

# Ocean-based Negative Emission Technologies



<b>Deliverable Title</b>	<b>D7.6 Report III of the interaction with the SRG and within WPs that have stakeholder sub-groups</b>
Lead	GEOMAR
Related Work Package	WP 7
Related Task	Task 7.1 and 7.2
Author(s)	Judith Meyer, David Keller and contributions from WP1, WP2, WP3, WP6 and WP7
Prieto Dissemination Level	Public
Due Submission Date	30.04.2024
Actual Submission	30.04.2024
Project Number	869357
Start Date of Project	01. July 2020
Duration	60 months
<b>Abstract:</b> This report provides an overview of OceanNETs engagement with relevant stakeholders and the OceanNETs stakeholder reference group between 01.01.2023 – 31.12.2023.	



This project has received funding from the European Union's Horizon 2020 research and innovation programme under grant agreement number 869357.

## Document History

Date	Version	Description	Name/Affiliation
30.04.2024	1.0	First submitted version	Judith Meyer/GEOMAR

**Disclaimer:** This document reflects only the author's view and the European Commission and their executive agency are not responsible for any use that may be made of the information it contains

## List of abbreviations, acronyms and definitions

NETs – Negative Emission Technologies  
SRG – Stakeholder Reference Group  
NGO – Non-Governmental Organisation

## List of figures

Figure 1: OceanNETs event page

## List of tables

Table 1: Website Impressions (yearly means)  
Table 2: Members of the OceanNETs stakeholder reference group  
Table 3: Stakeholder activities within WPs that have stakeholder sub-groups

## 1. Introduction

### 1.1 Context

OceanNETs is a European Union project funded by the Commission's Horizon 2020 program under the topic of Negative emissions and land-use based mitigation assessment (LC-CLA-02-2019), coordinated by GEOMAR | Helmholtz Center for Ocean Research Kiel (GEOMAR), Germany.

OceanNETs responds to the societal need to rapidly provide a scientifically rigorous and comprehensive assessment of negative emission technologies (NETs). The project focuses on analyzing and quantifying the environmental, social, and political feasibility and impacts of ocean-based NETs. OceanNETs will close fundamental knowledge gaps on specific ocean-based NETs and provide more in-depth investigations of NETs that have already been suggested to have a high CDR potential, levels of sustainability, or potential co-benefits. It will identify to what extent, and how, ocean-based NETs can play a role in keeping climate change within the limits set by the Paris Agreement.

### 1.2 Purpose and scope of the deliverable and relation to other deliverables

An important objective of OceanNETs is to initiate, conduct and sustain an on-going dialogue and cooperation with all relevant stakeholders interested in the field of carbon dioxide removal. OceanNETs aims to facilitate mutually beneficial engagement and interaction between the project's consortium and stakeholders. Key stakeholders are critical for successful engagement (see also deliverable 9.1 on exploitation and dissemination of results) and an ongoing stakeholder dialogue we will enhance the project acceptance. The stakeholders in our project are those interested in increasing their knowledge and understanding of ocean-based negative emission technologies (NETs), those that would like to engage in a dialogue with the consortium and those who are potentially affected by or concerned about ocean-based NETs or will be end-users of the projects results. OceanNETs stakeholders are from a variety of sectors including policy, industry, academia, non-governmental organisations (NGOs), civil society and also the research community itself is regarded as an important stakeholder group.

This report on the interaction with stakeholders is a living document (D7.4 and D7.5 were the 1<sup>st</sup> and 2<sup>nd</sup> version, respectively) that has been updated as new opportunities for interaction were identified and exploited. This document is the last update before the end of the project. Unfortunately, due to the maternity leave of the stakeholder manager and the replacement not being full time, stakeholder engagement with the SRG has been reduced.

## 2. Stakeholder Engagement

### 2.1 Website, Social Media & Newsletter

Our aim was to engage stakeholders from the very beginning of the project in order to use stakeholder knowledge for an optimal implementation of our research case studies, scenario modelling, participatory approaches, and analysis and assessment.

