Offshore Floating Wind

JP Morgan, Energy Transition Tour, 3 Jun 2020

Astrid S. Onsum, Head of Offshore Wind
Aker Solutions

Aker Solutions – Nearly 200 Years of Change

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Rapid and Interconnected Change

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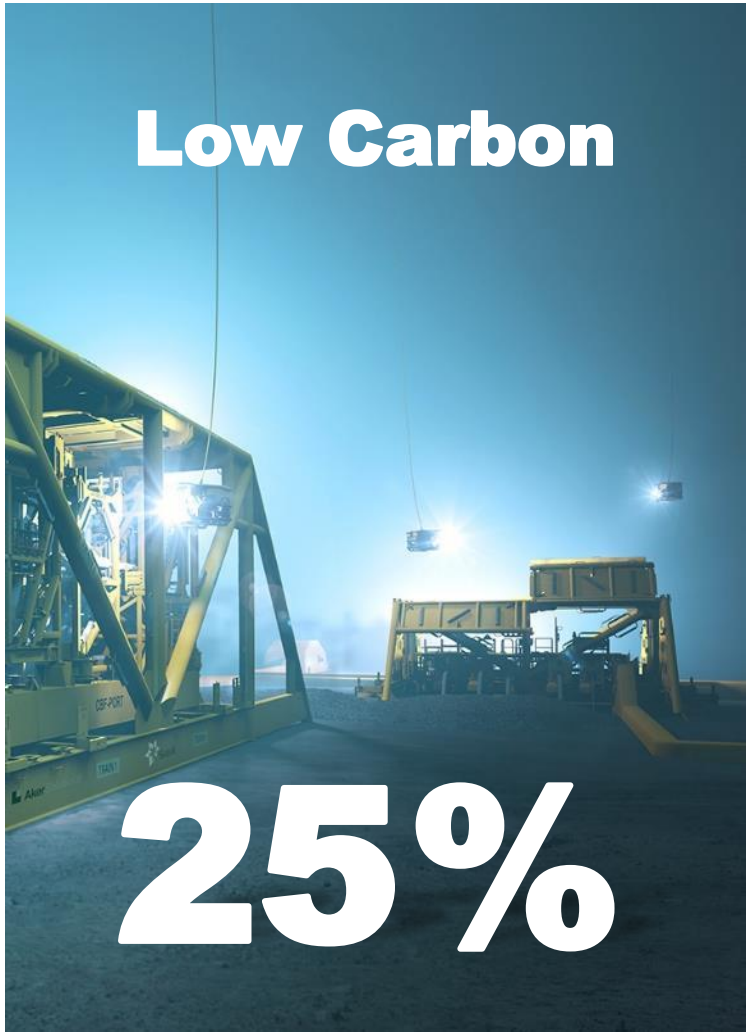
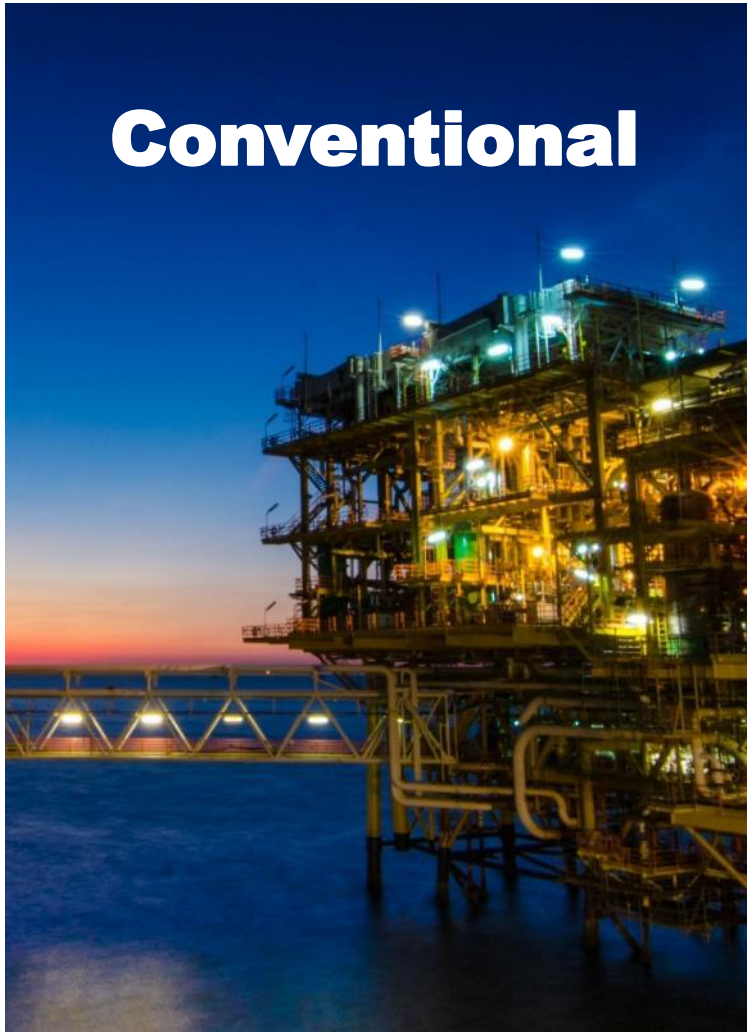
Aker Solutions – Leading a Sustainable Energy Future





