

# Kva trur me at me kan få til i Norge?

## Me er havvindregionen – korleis oppretthalda denne posisjonen?

Caroline Whittle,  
Norwegian Offshore Wind





equinor, sika, uptime, rts, AUTRONICA, Esgian, EnerMech, SEB, FLOATING POWER PLANT, MAGNORA OFFSHORE WIND, ecoBearings, G F M S, RENEWABLE STRATEGY, GEO PROVIDER, VISSIM, Microsoft, KLUGE, ABB, SOLSTAD OFFSHORE, LINJEBYGG, ALTRAD, CSUB, DNB, Lyse, 3B, geowynd, Fred. Olsen Ocean AS, SCAN REACH, offb, MAERSK SUPPLY SERVICE, norphonic, VRYHOF, Shell, PORT OF STAVANGER, Inventura, KONGSTEIN, ROSENBERG, SIEMENS Gamesa, SIEMENS energy, BILFINGER, PRESSERV, NTE, moreld ocean wind, SOT, NORTHCOM, OFFSHORE KINETICS, OTD ENERGY 21, CLOVERS, EDF renewables, AeronMollier, KONGSBERG MARITIME, KONGSBERG NORCONTROL, SIMON MØKSTER SHIPPING, Cranemaster, Hyndla, hexicon, OceanGric, AKVAPLAN, niva, EAB ENGINEERING, GE, ORIGO, BELZONA, Meventus, KYMAR, EY, AF, Eelum, SELMER, ØGLAND SYSTEM, HENTEC, DEEPOCEAN, DF, bring, TRIAD, ACE AQUATEC, BREEZE, saitec, marine aluminium, RIGMEC a/s, Applus, cegal, GCCD, GLAMC, pwc, COWI, HAUGALAND NÆRINGS-PARK, Axnor, abyss, gard, GLOBAL MARITIME, Hendrik Veder, AKER OFFSHORE WIND, moreld flux, KTM shipping as, THOMMESSEN, ARNTZEN DEBESCHE, VIND TECHNOLOGIES, MOHOLT GROUP, AMUNDSEN DIVING, Randberg Group, Petrofogg, Corvus Energy, iSQR, Radøy Gruppen, PXO, Baker Hughes, reg, WIKBORG REIN, IFE, proactima, IPS NORD, Norseman Wind as, WINDSPIDER, NorSea, RINA, CLP, ONS, FOCUS GROUP, NORTHERN PUNCHING, iSURVEY, PENTAGON, A. OLUFSEN SHIP & OFFSHORE, Norcable, Havfram, Atlas Copco, METCENTRE, Odfjell Oceanwind, ENERGY INNOVATION, INSTALL it, MOBYDO, NORMOD, Grette, P5 Consulting, SAFER, BEN LINE AGENCIES, XI WIND, Tschudi, PartnerPlast, PARISCO, ELEVON, ASCO, CoreMarine, IDEA SOLUTIONS AS, Deep Sea Anchors, JUMBO, Saferock, TGS, PDS GRUPPEN, UL, SparebankenVest, ESPELAND Energi AS, SINTEF OCEAN, NORDIC INNOVATORS, MRC Global, ilder, agito, bondura, WESTCON, EIGERSUND NÆRING OG HAVN KF, FrontEnergy, Fred. Olsen Seawind, MARLOG, SHORELINE, ROXTEC, subsea 7, bouvet, DR. TECHN. OLAV OLSEN, JOTUN, Østensjø Rederi, EXPLOR CROWD, MASKINERING & SVEISESERVICE AS, TotalEnergies, INJE INDUSTRI, Hafslund, ECO, Fearnley Offshore Supply, Clarksons Platou, WESTCON, BKK, MENTO, FORCE TECHNOLOGY, SEMCO, SUBDCO MARINE SERVICES, CAN, WIND CARRIER, Crosby, WERGELAND BASE AS, SCANTECH, BAGGERØD, SEABROKERS GROUP, VESTKONTAKT AS, BLUEFLOAT ENERGY, HAGLAND, INC GRUPPEN, EUROJURIS HADGESUND, solar, Applica TESS, CORPORATE COMMUNICATIONS, KAEFER ENERGY, itera, ScanSense, XRGIA, ADAPTİK, KHT, RWE, ULMATEC, EIDEL, norwegian offshore rental, nor, SEAWIND, RaKon, INNOVA, BLUE WIND, LEIRVIK, HAVIND, MIROS, SH GROUP, TechSafe, PARTRAC, scanmatic, BSA, WESTCON, HANSEN PROTECTION, OCEANEERING, Multiconsult, Caëra, HTS Dynamics, OWC, LOS, RelyOn Nutec, SEMCON, AANDERAA, BDO, SEAMAR, TRONDS MARINE SERVICE, INTERMOOI, ANKO, GAC, Marine Technologies, HANSEN PROTECTION, OCEANEERING, Multiconsult, Caëra, STS, PASSER GROUP, wood, NGI, GS, SRI, Deloitte, Haavind, THOME GROUP, spoor, NTNU, PGS, FAGSKOLEN ROGALAND, KARMSUND HAVN, Nor-Shipping 2021, GEODATA, NORKYST, SEVAN SSP, WIND CATCHING, HG, TECHNO DIV, LAPWING, BERGEN, Njordur AS, Karmsund Maritime OFFSHORE PRODUCTION AS, tampnet, NORCE, SPEO, AMON, VICINAY marine, invento team, OSM, MIKO, INNOVASJON, AKERBLÅ GRUPP, Wiersholm, propell, saga, imenco, SMART SOLUTIONS, VERTIKALSERVICE, Process Partner, BIROVIEW, VINDE, riskpoint, ONIX work, GEARConsult, NEKKAR, SEWELL, MARITIME, AKERBLÅ GRUPP, fugro, Stavanger kommune, FREKHAUG STÅL, SEAGUST, KLAVENESS MARINE, UTEC, norwegian electric systems

