

Wind resources at the Hollandse Kust (noord) Wind Farm Zone (HKNWFZ)

Description of the assignment

The objective of the assignment is to provide an independent assessment of the wind resources at the Hollandse Kust (noord) Wind Farm Zone (HKNWFZ). This information is to be used as input for wind farm modelling, yield assessments and business case calculations for the offshore wind farm to be developed in the HKNWFZ.

The HKNWFZ is located 10 Nautical Miles off the west coast of the Netherlands. Prinses Amalia Wind Farm lies within the HKNWFZ. The HKNWFZ contains one Wind Farm Site (HKNWFS). In total, 700 MW new offshore wind capacity is planned in the HKNWFS. The site boundaries are smaller than the HKNWFZ.

Two metocean buoys with LiDAR devices are currently deployed at the HKNWFS. Additional offshore wind measurement sources are available as basis for the assessment as well (e.g. floating LiDAR and offshore met masts).

The assessment is to be based on the best possible data sources, be carried out with state-of-the-art methods and models, in accordance with applicable wind industry and offshore standards and with the lowest possible uncertainties. Contactor shall analyse available offshore wind measurement sources as well as most recent re-analysis and mesoscale datasets, validate different mesoscale models and long-term correct the wind climate in the HKNWFZ.

An integral part of the study will be the interface with a metocean desk study performed in parallel. The wind resource assessment shall contain a comparison with the methods and results of the metocean desk study.

A descriptive report, GIS and pdf maps with the modelled horizontal wind climate as well as the calculated long-term wind climate will be the deliverables of the study.

The study will start in September 2018 and must be finished by the end of January 2019, (including two rounds of reviews and revisions). The final delivery has to be certified by certifying body DNVGL.

Parties who are interested to perform this study, has to register themselves at iucezteam1@rvo.nl with mentioning a person of contact and e mailaddress.