

Norwegian Offshore Wind





En sterk leverandørindustri

Offshore Wind Developers

	EPCI					
Development & engineering	Turbine supply	Balance of plant	Installation & commissioning	Operation & maintenance	Life time extension & decommissioning	Ecosystem
Site investigation and surveys	Marshalling yards	Turbine foundations	Turbine installation	Maintenance services	Life time extension	Law
Design and engineering	Turbine logistics	Assembly yards	Foundation installation	Inspection services	Decommissioning	Finance
Project management	Drive chain	Electrical cables	Offshore and onshore cable installation	Vessels		Marketing
Consenting and development services	Power conversions and supplies to the turbine	Electrical systems	Offshore and onshore substation installation	O & M ports		Digitalisation and systems
		HVAC/HVDC/Substations	Installation port	Training and certification		Universities and research institutions
		Secondary steel work	Installation logistics	Monitoring		Government and other public institutions
		Mooring	Commissioning			
		Equipment for foundation and transition piece				

We develop world leading supply chains within floating wind

Områder for flytende havvind



Must win battles



Home market



Innovation



Export development

Norges ambisjon: 30 GW innen 2040

Offshore wind parks

Floating: Utsira Nord 1,5 GW

Bottom fixed: Southern North Sea II



Consortium

Fred Olsen Renewables – Ørsted – Hafslund

Shell – Lyse Energi - Eviny

Equinor – Vårgrønn

Equinor - RWE

Norseman – EnBW m. fl

Vårgrønn – Agder Energi – Corio Generation

Aker Offshore Wind- Statkraft- BP

**Aker Offshore Wind – Statkraft – Ocean Winds
(Engie+EDPR)**

**Norsea Group – Parkwind – Copenhagen Infrastructure
Partners**

**Norsea Group – Parkwind – Copenhagen Infrastructure
Partners - Hammerfest Energi – Varanger Kraft**

Seagust (Ferd+Arendal Fossekompani) - Vattenfall

Norsk Havvind - TotalEnergies – Iberdrola

Deep Wind Offshore - EdF

RWE, Havfram, NTE

Agder Energi, Corio Generation

Source Energie – Odfjell Oceanwind