# Organisasjonen



**Arne Vatnøy**  
Communication Manager



**Arvid Nesse**  
Cluster Manager



**Astrid Green**  
Business Development  
Manager



**Caroline M. Whittle**  
Business Development  
Manager



**Cecilia Girard-Vika**  
Project Manager



**Christopher Harman**  
Innovation Manager



**Hanne Tvedt**  
Project Manager



**John-Atle Rasmussen**  
Administration Manager



**Marius Selsø Håkonsen**  
Project Manager



**Tor Arne Johnsen**  
EU Advisor



**Martine Farstad**  
EU Advisor/Communication



**We develop world leading supply chains within floating wind**

# Must win battles



**Home market**



**Innovation**

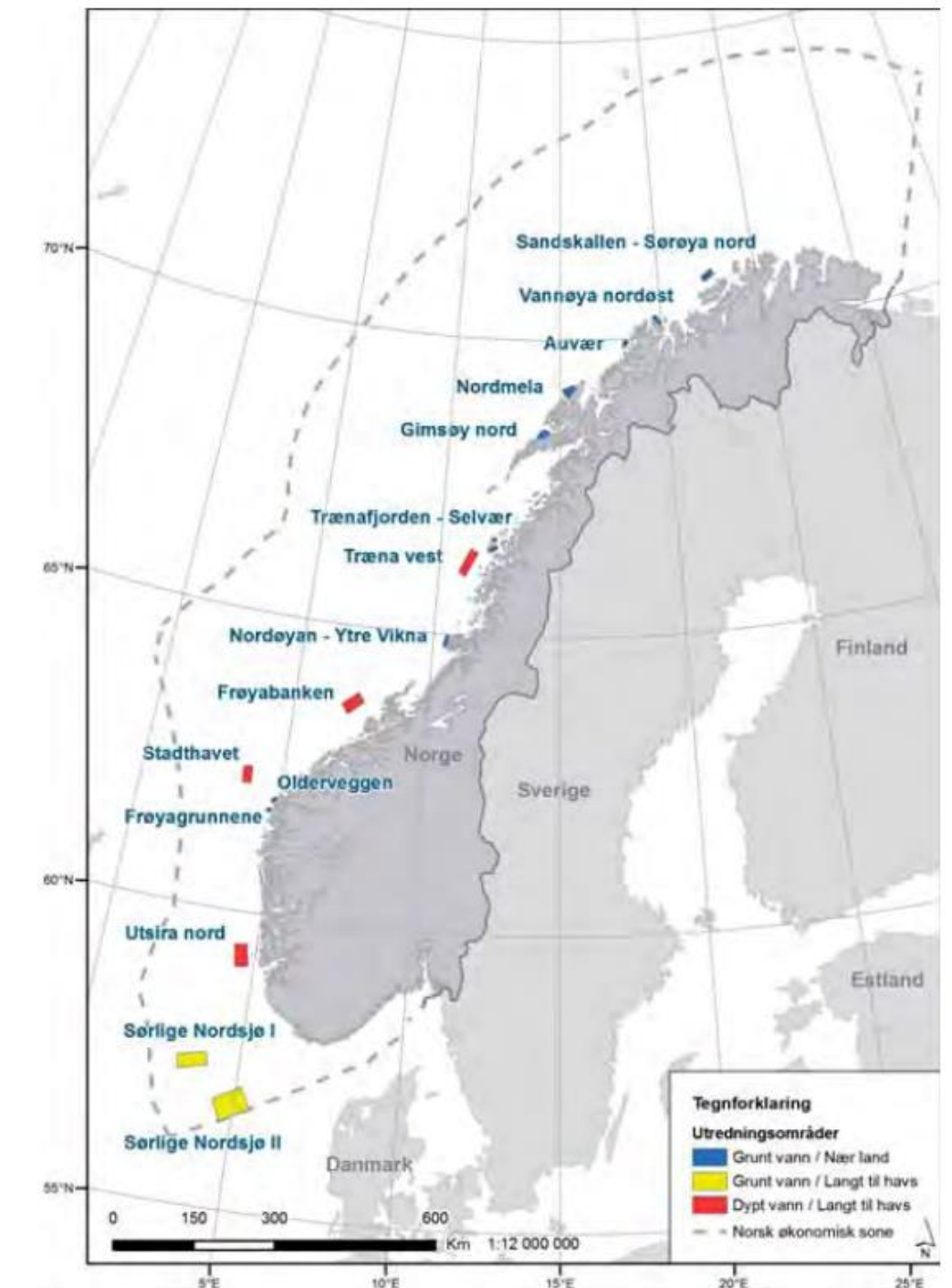


**Export development**

# Home market



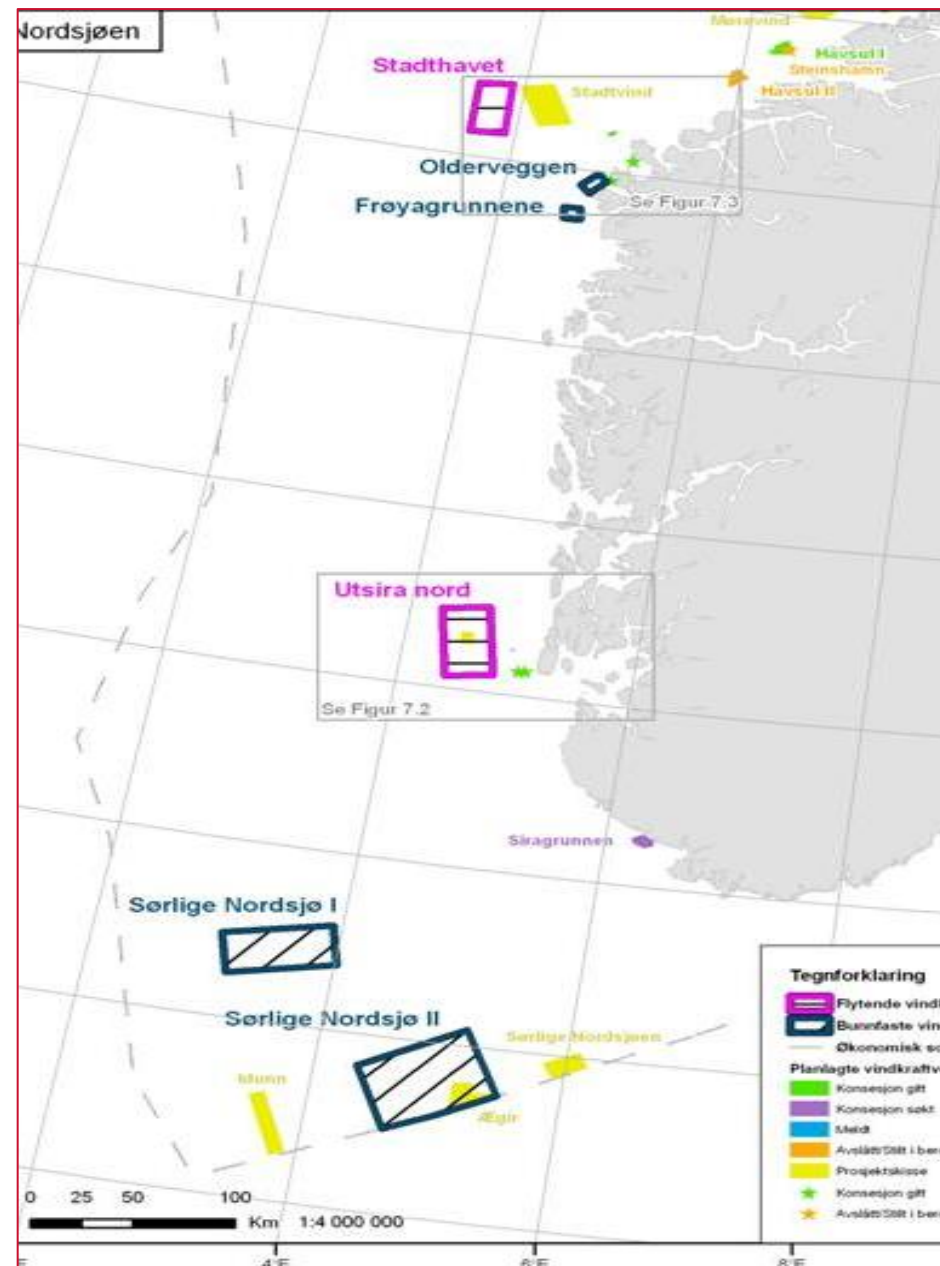
# Norway's goal: 30 GW by 2040



# Utsira North and Southern North Sea II

Floating: Utsira North

Bottom fixed: Southern North Sea II





## Consortium

**Fred Olsen Renewables – Ørsted – Hafslund Eco**

**Shell – Lyse Energi - Eviny**

**Equinor – Vårgrønn**

**Equinor – Hydro - 