



## PLANNING AND OPERATING A WINDFARM IS CHALLENGING

Having a competent partner is crucial



### THE EXPERTISE OF OMEXOM OFFSHORE

Never before had an offshore wind farm been so far out to sea as Germany's first offshore wind farm alpha ventus, namely 64 kilometers. With the start of planning in 2006 our success story began. Since then, the wind farm alpha ventus has produced two terawatt hours under our operational management.

Now Omexom Offshore delivers services to more than a dozen offshore wind farms. As a technological pioneer we bring along decades of wind energy expertise.

The success of renewable energies was a team effort from the very start. In our team all competencies for the development and operation of a windfarm are represented. Therefore we understand our customers' requirements perfectly and implement them on a daily basis. Omexom Offshore evaluates the feasibility and the economic efficiency, develops concepts and plans, takes over the supervision of all ongoing works and keeps an eye on operations, services and the management via its own control room.

"Our greatest motivation is to save our clients' time and nerves by delivering the solutions they need in their daily business - where others give up, we just get excited! "

> Steffen Reiche, Business Unit Manager of Omexom Offshore Solutions



#### WHAT SOLUTIONS MEAN TO US

Our experts from the Solutions Team can accompany you through all project phases: from conception to pre-development, commissioning and regular operation. Our experienced team has a wide range of competencies to successfully implement your offshore projects. With our expertise, we offer you first-class engineering service in the following areas:

- Turbine Engineering: specialised know-how for all relevant disciplines
- Construction: competence in structural integrity from steelwork over welding and casting up to corrosion protection
- Underwater: inspection and evaluation of the subsea parts.
- Electrical Engineering: in-depth knowledge in all electrical systems
- Permit Management: support in managing permit procedures and regulatory requirements to ensure legal compliance.
- · Waste Management: minimise environmental impact and ensure regulatory compliance
- Marking & Lighting: longterm experience in the regulatory finesse of marking & lighting for wind turbines.
- · Project Management: expertise in coordinating projects successfully

With this expertise in our team, we offer the following services, among others:

- Root cause analysis of serial faults
- Techical concepts, e.g. for repair, retrofits or general operation (initial operation, optimisation or decommissioning)
- Responsible electrician (VEFK) as a service
- Analysing the legal requirements applicable to your project
- Due diligence & expert advice
- Feasibility studies
- Support with certification and communication with authorities
- Technical advice on project acquisition and pre-development
- Client representation (manufacturing or construction representation)
- Project takeover
- Technical support in claim management
- Documentation
- · Lessons learned and improvement projects.



#### Didn't find exactly what you were looking for?

Let us know and we will analyse together how we can help you best! Rely on our extensive expertise to optimise your offshore projects and achieve the highest standards. Contact us today to discuss your requirements and receive customised solutions.

# **OUR SOLUTIONS**

#### **ROOT-CAUSE-ANALYSIS**

- · Do you experience regular component failures?
- Do you suffer serial damages to crucial components?
- Is a large component in your windfarm showing severe deterioration, that indicates failure?

Omexom Offshore is your partner to find the root cause and derive counter measures. With our vast knowledge and structured approach, we provide a comprehensive analysis. You can benefit from the experience we gathered over several years, in which we observed, analysed, and solved problems in various windfarms.

Our experts not only identify problem sources but can also suggest rectification concepts and retrofits. Through our close network of operators, component suppliers, and other wind engineers, we can access different information sources to find a solution to any technical problem you might face.

We provide structured analysis drawing on our deep knowledge to identify potential counter measures to your technical problem.

### STATUTORY COMPLIANCE

The number of statutory requirements which are legally binding for your windfarm can be hard to oversee. Are you sure that you comply with all requirements relevant for your windfarm? Omexom Offshore is your partner to guide you through the jungle of obligations on legal and approval matters! Through our longterm engagement in the permit acquisition and maintaining of several German windfarms, we developed deep expertise in the statutory requirements windfarms in Germany need to comply with.

- We help to identify applicable and relevant requirements from the standards valid in your approval regime
- We support you in finding an economically feasible compliance
- We perform risk assessments

With our help, you will be sure you are secure in fulfilling all applicable requirements.

## **VEFK (VERANTWORTLICHE ELEKTROFACHKRAFT)**

While windfarms are all about production of green energy, electricity also is one of the major risks to all persons working in the windfarms. The well-structured and sharply executed electrotechnical organisation is the backbone of overall personal safety and a secure windfarm operation. Therefore we offer personnel to take over this role in your windfarm as an intermediate or permanent service.

- We can support you by enhancing your structure, helping overcome challenges between different working entities and changes in organisation
- Our deep knowledge in electrotechnical standards and legal requirements ensures compliance and generate safety
- Organisation Processes Responsibilities Training

#### Huge responsibility in competent hands.

## WITH THE HELP OF OMEXOM OFFSHORE MY WINDFARM RUNS SAFELY & WELL!

#### **EXPERT ASSESSMENTS & DUE DILIGENCE**

The acquisition, sale, or financing of a windfarm requires comprehensive technical knowledge in different disciplines. In insurance cases, a precise damage description and assessment is necessary. This is why we offer our know-how to support all kinds of transactions of windfarms aswell as insurance cases involving windfarm components – offshore as onshore!

- The interests of several stakeholders in an accurate technical assessment must be fulfilled.
- With our experience in several different windfarms, we know the angles to look at – concerning approval, legal compliance, assessment of production, installation, commissioning, maintenance, common defects or deterioration, as well as overall technical condition
- We assess the real value of the technical status and the entirety of all further assessments in place we can be your assessors of all the assessors.

Financing processes or insurance cases can be complex. Reduce the complexity by getting a profound technical assessment from experienced experts.



## **OUR KNOWLEDGE - YOUR BENEFIT**

Omexom Offshore supervises more than a dozen offshore wind farms. A pioneer in renewable energies, the former EWE Offshore Service & Solutions now contributes its broad expertise to the VINCI group, operating as the offshore competence center Omexom Renewable Energies Offshore GmbH.

With this concentrated know-how, we can perform inspections that comply with the regulations of the Bundesamt für Seeschifffahrt und Hydrographie (the Federal Maritime and Hydrographic Agency in Germany) and are recognized by the responsible authorities. Our professional judgement is always problem-aware and solution-oriented.

We perform technical consultancy and engineering support. Our solutions always express our deep know-how, and our highest objective is to improve our clients' business and solve their challenges!

#### **FURTHER CERTIFICATES**

ISO 9001:2015 ISO 14001:2015 ISO 45001:2018 ISO 27001:2022 Safety Culture Ladder: Step 3

### CONTACT



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