its rapidly expanding offshore wind and submarine cable business and marine geoscience and assurance services. Vysus has worked with Ocean Winds on a number of offshore wind projects since 2009 – first on Moray East, subsequently on Moray West and now in support of the early development phases of Caledonia. These projects have benefitted from Vysus' expertise in site surveys and characterisation. In addition to these UK based projects, Vysus has also supported other Ocean Winds projects globally, including survey support on BC-Wind in Poland and deskbased studies for lease area sites in Europe and the US.

“As an organisation with a focus on the transition to net zero, our relationship with Ocean Winds has played a huge part in our own journey over the past five years.”

Michael Cousins VP Survey & Geo-Engineering, Vysus



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12. CHAP Group

Leading Scottish construction group

CHAP Group has a long heritage and proud reputation in the construction industry in the north of Scotland, with experience delivering across public works, residential projects, the healthcare industry and industrial projects.

Founded in 1976 and headquartered in Aberdeen, CHAP's expertise in construction and project management enables the company to provide efficient and comprehensive building solutions from early in the design phase of projects. The group directly employs 149 staff and supports an extensive network of local suppliers and contractors. Across its business, CHAP is committed to high-standard construction delivered by an experienced and valued workforce, which includes 100 employees with over 21 years of service. Alongside this, the business is an enthusiastic employer of apprentices, offering work and long-term career paths that benefit local communities.

CHAP delivered Moray East's O&M base in Fraserburgh, which has been in operation since 2021, and provided the sister onshore O&M facility for Moray West in Buckie, completed in May 2024. The centre will feature a fully equipped workshop, warehouse, and office and training facilities. The combination of the Buckie and Fraserburgh facilities will create a mature O&M hub for Ocean Winds' operations in the Moray Firth, supporting the Moray East, Moray West and Caledonia projects through their lifespans.



Operations base in Buckie during construction

13. Robertson

Construction and infrastructure group

Robertson Group is one of the UK's most significant family-owned construction, infrastructure and support service businesses.

The group is based in Stirling and employs more than 3,200 people across its construction business, which includes substantial projects for commercial construction, healthcare, education, distilleries, industrial and energy clients.

The group's Responsible Business 2030 strategy outlines its mission to enhance the lives of 10,000 people by creating work placements and job opportunities while supporting apprenticeships, upskilling and new qualifications. The firm has committed to creating £1 billion of social value by 2030 through spending on social enterprises, micro-businesses, SMEs and local procurement.

Robertsons was appointed by Siemens Energy to provide all civil construction support for the Moray West onshore substation site near Keith in Moray. This has included an important subcontract to local company Ross-shire Engineering for the provision of modular steel-clad buildings for the site.

14. Clarksons

Marine integration and coordination services

Clarksons supports clients with marine integration and coordination services in multiple countries from local offices. The company's breadth of shipping agent services includes port agency, logistics coordination, freight forwarding, warehousing, crew change coordination, customs clearance, helicopter operations and bunkering.

A contract to support Moray West was built on the strength of service provided on the Moray East project. With the new project taking a multi-contracting approach, the Aberdeen and Invergordon offices of Clarksons have been working closely with the project team to ensure smooth operations of the many vessels on hire and operating in multiple geographies at any one time. Clarksons' Invergordon office supports the vessels delivering monopiles into Invergordon and the heavylift vessel installing the monopiles.

Clarksons continue to support clients on the project with helicopter transfer services, customs clearance and freight forwarding. The broad scopes on the project started in June 2022 and span the full period of major component marshalling and offshore installation. Clarksons is a beneficiary of the Offshore Wind Growth Partnership Sharing in Growth programme. Participation and engagement in the programme aims to improve our efficiency and productivity within the UK offshore supply chain.

“As a global company we are proud to bring our expertise to the Oceans Winds projects in the Moray Firth. Our Aberdeen team of experts has been in the lead for coordinating our services to Ocean Winds, strengthening our capability and diversity of experience.”