We initially created our public website ([www.oceannets.eu](http://www.oceannets.eu)) and social media accounts ([www.twitter.com/OceanNETs\\_EU](https://www.twitter.com/OceanNETs_EU); [www.linkedin.com/company/oceannets-project](https://www.linkedin.com/company/oceannets-project)) to provide information on ocean-based NETs for the public and stakeholders and to generally promote the project.

#### Website

Throughout the past year, the OceanNETs website has been kept up-to-date continuously. New publications, new deliverables and new achieved milestones can be found on the site. The website has recently been updated and now also features our research data and links to landing pages listing raw and yet unpublished research data/code that have been obtained during numerical simulations and experiments (<https://www.oceannets.eu/research-data/>). Lists of published research data and code generated by OceanNETs work packages can also be found on the new page.

The website also lists main events OceanNETs participates in (see Fig. 1). Upcoming events are featured on the homepage of the website for quick access. Stakeholders that access the website are introduced to the Stakeholder Reference Group and encouraged to sign up and become a part of the OceanNETs stakeholder community.

*Table 1: Website Impressions (yearly means)*

Website	Visitors	Actions	Pageviews
OceanNETs	343	729	689

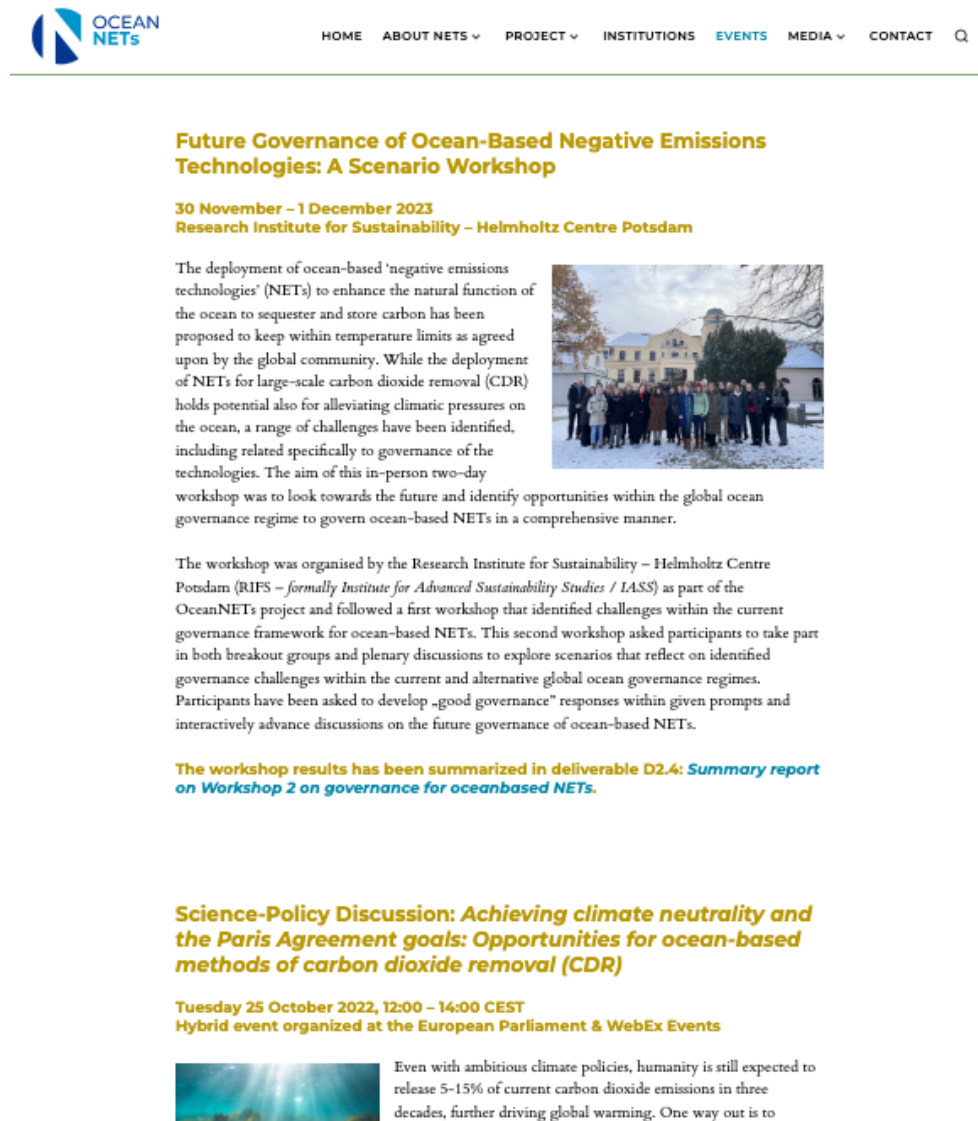
#### Social Media

OceanNETs is using two key social networks, “X” (we will refer to it here by its former name Twitter) and LinkedIn, first of all, to build its community and ultimately to communicate all the outputs and results. Both communities have been growing steadily. Since M18 when D7.4 was published, OceanNETs twitter account has gained 152 followers, coming to a total of 343. Our tweets had a total of 3881 impressions. Unfortunately, at the time of writing this report, twitter analytics was under construction and some analytic metrics were missing and cannot be reported on.

LinkedIn is mainly used to search new relevant stakeholders and invite these stakeholders to relevant OceanNETs events and webinars. It is particularly useful because of the capability to search for people with the specific job type in the specific geographic area that makes them part of a specific stakeholder group. Through connecting with these

individuals, they can be invited to events and see relevant updates through the company page. At the moment of writing, OceanNETs LinkedIn account has 141 followers.


Figure 1: OceanNETs event page



The screenshot shows the OceanNETs website with a navigation bar containing: HOME, ABOUT NETS, PROJECT, INSTITUTIONS, EVENTS, MEDIA, CONTACT, and a search icon. The main content area features two event announcements.

