

# Wadden Sea Workshop 2024

## CO<sub>2</sub> Sequestration in the Wadden Sea

### State of knowledge and open questions

**13 June 2024**  
**10:00 – 13:00 CEST**  
**Online (Zoom)**

## INTRODUCTION

Current research suggests that coastal wetlands, especially saltmarshes and seagrass beds, sequester carbon at much higher rate than forests and other terrestrial habitats. Given the accelerating impact of climate change, there is increasing interest in assessing the CO<sub>2</sub> sequestration potential of different habitat types and quantifying their contribution to greenhouse gas reduction. At the latest Trilateral Governmental Conference in 2022, the Trilateral Governmental Council decided to ‘investigate the role of the ecosystem service value of carbon sequestration by typical Wadden Sea habitats like seagrass beds and salt marshes and their contribution to the EU greenhouse gas reduction targets whilst preserving the Outstanding Universal Value’ ([CWSS, 2023](#), see also [SIMP](#)).

Exchange of information among experts, representing science, nature conservation or management, is key to better understand the current state of knowledge on CO<sub>2</sub> sequestration in the Wadden Sea and assess the area’s potential in contributing to the reduction of greenhouse gases. This webinar shall be a first step to gain an overview on available information, while also providing opportunities for experts to discuss e.g. knowledge gaps, opportunities for a trilateral assessment of CO<sub>2</sub> sequestration and/or potential impact of management actions on CO<sub>2</sub> sequestration in the Wadden Sea. We are planning to start with a number of presentations on ongoing projects, ideally covering different Wadden Sea habitat types, followed by time in breakout groups to discuss the critical topics in more detail, giving all participants the chance to contribute to the discussion.

## Preliminary programme

10:00 – 10:05	<b>Opening and welcome</b>	CWSS
10:05 – 10:20	<b>Keynote:</b> <i>Wadden Sea Blue Carbon – An Introduction.</i>	<b>Peter Müller</b> <i>University of Münster</i>
10:20 – 10:30	<i>Carbon sequestration rates in Dutch Wadden Sea marshes and the effects of grazing.</i>	<b>Kelly Elschot</b> <i>Wageningen Marine Research</i>
10:30 – 10:40	<i>Carbon retention in Danish eelgrass habitats.</i>	<b>Dorte Krause-Jensen</b> <i>University of Aarhus</i>

10:40 – 10:50	<i>Potential climate change effects on coastal ecosystems and their ability to sequester carbon</i>	<b>Svenja Reents</b> <i>Alfred Wegner Institute</i>
10:50 – 11:00	TBC	<b>Jelmer Cleveringa</b> <i>Arcadis</i>
11:00 – 11:10	<i>Benthic-pelagic coupling impacts on the carbon system in the Wadden Sea</i>	<b>Michael Ernst Böttcher</b> <i>Leibniz Institute for Baltic Sea Research</i>
11:10 – 10:20	<i>The role of shellfish in carbon sequestration</i>	<b>Henrice Jansen</b> <i>Wageningen Marine Research</i>
11:20 – 11:30	<i>What is the blue carbon potential of the Wadden Sea? An update from the NABU WATTRenature project</i>	<b>Irini Bauer</b> <i>NABU</i>
11:30 – 11:45	Q&A session with all speakers	
11:45 – 12:00	Coffee break	
12:00 – 12:35	<b>Discussions (in breakout groups):</b> <ol style="list-style-type: none"> <li>1) <i>What are necessary steps towards an assessment of the CO<sub>2</sub> sequestration potential for the entire Wadden Sea?</i></li> <li>2) <i>How can the CO<sub>2</sub> sequestration potential of the Wadden Sea be enhanced?</i></li> <li>3) <i>What are risks to the CO<sub>2</sub> sequestration potential of the Wadden Sea associated with managed measures and other human activities?</i></li> </ol>	
12:35 – 12:50	Short presentation of group work (5 minutes each)	
12:50 - 13:00	Summary and next steps.	CWSS