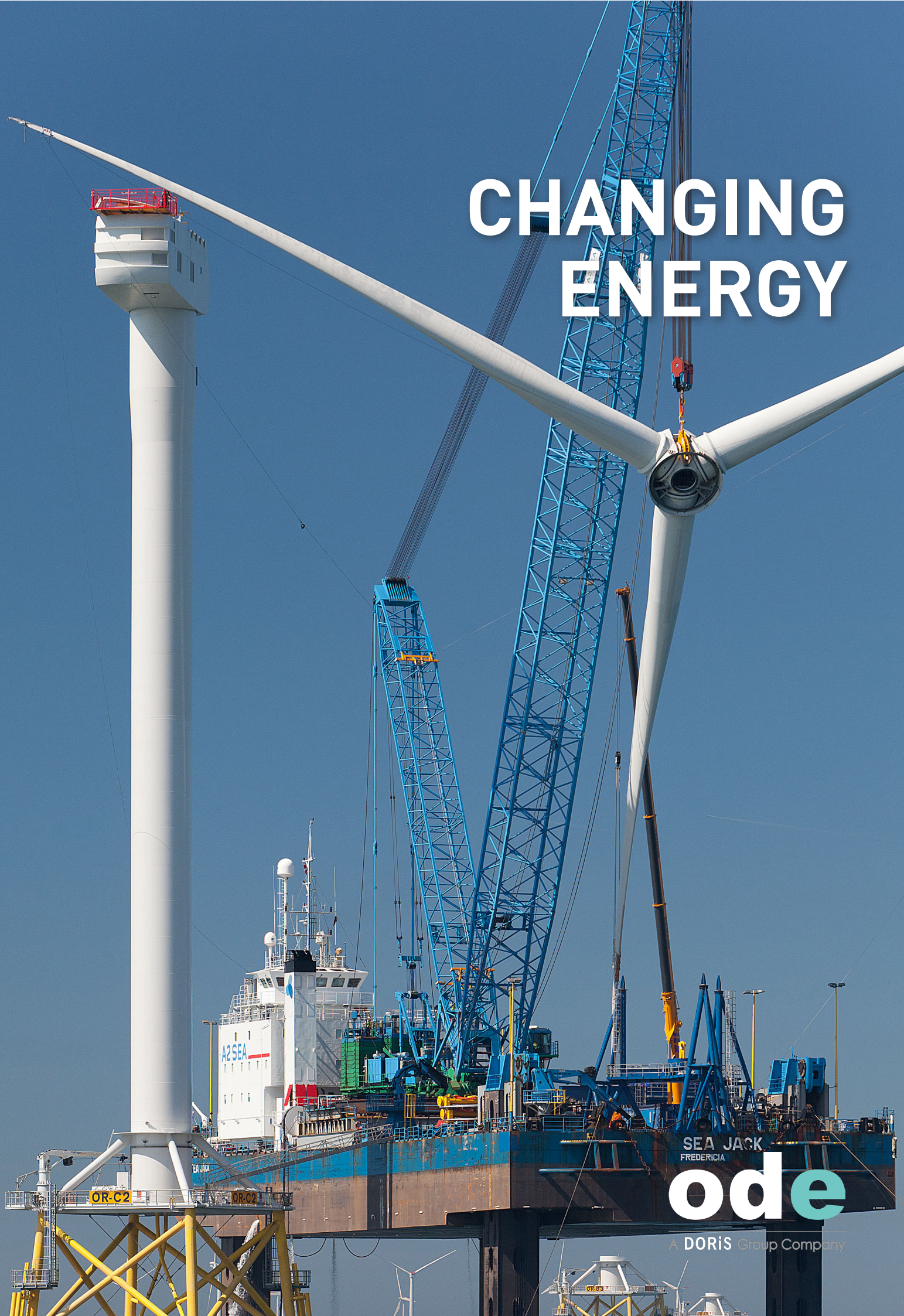


# CHANGING ENERGY



**ode**

A DORIS Group Company



SCROBY SANDS

# One of the first major offshore windfarms to be developed in the UK







# Our Business Values

We understand that energy is changing. We are a reliable, knowledgeable engineering partner to support clients in a changing market as well as an energy for change within the industry. Our commitment to this ethos is made possible by our experienced people, our proactive mindset, our pragmatism, and our innovation.