Zephyr – RES

Name

Utsira Nord

Sørliche Nordsjø

Blåvinge

X

X

X

X

X

X

X

Brigg vind

X

X

X

Ventyr

X

Blåse

X

X

X

Skjoldblad

X

X

X

X

X

X

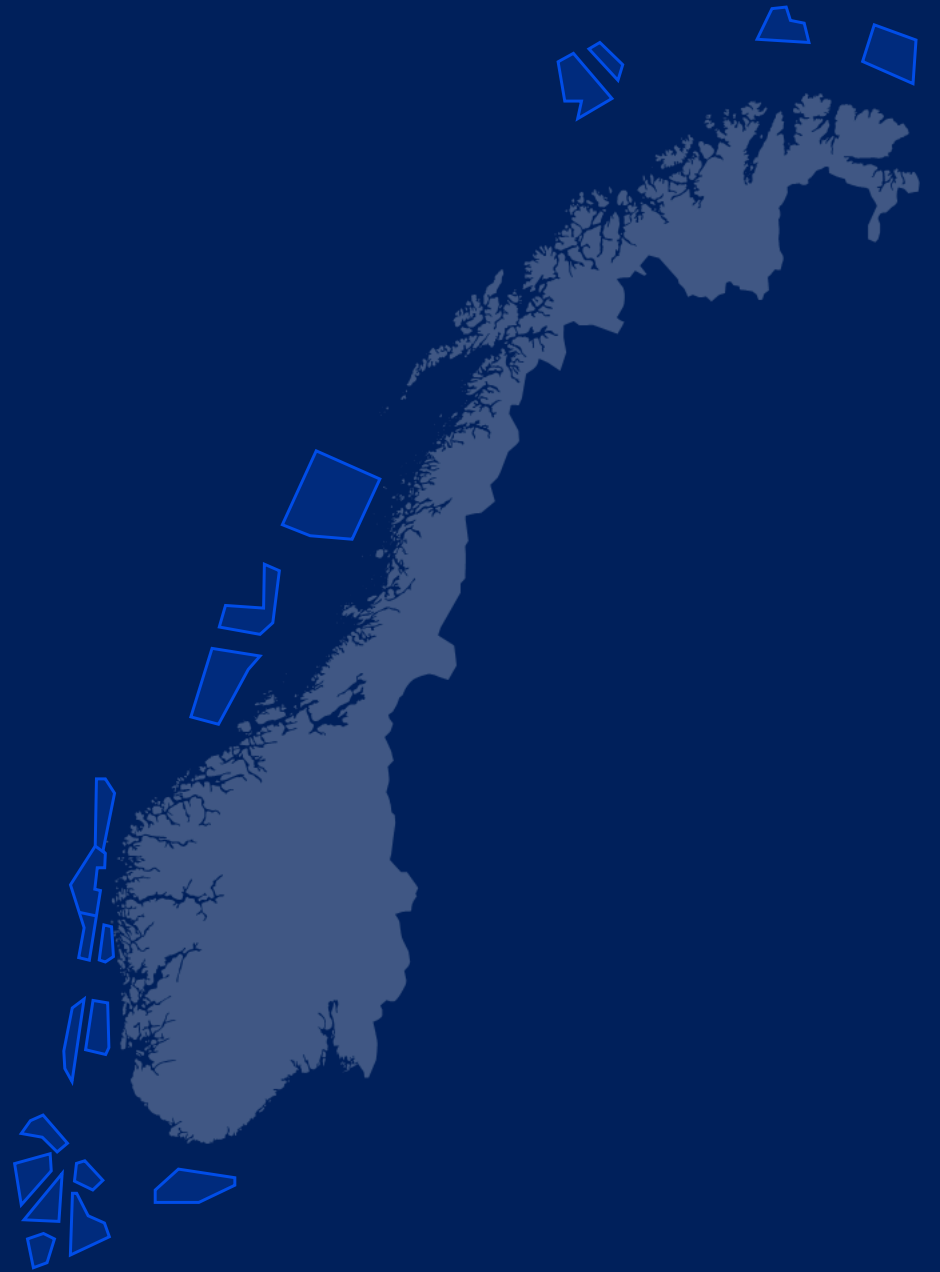
X

Siravind

X

New potential areas in Norway

75 percent floating





Company X



FLAGSHIP



Bluewater



SeaTwirl



Zephyros



TetraSpar

Company Y



Hexicon

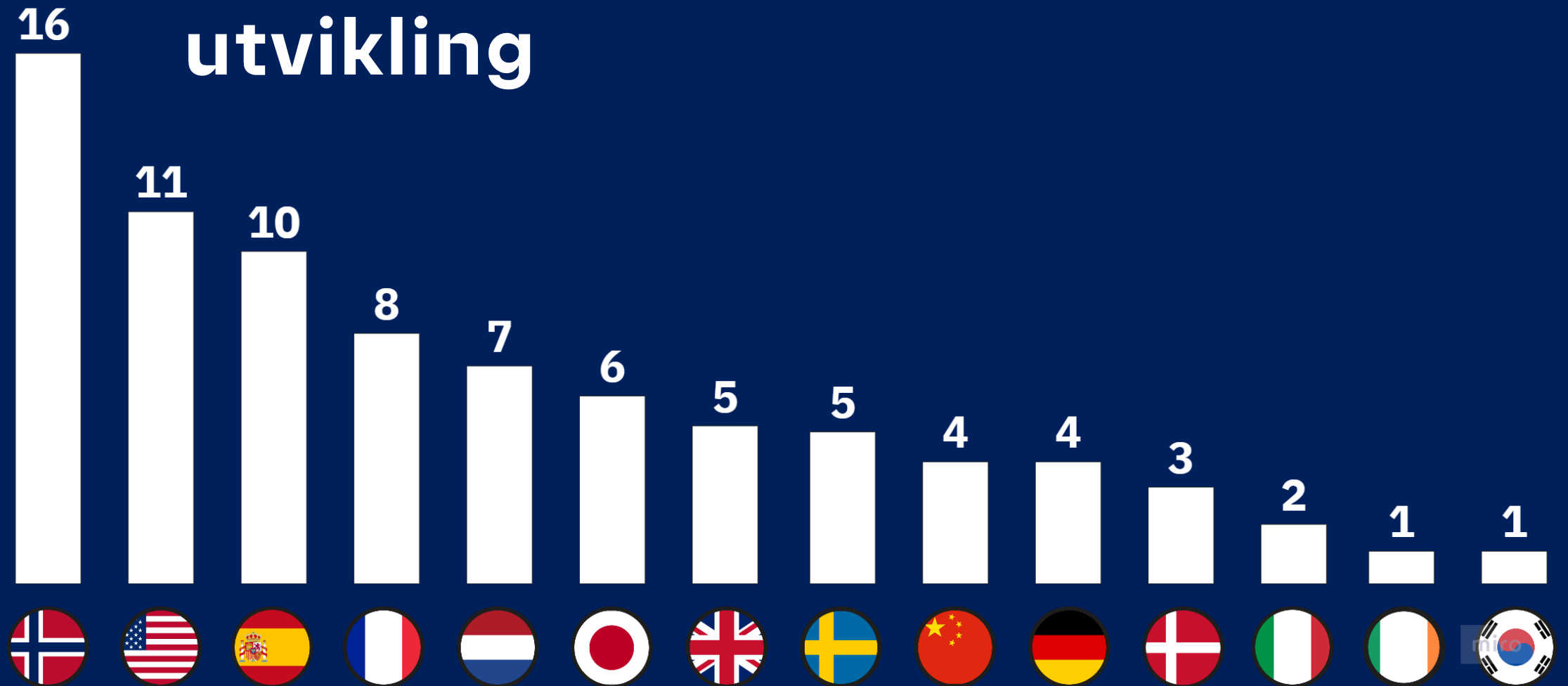


Flex2Power

Company z

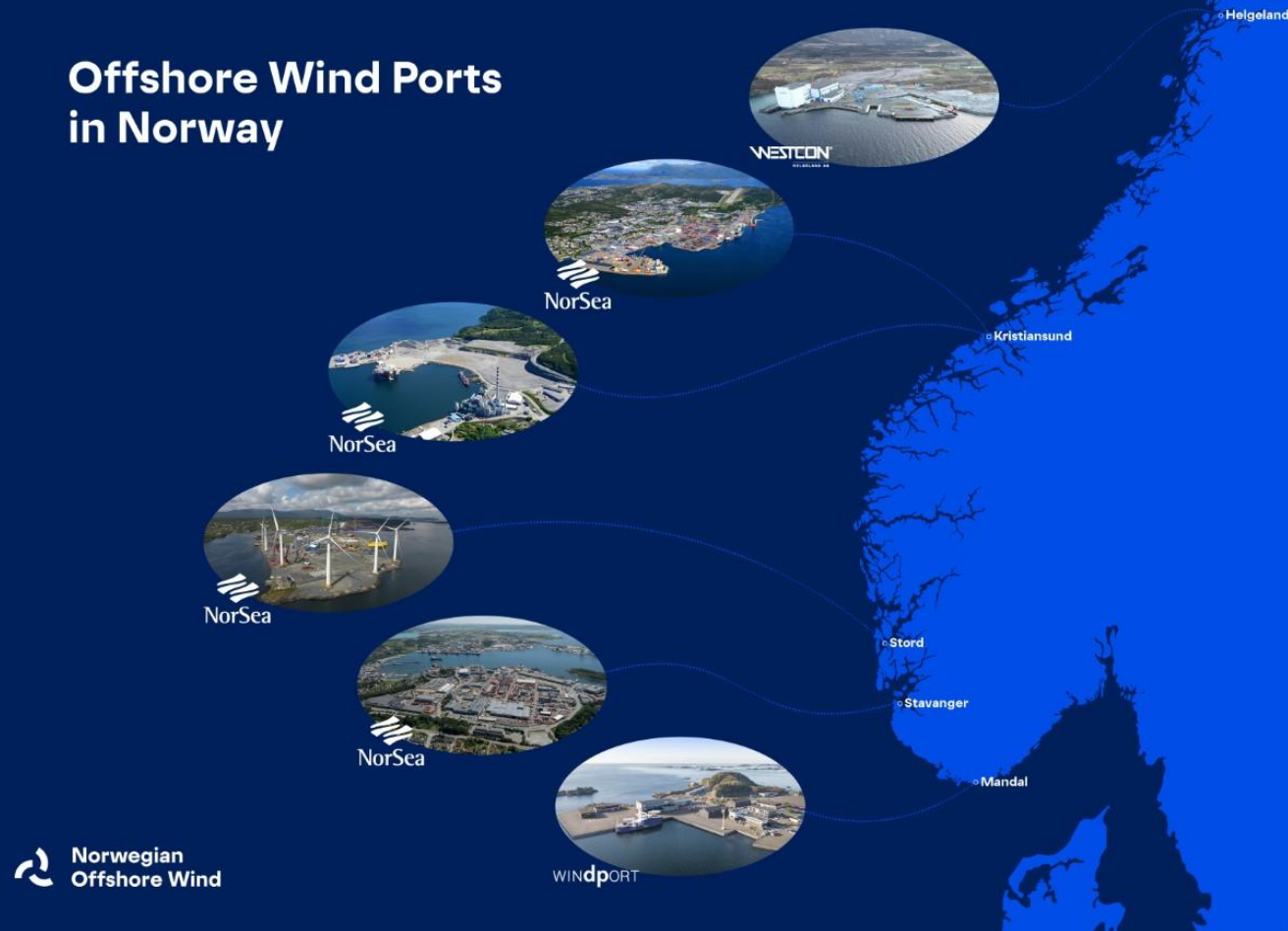
Karmøy

Flytende teknologier under utvikling



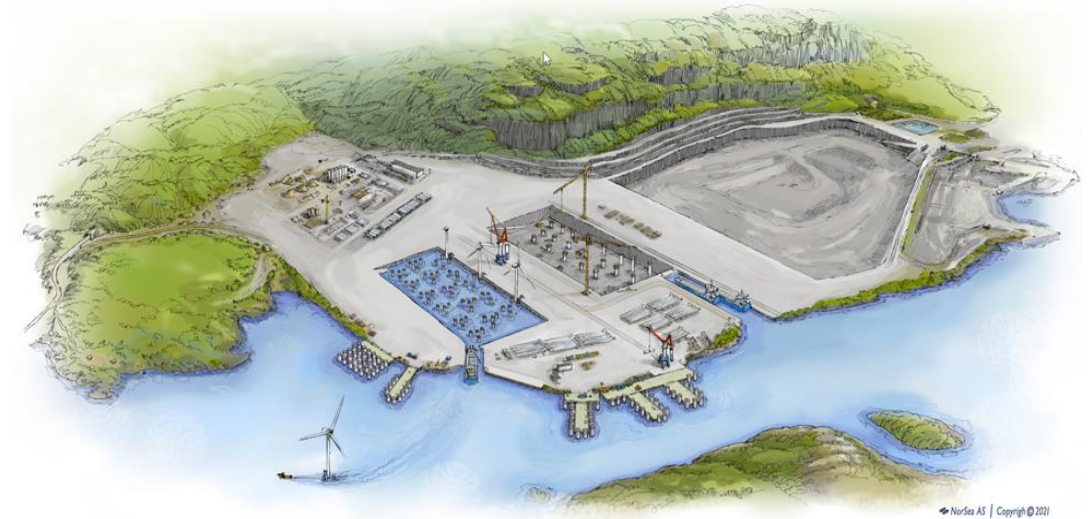
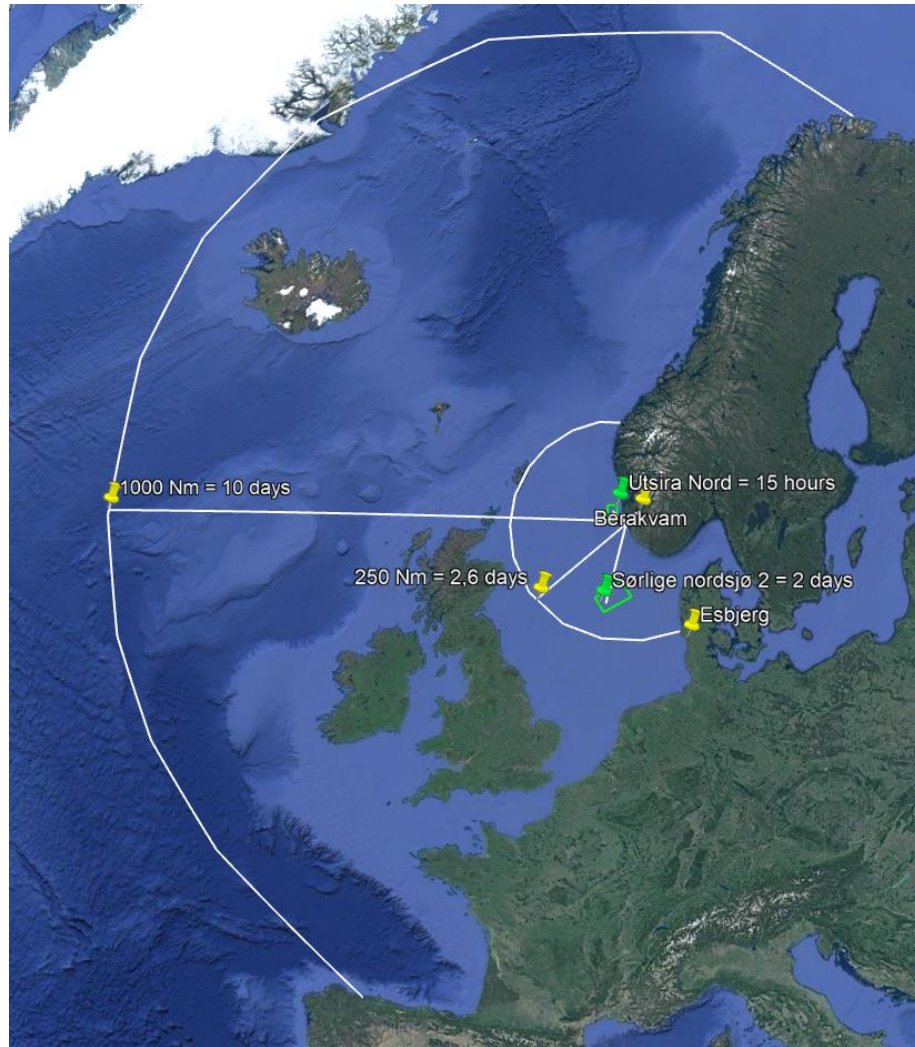
Port & Infrastructure – building global supply chains

