

Technical Due Diligence and Advisory Services

Offshore Renewables



DORIS

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Services we offer



ODE provides independent expertise to the offshore renewables industry.

Recognised as an international leader in consultancy and engineering for renewables, we have across a range of jurisdictions, technologies and scales of deployment.

We offer a comprehensive technical due diligence service to all stakeholders across the offshore renewables industry - from investors and developers to government bodies and local authorities.

Offshore projects carry a wealth of opportunity but also risk. We understand that it is essential to understand these risks before investing in a project.

We provide support to our clients by:

- Assessing the technical feasibility of projects
- Identifying technical risks which may affect project profitability
- Ensuring that all factors have been considered in the development process

We deliver a flexible service to our clients, adapting our scope to suit individual projects.



Our technical due diligence services can include any or all of the following items:

- Data gathering and assessment from data rooms, operator facilities or developer interviews.
- Structural and other Asset Integrity Condition surveys (up to classification) and Site Condition Assessments (up to geotechnical and seabed surveys).
- Structured review of technical and commercial reports and data.
- Market Analysis, Insight and Research.
- Project and Productivity Benchmarking.
- Conceptual Sizing, Layout and Cost Estimating for future developments or options.
- Preparation of study reports and presentations to suit or engage a variety of stakeholder types.
- Schedule Assessment and Critical Path Analysis and Assessment including Logistics and Support.
- Project Organisation Assessment including Contract Style, Split and Scope, Gap and Responsibility Analysis.
- Licences, Permits and Agreements and Compliance Reviews.
- Project Audits and Readiness Reviews.
- Operations and Asset Management Inputs for Planning and Budgeting.
- Construction, Installation and Decommissioning Methodology Reviews.
- Full Complement of Technical Safety Capabilities relevant to offshore projects.
- Strategic Decision Support and Development Planning.
- Contractual Issues and Liability Assessment.
- Technical Risk Assessment, Traffic Light / Red Flag Reporting, highlighting issues with provided technical report input data, methodology or conclusions. Providing estimates for values at risk for gaps in reviewed project information.

Why Choose ODE

Our experience supporting some of the world's most challenging and complex offshore renewable projects has provided us with unrivalled expertise.

- **Responsiveness:** We understand due diligence works are often time-critical so we work reactively, reassigning and relocating resources to support immediate, short-term needs.
- **Flexibility:** We are happy to explore what a client needs to achieve their objectives - whether this is by following ODE's own processes or alternatively engaging in client-led methodologies.
- **Depth of Experience:** Across our 50+ year track record in the offshore industry, we have been involved in a wealth of projects - both conventional and niche. This breadth of experience has given us the knowledge pool and confidence to innovate.

ODE can support projects involving:

- Offshore Wind Farms
- Turbines
- Mountings and Transition Pieces
- Offshore Substations
- Jackets, Monopiles, Gravity Bases and Floating
- Piling
- Seabed, Wave, Tide and Scour Protection Engineering
- Asset Integrity
- Offshore Installation Vessels

All Engineering Disciplines Represented:
Electrical, Mechanical, Technical Safety, Structural, Civil, Control & Instruments, Procurement, Construction, Naval Architecture, Operations.

Once a risk is identified, we are able to direct clients to mitigations or strategies for a solution. This approach is valued by our clients as it helps to quantify their risk exposure and ensure consistency with their project or business model.

Scopes we support:

- Potential Investments
 - Final Investment Decisions and Option Selection
 - Distressed Projects or Asset Sales
 - Joint Venture / Stakeholder Independent Checks
 - Operational Efficiency Audits
 - Turbine Technical Design Review
 - Vessel Classification Surveys
 - Geotechnical or Seabed Surveys
 - Wind Power Yield Assessments
 - Environmental Impact, Noise and Ecological studies
 - Technical Safety & HSE
 - O&M strategies
 - Decommissioning
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OPERATING AND MAINTENANCE COSTS



EQUIPMENT AND TECHNOLOGY AUDITS



Due Diligence Experience

We cover both fixed and floating offshore wind, having had significant early and continued involvement in offshore wind farm developments in the UK and internationally. We have extensive experience as OWF Owner's Engineers and Installation Managers.

Our due diligence services extend to the review of all technical aspects of a project, including the assessment of nominated key suppliers, contracting arrangements, project schedules and budgets. Technical audits include:

- Offshore and onshore structural / civil and electrical designs
- Equipment and technology
- Estimates for energy production
- Permitting
- Environmental Impact Assessment
- Operating and maintenance costs

