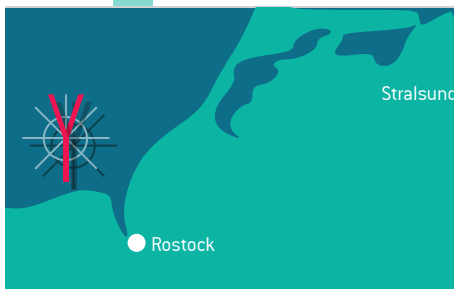


National Test Site **OFFSHORE** **WIND ENERGY**

*No energy transition
without cutting-edge technology
Mecklenburg-Western Pomerania delivers*



DURATION

03/2019 bis 02/2023

SUPPORTED BY

Bundesministerium für Wirtschaft
und Energie (BMWi)

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Supported by:



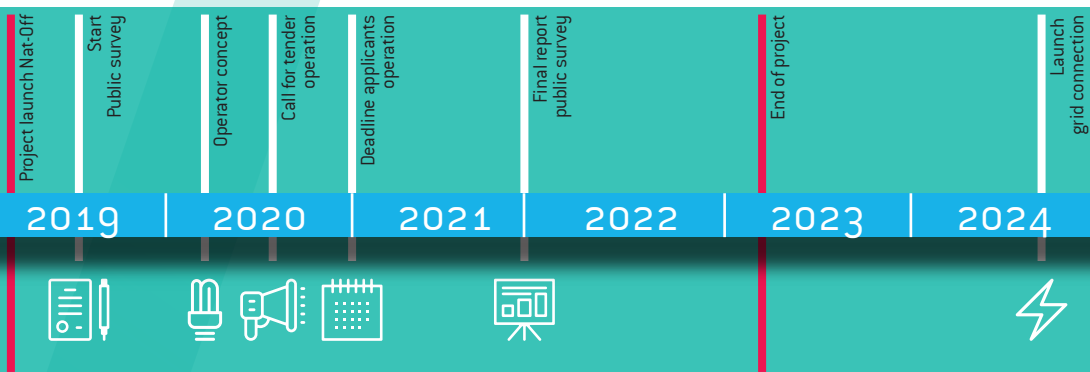
on the basis of a decision
by the German Bundestag

Climate change cannot be denied and climate data of the past decades give proof that global warming is human-caused. Therefore, rapid and comprehensive climate action is necessary to achieve our climate protection goals – especially within the world's industrialized nations. Offshore wind energy can play an essential role in accomplishing this task.

To bolster and advance the leading role of Germany in technology development and sustainable value creation, reducing the costs is as important as improving logistic processes and ensuring sustainability. Designing new offshore wind turbines (OWT) and suitable logistic concepts can play a key role. In order to bring these to market maturity where operators, manufacturers and service providers need offshore areas where they can test their products and ideas.

Supported by the German Federal Ministry Economic Affairs and Energy (BMWi), the four-year project NaT-Off shall create ideal conceptual, technical and logistical conditions for establishing a national offshore test site in the Baltic Sea near Rostock-Warnemünde.

This test site has been included in the the German federal government's coalition agreement and has been identified as a maritime preferential site in the regional spatial planning programme of the state of Mecklenburg-Western Pomerania in 2016. The location chosen provides space for 10 to 12 OWT 10 kilometers from shore and approximately 20 meters deep. In tandem with the excellent wind and weather conditions, the soil properties and lack of nature protection concerns, the location is ideally suited for building an offshore test site.



PROJECT ORGANIZATION

Within this project the Foundation OFFSHORE WIND ENERGY coordinates the initiation of the offshore wind farm for test purposes near Rostock-Warnemünde.

NEED FOR TESTING AND DEMONSTRATION

At first, we determine the needs of industry and service providers. Besides the needs for designing innovative and powerful OWT as well as the conditions needed for new types of foundation structures, components and logistic concepts will be relevant.

OPERATOR FOR THE TEST SITE

One main task is to identify the best operator or operator consortium for the subsequent operation of the test site. Therefore, an operator concept and criteria for the operator selection will be created.

SELECTION PROCESS FOR INNOVATIONS

The technologies to be tested need to be chosen based on a process to be developed within the project. Examples could be new wind turbines, foundation structures, large components like gearboxes or rotor blades and logistic concepts.

ACCOMPANYING RESEARCH

The test site shall provide research in cooperation between science institutions and the industry sector. The fields of research can be technical, logistical or maritime as well as scientific issues concerning nature conservation. The project will set up a concept for the implementation of scientific research.

MONITORING AND PROMOTION OF SOCIAL ACCEPTANCE

Preserving and promoting social acceptance is very important for a large-scale project like an offshore test site. For this reason, it is important to monitor the general attitude of the public towards the project. Activities including a travel exhibition, fact sheets, brochures and public events as well as setting up online and social media tools will help to inform the public about offshore wind energy in general and the test site in particular.

An examination of the best communication strategy will lead to an acceptance-based concept. In order to involve all interested groups from the beginning, the Foundation OFFSHORE WIND ENERGY will organize moderated discussions with stakeholders and other regional events.

HOW WAS THIS LOCATION CHOSEN?

Besides the chosen location two other areas were determined as potential locations for an offshore test site in the state spatial development plan of Mecklenburg-Western Pomerania. Both sites are located west of the Island of Rügen. One is located north of the Darss/Zingst peninsula in close proximity to the offshore wind farm "Baltic 1". The other site is located to the east of the first.

In direct comparison of the three areas the site near shore

of Rostock was determined to be the most suitable. Port access, grid connection and technical capabilities were far better at this site. In addition, the most distinctive advantages concern nature conservation.

The chosen site provides the best conditions in terms of migratory and resting birds, marine mammals and distance to protected areas.