Commercializing Floating Offshore Wind

Jonah Margulis
Senior Vice President of US Operations
March 1, 2022
Aker Offshore Wind in Brief

- **Global pure play offshore wind developer**, headquartered in Norway, focusing on assets in deep water. The company will source, develop and operate offshore wind farms.

- Aker Offshore Wind will deploy cost-effective solutions and innovative technology based on **decades of offshore experience**. The company will work in close cooperation with local and leading global partners, while leveraging a best in class workforce.

- **Global portfolio with a gross capacity of 6.67 GW** in the US (California), South Korea (Ulsan), Japan, Sweden, and Norway.
Expanding Global Floating Wind Landscape

WHERE WE ARE
- Aker Offshore Wind offices
- Aker Offshore Wind projects
- Principle Power
Case Study: South Korea
Developing the World’s First Commercial Floating Wind Farm

- South Korea’s Green Deal targets **6GW of floating wind to be installed before 2030**
- KF Wind is one of a small number of consortia realizing what will be part of the largest and first commercial scale floating wind farm in the world
- Ulsan is home to the corporate HQ of Hyundai

**Gross projected GW:** EBL capacity of 1.32 GW  
**Partner(s):** Ocean Winds, Kumyang Co.  
**Location:** Offshore Ulsan  
**Water depths:** 200m-250m  
**Upcoming milestones:** Obtaining second EBL

**Project website:** koreafloatingwind.kr
Project Execution

- Permitting & consent
- Project management and logistics:
  - Large international supply chain
  - Contract strategy and interfaces
- Novel products and technology:
  - WTG 15MW ++
  - Floater & mooring system design
  - Floating offshore substation
  - Dynamic export cable

- Design life – 20-30 years
- Many moving parts and equipment:
  - WTG – 75 off, including 25 km of blades
  - Floaters – 75 off, approx. 300,000 tons of steel
  - Mooring – 150 km of chain
  - Inter array cables – 170 km
  - Export cables – 200 km
  - Floating offshore substation – 2 x 7000 tons
Timeline for Driving Cost Down to 50 €/MWh

**2022 LCoE**: Approx 130 €/MWh

**2023**: €120/MWh

**2024**: €110/MWh

**2025**: €90/MWh

**2026-2029**: Approx 50 €/MWh

**2030 LCoE**: Approx 62% reduction

**ENABLED BY**

**ECONOMIES OF SCALE**
- Turbine size
- Number of turbines
- Sizable project pipeline

**INDUSTRIALIZATION**
- Supply chain for mass production
- Ease of fabrication / constructability
- Reduce foundation/mooring system cost together with PPI and PPI shareholders
- Reduce WTG cost by partnering with WTG OEMs
- Reduce cable system cost

**INNOVATION**
- Subsea power systems
- Mooring
- Digitalization
Building an Industry in the US

Federal and State Support

• US sets target of 30GW of offshore Wind by 2030; historic $1T infrastructure bill provides funding for ports and grid updates

• BOEM releases leasing path forward for offshore wind leases through 2025; five of seven leases include floating opportunities

Project Highlight: Humboldt, CA

• US Gross projected GW: 0.2 GW

• Location: Humboldt Bay, California

• Water depths: 700m-1100m

• Upcoming milestones: CA Lease auction Fall 2022
Copyright and Disclaimer

Copyright
Copyright of all published material including photographs, drawings and images in this document remains vested in Aker Offshore Wind and third party contributors as appropriate. Accordingly, neither the whole nor any part of this document shall be reproduced in any form nor used in any manner without express prior permission and applicable acknowledgements. No trademark, copyright or other notice shall be altered or removed from any reproduction.

Disclaimer
This PowerPoint presentation (the “Presentation”) includes and is based, inter alia, on forward-looking information and statements that are subject to risks and uncertainties that could cause actual results to differ. These statements and this Presentation are based on current expectations, estimates and projections about global economic conditions, the economic conditions of the regions and industries that are major markets for Aker Offshore Wind AS and its (including subsidiaries and affiliates) lines of business. These expectations, estimates and projections are generally identifiable by statements containing words such as “expects”, “believes”, “estimates” or similar expressions. Important factors that could cause actual results to differ materially from those expectations include, among others, economic and market conditions in the geographic areas and industries that are or will be major markets for Aker Offshore Wind’s businesses, oil prices, market acceptance of new products and services, changes in governmental regulations, interest rates, fluctuations in currency exchange rates and such other factors as may be discussed from time to time in the Presentation. Although Aker Offshore Wind AS believes that its expectations and the Presentation are based upon reasonable assumptions, it can give no assurance that those expectations will be achieved or that the actual results will be as set out in the Presentation. Aker Offshore Wind AS is making no representation or warranty, expressed or implied, as to the accuracy, reliability or completeness of the Presentation, and neither Aker Offshore Wind AS nor any of its directors, officers or employees will have any liability to you or any other persons resulting from your use.

Aker Offshore Wind consists of many legally independent entities, constituting their own separate identities. Aker Offshore Wind is used as the common brand or trade mark for most of these entities. In this presentation we may sometimes use “Aker Offshore Wind”, “we” or “us” when we refer to Aker Offshore Wind companies in general or where no useful purpose is served by identifying any particular Aker Offshore Wind company.