## People

We are an international technical service provider with over 50 years of experience in the industry. Our expertise comes from our people and their shared knowledge base, drawing on the very best engineers to support clients through a changing market.

With personnel spread across operation centres - from our London headquarters to our presence in Aberdeen and our regional hubs in cities such as Taipei, Tokyo and Boston - our personnel are well-placed to provide engineering support wherever they are needed. Where it adds value and strength, our parent company DORIS, in Paris, complements this service.

## Proactive

We are an energy for change. We challenge and think with our clients and our 'can-do' attitude always pushes us to seek enhanced value in whatever we do.

## Pragmatic

In transforming markets, a clear focus and understand of what's possible is essential. We recommend the right solution based on our own expertise and experience and, just as important, what we know and learn from our clients.

## Ambitious

From the smallest project to the largest, we have the ambition to create change and we deliver.



# Safety & Quality: key values for everyone

Technical and Occupational Safety starts with identifying the risks, selecting the right safe solutions, and applying ALARP principles to everything we do. This process covers the full asset life cycle through each phase; from concept selection to design, build, operations, modifications and decommissioning.

## Occupational HSE

SHEQ principles are fully embedded in our values, in our culture, and how we perform our daily business. Beyond the standard ISO quality accreditations, we strive to excel as we undertake our daily tasks, considering how our actions impact us, the environment, and all stakeholders, both today and in the future. This commitment is more than words, and can be demonstrated in some key achievements:

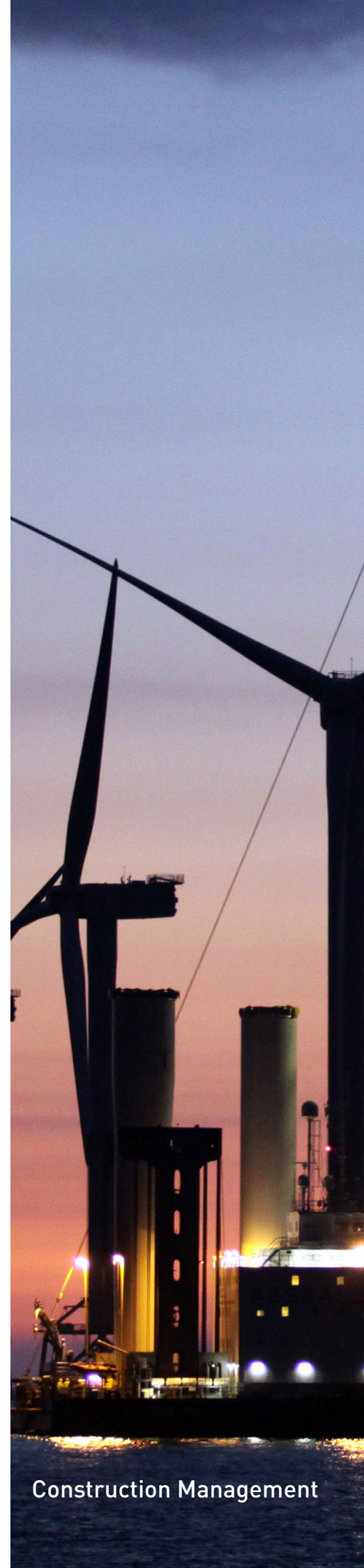
- In the last 5 years, circa 2.5 million man-hours without significant injuries (RIDDOR reportable).
- In 2020 / 2021, circa 1 million hours worked under ODE's management responsibility with 25% of these being 'high hazard' offshore / onshore site and construction working.
- Received annual Gold and Commendation Awards from RoSPA from 2010 - 2018 and received President's Awards in 2019 and 2020.
- Received Merit Award from International British Safety Council Awards from 2010 - 2021.



## Technical Safety

The ODE Safety Consultancy Team is a core company competency that provides either independent Safety Management services or as part of an integrated project team. We provide a strong relentless focus on reducing risk and assuring operational integrity.

Our key expertise ranges from Qualitative & Quantitative Hazard Identification & Assessment Processes, to Safety Engineering including Safety Case Preparation and documented Regulatory Compliance. We also support Operational Technical Safety and Management of Change processes.