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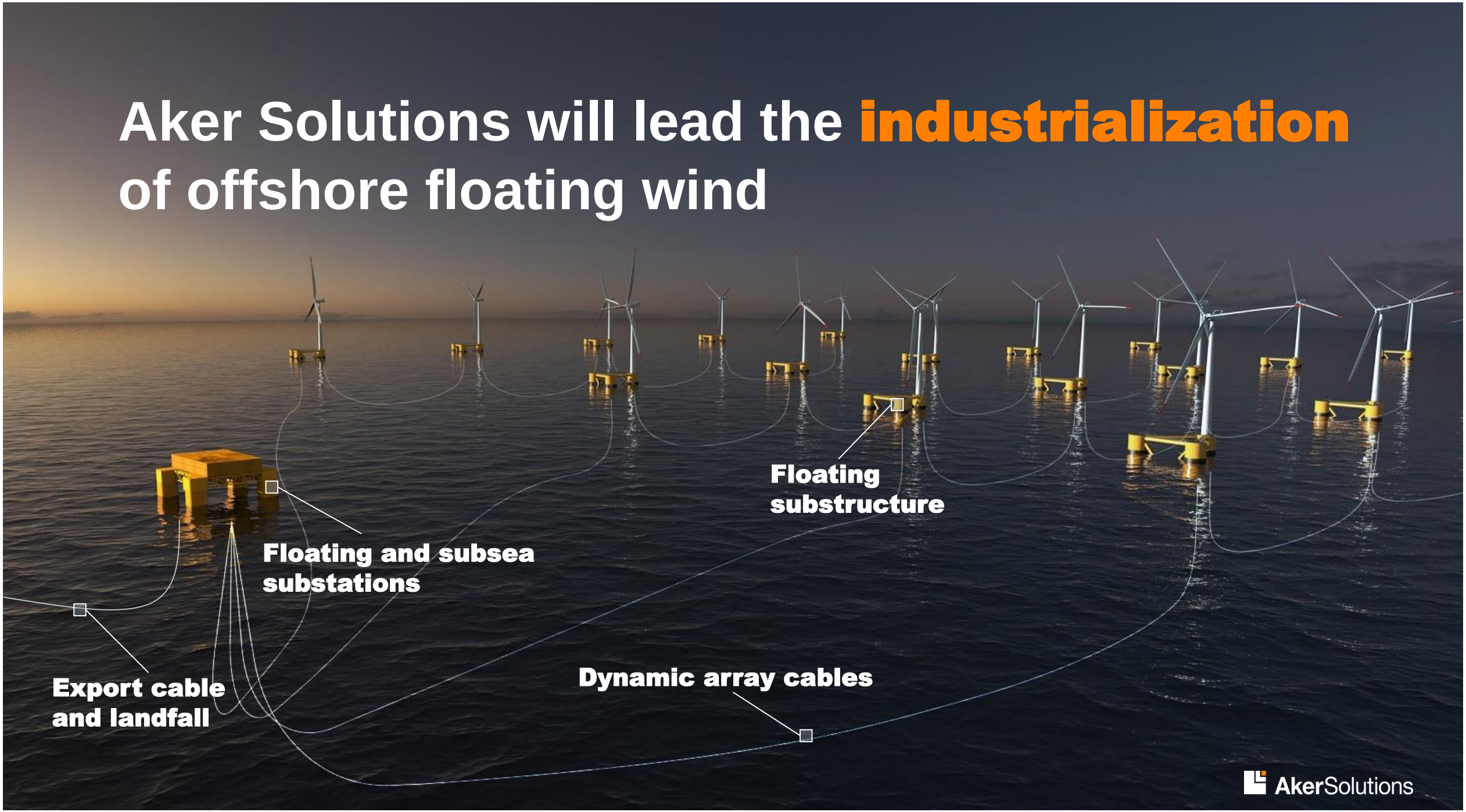
Aker Solutions will lead the **industrialization** of offshore floating wind



