Roadmap for technological advancements for Symbiosis-Inclusive Design in Offshore Wind

Publieke samenvatting / Public summary

Introduction

The North Sea is one of the most heavily used seas globally, hosting various functions like nature, energy, shipping, recreation, and fishing. Over the past years, regulations have been restricting the wind farm areas to host any other functions besides the generation of wind energy, to reduce risks and to support the energy transition. However, with the expected growth of offshore wind in the coming years, a more efficient use of space is needed. Recently, regulations and agreement frameworks between governments and stakeholders have been emerging that promote the co-existence of offshore wind with other considered low-risk functions. Some concepts already exist that integrate offshore wind with other functions like nature, floating solar, aquaculture and passive fishing. However, so far these concepts are foreseen as add-ons to existing offshore wind farms. Furthermore, they all lack track record when adopted within the windfarm contour or even as integrated in the windfarm design. As a result, new legislation is limited by the available knowledge and technology on the symbiosis of various sea users.

Objective

To support the offshore wind industry with the development of symbiosis-inclusive wind farms, the governmental bodies with legislation in addressing

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Algemene informatie / General information

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the emerging tensions and finally to further accelerate the energy transition and make efficient use of the space at sea, ROAD2SID is aiming to explore what are the opportunities for technological advancements regarding a more symbiosis-integrated design of offshore wind farms.

Short Description

In this project, a consortium initiated in GROW and consisting of research institutes (Deltares, MARIN, TNO), and industrial parties (Van Oord, Boskalis, Seaway7, TenneT, Shell, RWE) is investigating the available options for co-use in offshore wind farms. This research is based on stakeholder interviews, interaction with regulatory bodies, workshops and case studies. Special attention is paid to potential risks of symbiotic design, interfaces between various functions, and opportunities for technological advancements in order to draft a roadmap for symbiosis-inclusive design of offshore wind farms.

Website
More information on this project can be found on the GROW website.

De data in deze applicatie is afkomstig van de Rijksdienst voor Ondernemend Nederland (RVO) en wordt in samenwerking met de Topsector Energie ontsloten.
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