

# **ULTFARMS Ocean Multi-Use Industry Sounding Board & Nordic Innovation**

Revealing the potential of multi-use innovation and market application

**THEME: Ocean Multi - Use UNITED Final Event**



# ULTFARMS Project

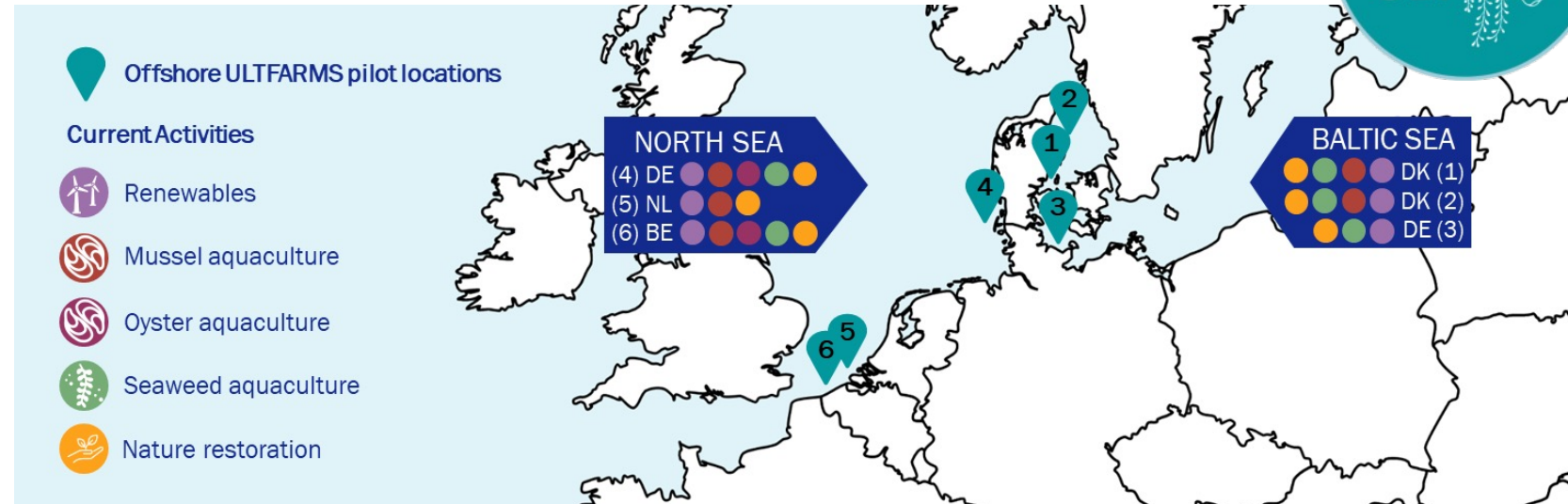
- Enhance **solutions to LTA farming** in combined space with **OWF for an optimal use of marine space** and synchronized offshore activities in compliance with spatial planning targets and to **demonstrate offshore LTA systems in OWF**
- To implement **efficient and cost-effective monitoring strategies** for aquaculture industry within **unified LTA systems**
- To ensure the share of **renewable energy consumption along the full value chain** of aquaculture
- To sustain **biodiversity** and to provide **suitable habitats** for fish and other biota through the inclusion of **nature restoration efforts**
- To ensure **replicability, transferability, training and capacity** building in other basins supported by a roadmap of **guidance for solution roll-out**



# ULTFARMS Project

- Enhance **solutions to LTA farming** in combined space with **OWF for an optimal use of marine space** and synchronized offshore activities in compliance with spatial planning targets and to **demonstrate offshore LTA systems in OWF**
- To implement **efficient and cost-effective monitoring strategies** for aquaculture industry within **unified LTA systems**
- To ensure the share of **renewable energy consumption along the full value chain** of aquaculture
- To sustain **biodiversity** and to provide **suitable habitats** for fish and other biota through the inclusion of **nature restoration efforts**
- To ensure **replicability, transferability, training and capacity** building in other basins supported by a roadmap of **guidance for solution roll-out**

