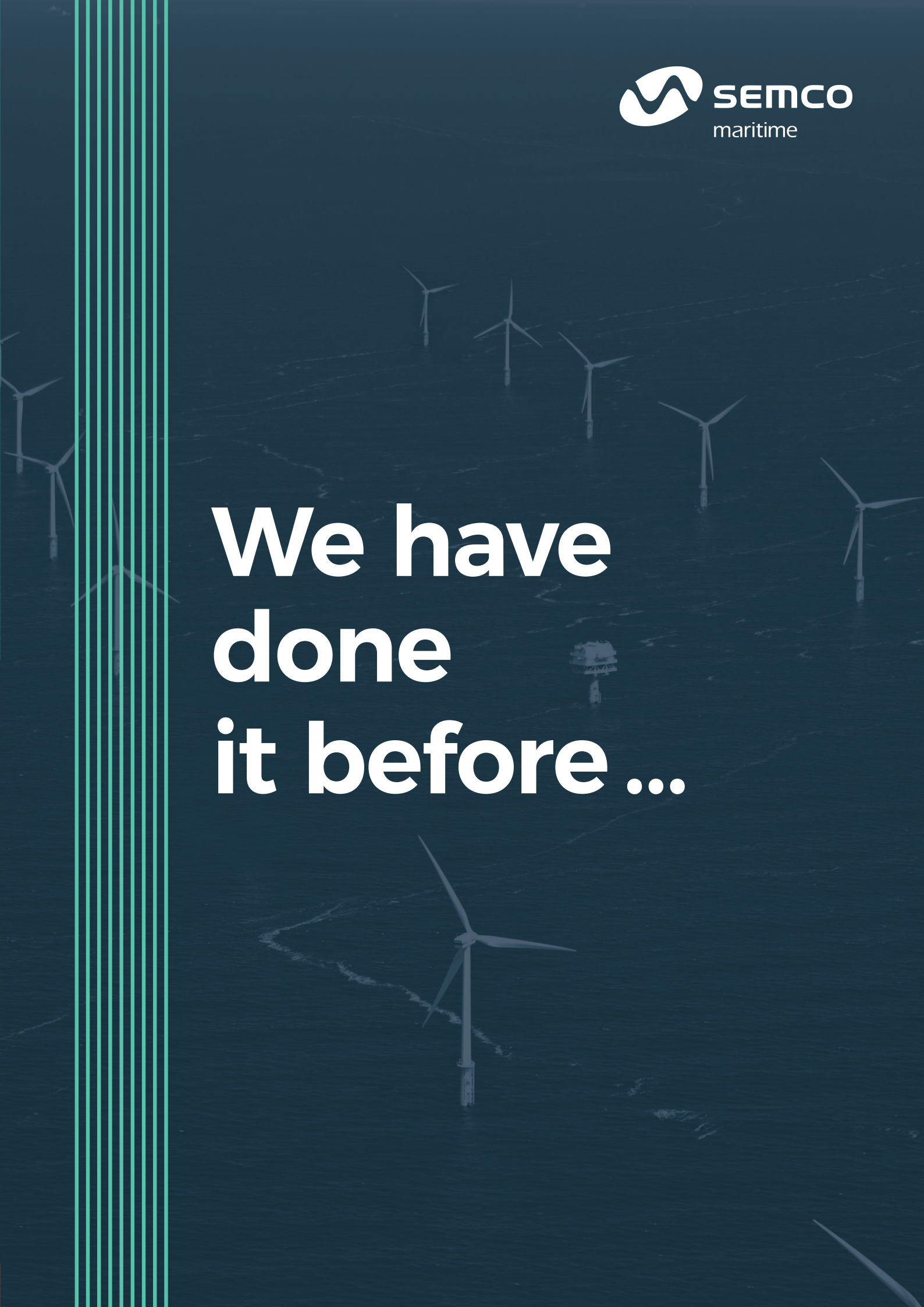
SEMCO maritime

We have done it before ...



FEED - Front End Engineering and Design

Hornsea Two

Customer: Ørsted Wind Power A/S
Location: UK
Period: 2018
Scope: Basic Design of LV and Utilities

The solution
The scope of work covered basic engineering design of one 1380 MW offshore substation (OSS) and one reactive compensation station (RCS) including LV/utility and diesel systems, telecom, HVAC, FAS, cable systems and space optimisation, a specific cost-out process and 3D designs.

Vesterhav South and North

Customer: wpd Denmark A/S
Location: Vesterhavet (Eastern North Sea), Denmark
Period: 2016
Scope: Electrical FEED Study

The solution
The FEED Study consisted of a technical investigation in respect of utilization of 33 kV or 66 kV array grids. The study included the specification of all electrical disciplines, planning onshore substation designs, cable corridors and landfall sites, cost estimation model and development of a SCADA and Station control systems.