Construction Management







OPERATIONS & LOGISTICS SUPPORT

In the last 5 years, circa 2.5 million man-hours without significant injuries (RIDDOR reportable)



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# The ODE way

At our core, we are engineers dedicated to solving problems with a straightforward, consistent approach.

We are dedicated to changing energy.



We are engineers experienced in the pursuit of innovation and we always ensure that the right solution is found, focusing on our clients' needs whilst balancing risk and value.

We apply appropriate technology, proven processes, investment in our people, and a focus on safety and risk management to change energy.

We are judged by results - meeting deadlines and budgets, and exceeding Safety and Environmental targets.



ODE is a subsidiary of DORIS, a leading engineering service provider for the energy industry.

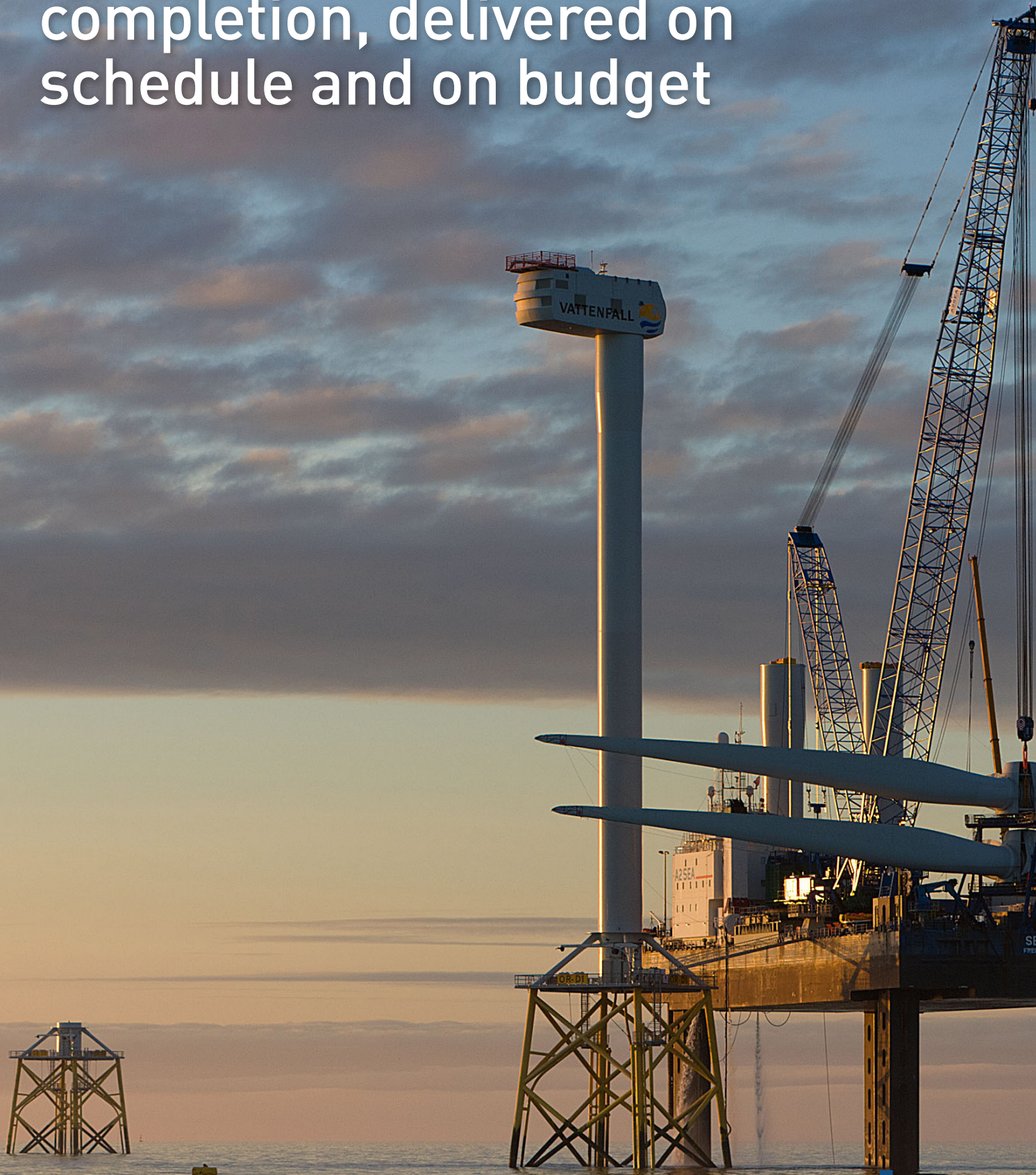
A **DORIS** Group Company

**ode**  
A DORIS Group Company



ORMONDE WIND FARM, IRISH SEA

# From concept to completion, delivered on schedule and on budget



**ode**

A BURNS Group Company



# Serving the energy industry

ODE is a technical service provider to the renewables, oil and gas, and energy transition markets with a proven track record from Owner's Engineer to Operations.

With our origins in the North Sea, our reach has spread internationally.

We have been providing consultancy, front end engineering, project implementation support, asset management and decommissioning services for over 50 years.

In the last decade we have been responsible for the engineering and construction management of over \$3 billion of capital projects.





PROJECT MANAGEMENT CONTRACTOR  