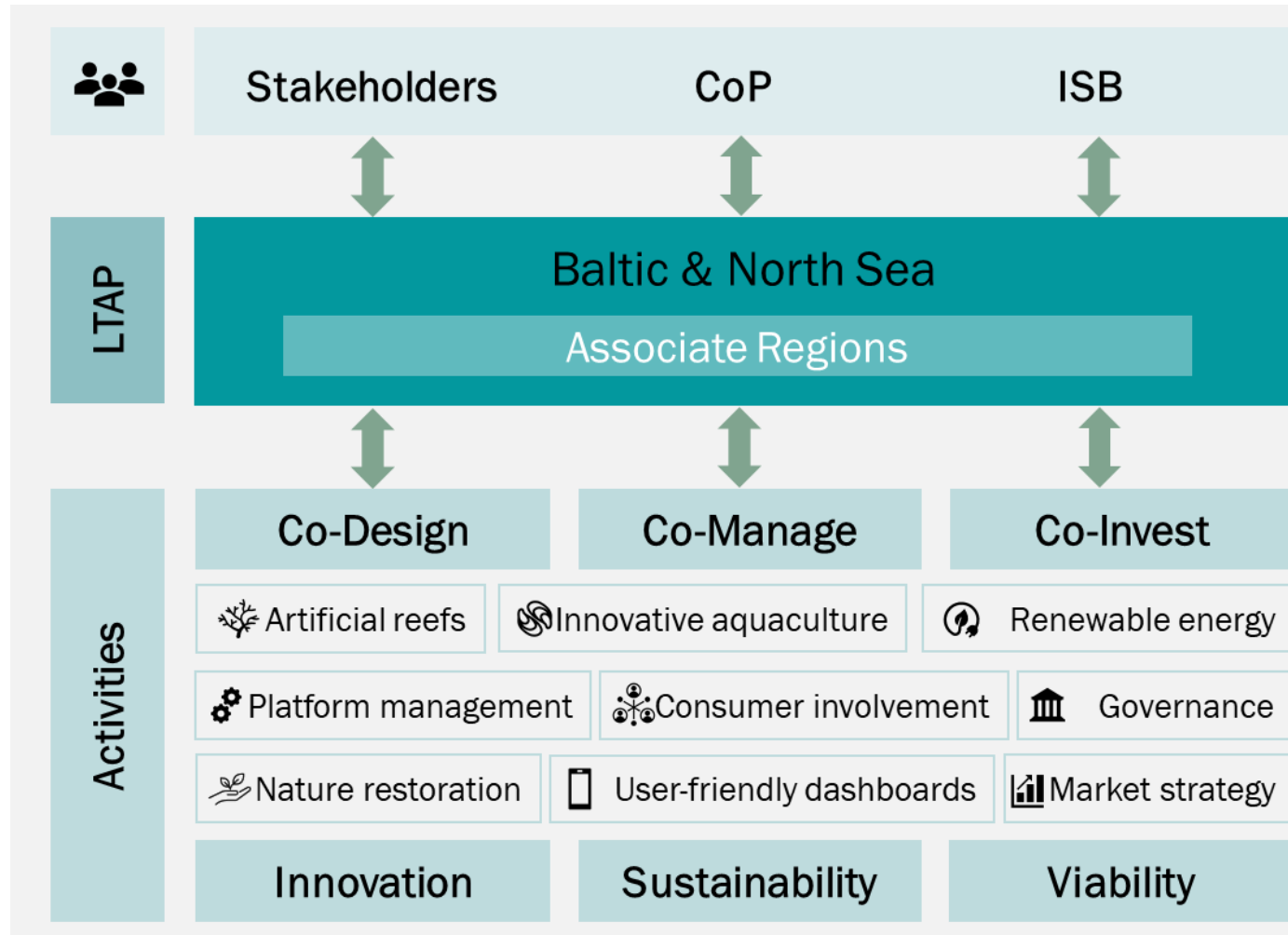
# Project Pilots



Seaweed (S); mussels (M); oyster (O), present TRL (P) and foreseen TRL at the end of the project (E), and partners involved

Country	Basin	Pilot	LTA species	TRL		Partners
				P	E	
Denmark	Baltic	Samsø	<i>S-M</i>	5	8	DTU, BBM, ØST, NSF
	Baltic	Anholt	<i>S-M</i>	5	7	DTU, BBM, ØST, NSF
Germany	Baltic	FINO2	<i>S</i>	6	8	FuE, SUB, KMF, DNV, UG, NSF, DTU, BBE
	North	FINO3	<i>S-M-O</i>	6	8	FuE, KMF, HOR, BBE
The Netherlands	North	Borssele	<i>M</i>	6	9	WR, OOS, UGent, SAS
Belgium	North	Belwind	<i>S-M-O</i>	6	8	UGent