Paul Young

Account Manager, Clarksons Port Services

15. Harlyn Solutions

Offshore transportation and logistics specialist

Harlyn Solutions is an engineering-led transporting company specialising in moving complex, heavy and unique cargo. Operating across Europe but based in the port of Blyth in north-east England, Harlyn Solutions was ideally placed to support the transport of the two OSPs for Moray West.

The two OSPs were loaded onto Harlyn barges at the Smulders yard on the Tyne and towed to the Port of Nigg in the Cromarty Firth where they were transhipped to a heavylift installation vessel. Harlyn has delivered the required engineering, vessels and marine support to perform the complex turnkey operations in addition to the offshore seafastening release prior to transfer to installation vessel. Harlyn were also contracted to undertake monopile cleaning prior to transition piece installation. The process used a specialist tool fabricated by Claxton at their Aberdeen facility.



Harlyn were contracted for the monopile cleaning using the Claxton tool



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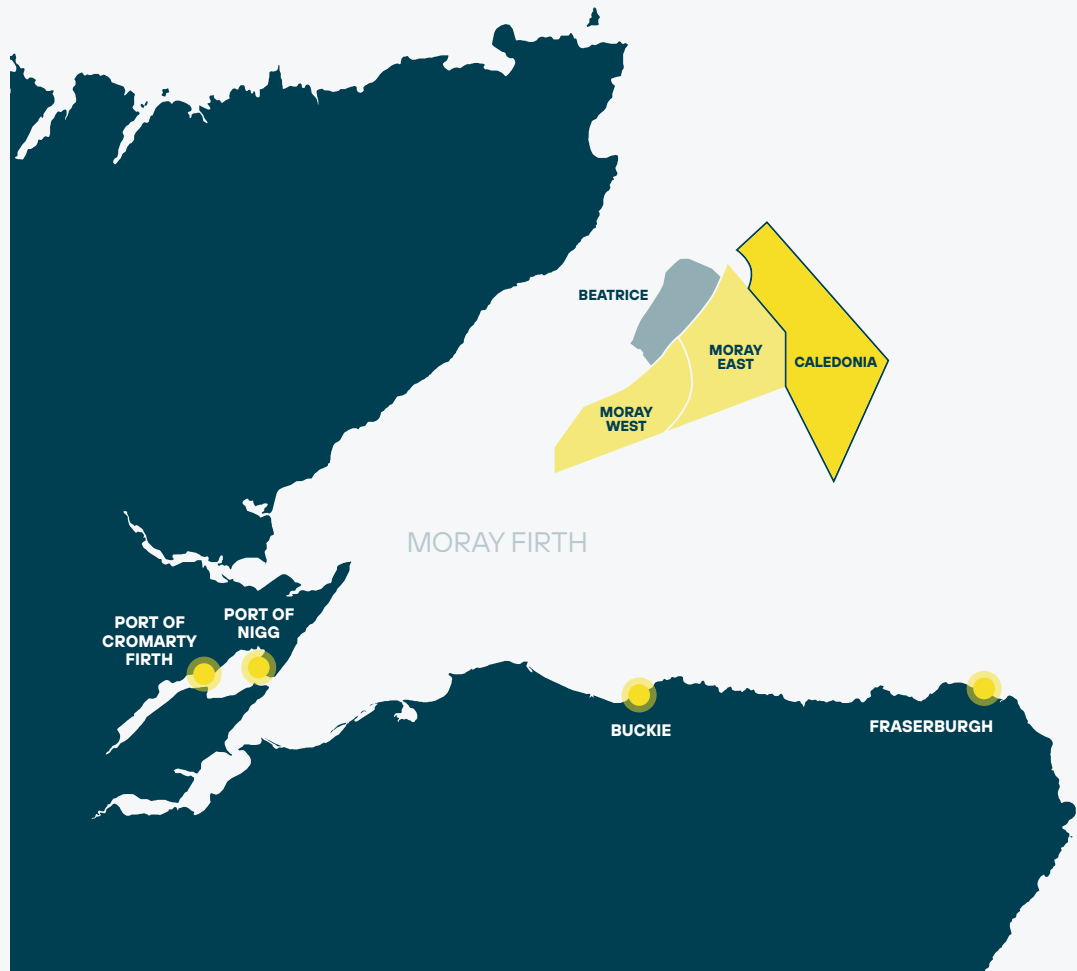
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PORTS AND HARBOURSIDE FACILITIES

In conjunction with the expansion of the UK's manufacturing facilities, the development of port infrastructure is a critical aspect of the build-out of offshore wind and provides significant opportunities for high-skilled technical employment in coastal communities.