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**

**Seagust (Ferd+Arendal Fossekompani) - Vattenfall**

**Norsk Havvind - TotalEnergies – Iberdrola**

**Deep Wind Offshore - EdF**

**Magnora Offshore Wind.**

**RWE, Havfram, NTE**

**Agder Energi, Corio Generation**

**Source Energie – Odfjell Oceanwind**

## Name

## Utsira Nord

## Sørliche Nordsjø

Blåvinge

X

X

X

X

X

X

X

X

X

X

Ventyr

X

X

X

X

Skjoldblad

X

X

X

X

X

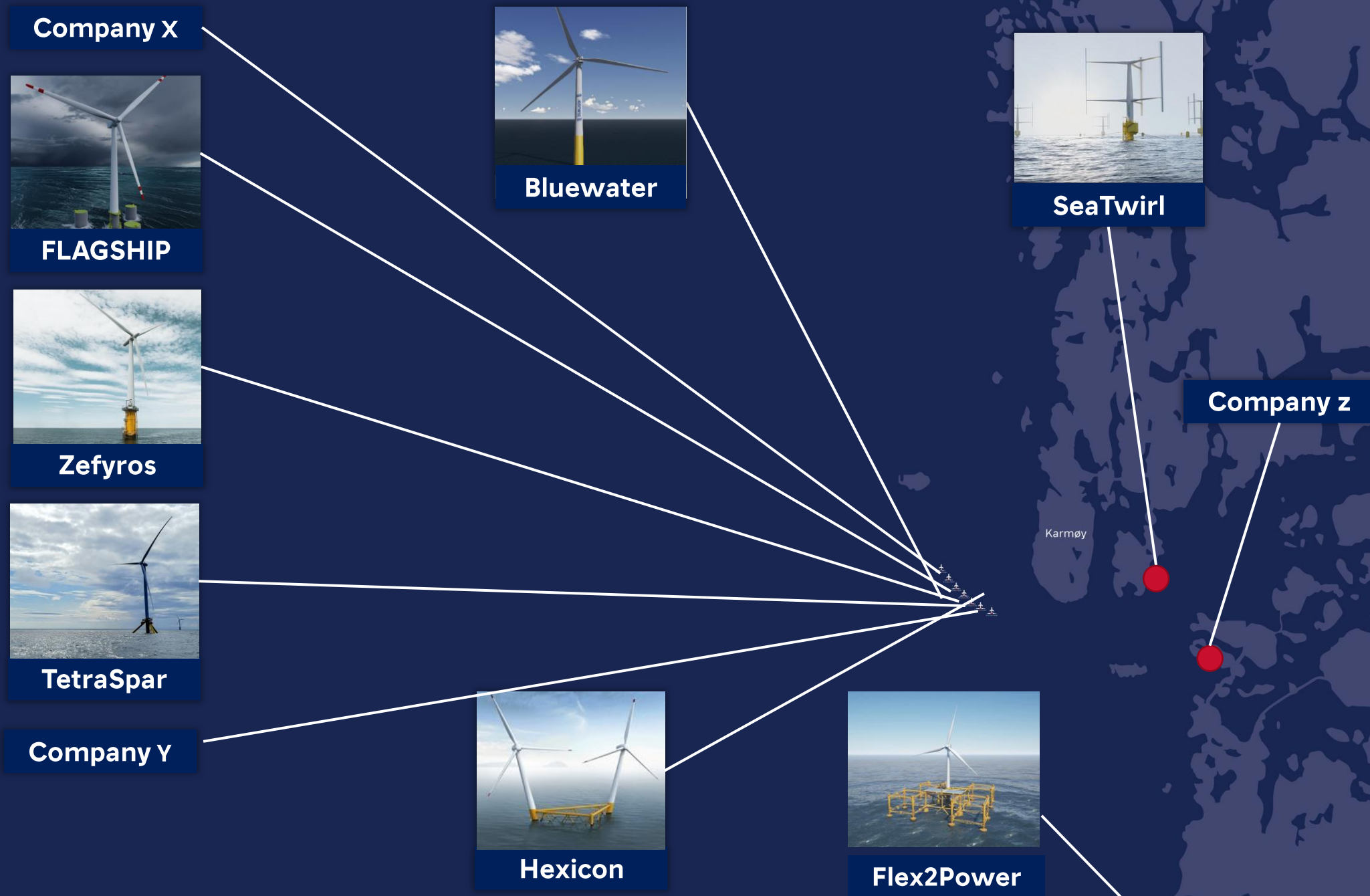
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# Innovation