ROBIN RIGG, SOLWAY FIRTH, UK

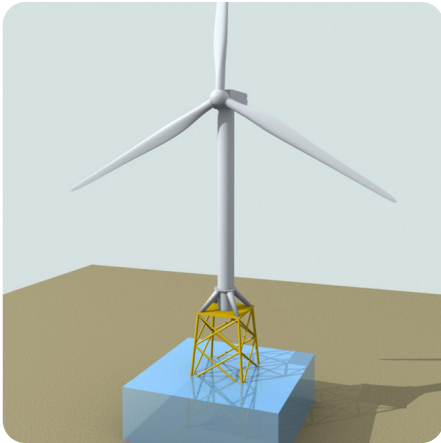


THE ORMONDE MARINE BASE  
AND CTV FACILITY BARROW, UK





# We are a recognised leader in renewables



## CONSULTANCY

We provide leading-edge consultancy services, offering insights into design, installation, construction and operations insights from the earliest stages of a renewable project development. Our high quality expertise, flexibly delivered, is available at the inception of concept exploration and business opportunity creation.



## ASSET DEVELOPMENT

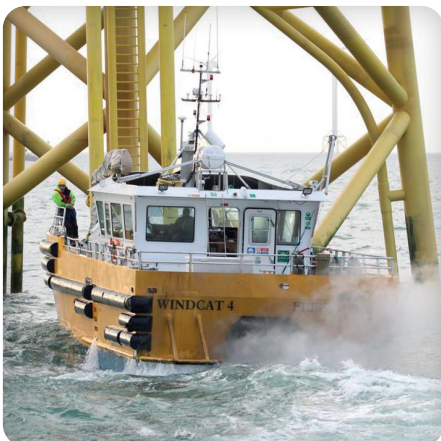
Our multi-disciplinary teams are able to provide a complete Owner's Engineer service, or can collaborate and integrate with clients from the definition to the execution stage. This allows us to adapt to our clients' needs, delivering fit-for-purpose solutions which address all stakeholder requirements.



## ENGINEERING

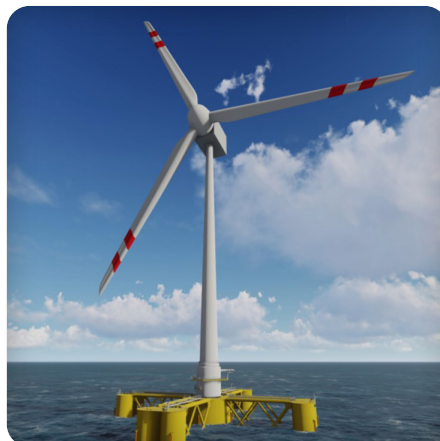
We have the specialist expertise for:

- Foundation & Transformer Platform Design
- Complex Structure & Marine Analysis
- Offshore Construction Methodologies
- Health & Safety Assessments
- Industry Technical Specifications
- Templates for Tender Preparations & Evaluations



## ASSET MANAGEMENT

ODE has a proven track record for obtaining the maximum value, with lowest cost and highest reliability. We maintain offshore assets using hands-on knowledge. This approach is also applied to the early integration of O&M requirements in project developments.



## INNOVATION

We draw on our knowledge and confidence to innovate as we provide solutions to core challenges in the industry. We search for areas of opportunity and develop technologies that benefit our clients and their projects.