Offshore Wind Ports in Norway

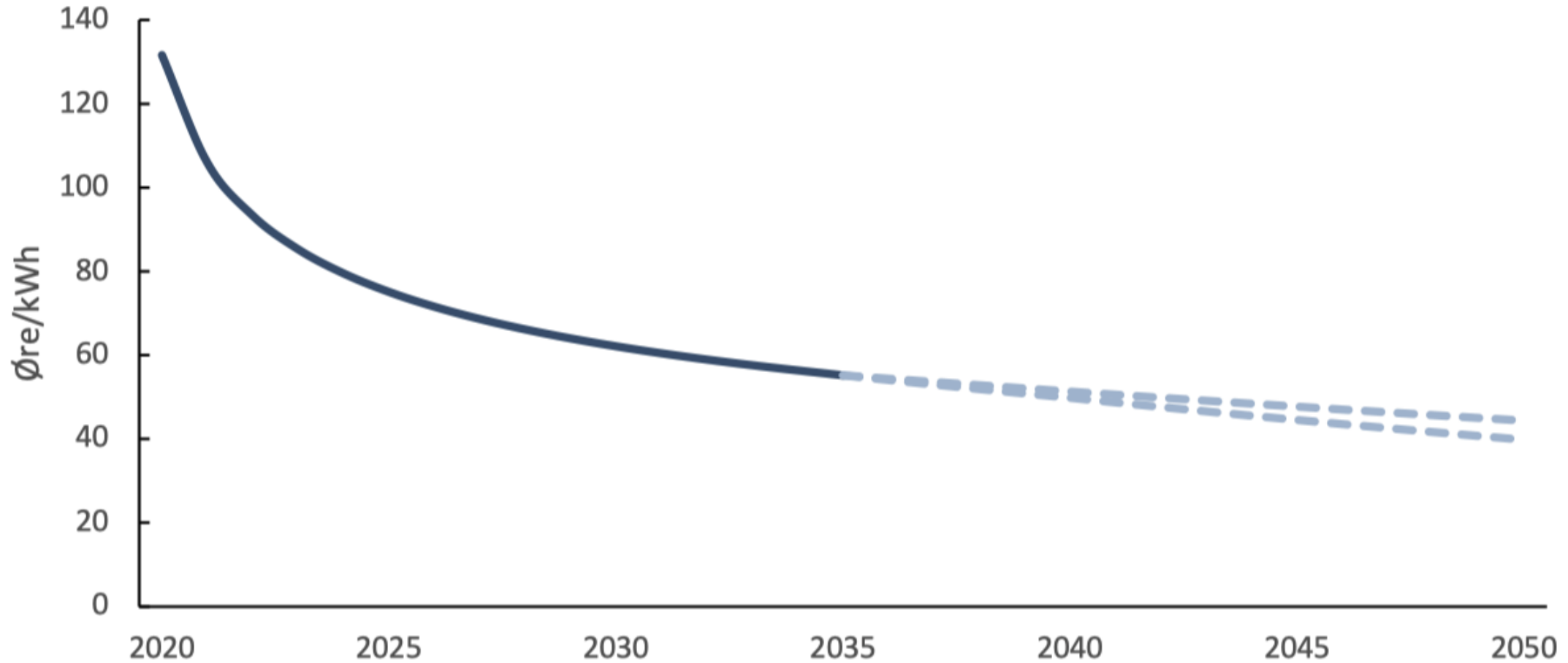


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Construction facilities for concrete foundations



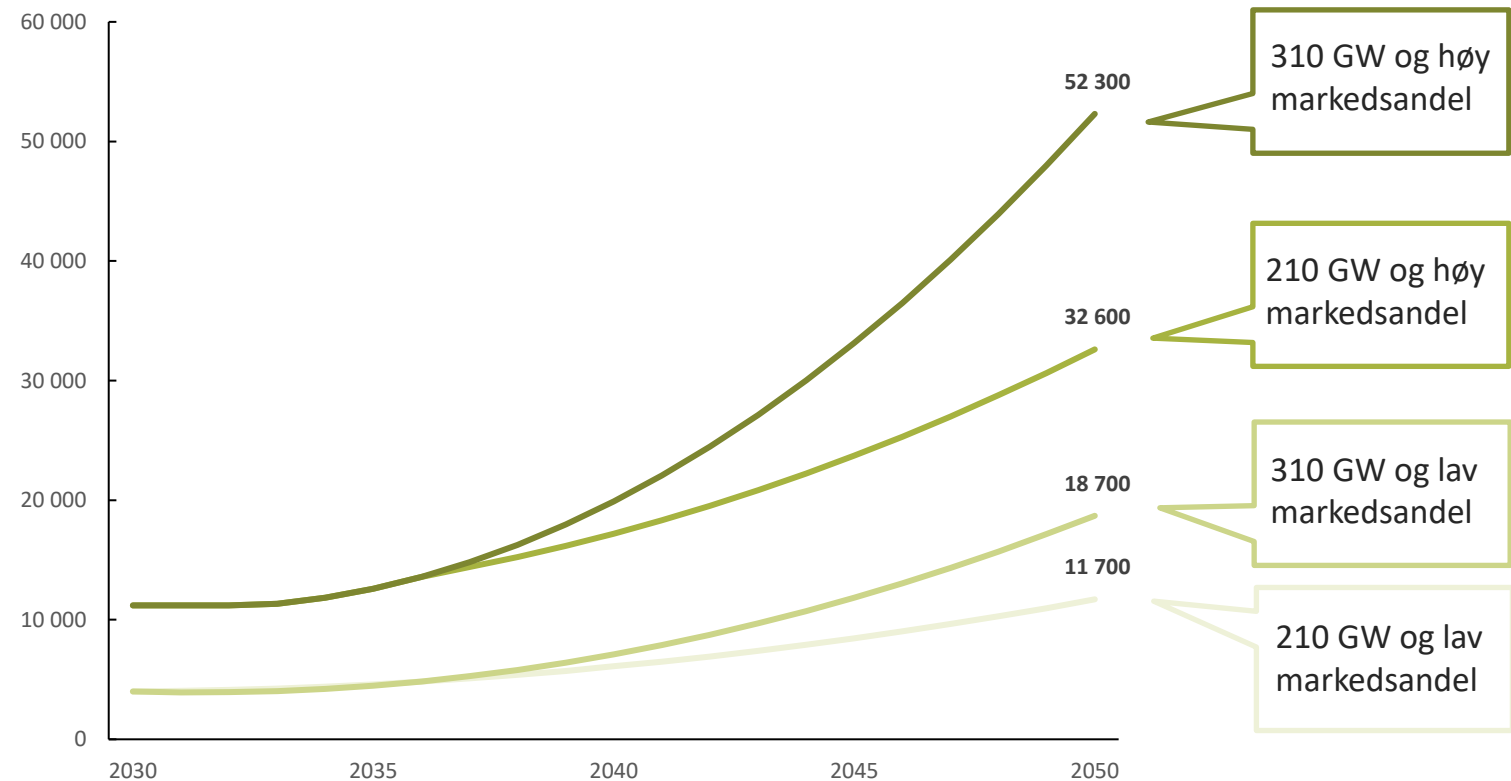
Forventet utvikling i LCOE for flytende havvind (2022-priser)