HVDC platform

Customer: Confidential
Location: UK
Period: 2018
Scope: FEED Study

The solution
A full FEED study for all auxiliary systems for a 1.2 GW HVDC offshore substation, including construction, onshore testing, offshore installation, offshore testing and maintenance. The FEED was developed in close corporation with the supplier of the HVDC/HVAC equipment and the yard.

Vineyard Wind

Customer: Vineyard Wind LLC
Location: East Coast, USA
Period: 2018
Scope: Electrical FEED Study

The solution
A full FEED study aimed at an optimal design for an 800 MW offshore substation for the US market. The basic design of all electrical and mechanical systems on the topside including the considerations for construction, onshore testing, offshore installation, offshore testing and maintenance. The study also looked into in detail the electrical specification requirements of the international IEC standards vs the American IEEE standards.

Alternative Grid Connection

Customer: Jhong Jie Industrial Co. Ltd.
Location: Changhua and Taiwan Strait, Taiwan
Period: 2017
Scope: Feasibility study

The solution
The feasibility study consisted of a technical investigation regarding the grid connection of 6.5 GW of offshore wind farms including part of the export cable layout. The study included the design and layout of an onshore switchingstation, the route planning of 345 kV transmission lines to connect to the Taipower grid, cable corridors and a budget and a proposed financial model for bankability.

Hailong II and Hailong III

Customer: Northland Power & Yushan Energy
Location: Taiwan Strait, Taiwan
Period: 2018
Scope: Electrical FEED Study

The solution
A full FEED study aimed at optimizing the grid connection solution for the Hailong II and Hailong III offshore wind farms. The study included array cables, offshore substations, export cables, onshore substation, grid calculations and details around jacket construction and soil conditions and cost models for the fabrication of different sizes of offshore substations.

Expert in offshore engineering

Increasing demands for clean, renewable energy sources across the globe have led to record growth in the offshore wind industry. As the industry has developed, so too has the scale and scope of wind farms and turbines – and that is where we come in.

We have participated in most of the major wind farm projects in Europe and in addition have been involved in the construction of more than twenty offshore substations which makes us leader in EPCI solutions and service for the offshore wind industry. Therefore, if you have an offshore wind site and need to know how to evacuate the power in the most optimized way then we have a first-rate solution for you.

From the onshore substation to and including the offshore substation and wind farm, our expertise covers every aspect involved in transmitting electricity from offshore turbines.

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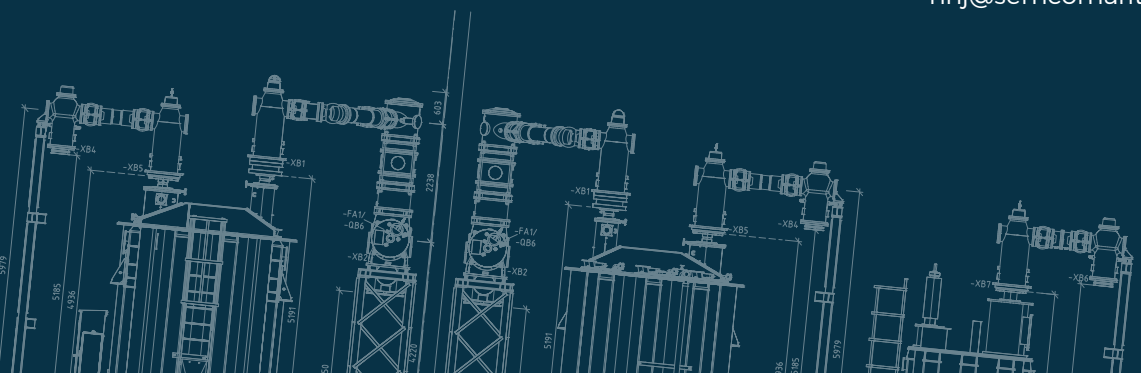

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About Semco Maritime

Semco Maritime is an international engineering and contracting company dedicated to projects in the energy sector. For more than 30 years, we have been facilitating design, fabrication, service and maintenance of our customers' assets, providing comprehensive project management across all phases of energy projects.

Semco Maritime is based in Denmark but has branches in Norway, Germany, the UK, Singapore, Central America and the US.

Safety is part of our DNA and our first priority is to safeguard people, the environment and your assets!

For further information please contact us or visit our website:

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Semco Maritime A/S is third-party certified:

- ISO 9001
- ISO 14001
- OHSAS 18001
- ISO 3834-2

Achilles Certifications:

- FPAL
- Achilles JQS
- Utilities NCE
- UVDB

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