## A partner for renewables



OWNER'S REPRESENTATIVE  
ICEBREAKER PROJECT / LAKE ERIE

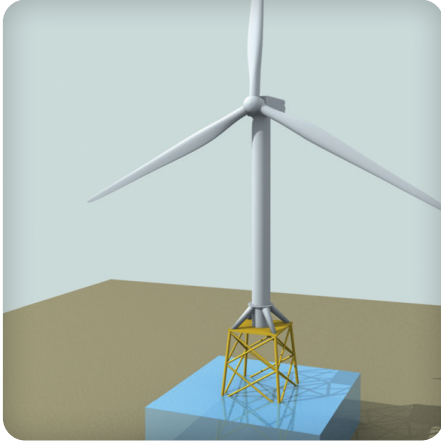


SUBSTATION  
CONSTRUCTION  
AND LOGISTICS  
MANAGEMENT



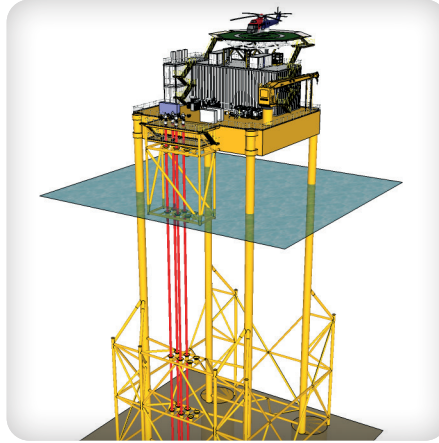


# We deliver value over the full life cycle



## PERMIT APPLICATION

Support in the preparation of wind farm permit applications and assessment of environmental impact, safety, metocean data, geophysical and geotechnical data, navigational considerations, foundation considerations, grid connection. Cost estimating and development planning, supply chain assessment, operations and maintenance philosophies.



## CONCEPTUAL DESIGN

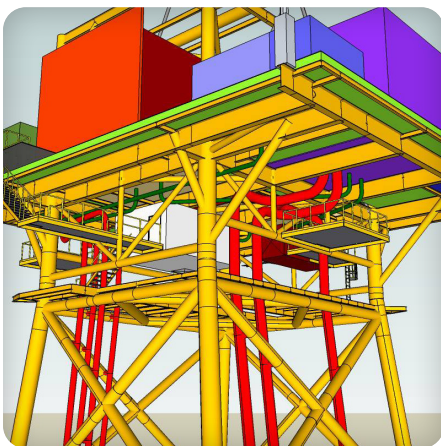
Conceptual engineering, FEED, and development of a design basis incorporating site data and main technical issues based upon appropriate codes and standards.

Typical studies include site layouts, outline foundation and wind turbine specifications, preliminary electrical system design, transformer platform functional requirements, grid connection requirements and techno-commercial risk analysis.



## TECHNICAL SPECIFICATIONS & TENDERING

ODE draws on its extensive wind farm experience in the preparation of basis of design, technical and functional specifications, and other documentation for inclusion within the technical sections of a Request for Quotation (RFQ), a Request for Information (RFI) or an Expression of Interest (EOI) package. We also undertake full technical reviews in order to identify, assess and make recommendations relating to technical proposals.



## DESIGN

Selection and optimisation of WTG foundation geometry and jacket and topside design for offshore transformer platforms.



## CONSTRUCTION

Development of construction and installation plans including consideration of logistics, vessel requirements and offshore / onshore installation methods.

## Engineering solutions by design



# Changing energy for over 50 years

DORIS Engineering  
**50** years  
providing INNOVATIVE DESIGN & QUALITY SERVICES  
1965-2015

