



Newsletter

Future Meetings

We are starting to plan for our next Programme Advisory Group (PAG) meeting sometime in May 2023. We will be in touch with members of the PAG to identify a suitable date.

We are also keen to hold a face-to-face meeting/workshop with all our stakeholders in the Autumn – late September/October. Watch this space for more information.

Stakeholder survey (Work package 4) - A survey was circulated to all MOET stakeholders in December 2022. 11 stakeholders responded representing approximately half of the stakeholder group at the time of circulation.

Respondents showed strong interest across all three aspects of the MOET project (geological storage of both CO₂ and H₂, and wind power). Other categories of interest included tidal and wave energy, and transmission infrastructure.

Most felt that the project was important or very important with three undecided and one suggesting it was too early to tell. All respondents had high or considerable interest in issues related to the sustainability of the offshore energy transition.

In terms of outputs, most respondents said they would like to receive policy guidance, information papers and reports, and discussion documents, with the majority of those also requesting maps, GIS, and decision support tools.

Gaps identified included the following:

- Bringing the data from research and monitoring together.
- Gaining open access information across sectors.
- Interactions between various actors and departments
- 3D model data and co-existence, spatial conflicts/squeeze
- Ecological, social and economic impacts of co-location and co-existence of other sea users with energy infrastructure
- Data on cumulative impacts of the identified technologies and infrastructure on shipping and navigation across all sectors
- Direct and cumulative impact of energy transition on coastal communities, the natural environment, and potential solutions
- Data and evidence to support the case for safe storage of hydrogen in porous media.

Data collected will be used to inform future stakeholder engagement and interactions through stakeholder mapping

Work Package 1 update - Optimal use of subsurface geological resources for storage of H₂ and CO₂
Structural mapping in Southern North Sea ongoing; top of the Bunter Sandstone surface being refined, top and base of the Zechstein nearly complete. Framework mapping of the main seismic horizons and structural framework completed. Refinement of regional fault zones and fault offsets within the Bunter Sandstone interval ongoing. Single well calculation of theoretical storage capacity underway; will be refined once Bunter Sandstone core is characterised and structural mapping of zone boundaries is complete.

Experimental work: Samples analysed for a candidate storage horizon in the Bunter - to be used for core flood experiments at NOC. Additional samples selected from Rough depleted gas field and similar aged Rotliegendes sandstone from onshore NE England. Samples will be exposed to H₂ in BGS labs to test for potential reactions (geochemical, microbial).

Work Package 2 update - Understanding the shallow subsurface, seeps and the marine environment.

Seabed 'geological' mapping (Southern North Sea) - data compilation of Hi-Res multibeam data completed for several HI areas adjacent to the Wash. Mapping of bedrock geology (including structure), superficial geology, mobile seabed sediments, geomorphology and anthropogenic geology will be completed for Offshore East Anglia and Offshore Yorkshire (Southern North Sea).

Collation of seismic data, including 2D SEGY and BGS scanned seismic images, are in the process being evaluated to see how well imaged the base of superficial deposits are. The aim is to understand what data can show depth to important geological boundaries in the subsurface that could help inform future offshore developments.

Work Package 3 update - Collation of existing ecosystem service data from previous PML projects (e.g. UKERC, DREAMS INSITE) is complete. Identification of appropriate ecosystem service parameters from WP 2.3 & WP 3. National public survey is being developed, and ethical approval for the programme of work is being sought. We are keen to include stakeholders in the development of the public perceptions survey and welcome interested parties to get in touch directly (egt@pml.ac.uk) and plan to present different options at future stakeholder events.