**Company X**



**FLAGSHIP**



**Zephyros**



**TetraSpar**

**Company Y**



**Bluewater**



**Hexicon**



**Flex2Power**

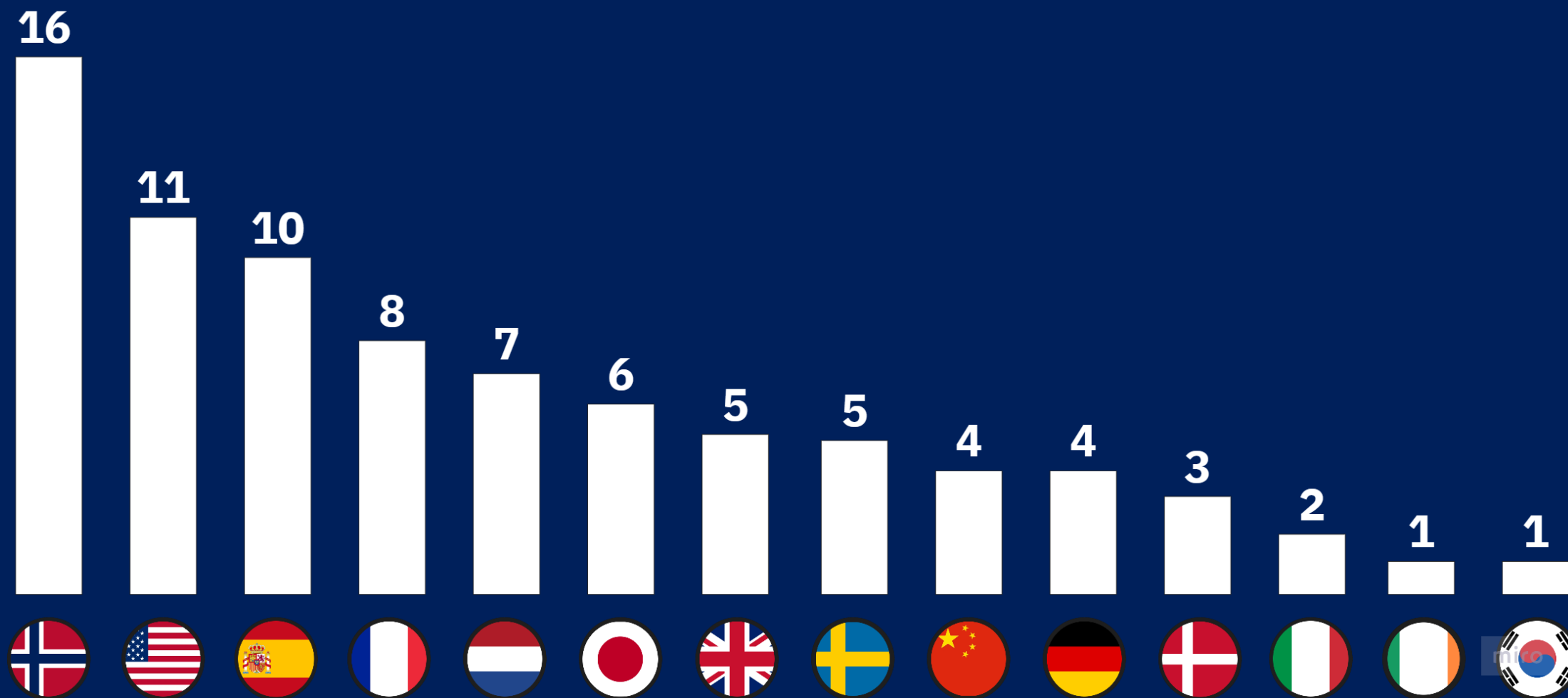


**SeaTwirl**

**Company z**

Karmøy





# Export development



# Visit Now

- **Cluster to cluster collaboration**
- **Aimed at specific projects**
- **Often outside of the big conferences**
- **A result of market research**