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Principle Power Inc.

- **Founded in 2007**, headquartered in California, USA
- **Technology and service provider** to the offshore deep water wind energy market
- **Co-owners** include EDP Renewables, Repsol and Tokyo Gas

The WindFloat

- A **leading, field proven** floating offshore wind concept
- **One of only two field proven** floaters in the world
  - Pilot from 2011-2016
- **World's first 8.4 MW** floating wind turbine installed offshore Portugal 2019
- **100 MW** in the water already by 2022

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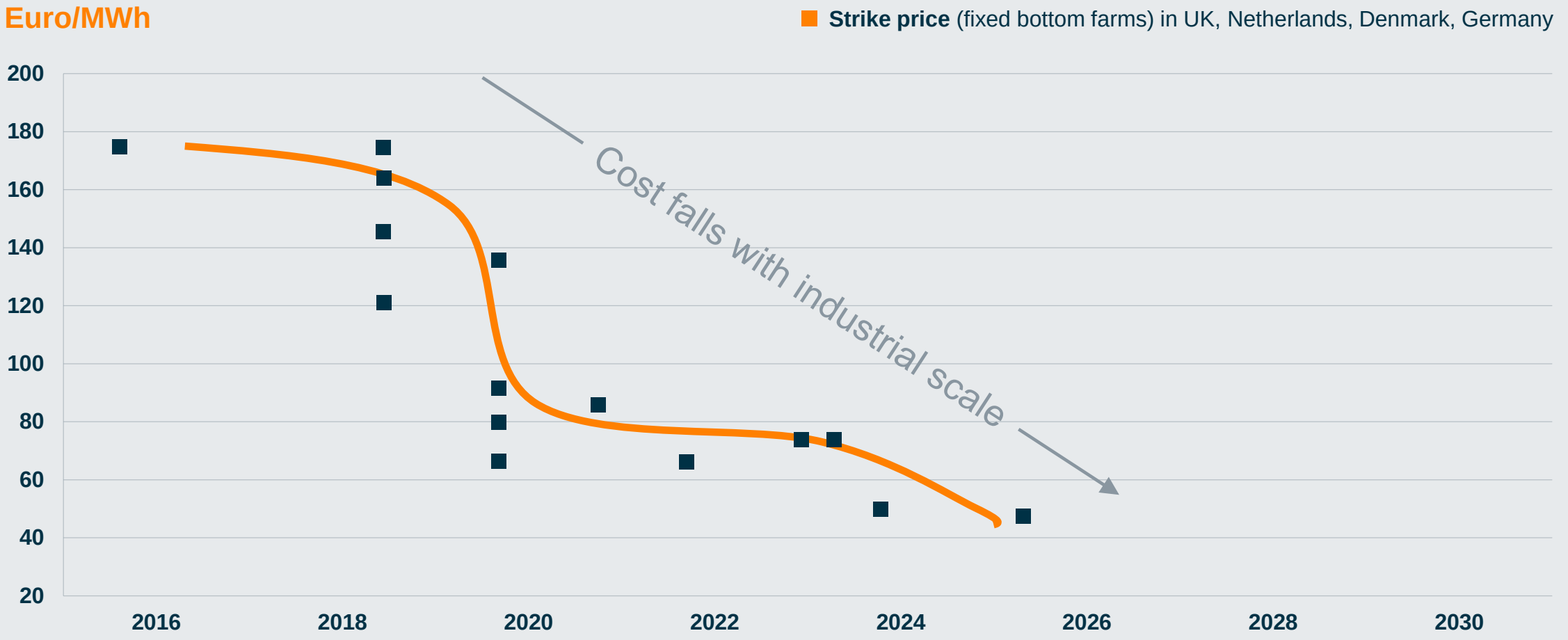
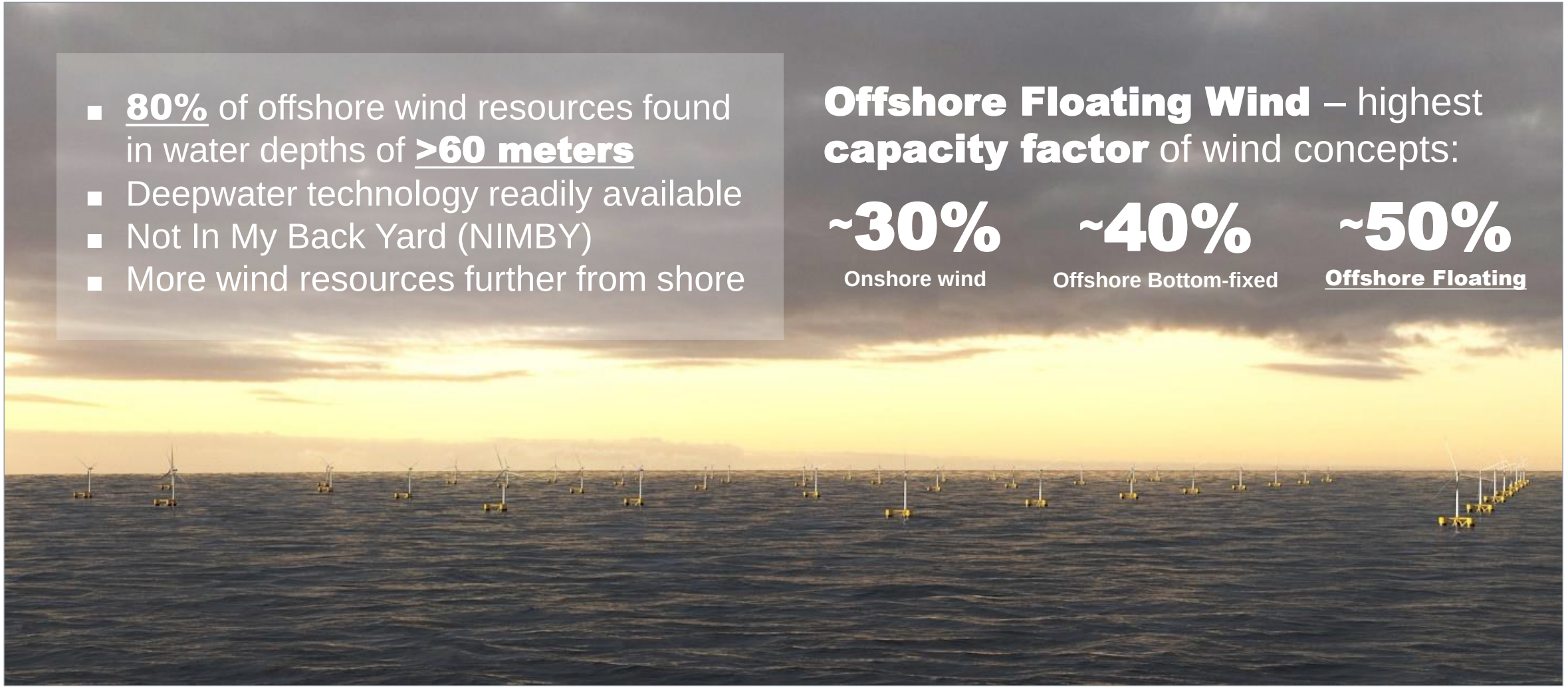
Falling Cost of Offshore Wind Projects