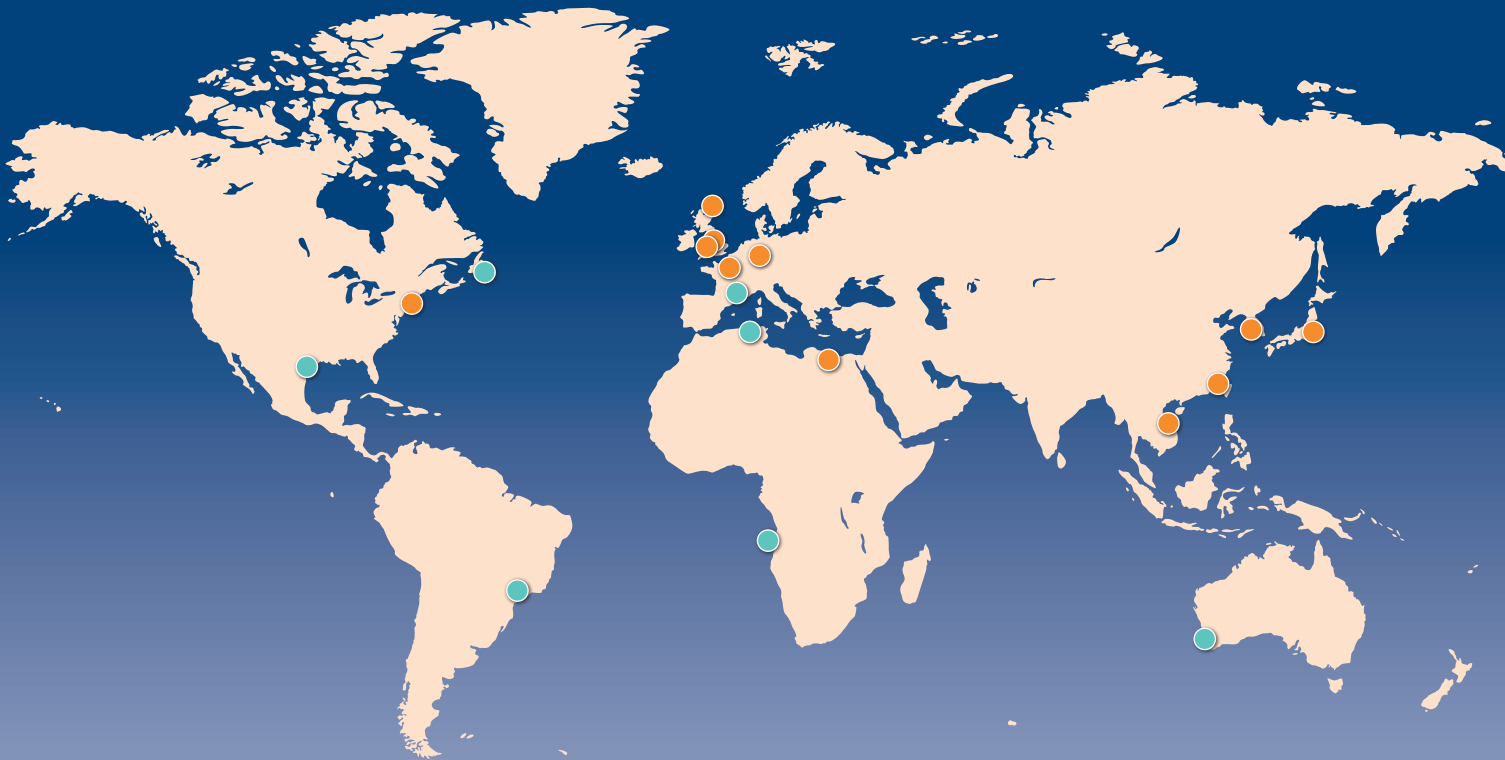
Detailed audits of ongoing construction / equipment and progress measurement can also be provided depending upon the entry point of the client into a given project.

All of this technical audit work is undertaken to ensure parallel and adequate "bankability" of the project depending upon how it is to be financed by the Client.

ODE demonstrates a breadth and depth of knowledge across asset types with successful delivery of due diligence scopes for both oil & gas and offshore wind projects.

Client	Asset
Bankset Energy (Data room review) Renewables	West of Scotland
Transmission Capital	Various - Renewables
Mainstream Round 3 (UK OWF Licence Round)	Options review
Ecotricity Round 3	OWF Licence Round Tender Submissions
Clipper Round Three	OWF Licence Round Tender Submissions
Naikun Wind Development	Naikun OWF (Canada)
Baryonyx	Go Wind Demonstration Project (Gulf of Mexico)
Scottish Power Round 3	OWF Licence Round Tender Submissions
Perenco, Exxon & Shell	Various North Sea Assets (ABEX DD)
HHI (Technical DD of FEED)	Adma-Opco Supercomplex
Summit Petroleum	Alba
Total E & P (Capex using @Risk)	New Development
Apache	BP North Sea Assets
Burlington Resources	Calder & Millom West
Various	Carbon Capture and Sequestration
Shell	Barque PB (OPEX)
BG T&T	Poinsettia
AOC	NW October
Ithaca	Jacky
Loss Adjuster (insurance claim)	UK Gas Storage Facility
Port Meridian Energy Ltd	Project Stakeholder Risk and Gap Analysis
SLLP 134 Ltd	Offshore Production Buoy Design Review
Jee	Technical due diligence of Tolmount Platform FEED
Confidential M&A Oil company	Package of Norwegian assets
Equis	Technical due diligence for Fuhai OWF Taiwan
Confidential IOC	LNG Import Terminal Feasibility Study SEA

Energy is changing and we are the energy for change



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ODE is a subsidiary of DORIS,
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