# A



**SPAIN**



**USA**



**UK**



**SWEDEN**



**FRANCE**



**IRELAND**

# B



**JAPAN**



**SOUTH KOREA**



**ITALY**



**PORTUGAL**



**GERMANY**



**BALTICS**



**DENMARK**



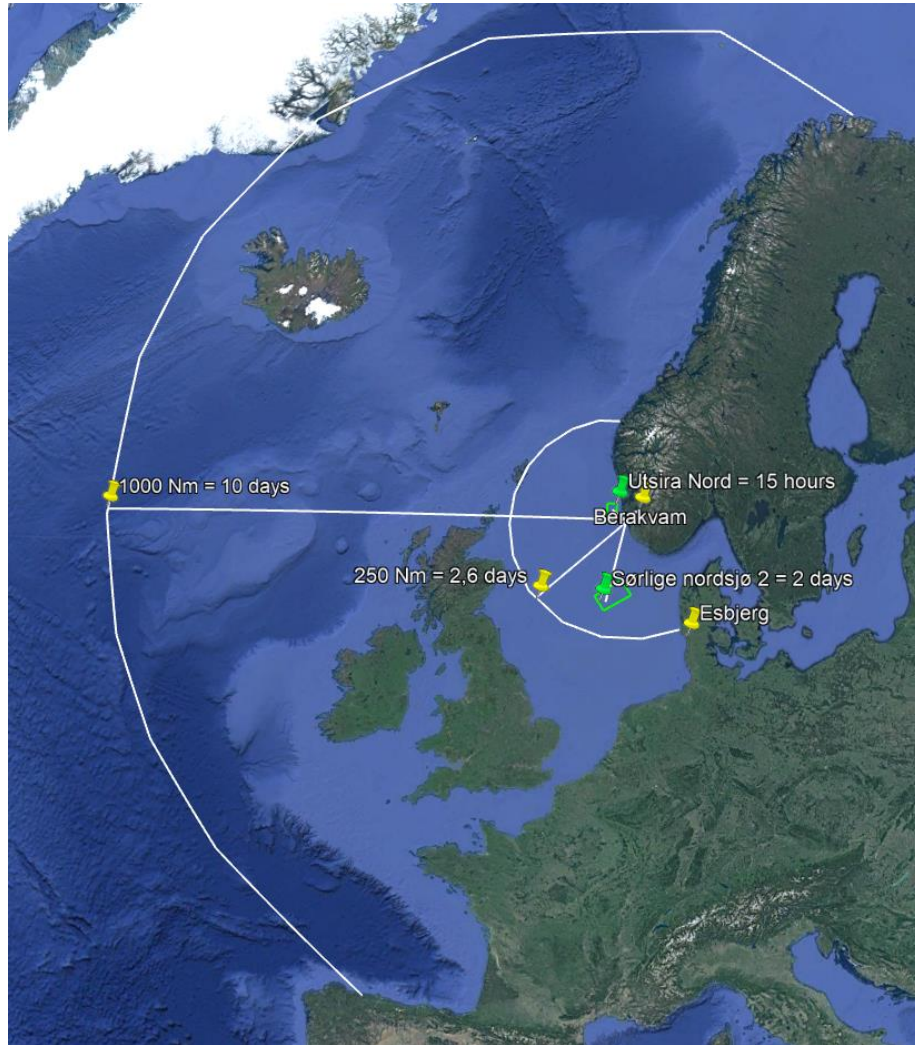
**POLAND**

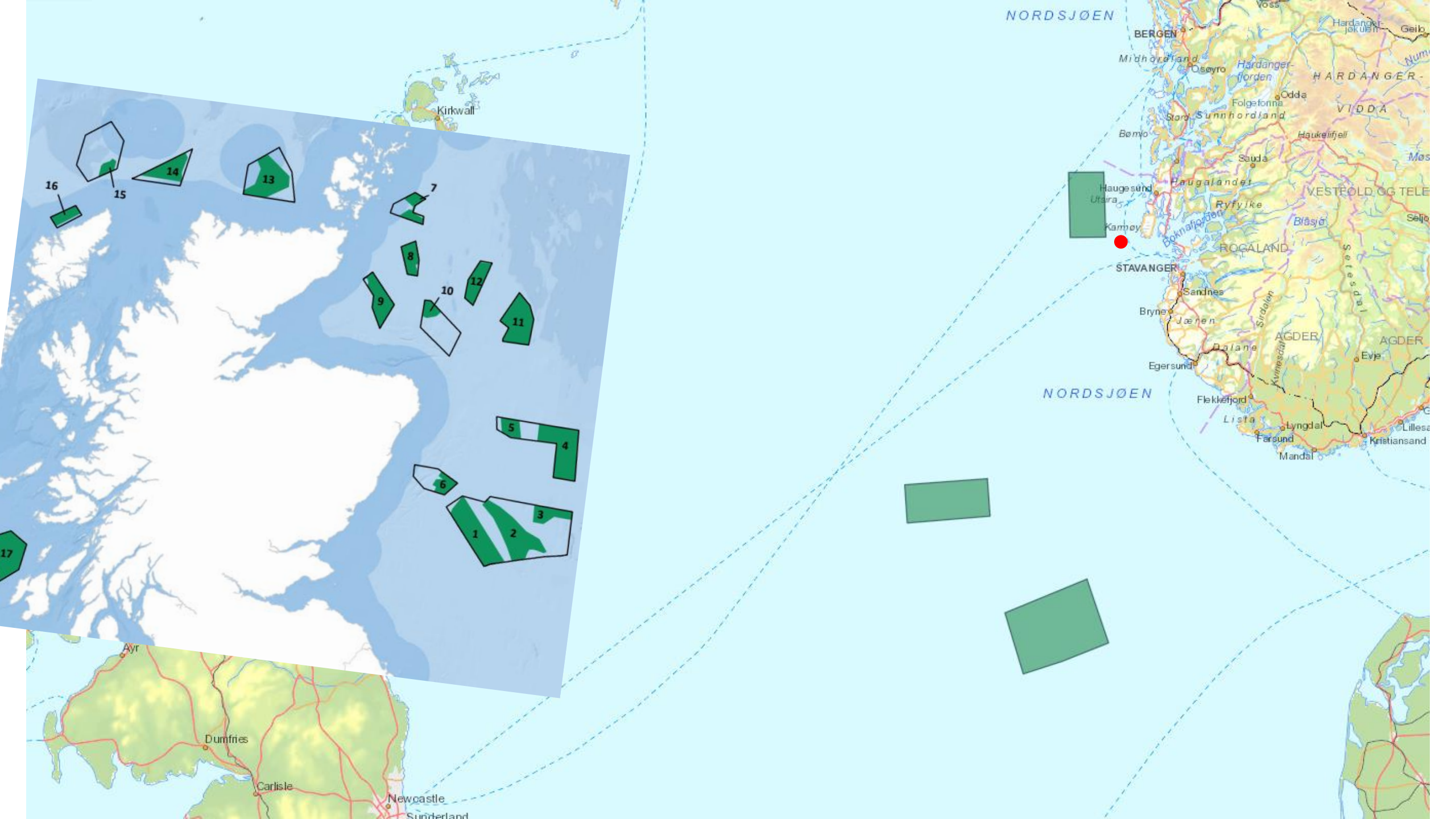


**GREECE**



# Construction facilities for concrete foundations





EUROPA 2000 000 MNOK 2030 - 2050



UTSIRA NORD 40 000 - 60 000 MNOK 2027 - 2030



METCENTER 3500 MNOK 2021-2025



GISMARVIK

HAUGESUND

DOMMERSNES

STORD



RAPPORT

## FLYTENDE HAVVIND

ANALYSE AV MARKEDET OG NORSKE AKTØRERS OMSETNINGSPOTENSIAL