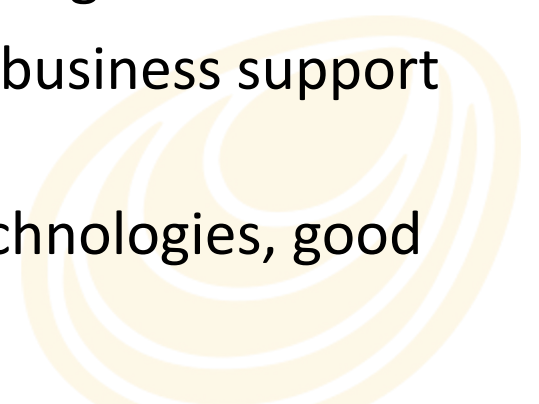
# ULTFARMS Project – Associate Regions





# Industry Sounding Board

- Group consisting of Industry Actors, Research and Development Programmes, and Communities of Practice
- Enables continuous engagement with external entities to join deployment activities and take advantage of developments as they are realised in the project
- Validates future end-user needs & market trends with industry stakeholders →
  - Align & co-create
  - Identify market uptake barriers early on and where possible, mitigate
- Transfer solutions and knowledge among practitioners, regions and business support organisations
- Disseminate and support exploitation of KERS e.g. demonstrated technologies, good practices, new trends and transferable new business models



# Nordic Innovation Hackathon

## Who are we?

**Thordur Reynisson**, Head of Program at Nordic Innovation

[tr@nordicinnovation.org](mailto:tr@nordicinnovation.org)

**Dr. Alexandra Leeper**, Managing Director at Iceland Ocean Cluster

[alexandra@sjavarklasinn.is](mailto:alexandra@sjavarklasinn.is)



# Nordic Innovation

## *Enabler and catalyst*

By bringing, businesses, people and organizations together, we lay the foundation for solutions and innovations that will benefit the inhabitants in the Nordic countries — **and the rest of the world.**

Aims to make the Nordics a pioneering region for sustainable growth

Nordic Innovation only engages in activities where there is **Nordic added value.**





# The task

To uphold the Nordic Region's role as a pioneer in innovative new solutions that contribute towards **making the Nordic region a frontrunner within the field of sustainable ocean economy.**

Support and contribute to the Sustainable Development Goals

# Different interests and challenges



# Hackathon as a tool

- NI's previous experience
- Promoting the agenda
- Innovative and cross-sectoral approach
- Networking
- “Tangible” examples of Multi-Use at sea.



# The decision

- Why?
- Who?
- How?



# Hack the Ocean

“The hackathon invites applicants to submit proposals for practical ways of co-locating marine activities e.g., offshore wind, aquaculture and carbon capture, with a particular focus on conceptual design, business models, and climate impact.