**Future Governance of Ocean-Based Negative Emissions Technologies: A Scenario Workshop**  
**30 November – 1 December 2023**  
**Research Institute for Sustainability – Helmholtz Centre Potsdam**


The deployment of ocean-based 'negative emissions technologies' (NETs) to enhance the natural function of the ocean to sequester and store carbon has been proposed to keep within temperature limits as agreed upon by the global community. While the deployment of NETs for large-scale carbon dioxide removal (CDR) holds potential also for alleviating climatic pressures on the ocean, a range of challenges have been identified, including related specifically to governance of the technologies. The aim of this in-person two-day workshop was to look towards the future and identify opportunities within the global ocean governance regime to govern ocean-based NETs in a comprehensive manner.



The workshop was organised by the Research Institute for Sustainability – Helmholtz Centre Potsdam (RIFS – formerly Institute for Advanced Sustainability Studies / IASS) as part of the OceanNETs project and followed a first workshop that identified challenges within the current governance framework for ocean-based NETs. This second workshop asked participants to take part in both breakout groups and plenary discussions to explore scenarios that reflect on identified governance challenges within the current and alternative global ocean governance regimes. Participants have been asked to develop „good governance“ responses within given prompts and interactively advance discussions on the future governance of ocean-based NETs.

**The workshop results has been summarized in deliverable D2.4: [Summary report on Workshop 2 on governance for oceanbased NETs](#).**

**Science-Policy Discussion: Achieving climate neutrality and the Paris Agreement goals: Opportunities for ocean-based methods of carbon dioxide removal (CDR)**  
**Tuesday 25 October 2022, 12:00 – 14:00 CEST**  
**Hybrid event organized at the European Parliament & WebEx Events**



Even with ambitious climate policies, humanity is still expected to release 5-15% of current carbon dioxide emissions in three decades, further driving global warming. One way out is to

## Newsletter

The OceanNETs newsletter is frequently being sent out to our stakeholders. It includes all the relevant activities of the consortium, such as experiments, workshops, meetings, webinars, conference participations, new deliverables, new publications and relevant conferences and workshops on negative emission technologies and carbon dioxide removal.

## 2.2 Events

Events are where the OceanNETs project can maximize impact on its stakeholders. WP7 promotes and supports the organization and the dissemination of meetings, workshops, webinars and conference that OceanNETs is attending.

## 2.3 Stakeholder Reference Group

At the moment of writing, our SRG includes 14 active members from NGOs, NPOs, consulting businesses, industry and scientists that are part of international earth system programmes (see table 2).

