

### **Carbon Storage and Offshore Wind Energy**









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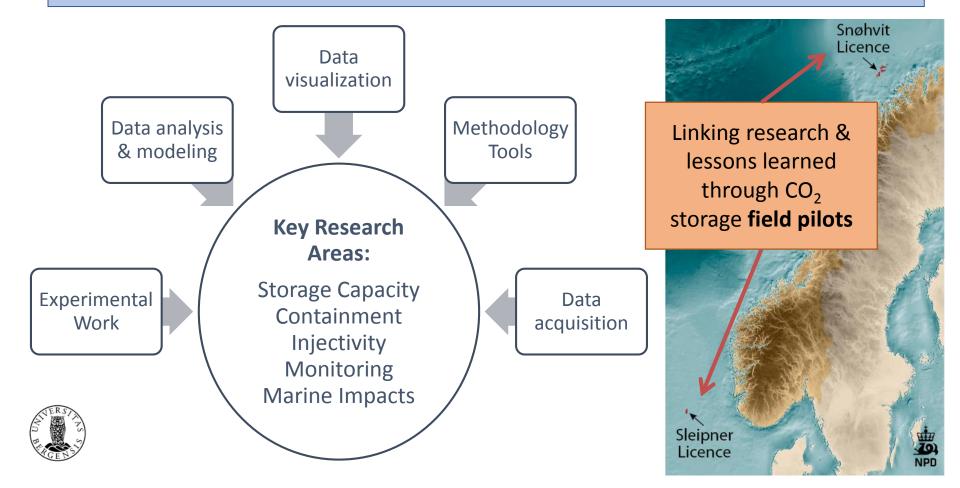




### **Success**



The main objective of the SUCCESS center is to provide a sound scientific base for  $CO_2$  injection, storage and monitoring, to fill gaps in strategic knowledge, and to provide a system for learning and development of new expertise.





### **SUCCESS**



#### **Important research results**

- Characterize geology of target CO<sub>2</sub> storage sites and seals
- Understand impact of dissolution and mineralization on CO<sub>2</sub> storage security
- Predict microcracking during CO<sub>2</sub> injection in tight rocks
- Improve subsurface and seabed monitoring for CO<sub>2</sub> leakage
- Understand the detection and impact of leaks on marine life

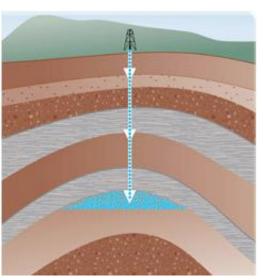




### **Success**

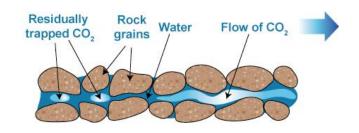
#### Research institutions:

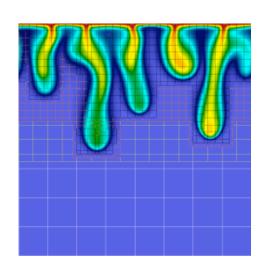
- Christian Michelsen Research AS (host)
- Institute for Energy Technology
- Norwegian Institute for Water research
- Norwegian Geotechnical Institute
- Uni Research AS
- University of Bergen
- University of Oslo
- University Centre in Svalbard



#### Industry partners:

- Statoil AS
- DEA Norge AS
- OCTIO AS







# Research motivated by industrial challenges to develop cost-effective offshore wind farms

- Help to solve current and future challenges for the offshore wind industry
- Help the industry to identify issues that need attention
- Mobilize new Norwegian research groups to address offshore wind
- Joint effort, cooperation towards common goals
- Add value to the partners: Coordination, network and marketing



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# Research motivated by industrial challenges to develop cost-effective offshore wind farms

#### **Important research results**

- Data from the measurement campaigns in databases
- NORCOWE Reference Wind Farm and case studies
- Improved understanding of the Marine Atmospheric Boundary Layer
- Spin-off projects
- Spin-off companies
- Equipment
- Norwegian Motion Lab
- PhD candidates
- Master candidates
- Papers
- Increased capacity
- Network



#### Research partners:

- Christian Michelsen Research AS (host)
- Uni Research AS
- University of Agder
- University of Bergen
- University of Stavanger
- Aalborg University (DK)

#### User partners:

- Statkraft AS
- Statoil AS
- Acona Flow Technology AS
- Aquiloz AS
- Axys Technologies
- Leosphere
- Norwegian Meteorological Institute
- StormGeo AS







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