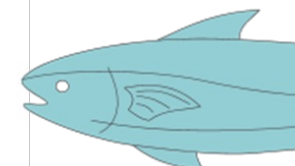
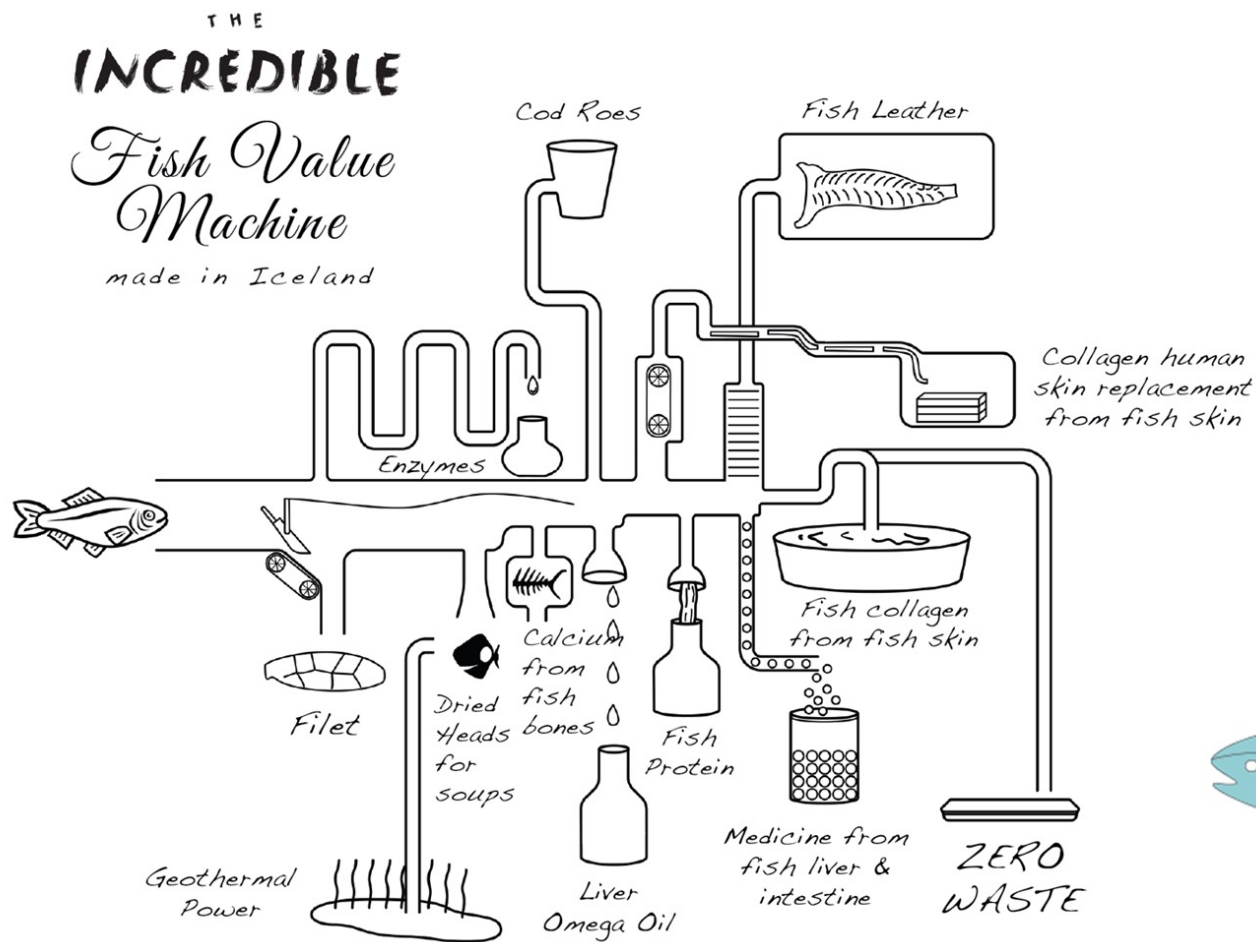
The most relevant applicants will be invited to a physical event, **The Hackathon Grand Slam in Reykjavik, Iceland.**”



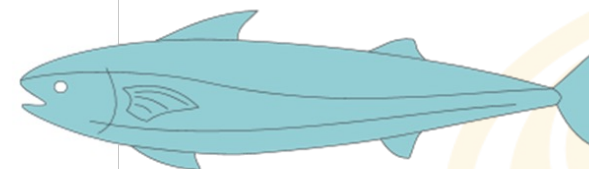
# Hosting Hack the Ocean



# Driven by collaboration



**40-50%**



**90%**



# Lessons from the land



HS ORKA

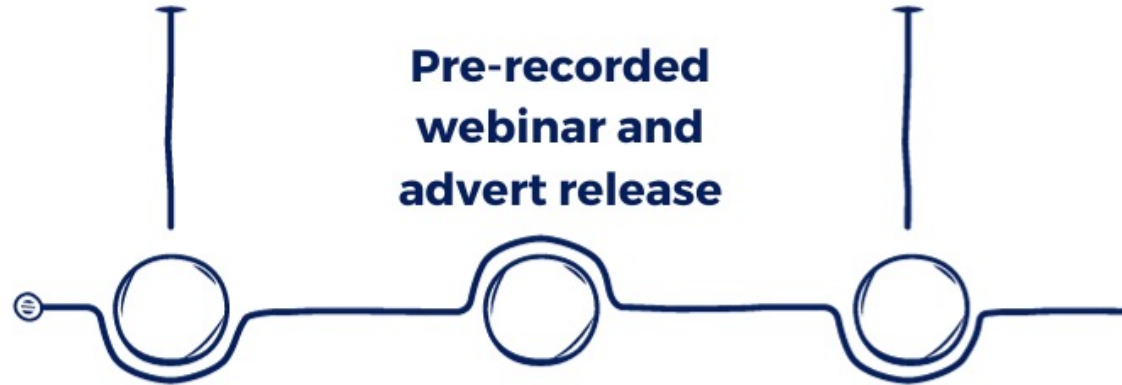




# August 10

# Oct 5-6

Pre-recorded  
webinar and  
advert release



Co-location  
Coffee  
(online)

Hackathon  
(Iceland)

# August 30



# Identifying the challenge

How might we **design** a viable and sustainable multi-use concept at sea that facilitates co-existence in the **Nordic Ocean space**?