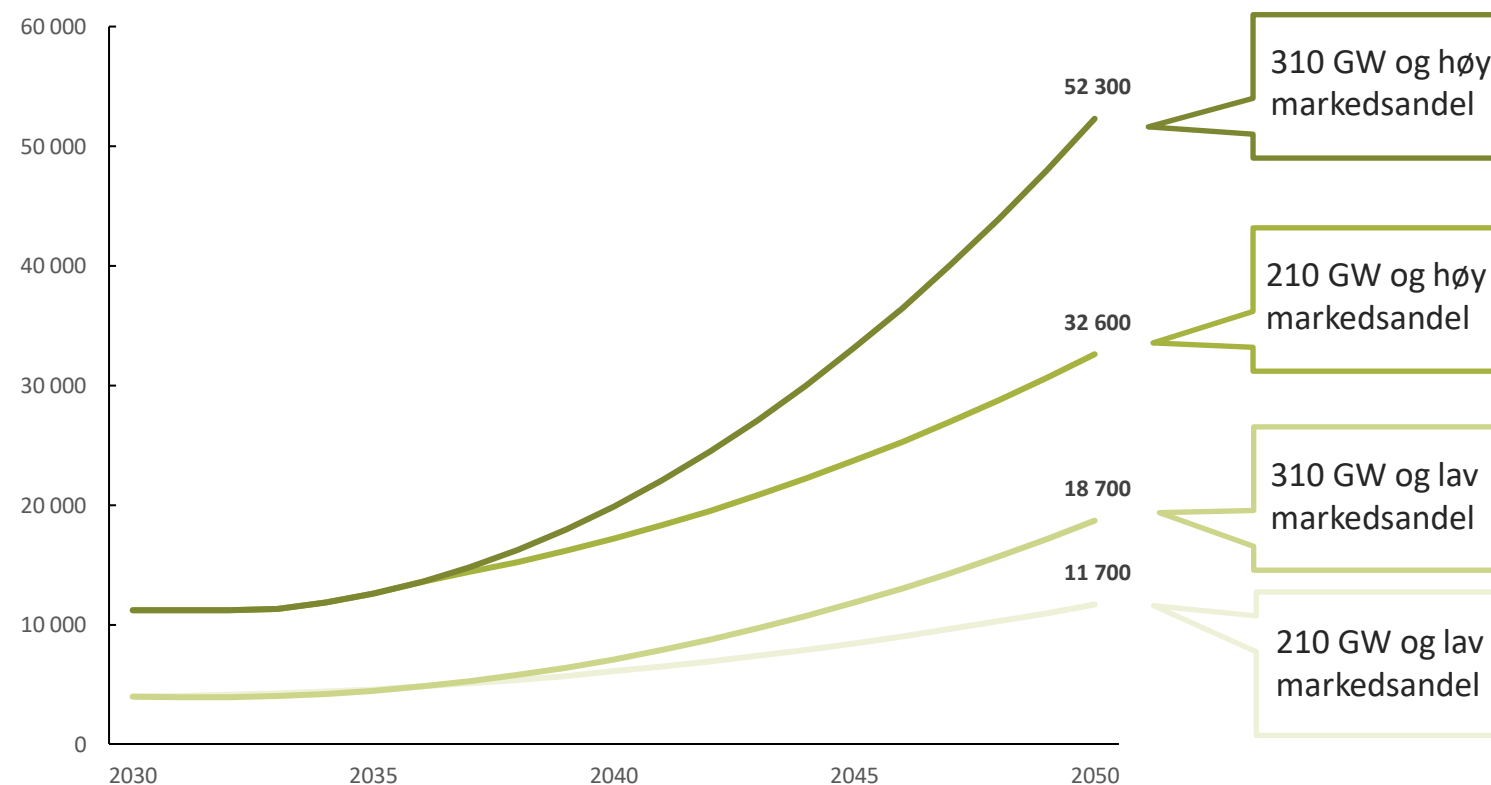
**MENON-PUBLIKASJON NR. 53/2022**

Av Sander Aslesen, Maren N. Basso, Jonas Errala, Henrik Foseid, Sigrid Hernes, Erik Jakobsen og Even Winje

# 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)





# Floating Wind Days 2023

[www.floatingwinddays.com](http://www.floatingwinddays.com)



“

**Our ambition is that FWD will be the most important event for the international floating wind industry.**

**– Arvid Nesse, CEO, Norwegian Offshore Wind**

# The FWD Hub



Main stage & expo

Talks & Workshops

Round table discussions

Networking

B2B meetings





Et aktivt hjemmemarked



En storstilt europeisk satsing



Være tidlig ute



Omstillingsvilje hos norske aktører



Konkrete tiltak og effektive prosesser



Videreutvikling av overførbar kompetanse



Måltrettede virkemidler



Investeringsvilje i produksjonskapasitet og standardisering

# Norwegian strengths

**Technology and innovation**

**World leading METCentre**

**Production facilities**

**Offshore competence**

**Respected HSE Culture and experience**

**The Norwegian model**





**Norwegian  
Offshore Wind**