## Collaboration on Offshore Wind Energy R&I

Peter Hauge Madsen Director, DTU Wind Energy









## **Complementary competence profiles**

#### DTU

Globally leading in wind energy research including wind turbine loads and control, aerodynamics, and resource assessment

Operating three wind turbine test sites in Denmark and several large test facilities.
PhD and MSc education

Total staff of about 5900: incl. approx. 1200 PhD students

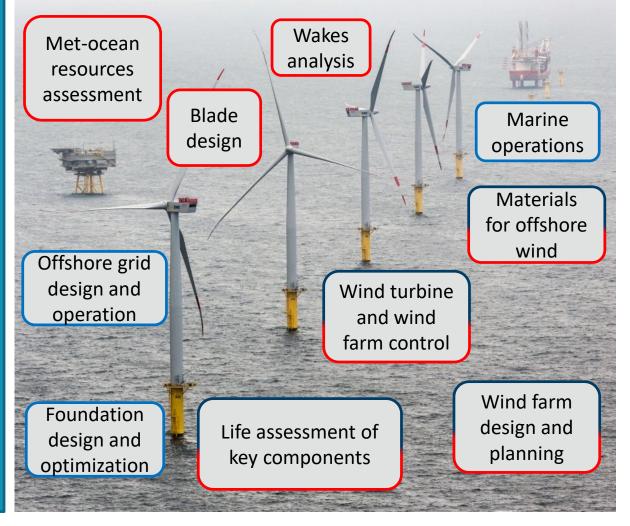
#### **SINTEF & NTNU**

Strong competence on offshore wind technology, including substructures, O&M, materials, grid connection and control

Relevant laboratories include ocean basin, smart grids and wind tunnel

PhD and MSc education

Total staff of about 2000: SINTEF, 6900: NTNU incl. approx. 1200 PhD students









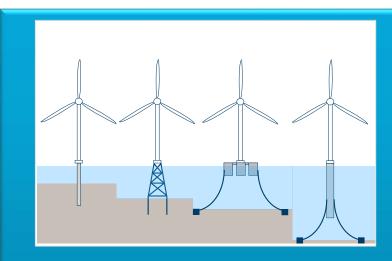
# Nordic Offshore Wind R&I Centre Vision: Accelerating deployment of offshore wind Mission: a strong platform for academic and industrial collaboration focused research within prioritized areas







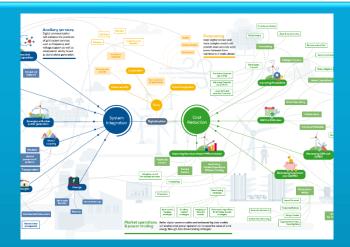
## Research priorities



- Support structures
- Marine operations
- Materials



- Grid connection
- System integration
- Energy storage



- Digitalization
- Asset management
- Wind farm control

- ✓ New knowledge and reduced risks
- **✓** Innovation and value creation
- ✓ Reliable and affordable energy supply