Ocean Winds has made extensive use of UK ports for the Moray Firth projects. To enable long-term operations and maintenance for Moray East and Moray West, an O&M base has been established at Fraserburgh and a second base is under construction at Buckie.

Ocean Winds has also placed contracts with both deep-water ports in the Cromarty Firth, with Global Energy Group at the Port of Nigg and with Port of Cromarty Firth at Invergordon, supporting their port expansion plans.



Port of Nigg

The Port of Nigg is a leading offshore renewables hub, combining deep water access with multi-sector capabilities and a strategic location in the Cromarty Firth.

The dock includes an impressive 332,000 square metre construction yard, some of Europe's largest fabrication and assembly shops extensive laydown and storage areas, and one of Europe's largest dry docks. The port has direct access to the North Sea and over 1,200 metres of unrestricted, deep-water, heavylift quayside.

Having acquired the near-derelict site at Nigg in 2011, Global Energy Group (GEG) has pursued an ambitious growth strategy based on the UK's status as a leading offshore wind market. To service the pipeline of North Sea wind farms, GEG converted the existing O&G fabrication yard at Nigg into a leading renewables hub, directly investing more than £120 million on

facilities including the new East Quay which opened in July 2022. Since 2016, the port has enabled three large offshore wind installation campaigns totalling 2.6GW. Moray West will add a further 0.9GW to the total capacity that has passed through the port.

The development of GEG's Port of Nigg facilities enabled its selection initially for Moray East foundations marshalling and wind turbine pre-assembly. More recently, GEG has been selected for a range of component and services provision for Moray West. The marshalling and pre-assembly of Moray West's wind turbines and transition pieces will take place at Port of Nigg, supported by port services from GEG. Ocean Winds' contracts with GEG have supported investment decisions by GEG and the public sector in the port, helping to ensure its place as key port infrastructure for the Scottish offshore wind sector.



Moray East jackets marshalled at Port of Nigg being loaded onto the installation vessel



OCEAN WINDS

Driving Ambitious Supply Chain Transformation Across Scotland and UK

Port of Cromarty Firth , Invergordon

The Port of Cromarty Firth (POCF) has served the economy of the Highlands and beyond for more than four decades, generating £275 million of economic impact annually and supporting high-value employment in the area.

With two new berths and a 372-metre quayside, POCF's Quay West development has one of the UK's most extensive port laydown facilities at more than 90,000 square metres.

A 2018 partnership formed between Highlands and Islands Enterprise, the European Regional Development Fund, the Moray East project and POCF led to the construction of a new £30 million quayside at Invergordon. This investment enabled the port to act as a pre-assembly harbour for Moray East, in addition to extending its capacity to service cruise ships and O&G vessels.



Moray West monopiles ready for offloading onto the new Invergordon quayside

Ocean Winds has continued to develop its partnership with POCF, utilising the increased capacity for marshalling all 62 of Moray West's monopile foundations.

The investments made in the Port in recent years, combined with its proximity to the majority of the ScotWind development areas, means it is well placed to continue the growth it has established over the last several years.

POCF was also a key driver, working alongside Ocean Winds, Global Energy Group, Highland Council and the University of the Highlands and Islands, to secure Green Freeport status in January 2023 – and Cromarty Firth Green Freeport is at the forefront of efforts to expand opportunities in offshore wind along with emerging sectors such as floating wind and green hydrogen.

