

# Spotlight Offshore Wind



## Life-of-field services



From the tip of the blade to the seabed, offshore substation to onshore operations, our capability spans all windfarm assets.



#### **WE DO MORE**

With over 3,500 offshore technicians and integrated project management as a core competency, we promise execution excellence. When you engage Petrofac, you partner with a team that has experience across the project lifecycle, from the early conceptual phases, through design, engineering, procurement, construction, installation and commissioning, to operations, maintenance, and competency assurance.

#### **DEVELOP**

Drawing on our EPC and operational know-how, our specialist consultants think ahead, de-risking project delivery by developing safe, cost-effective and technically -innovative solutions.

#### **DESIGN**

Our construction and commissioning teams are involved through the front-end engineering phase to ensure constructability, operability and cost-control are prioritised.

#### **BUILD**

Operating safely, and known for succeeding with challenging projects, we bring certainty in cost and delivery, and offer a choice of flexible commercial models.

#### **OPERATE**

From one-off assignments to fully managed solutions, we deploy ultra-efficient operations to help reduce costs and enhance productivity.

### We bring the right energy



We have built a successful track record in the engineering, procurement, construction, installation, and commissioning of offshore wind projects. We've been operating in the offshore wind sector for the last decade and have delivered over US\$1.5 bn of projects in that time. We've safely executed more than four million hours in the UK alone, and can integrate all offshore disciplines so that we optimise vessel trips and personnel.

#### **WE UNDERSTAND**

We have our own industrial service division, including rope access, and can seamlessly deliver offshore execution. Our team has high voltage (HV) competence and a full suite of in-house Technical Authorities. We can fully digitise operations, breaking down barriers and building proportionate maintenance strategies that reduce OPEX.

#### **ULTRA-EFFICIENT OPERATIONS**

Our integrated offshore operations and maintenance services allow us to drive improvements in safety, productivity, and performance. We have more than 3,500 personnel ready to deliver local support to wind farm operators and offshore transmission owners (OFTO). Using best-in-class digital tools and proven systems and processes, our teams engage with onshore technical, asset management and engineering teams to ensure repairs, modifications and upgrades are right first time. This support spans structural maintenance programmes, inspections, repairs, cleaning, and statutory inspection to full crew provision.



#### A FLEXIBLE DELIVERY MODEL



#### **ASSET STRATEGY+ HSSEQ MANAGEMENT**

Asset management, strategy, registers and budgeting O&M strategy, WSE HSE frameworks and Safety leadership



#### **PROGRAMME DELIVERY**

Scheduling Third party management Work execution and Safety



#### **DYNAMIC PROJECT**

**MANAGEMENT** 



#### **LOGISTICS + MARINE MANAGEMENT**

Scheduling Third party management Chartering



#### **MULTI-SKILLED** DYNAMIC EXECUTION













- >Structural
- > Mechanical
- > Electrical
- > Statutory and safety system inspection
- and mechanical repair - coatings, welds, topsides services

>Structural electrical

- >HV/MV/LV
- >Rope access
- >Scaffolding
- >Field access
- > Lifting and rigging
- > Control and automation
- >SCADA
- >Switchgear
- > System integration
- > Asset management
- > Digital maintenance systems
- >Connected worker
- >Integrated work
- > Planning engineering and dynamic O&M support

**SPOTLIGHT - OFFSHORE WIND** /2

## Delivery in action





#### SUPPORTING GERMANY'S ENERGY TRANSITION

One of our most challenging offshore wind projects was the BorWin3 offshore wind grid connection for TenneT, which now supplies more than one million German homes with clean energy. Delivered in partnership with Siemens, we were responsible for the concept design, engineering, procurement, and construction of one of the world's largest and heaviest HVDC platforms. The installation of the finished topside involved the region's first-ever float over, using dynamic positioning technology on a semi-submersible vessel.



#### CONTRIBUTING TO SCOTLAND'S LARGEST OFFSHORE WIND PROJECT

In 2020, Seagreen Wind Energy recognised our track record for safe and effective project delivery in the renewable energy sector with a major project award. This entails the engineering, procurement, fabrication, transportation, offshore installation, and commissioning of the HVAC offshore substation platform, including the topside, jacket, and piles. An onshore substation scope with all civil work and major equipment is included.



#### SUPPORTING AUSTRALIA'S LARGEST COMMERCIAL-SCALE GREEN HYDROGEN INITIATIVE

We are working with Infinite Blue
Energy on the development of
Australia's landmark Arrowsmith
Hydrogen Project, which will use a
combination of wind, water, and solar
energy to generate 25 tonnes of green
hydrogen a day. Our scope of work
includes a review of the early conceptual
work and the execution of the FEED
study, including a robust Engineering,
Procurement and Construction (EPC)
design, cost, and schedule estimation to
support the final investment decision.

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For a tailored solution in offshore wind delivery and operation, **turn to Petrofac** 

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