*Table 2: Members of the OceanNETs stakeholder reference group*

Contact Person	Institution/Project
NGOs	
Brad Ack	Ocean Vision
Marc von Keitz	Grantham Foundation for the Protection of the Environment
NPOs	
Daniel Pike	The Climate Map
Consulting businesses	
Maurizio Cocchi	ETA Florence Renewable Energy
Fiona Trappe	Seas The Opportunity
Lydia Kapsenberg	CEA Consulting
Philanthropic Fundraising Services	
Antonius Gagern	Carbon to Sea
Industry / Start-ups	
Steve Willis, Jerry Joynson	Herculean Climate Solutions
Swiss Williamson	Skyology
Nathan Walworth	Vesta
Matthieu Helwig	Carbon Time

Earth system science projects, programmes, scientists	
Raffaele Bernardello	RESCUE Project
Matthew Long	National Center for Atmospheric Research, USA
Filip Meysman	University of Antwerp

Most of our interaction with the SRG is based on personal communication, such as email conversations and personal meetings via video conferences (e.g., Zoom, Webex). The SRG is invited to give presentations at the OceanNETs knowledge exchange seminar which consists of a 40min presentation and 20min Q&A session. They are also frequently invited to participate in said seminars to get insights into newest project results.

Members of the SRG were also invited to the 3<sup>rd</sup> annual project meeting, that took place from Tuesday, 12 September – Thursday, 14 September 2023 in Hamburg, Germany. They were able to participate virtually and in person. Raffaele Bernadello (RESCUE Project) was able to attend the meeting in person. He presented himself as well as the work currently conducted at his project relevant to OceanNETs and their expectations regarding their engagement with the project.

#### 2.4 Dialogue with stakeholders outside the SRG

Individual OceanNETs WPs have also engaged directly with stakeholders as part of their research. These wider stakeholder dialogue activities and targeted interaction with specific groups of stakeholders made sure to include relevant project information and results for the specific interests of these stakeholder groups. These individual stakeholder activities have been monitored and documented (see table 3).



*Table 3: Stakeholder activities within WPs that have stakeholder sub-groups*

<b>Participants</b>	<b>Purpose of the engagement</b>	<b>Type of meeting</b>	<b>Summary of discussions</b>	<b>Outputs</b>
WP2, experts from academia, civil society and policy	Scenario workshop with the purpose of discussing the future governance of ocean-based NETs and exchanging on aspects of good governance.	In-person and virtual (hybrid format)	Distributed across four break-out groups, participants received scenarios outlining potential future deployment of ocean-based NETs. Based on these scenarios, participants were asked to discuss potential challenges and future governance responses.	Knowledge exchange and networking facilitated. The results of the workshop will inform a policy brief to be published mid-2024.
WP3, Christine Merk as invited expert, Members of the Sub-Committee from all parties except AfD, German Ocean Commissioner, Representatives from the German Ministry for the Environment	Meeting of the Sub-Committee on International Energy and Climate Policy of the Committee on Foreign Affairs in the German Bundestag on the role of the oceans for climate protection and global carbon management	In person meeting	Low level of politization of the debate, many committee members were not aware about Marine CDR before and asked questions	Awareness raising about the pressures of climate change on the state of the oceans and about carbon management
WP3, Christine Merk Representatives from eNGOs (and German ministries (Economics & Climate Protection, Environment), German Climate Change Consortium	Presentation of OceanNETs results on Public Perceptions of marine CDR and engaging with stakeholders	in person Stakeholder-Dialogue „Carbon Management – Negative Emissions” organized by Center for Liberal Modernity, Berlin, 25 October 2023	Participants were very interested in the environmental side-effects of alkalization and CCS. Some voiced very strong concerns about research and especially deployment of both	Knowledge exchange and networking facilitated on both sides.
WP6, European Expert Workshop on Ocean Alkalinity Enhancement	Deliberation with experts about the potential for deployment of water desalination brine splitting for ocean alkalization in Spain, based on LCA analysis and long-term scenarios.	Virtual meeting	Presentation of LCA and geographically detailed study of potential. Discussion of key factors and conditions for potential deployment.	Feedback on the conditions to consider developing for realistic deployment scenarios in the concrete case of water desalination in Spain.