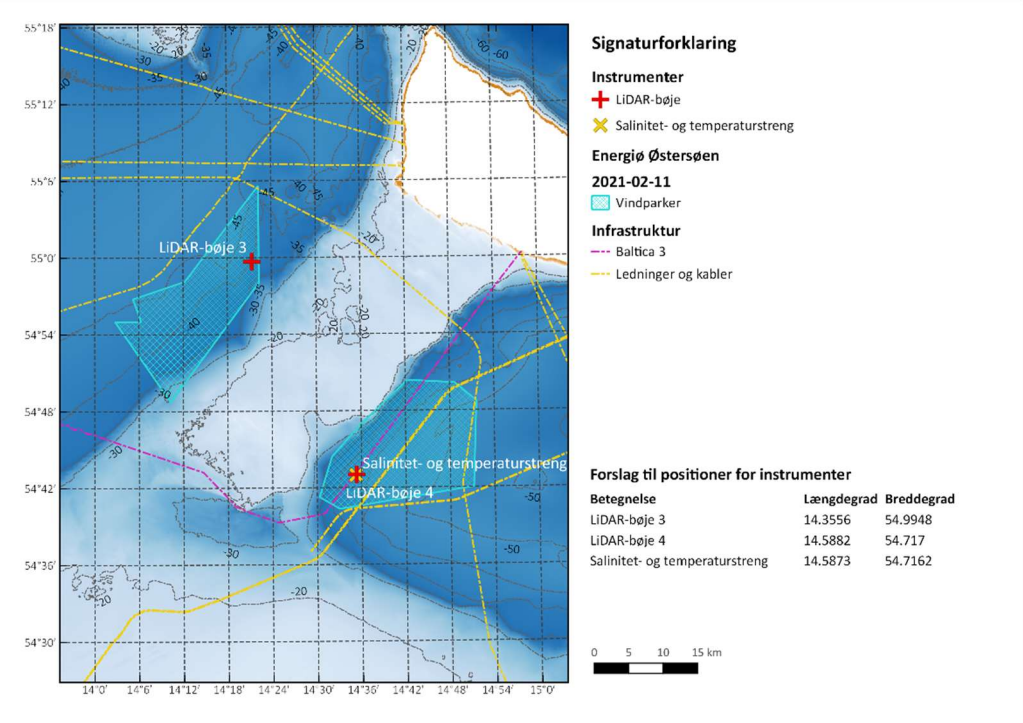
The Baltic Sea Park Areas and F-LiDAR measurements

No. 3101, 2102 F-LiDAR measurements

Two Floating LiDAR buoys have been deployed and are collecting wind, wave, current and other measurements. The locations of the buoys are shown on the map below. On one buoy, a salinity and temperature string, is deployed. Measurements collected are listed in the next section.



Measurement Parameters (selected)

- Air temperature and humidity
- Air pressure
- Wind speed (4m)
- Precipitation
- Solar radiation
- Fog/Visibility
- Bat presence
- Wind speed, wind direction at 30, 40, 60, 90, 100, 120, 150, 180, 200, 240, 270 m
- Wave height, period, and direction
- Current speed and direction in 1 meter depth increments
- Wave spectrum and dispersion
- Water level
- Buoy position
- Sea surface temperature
- Conductivity/salinity

No. 3103 Wind Farm Metocean Reports (one for each 1GW park)

The *Metocean reports* will describe the operational design conditions at the energy island site (wind, wave, current, water level, and weather windows). This includes directional and omnidirectional analysis of these parameters and presentation of their joint probability distributions. The report will also describe the extreme design conditions, specifying extreme values for wind, waves, current, and water level for return periods of 1, 5, 10, 50, and 100 years and will utilize joint extreme value analysis methods.

No. 3104 Two (2) *Wind Farm Site Conditions Assessment Reports* (one for each 1GW park). Each of the wind site conditions assessments will establish the operational and extreme wind conditions (up to 50-year return period) for the wind farm sites in accordance with IEC 61400-3-1 and other industry standards. This includes long-term wind speed distribution, wind shear, turbulence intensity, air density and other parameters needed for an integrated loads analysis of the turbine and support structure.

No. 3105 Two (2) Plausibility Statement from Certification Body (one for each 1GW wind park area)
A certification body will review all reports and deliver a plausibility statement that evaluates their suitability for undertaking conceptual designs for the energy island and for the wind farms.