The DORIS Group was established in 1965 and ODE commenced operations in 1978

Scroby Sands, E.ON, UK  
Design / Construction Consulting



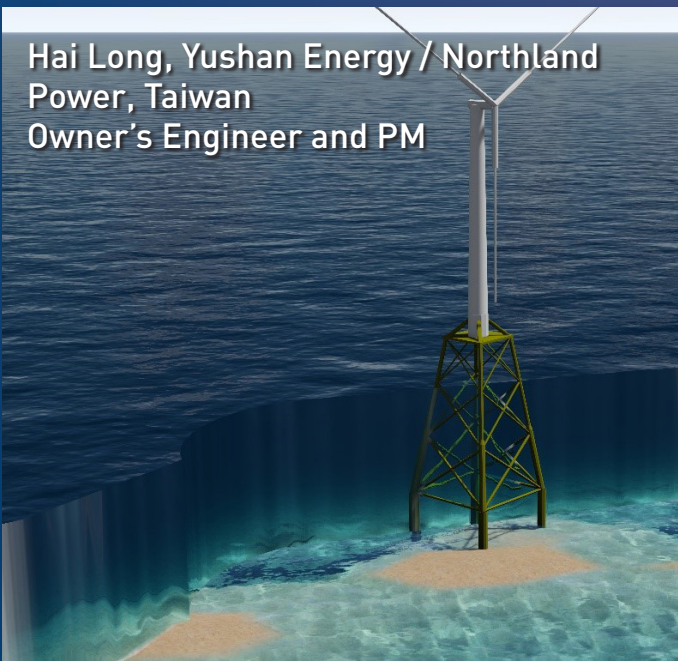
Project Management Services (PMS) to manage, monitor and co-ordinate the performance of EPIC Contract, cable supply contract, onshore cable installation contract and onshore cable connection.

Ormonde, Vattenfall, UK  
Concept, FEED, Detailed Design and PM



First full-field offshore wind farm development deploying jacket WTG foundations and large 5MW turbine. Project management contractor overseeing conceptual studies, FEED, detailed design etc.

Hai Long, Yushan Energy / Northland Power, Taiwan  
Owner's Engineer and PM



Owner's Engineer and Project Manager for the development phase of Hai Long 2 and 3. Carried out electrical and structural conceptual engineering and FEED services for WTG foundations.

Wikinger, Vattenfall, UK  
PM from FEED to Operations Handover



ODE seconded a selected team of core specialists into Iberdrola's overall Project Management team for this development, providing technical support services and resources from all phases of FEED through to operations handover.



## Codling Wind Park, Codling Wind Park Ltd, Ireland Owner's Engineer



Concept and feasibility development of the WTG foundations, onshore and offshore substation, and array cables. Also providing wider technical expertise as necessary to project.

## Various OWFs, SSE Renewables, UK / Ireland Engineering Consultancy Framework Agreement



ODE was named as a Specialist Offshore Structural Advisor and seconds personnel to SSE Renewables' offices to work on a range of projects across SSE's portfolio. Specific packages include Concept Development, Technical Due Diligence and Fabrication Support.

## Various OWFs, Green Investment Group, Korea Owner's Engineer and Package Manager



Managing a range of packages across GIG's offshore wind farms in Korea including foundations, cables, electrical interface, and onshore engineering. Supporting GIG across concept, FEED and detailed design.

## Recent Delivery Highlights

### 2022 Ongoing:

AWC Demonstration Project, AWC Technology, UK: floating foundation concept and pre-FEED.

### 2021 Ongoing:

Anma-do offshore wind farm, Hyundai Engineering Corporation, Korea: technical consultant (alongside Arup).

### 2021 Ongoing:

Codling Wind Park, CWP Ltd, Ireland: Owner's Engineer. Concept and feasibility of WTG foundations, onshore and offshore substation and array cables.

### 2021 Ongoing:

Confidential offshore wind farm, confidential client, Japan: technical advisory consultancy for tender preparation to public auction.

### 2021 Ongoing:

Various OWFs, GIG, Korea: Owner's Engineer and Package Manager. Packages include foundations, cables and electrical interfacing.

### 2020

Confidential OWFs, confidential developer, Europe: feasibility study for grid connection, offshore substations and array cables.

### 2020 Ongoing:

Baltic Power offshore wind farm, Baltic Power, Poland: FEED. Conceptual and FEED engineering and technical services.

### 2019 Ongoing:

Dolphyn hydrogen study floating wind, ERM, UK: large-scale hydrogen production.

### 2019 Ongoing:

Ke Ga offshore wind farm, Enterprize Energy, Vietnam: project management.

### 2018 Ongoing:

Various OWFs, ScottishPower Renewables, UK: consultancy. Engineering services for all European offshore wind projects.