“The relationship between POCF and Ocean Winds dates back around 10 years when we started initial discussions to enhance the port infrastructure at Invergordon to support the emerging offshore wind sector. We look forward to future opportunities on the Caledonia project to ensure that our great port facilities are available to Ocean Winds and the many other offshore wind projects that are now in our busy schedule.”

Joanne Allday

Strategic Business Development Manager, POCF

Fraserburgh

Fraserburgh Harbour is located on the Outer Moray Firth on the north-east coast of Scotland. In 2018, the harbour was chosen as the location of Moray East's O&M base and, in 2021, the Scottish Government Cabinet Secretary Michael Matheson officially opened the facility.

The O&M base provides the facilities for the day-to-day running of the wind farm, its associated administrative and procurement support, and warehousing for spare parts. It is home to the Service Operations Vessel (SOV), Esvagt Alba.

Ocean Winds worked closely with the Fraserburgh Harbour Commission and Aberdeenshire Council to establish the facility, which in total supports more than 70 permanent staff onshore and offshore, as well as additional staff working on specific projects on Moray East.

“ Ocean Winds has helped us to develop our resilience as a trusted port and as a community. The jobs created are important as they bring diverse and attractive employment opportunities to Fraserburgh and there is also a ripple effect with additional work for our excellent harbour supply chain, which can now consider Moray East a customer.”

Pamela Neri

Fraserburgh Harbour Development Manager



Ocean Winds team welcome Cabinet Secretary Matheson to officially open the Fraserburgh O&M base



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Buckie

Buckie, located on the Moray Firth, is the site of the new O&M base that will initially serve Moray West. The site has been leased from Moray Council who operate the harbour. Moray Council were delighted to secure the regeneration possibilities provided by the Ocean Winds investment in the harbour. The O&M base will be operational mid 2024.

The Ocean Winds harbour investment includes structural reinforcements to the quayside to support new craneage that will serve the vessels maintaining the wind farm, plus two purpose-built pontoons providing safe access to berthed vessels.

The synergy between Buckie's new O&M base and the existing Moray East O&M facility at Fraserburgh will enable Ocean Winds to efficiently manage and maintain the growing portfolio of wind farms in the Moray Firth.

Recruitment for the new O&M base is underway. With a full complement of around 70 long-term roles, Ocean Winds is supporting the local recruitment of these roles with extensive training.

The increased operational diversity of the two O&M bases is entrenching offshore wind as a high-skill part of the north-east coastal economy, boosting the local economy and providing vital operational functions as part of Scotland's path towards a cleaner, greener future.

The high-skilled teams will ensure that the wind farms run smoothly and continue to provide affordable, reliable energy for many years.



Energy Minister Gillian Martin MSP joins Ocean Winds to mark start of construction at Buckie, May 2023



Buckie O&M Base and harbour upgrades, June 2024

UK SUPPLIERS TO OUR UK PORTFOLIO

REST OF UK

6 Alpha Associates	Consultancy
AECOM	Engineering consultant
Albion Manufacturing	Cable Grips
Apem	Consultant
Aurora	Advisor
Balltec Engineering Solutions	Foundations Installation Equipment
Barrier	Fire Protective Coating
Brown & May Marine	Surveys & EIA Consultancy
Cable Consulting International	Electrical Engineering Services
Cathie Associates	Engineering Consultancy
Claxston Engineering Services	MP Cleaning Equipment Fabrication, Testing, O&M
DMJ Drainage (UK)	Drainage Works
EDS	HV services
FB Taylor (UK)	Cable Pulling
Fern Communications Ltd	Communications
Gardline	Surveys
Glenturas (UK)	Onshore Civil Works
Global Marine Group	Specialist Cable Installation & Maintenance
Global Maritime Consultancy	Marine & Engineering Consultancy
Harlyn Solutions	Marine Logistics
HiDef Aerial Surveying	Surveys
James Fisher Marine Services	Offshore Services
LCP	Advisor
LMR Drilling UK	Landfall Hdd Works
LOC	Advisor
Mammoet Offshore Services	Main Offshore Winch
Marinespace	Marine & Enviromental Consultancy
McGill	Advisor
OEL	Surveys
Ordtek	UXO
Osbit	Foundations Installation Equipment
Peter McCormack (UK)	HDD Works
RCG	Advisor
Sarens UK	Heavy lift
Seajacks UK	WTG Installation
Seiche	Enviromental & Consenting Consultancy
Siemens Energy	Power Solutions
Siemens Gamesa Renewable Energy (SGRE)	Wind Turbine Oem, Blade Manufacturing
Smulders Projects UK	Heavy Steel Fabrication
Tekmar Energy	Cable Protection Systems
Volkerinfra	Onshore Cable Installation
WSP UK	Design, Surveys, Inspection & Monitoring

