North Sea Energy

offshore system integration

Nature Inclusive Spatial Design

For Hub North

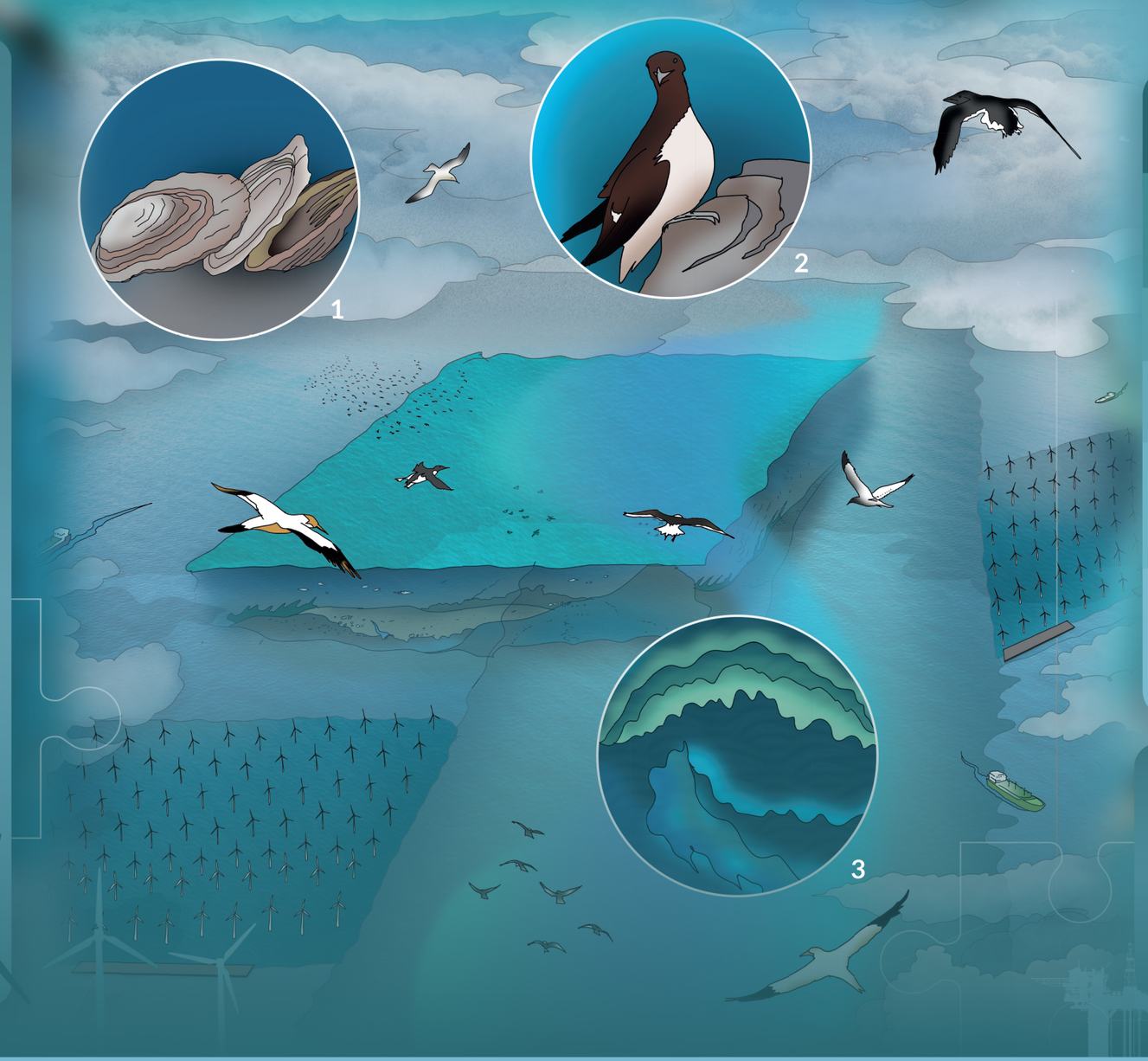
Researchers collaborated with stakeholder workshops and the technical design team to devise a nature inclusive spatial design (NISD) and nature inclusive design (NID) for Hub North. On this poster we present our NISD and its most ideal outcomes in a readable way. For a full disclaimer on the uncertainties of assessing and predicting ecological processes we recommend reading the full report.

Main results

1. A 40 km wide bird corridor to allow guillemots, razorbills and other seabirds to migrate undisturbed between the nearby marine protected areas (MPAs) and between their foraging area and breeding grounds in the UK.

2. Zone where extensive active oyster restoration could occur, even before construction. This allows oysters to reach maturity and spawning capacity when the wind farm is installed. The eastward currents promote oyster larvae dispersal throughout the hub.

3. Stratification area. Undeveloped area to allow the current water stratification patterns and high ecological values and long living species such as the ocean quahog to remain intact.



Our recommendations

1. Gather information on the current, past and expected future ecological state.
2. Apply the mitigation hierarchy.
3. Strategically concentrate or disperse ecological impacts.
4. Zoom out and look at larger migration patterns e.g. flight paths when designing a hub
5. Organise stakeholder sessions with both ecologists, policy makers and technical experts to identify all constraints, needs and uses of a hub.

On the visual:

1. **Active oyster restoration zone**
2. **Bird corridor**
3. **Stratification zone**

The project has been carried out with a subsidy from the Dutch Ministry of Economic Affairs and Climate, National Schemes EZK-subsidies, Top Sector Energy, as taken care of by RVO. Thanks to the project team from MSG Strategies, Arcadis, Deltares and to all NSE Partners.