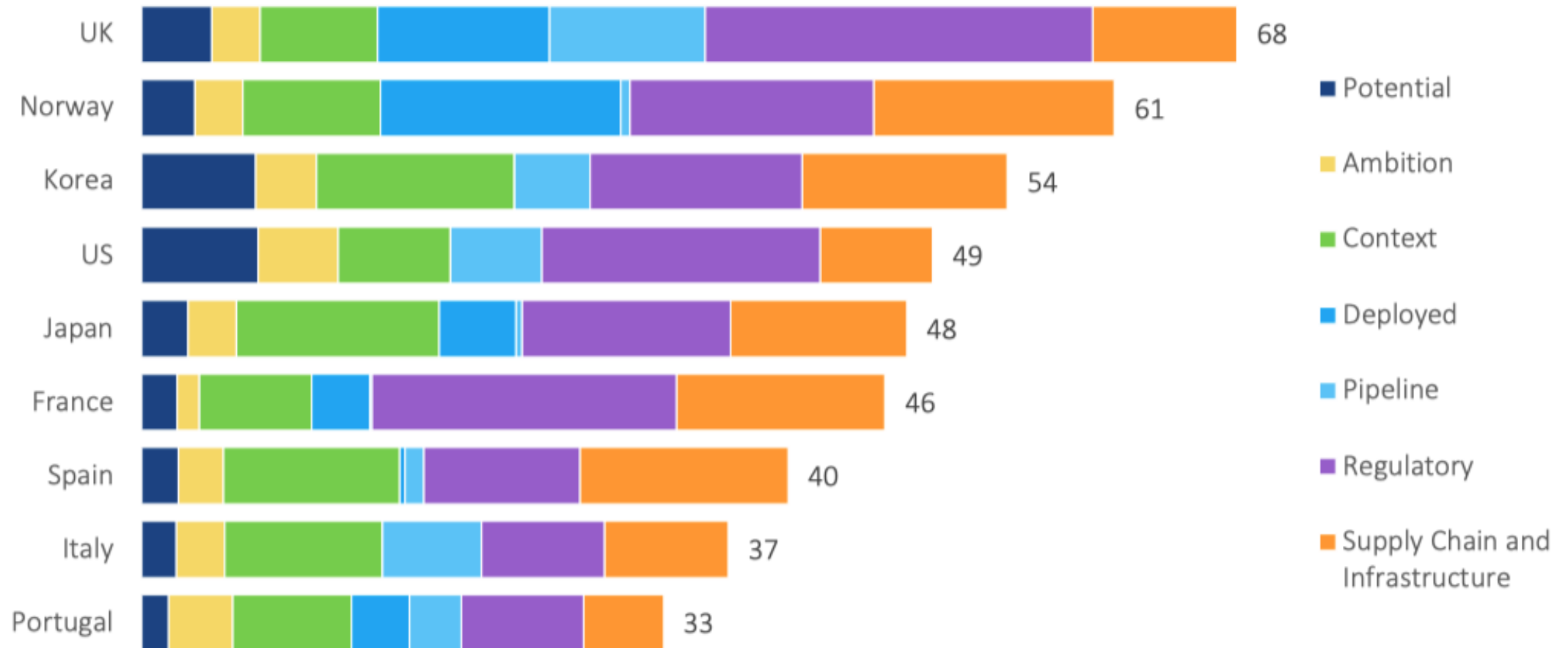
Omsetningen i en norskbasert industri for flytende havvind kan understøtte betydelige sysselsettingseffekter de neste tiårene.

