



# Aker Solutions

A supplier accelerating the transition to sustainable energy production

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# Solid Foundation for Transition to Renewable Energy

Our Core Capabilities...



Photo: C. Thomas

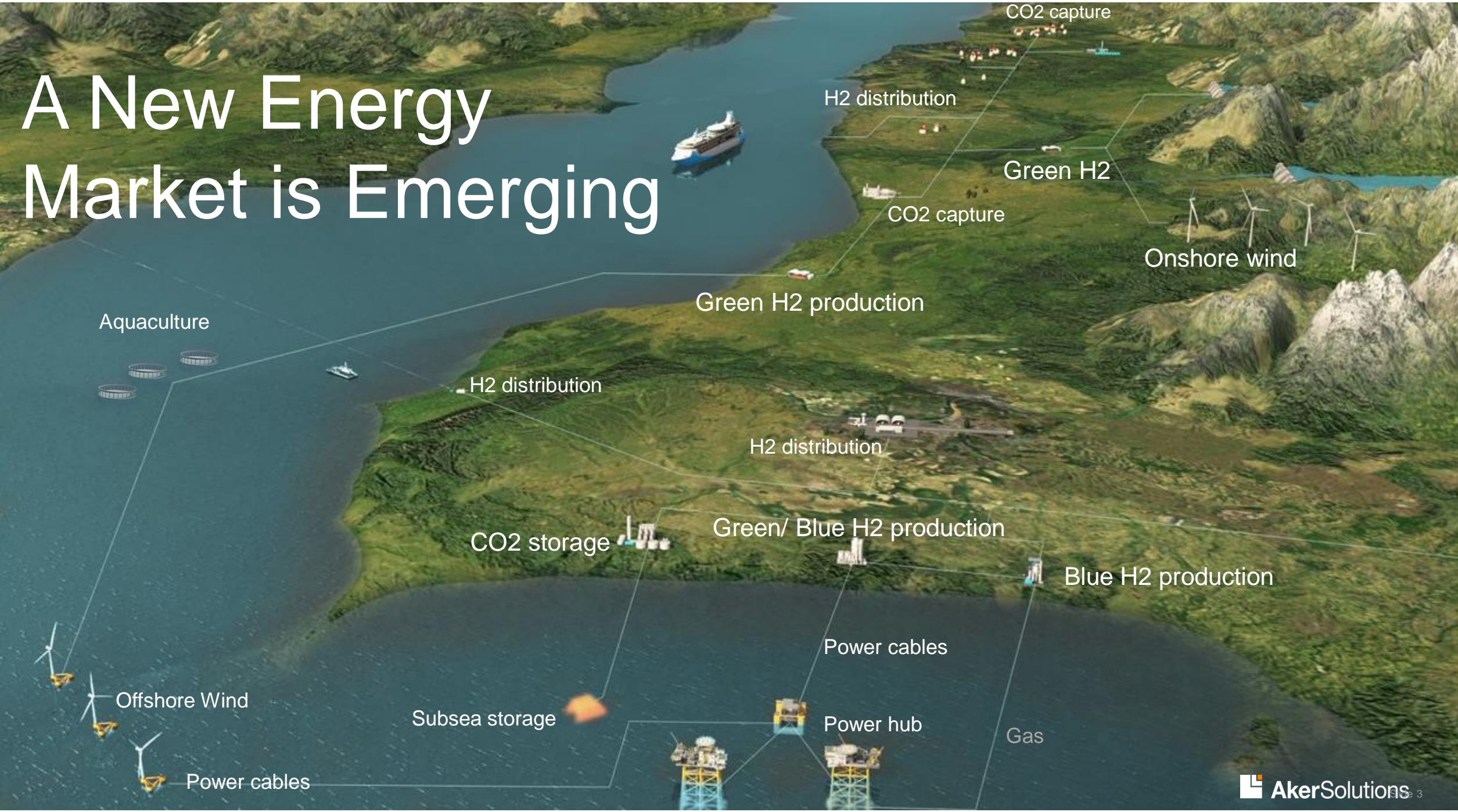
...are needed in emerging industries



Photo: N. Doherty



# A New Energy Market is Emerging





# Our Approach for Green Hydrogen

## Strategic Partnerships

Aker Offshore Wind, NEL, ABB and Principle Power Inc.



## Capability

Engineering, fabrication, manufacture, O&M and subsea power mgmt. track record



## Broad Engagement

- Onshore Hydrogen plant DD
- Green Hydrogen –FEED with NEL in Netherlands
- Green Ammonia Berlevåg: 100 MW electrolyser and green ammonia plant
- Nordic Blue Crude: 30 MW electrolyser and synthetic fuel plant
- Blue hydrogen pre-feasibility studies
- Repurpose of N Sea asset for hydrogen



# ZEEDES SHIPPING 1 billion tons CO<sub>2</sub>

## Supplier lead consortium for clean shipping

- Shipping accounts for emissions of approx. 1 billion tonnes of CO<sub>2</sub> a quarter of a year. It is more than all emissions from all of Germany, and corresponds to number five on the list of worlds with the most emissions..
- Wärtsilä has partnered with five other forward-thinking companies to lead the way towards a cleaner and more sustainable future for the shipping industry with the Zero Emission Energy Distribution at Sea initiative or ZEEDES as it is popularly known. What does this mean for the shipping industry?
- Once proposition was developed the consortium presented to Norwegian government who provided an Open Innovation fund award to commence development of the project. Industrial and investment partners have subsequently co-funded based on business value
- <https://www.youtube.com/watch?v=aClnJeKoDAI&feature=youtu.be>
- <https://www.youtube.com/watch?v=SPJLZYDRlyI>

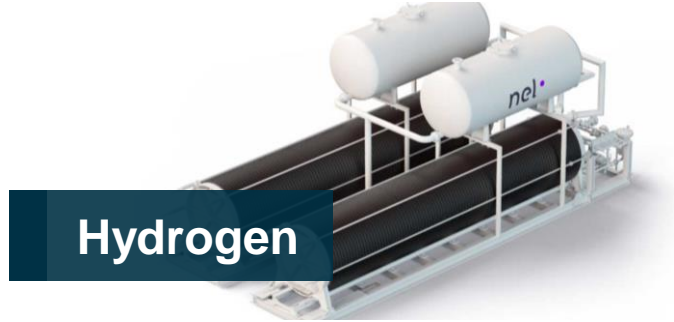


# Opportunity for the UK | Projected Volumes needed in UK by 2050



**Hydrogen**

60 Hydrogen Reformers



**Hydrogen**

500 Hydrogen Electrolysers



**CCUS**

±50 Industrial size CO<sub>2</sub> capture plants



**Infrastructure**

Up to 1,800km of CO<sub>2</sub> pipelines



**Onshore**

H<sub>2</sub> and CCS at many energy intensive industrial sites



**Offshore**

±120 CO<sub>2</sub> injection wells

# Way Forward in the UK

## Investment

Significant Investment needed to accelerate the development of key technologies and drive economies of industrial scale to be successful in future projects

## Collaboration

Government, industry and supply chain companies to work together to drive UK forward

## Skills of the Future

Grow the economy, create future jobs and opportunities



AkerSolutions