SCOTLAND

Anatec	Maritime Consultancy
Arch Henderson	Civils
Arup Engineering (Scotland Office)	Engineering & Technical Consultancy
Aspect	Communications
Balmoral Offshore	Cable Protection Systems
Briggs Marine Contractors	Marine Services
CHAP	Construction Services
Clarksons Port Services	Vessel Management
Corstorphine & Wright	O&M Building Design
Dangle Ltd	Corrosive Protection & Maintenance
Deepocean	Engineering Services

Donut International	Safety Equipment
Empire Engineering	Technical Consulting & Design Services
Eodex	UXO Specialist
Foundocean	Grout Installation
FPP Scotland	Duct Entry & Exit Seal Flanges
G&A Barnie Group	Eletrcial, Inspection & Maintance
Gael Force Engineering	Pontoons
Galbraith	Land Agency
Global Energy Group	J-Tube Cage Fabrication, Port Services & Facilities
Gobe Consultants	Enviromental Consultancy
Greencat Renewables	EIA consultant; Arven
Helix Robotics Solutions	Vessels
HiDef	Bird surveys
Highland Stoneways	Site Maintenance
I&H Brown	Moray East Onshore Substation Civils
ITP Energised/Energised Environments	Environmental consultant
JDR Cable Systems	Array Cables
JGC, Thurso	OSP topside containers
JKR (Scottish & Regional)	Onshore Civil Works
John Lawrie Metals	Decommissioning & Recycling
Kraken Robotics Services UK	Robotic Services
Leask Marine	Nearshore Diving
Lubbers UK	Engineering & Logistics
Moray First Marine	Vessel services
Natural Power	Operations Management
Nicol of Skene	Directional drilling
Niras	Consultant
Ocean Infinity Group	Geophysical & Enviromental Services
Ocean Science Consulting	Technical Consulting Services
Outreach Offshore	Lifting Equipment
Pinsent Masons	Legal
PJ Carey Contractors	Construction Services
PMK (Scottish)	Onshore Civil Works
Prodiver	Diving Consultancy
Quoceant	Engineering consultant
Renewable Energy Systems	Maintenance & Decommissioning Services
RES	Control room
Riggall and Associates	HDD consultancy
Roavr Group	Survey & Port Logistics Services
Robertson Group	Construction Services
Ross-Shire Engineering	Construction Services
Royal Haskoning/RHDHV	Environmental consult
Sarens PSG	Heavy Lift
Savills	Land Agency
Seaway 7	Submarine Cable, Installation & Tnsportation Services
Senergy Wells	Site Investigation
SFF Services	Marine Services
Shepherd & Wedderburn	Law Firm
SLR	Enviromental consultant
Stork Technical Services UK	OSP Scaffolding
Stowen Clean Energy Limited	
Ternan Energy	Site Investigation
Terraoccean	Integrated Services Ltd
TNEI	Engineering Design
The University of Aberdeen	Enviromental Research
Utility ROV Services	Offshore Rov Services
Vysus	Site Investigationn
Windcat Workboats	Vessels
Wood Group UK	Engineering & Technical Consultancy
Xodus Group	Engineering Consultancy
Young Planning & Energy Consenting	Development & Consenting Services



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Link to Ocean Winds website, and suppliers' registration:

