

# Norseman

An innovative hybrid project as gateway for a global Norwegian supply chain

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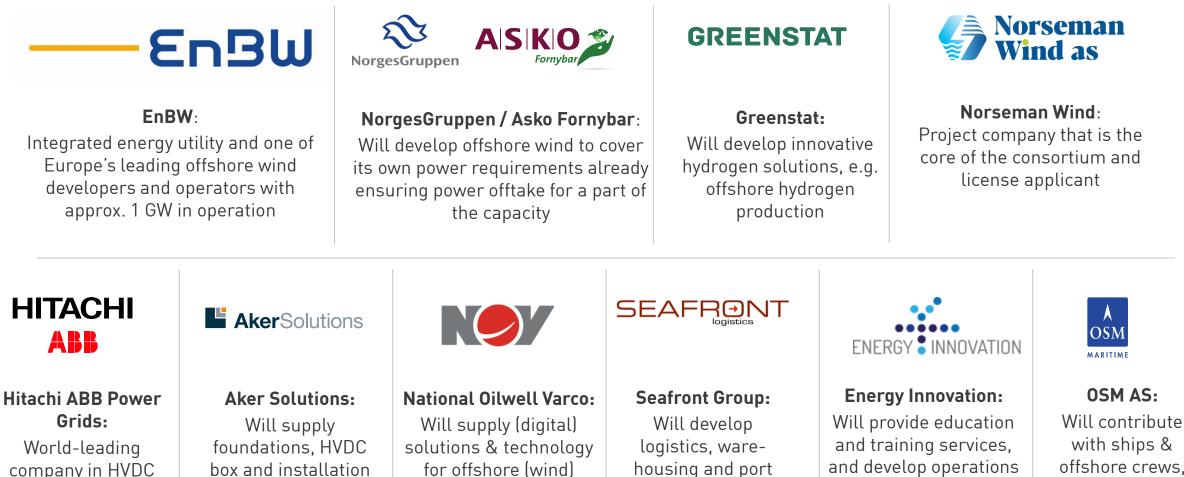


Norseman consortium at a glance

The Norseman consortium combines international development expertise with top players of a future Norwegian offshore wind supply chain

installation &

maintenance



solutions based in

Agder

& maintenance based

in Egersund

company in HVDC technology

offshore crews. and offshore management training 2

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Norseman

As of 31/12/2020, earnings before the investment and financial results, income taxes and amortization, adjusted for non-operating effects Norseman Wind hybrid project

### EnBW at a glance From a traditional, integrated utility, EnBW's core business evolved into providing infrastructure and sustainable energy generation

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## EnBW's strategy for achieving climate neutrality by 2035

#### Smart infrastructure for customers

- > Sales of electricity and gas and billing services
- Installation and sales of critical infrastructure such as broadband, charging and urban infrastructure

#### System critical infrastructure

- > Transmission of electricity, gas and water
- > Provision of grid-related services

### Sustainable energy generation

- > Generation of electricity from renewable energies
- Generation of electricity from conventional power plants, generation of heating, storage of gas, electricity and gas trading and system services





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1: secured site lease in a 50/50 joint venture with BP Norseman Wind hybrid project

Suppliers are invited to register their early interest through: <u>https://www.enbwbp.com/suppliers/</u> If your services are of interest our team members will get in touch to arrange a meeting.

Covernment of the own generation portfolio (onshore/offshore)

#### Home market

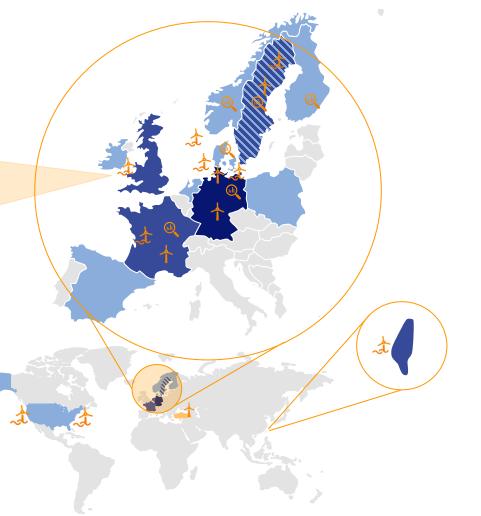


Prospective markets

EnBW's offshore wind business

Work with us on our 3 GW UK projects!

EnBW is developing offshore wind in over 10 countries and has currently 1 GW in operation, 900 MW in advanced development and 3 GW<sup>1</sup> secured



#### EnBW's offshore wind milestones

- > The first commercial offshore wind farm in the German Baltic Sea
- Part of the Combined Grid Solution – the first hybrid project in Europe
- The largest offshore wind farm in operation in Germany
- The first auction commitment to deliver without subsidies - He Dreiht



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Norseman – an innovative hybrid project

The Norseman project combines offshore wind power generation, an interconnector solution and prospectively innovative power to H2 production

#### Viable Business Case

Based on simulations, an interconnected hybrid project provides a viable business case despite low Norwegian power prices.

#### Innovative Technology

Integrating innovative technologies, e.g. offshore H2 production further supports sustainability and Norwegian ingenuity.

#### Potential Connection to Germany

Among other options, EnBW's He Dreiht project will be further evaluated connecting Norseman to the German market



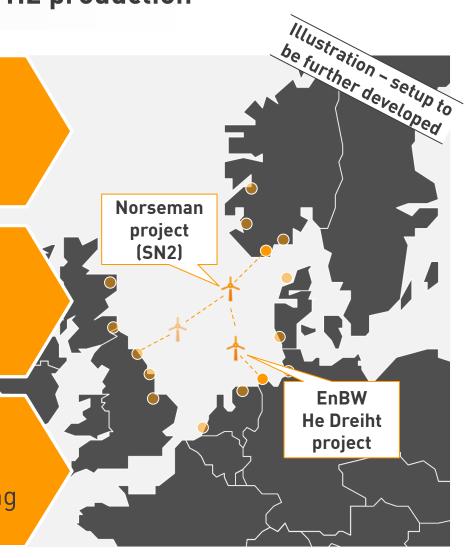


Interconnected System

Simulated Net Power Flows

TWh/Yr







EnBW

#### **Contract structure**

The Norseman project plans with a multi-contracting setup ensuring profitability while maximising Norwegian local content

Draft - to be further Foundations (FOU) Offshore Export Inter-Array Cables Offshore substation Wind Turbines **Major Contracts Map** Cable/ (IAG) (OSS) topside (WTG) Interconnector WTG FOU OSS FOU Land substation (LSS) **Development & Project Management** Norseman Development Geological & hydrographical surveys Survey & Site Investigation Contractors Environmental Social Impact Assessment **ESIA** Contractor FEED - Functional Requirements Norseman/FEED Contractor Detailed Engineering & Design FOU design **Potentially Statnett** WTG OEM EPC IAG EPC OSS topside EPC O-EXP EPC Supply (Procurement & Fabrication/Construction) FOU PC (scope of work TSO to be defined by regulation) Transp. contractor (excl WTG Transportation OWM pre-transp.) Execution IAG T & I T& I contractor (FOU-WTG/OSS & OSS) O-EXP T&I Installation Commissioning <5 yrs OEM **Operations & Maintenance O&M** Contractor >5 yrs **Operations & Maintenance Harbour O&M** Base



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Norseman supplier portal

The Norseman project aims to be a champion of localisation supporting the development of a Norwegian offshore wind supply chain

## **Working with Norseman**

- > We want to maximise local content in the procurement approach, benefitting Norway and the regions closest to the wind farm.
- > After a successful site allocation, suppliers will be invited to register their early interest through an online portal which can be found via our website <u>https://norsemanwind.no/</u>
- If your services are of interest our team members will get in touch to arrange a meeting.

	man Supplier Portal Work with us!	Going online af
Company *	Website *	
Number of Employees *		1
Please select	~	Sec. 1
First name *	Last name *	1000
First	Last	
Job Position*		
Email *	Phone *	See.
	+ 406 12 345	
Address - corporate off	īce	
Address Line 1*		10.





# Thank you!

Also, don't miss our Norseman roadshow 27.09. – Kristiansand GCE Node 28.09. – Stavanger Næringsforeningen i Stavanger 29.09. – Ålesund

**Blue Maritime** 