Drivers for Deepwater Wind Power



(sources: EIC Global Offshore Wind report 2019; Norwep, internal analysis)

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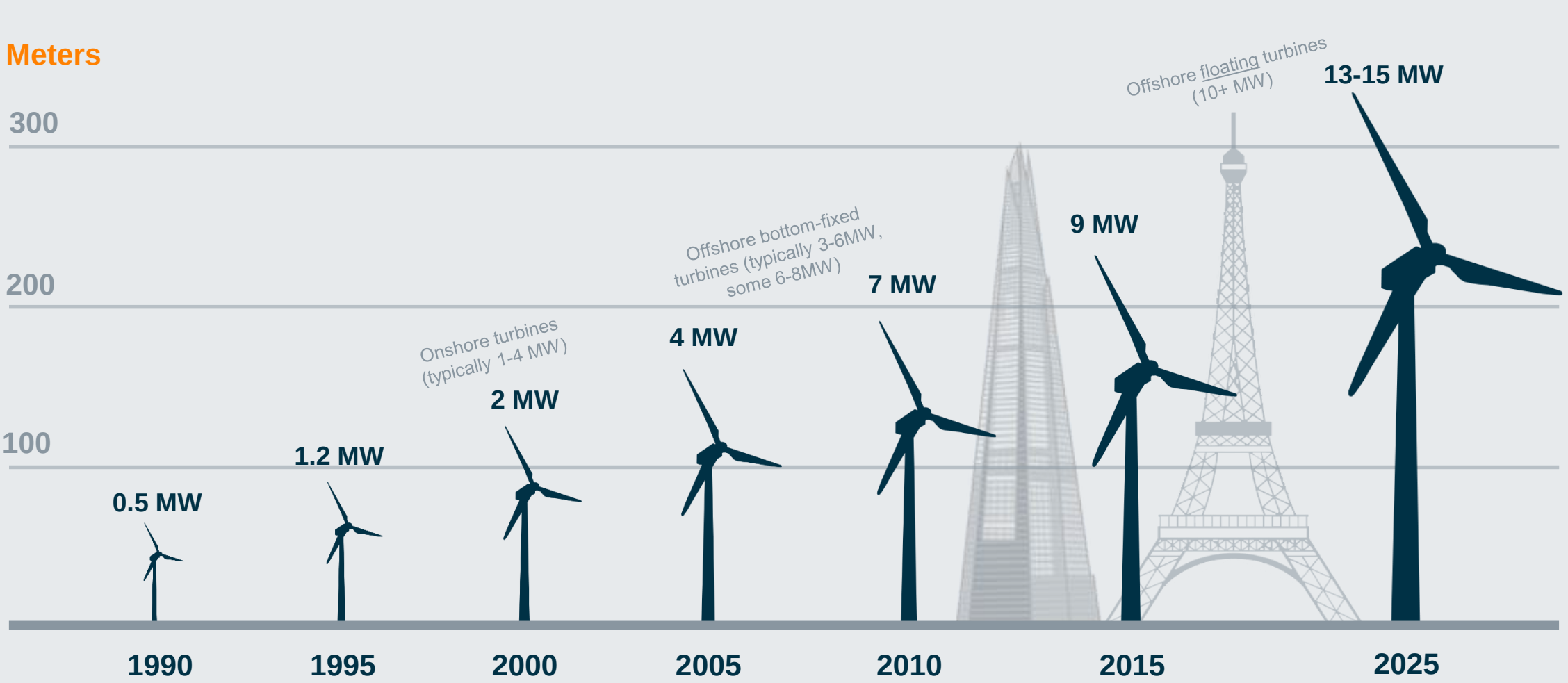
Economy of Scale – Increasing with Turbine Size



(sources: Bloomberg New Energy Finance; various)

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Global Market
Norway
Europe
Canada
Russia
United Kingdom
Americas
Italy
Cyprus
Korea
United States
Qatar
China
Saudi Arabia
Asia Pacific
UAE
India
Ghana
Brunei
Nigeria
Malaysia
Republic of Congo
Tanzania
Brazil
Angola
Mozambique
Australia
Aker Solutions Presence
Active Markets
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WindFloat Kincardine
Scotland | 50 MW
Redwood Coast
California | 150 MW
Golf de Lion
France | 30 MW
WindFloat Atlantic
Portugal | 25 MW
KFWind
South Korea | 500 MW
This is Happening. Now.
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Collaboration is Key to Success – California, US