Co-Location Coffee: An interactive event about multi-use at sea  
eventbrite.ie • 1 min read

Which sector do you represent?



# Resources for multi-use at sea



HACK THE OCEAN - Multi-use at sea webinar - Iceland Ocean Cluster



funded by  
 Nordic  
Innovation



**THURSDAY**  
**05-10-2023**

- 07:30 **Breakfast**  
📍 Kastali Guesthouse, Reykjavik
- 09:30 **HS Orka Visit**  
📍 Grindavik  
Exploring an energy and resource Park and co-location business model.
- 10:15 **Aurora Abalone Visit**  
📍 Grindavik  
Insights into Circle Feed and seaweed production in sea cage aquaculture.
- 11:15 **Matorka**  
📍 Grindavik  
Guided tour around a land-based arctic char aquaculture facility.
- 12:30 **Lunch**  
📍 Grindavik

- 14:15 **Iceland Eco-Business Park**  
📍 Helguvik  
Dream Big: Blue meets green co-location
- 16:00 **Team building**  
📍 IOC, Reykjavik  
Team building.
- 17:00 **Ocean Cluster & Expert talks**  
📍 IOC, Reykjavik  
Visit of the cluster and hear from experts.
- 18:00 **Ideation & preparation**  
📍 IOC, Reykjavik
- 19:30 **Dinner**  
📍 IOC, Reykjavik
- 19:30 **Tools for prototyping**  
📍 IOC, Reykjavik
- 21:30 **Closing**  
📍 IOC, Reykjavik



 **FRIDAY**  
**06-10-2023**

- |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <p> 08:00  <b>Breakfast</b><br/> IOC, Reykjavík</p> <p> 08:20  <b>Team work on prototype</b><br/> IOC, Reykjavík</p> <p> 10:00  <b>Quick presentations</b><br/> IOC, Reykjavík</p> <p> 10:30  <b>Preparation &amp; mentor support</b><br/> IOC, Reykjavík</p> <p> 12:00  <b>Coffee break</b><br/> IOC, Reykjavík</p> | <p> 13:00  <b>Team work time</b><br/> IOC, Reykjavík</p> <p> 15:00  <b>Coffee break</b><br/> IOC, Reykjavík</p> <p> 15:15  <b>Pitch training</b><br/> IOC, Reykjavík</p> <p> 15:45  <b>Pitch building &amp; team work</b><br/> IOC, Reykjavík</p> <p> 17:00  <b>Pitch session &amp; public event</b><br/> IOC, Reykjavík</p> <p> 20:00  <b>End of hackathon</b> </p> |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|



# Selecting a winner

- Valhalla Gate
- E-HoneyHub
- Sea Vitamin
- **Blue Waste Renewable**





# Impact for Nordic Innovation

- Raised awareness among stakeholders
- Media coverage and promotion
- Networking
- “Tangible” examples of Multi-Use at Sea concepts
- Good “Value for Money”





