

A scenario analysis of alternative options for PtX production in the North Sea

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The idea of developing a research project was put forward at the Maritime Research Alliance (MRA) event 'Industry-academia follow-up workshop on green transition in ports and city-port relations' of 24 May 2023



One risk has already become true

Press release, June 28, 2023

The Danish government has postponed the decision to initiate the tender for the artificial energy island it plans to build in the North Sea. The reason behind the move is that the current concept for the North Sea Energy Island is too expensive, so the government wants to look into other concepts.

"In its current form, the costs to the state are too great and the risks too many", the ministry states

Decision is to thoroughly analyse several options for a better and cheaper North Sea Energy island concept

It is timely to scrutinise alternative set-ups

The focus suggested is **PtX production**
(*can be extended to the energy storage and other innovation activities*)

There are a number of foreseen alternatives:

Production of what? Hydrogen, ethanol or ammonia?

Production where? On the Island, separate platform or onshore?

Transportation by pipelines to shore, **bunkering** ships offshore, storage, usage for **different needs**?

The analysis could cover the risks, technical feasibility, socio-economic considerations, energy efficiency, timeline for alternative fuel deployment, timeline for scaling up, and synergies with out-of-sector activities.