### 2018 Ongoing:

Formosa 1 and 2 offshore wind farms, Macquarie, Taiwan: consulting and engineering services.

### 2017 Ongoing:

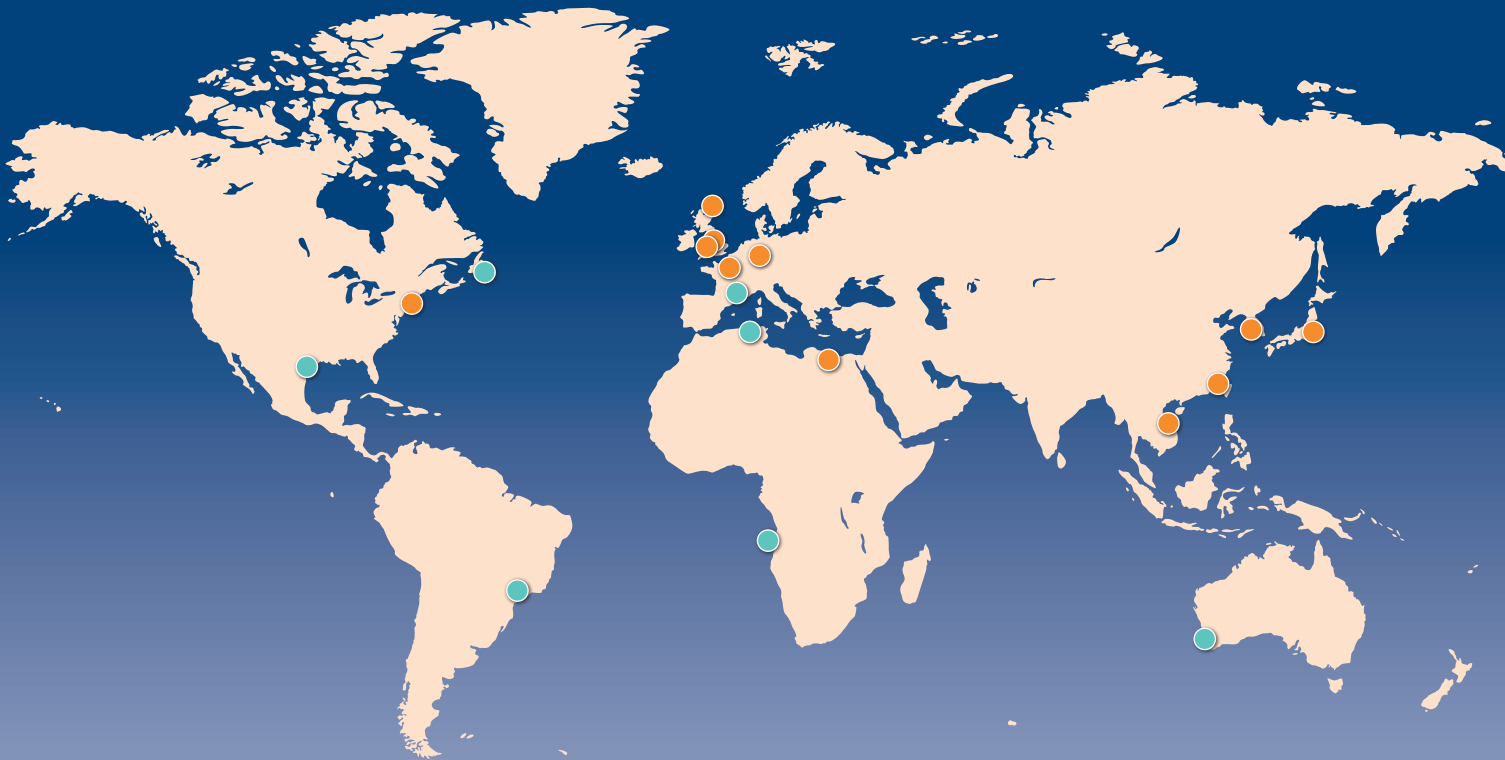
Iles d'Yeu et de Noirmoutier and Dieppe-Le Treport offshore wind farms, LEMS, France: Owner's Engineer and construction support.

### 2016 Ongoing:

Hai Long offshore wind farm, Yushan Energy / Northland Power, Taiwan: project management and design engineering.



# Energy is changing and we are the energy for change



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