Totale sysselsettingseffekter på opp mot **52 300** sysselsatte i 2050, om man lykkes med å bygge en ledende verdikjede.

(inkl. ringvirkninger)



Market Attractiveness Index for Floating Wind



En sterk norsk eksportindustri

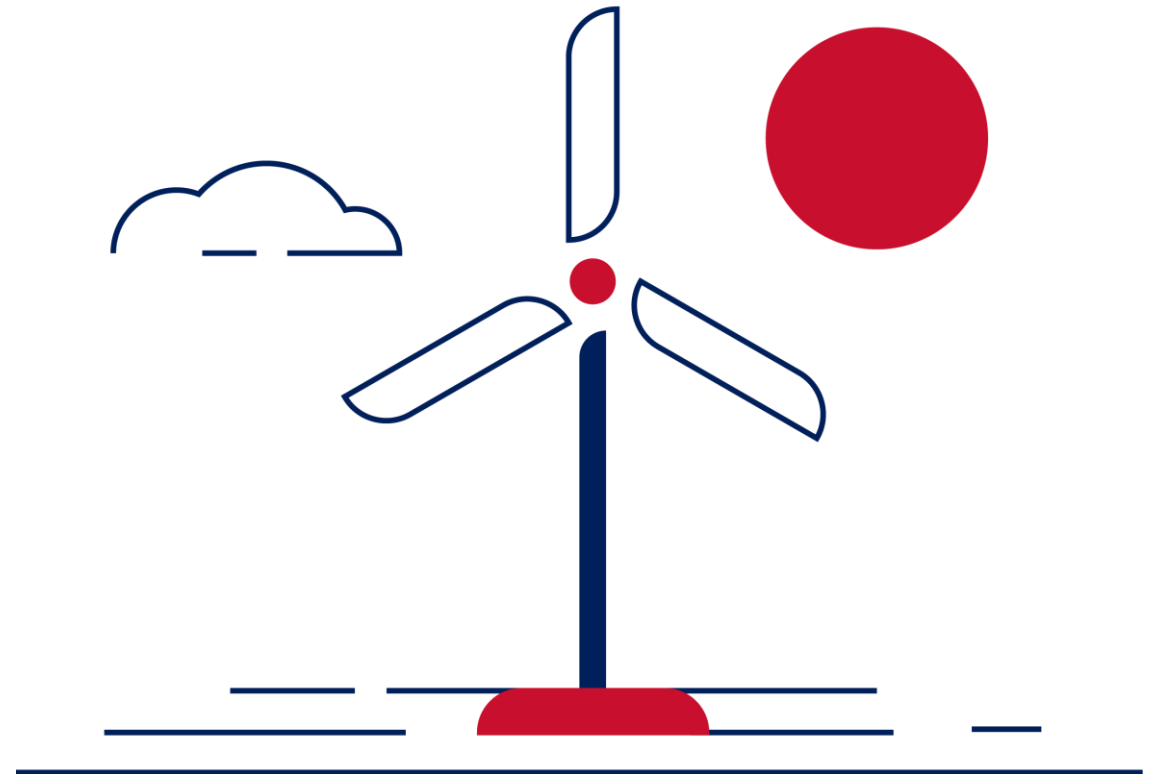
- **Teknologi og innovasjon**
- **Produkter og tjenester**
- **Grønn elektrisk kraft**