Major Wind Farm development – Ulsan, South Korea

- **Aker Solutions**, **EDP Renewables** and **WindPower Korea** have formed a consortium
- Ambition to develop an initial **500 MW** floating wind farm off the coast of Ulsan Metropolitan City in **South Korea**
- The South Korean Government has called for **13 GW** of offshore wind to be installed **by 2030**
  - Target of at least 30 percent renewable energy by 2040
  - 7 GW targeted by Ulsan City

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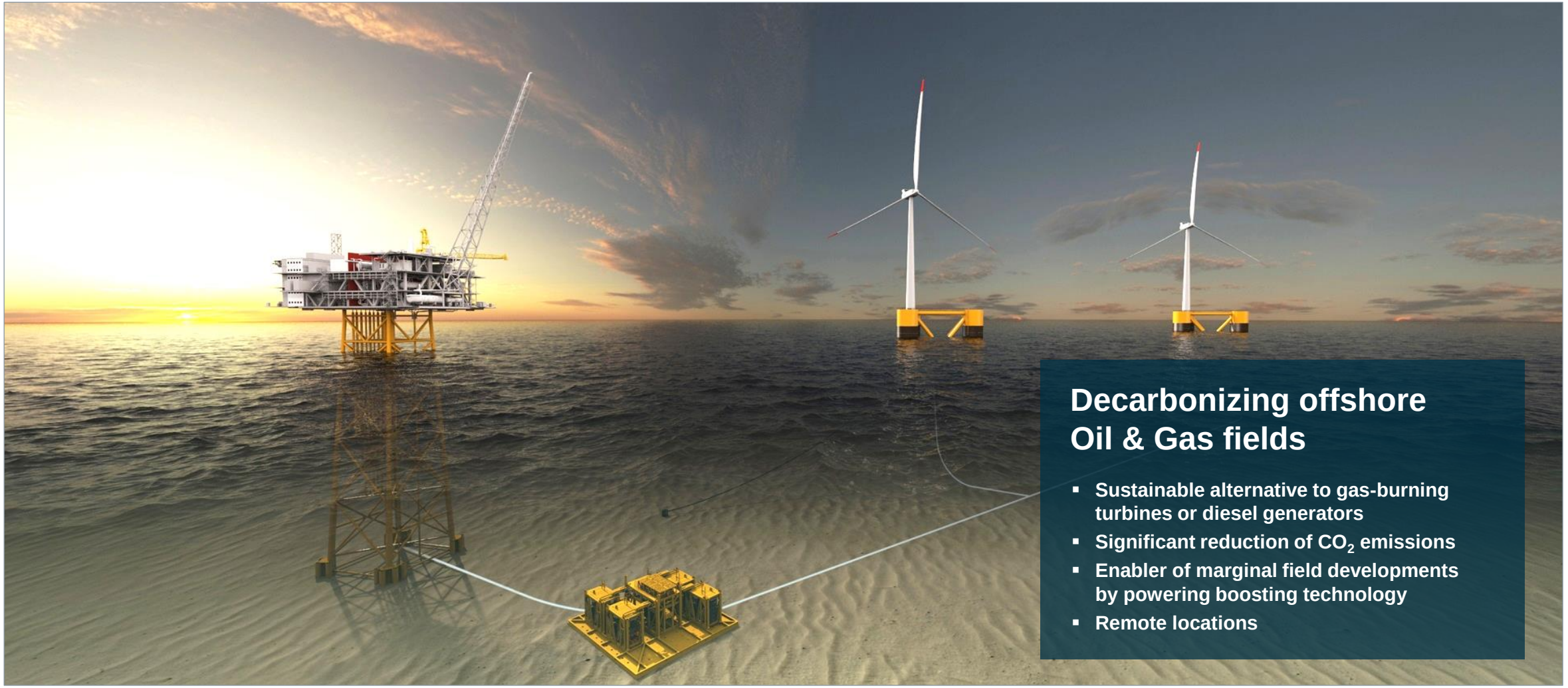
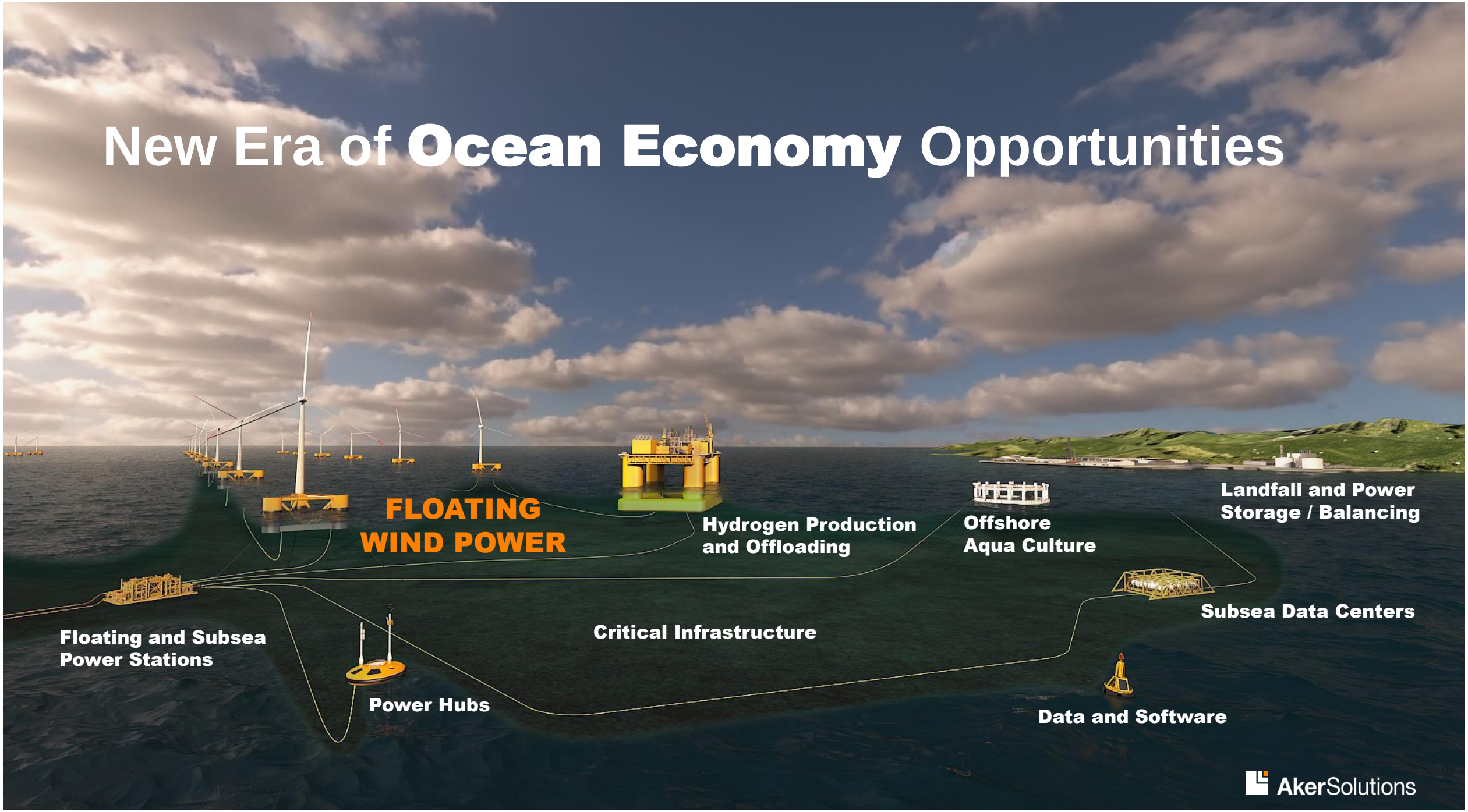
Floating wind – decarbonizing offshore oil and gas fields



New Era of **Ocean Economy** Opportunities



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