# Impact for Iceland



# Lessons learned

## Challenges with Hackathon as a tool?





# Panel Discussion



Annelies Declercq  
University of Gent  
Belgian Perspective



Ann Ruddy  
Chief Executive Officer  
Commercial Seaweed



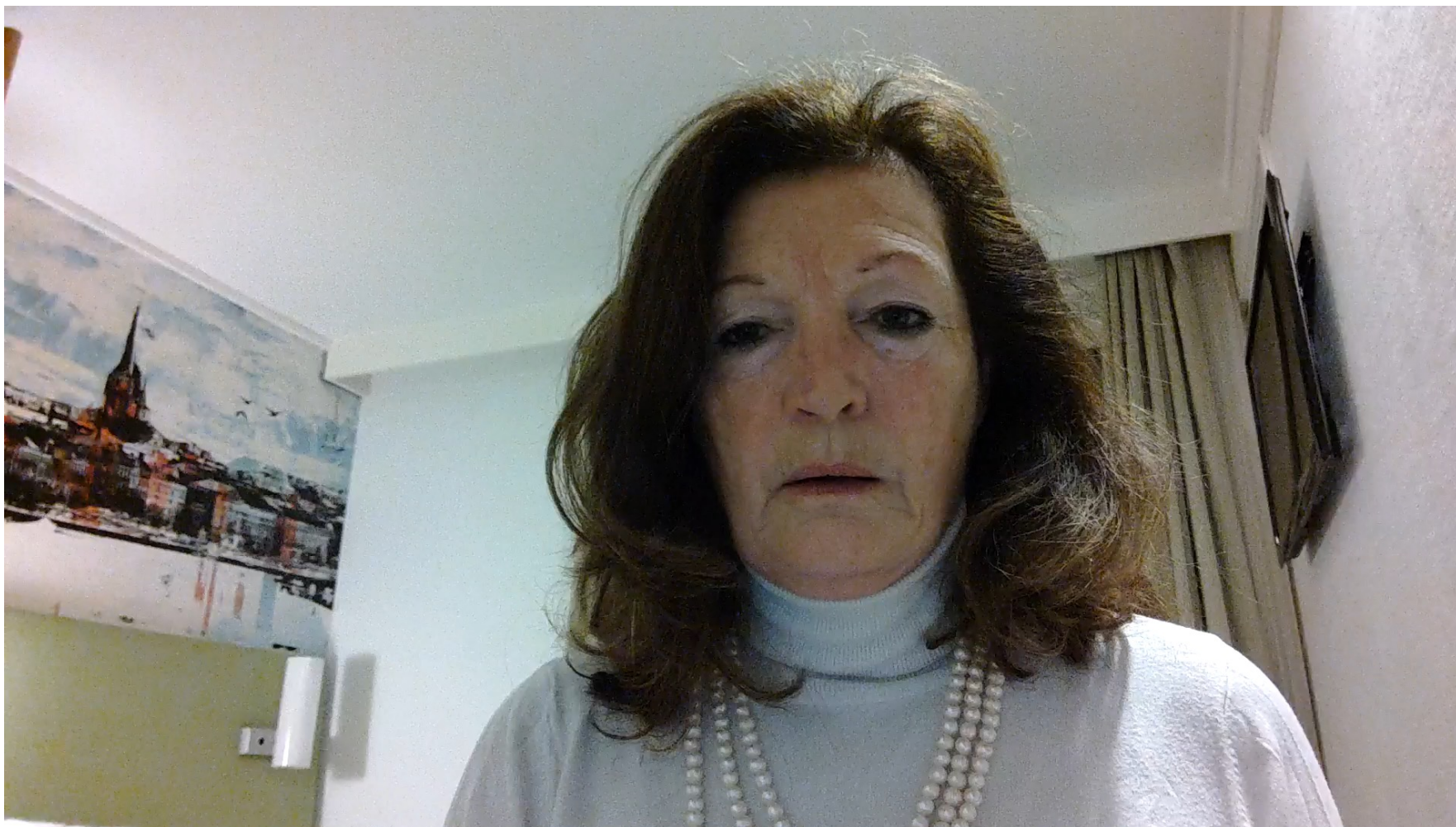
Mattia Cecchinato  
Senior Advisor Wind Europe  
Offshore Wind Energy



Eline van Onselen  
Stichting De Noordzee  
The Rich North Sea  
Nature Inclusion and Restoration



# Starting Words For Thought





# Base Line Discussion Points

1. Considering your specific industry / region, what is the current status of multi-use adoption?
2. How is the concept approached in your industry or is it currently not addressed?
3. What are the opportunities or potential your group and/or industry have found in adopting multi-use activities?
4. Could you highlight the key drivers for multi-use projects in your region?
5. If Multi-use is not addressed, what are the barriers or limitations in place that are hindering the adoption thereof?
6. What are the most pressing challenges where multi-use solutions and supporting evidence are crucial? Do you see challenges in terms of conflict regulation, liability and insurance, or other areas?
7. What would you identify as requirements to enable or increase the attractiveness for adopting Multi-Use projects within your region and / or Industry?



[HTTPS://ULTFARMS.EU](https://ultfarms.eu)



**Alex Ziemba**

Alex.Ziemba@Deltares.nl