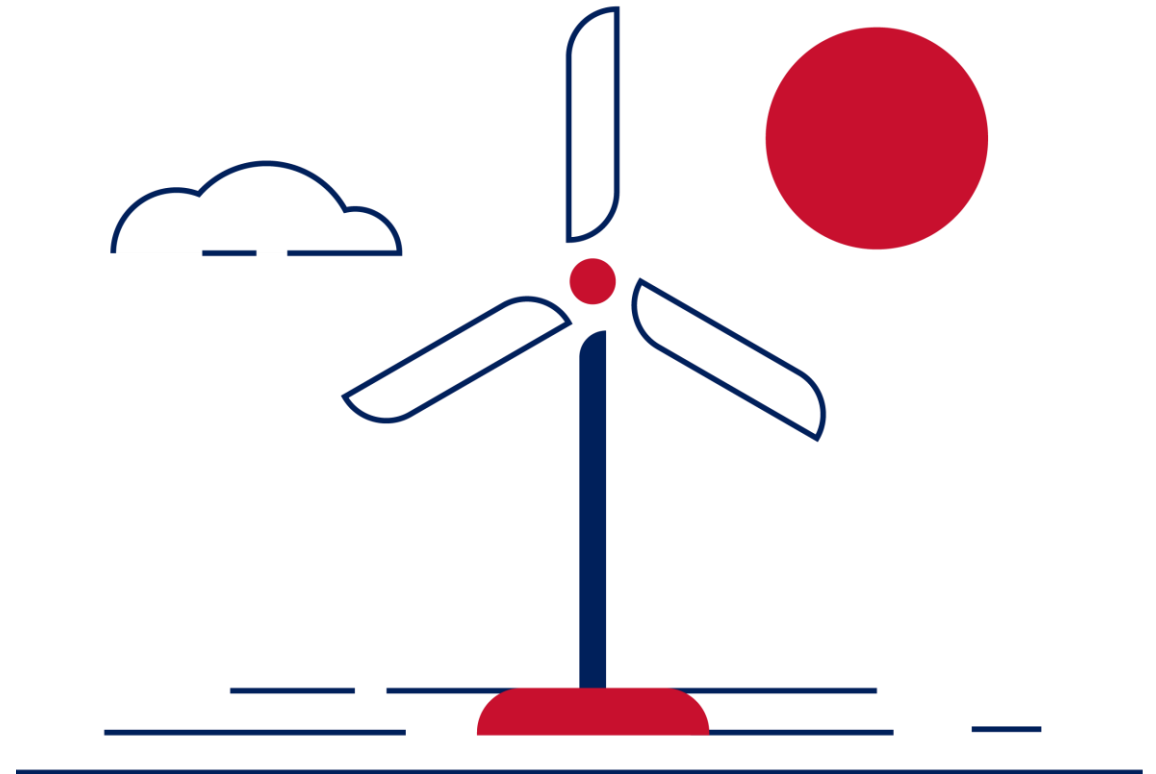
Vårt budskap til myndighetene



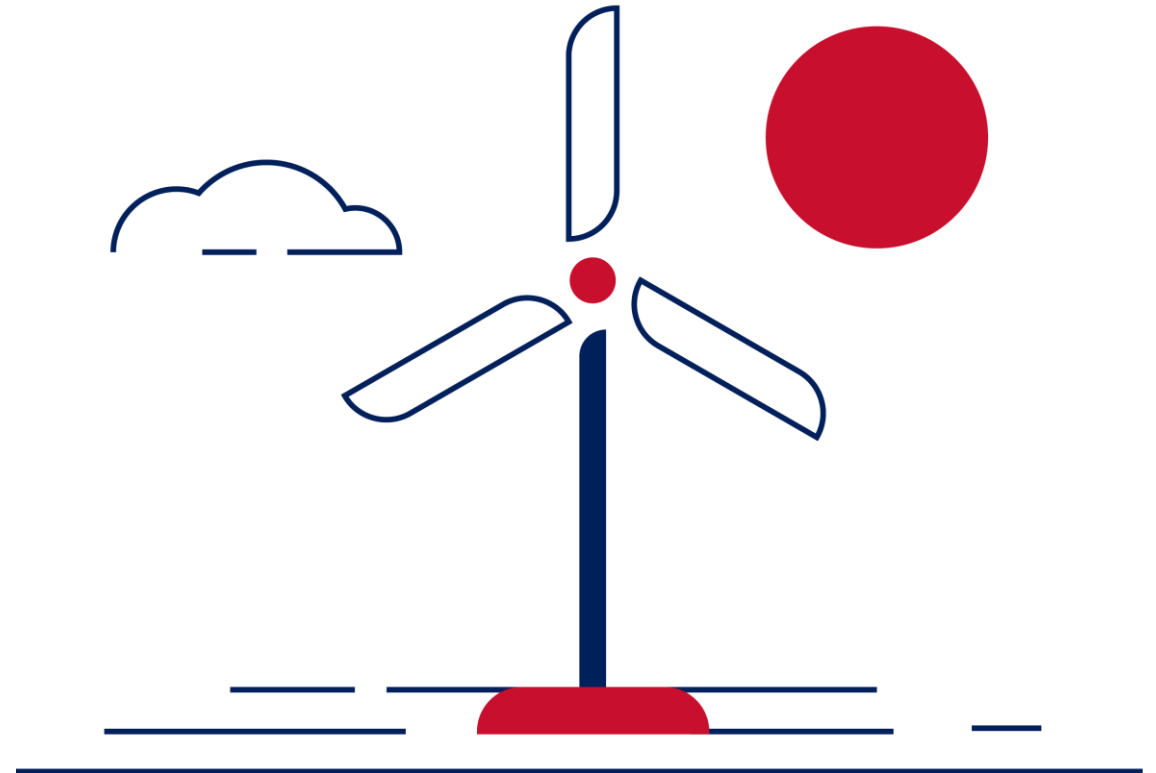
Regjeringen må oppruste apparatet rundt havvind. Vi klarer ikke ambisjonene de har satt med mindre både NVE og OED har nødvendig kompetanse og kapasitet.



Regjeringen må legge fram en bindende plan for volum og kapasitet i kommende utlysninger.



Regjeringen må legge fram en klar plan for rekruttering og utdanning til havvindnæringen



Det må etableres norske baser og byggesteder. Norge har naturgitte forutsetninger med mange dypvannshavner og skjermede arealer. Dette er langsiktige investeringer, og vi ber regjeringen vurdere virkemidler for å sikre kapitaltilgang til slike prosjekter.



