



Newsletter

Project information

We would like to take this opportunity to welcome Jim White (BGS) who will be taking over as the MOET Principal Investigator. Many of you will know Jim and I expect will look forward to engaging with him further as part of the MOET project. We would like to extend our huge thanks to Emrys Phillips for leading the project until now. Whilst Emrys has decided to step away from the role of Principle Investigator, he will still lead on the mapping of the seabed and the shallow subsurface task under WP2 so will continue to be heavily involved in the success of this exciting project.

Meetings and engagement activities

The date and venue for our face-to-face stakeholder workshop is 23 November 2023, 12 Bloomsbury Square, London. The workshop will explore priority research areas and co-design of outputs through group discussion and breakout activities. It will also be an opportunity for engagement with our wider project team to explore the project in greater depth. We are delighted at how many of our stakeholders have already signed up for the event but welcome any others who wish to join us. If you have yet to sign up, please do get in touch with [Hazel Napier](#) before 1st November 2023. To inform workshop planning, an email will go out in the next few days inviting participants to suggest priority topics for discussion. We look forward to seeing you there!

Work Package 1 update - Optimal use of subsurface geological resources for storage of H₂ and CO₂

Rock-physics flow-through experiments on Bunter Sandstone core samples from the southern North Sea, with measured permeabilities of 40-70 mD, and data processing have now been completed. The experimental set up is representative of the subsurface conditions and high-salinity brine composition of the strata planned for storage. The experimental results will inform assessment of the monitoring of injected H₂ or CO₂ by seismic survey and resistivity techniques.

Application of the classification of the Bunter Sandstone Zone boundaries in the southern North Sea study area is progressing well and on track, with interesting initial emerging findings. The distribution of the classification categories that indicate an increased probability of pore volume connection across a zone boundary are being mapped. The results will be used to inform the likelihood of pressure communication during subsurface storage operations in the Bunter Sandstone.

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

Experiments on hydrogen reactivity are being run by NOC and PML. Samples are in place from Dogger Bank, and we will start experimental incubation next week. Modelling of hydrogen plume and bubbles are ready, and simulations will start soon. Modelling of windfarms effects will be delivered through a north-west European-wide model with refinement in the MOET case study areas. WP2 team already has the decommissioned oil and gas structure information and how they interact with the ecology. Wind farms structures will be added this year. Three scenarios will be modelled next year – (i) no structures, (ii) current wind farms and (iii) current and planned wind farms.

Work Package 3 update - Societal consequences of the energy transition

To address social science research gaps, work package 3 will compare different scenarios and combinations of energy technologies using a place-based approach. Sourcing useful scenarios has been challenging for the team there the WP3 team is keen to get stakeholder input on energy transition scenarios that can be used to elicit public perceptions through an online survey. WP3 will also run a participatory session at the face-to-face meeting on 23 November and invites stakeholders to get in touch with any questions or discussion points of interest.

Project management team

Jim White – Principal Investigator (BGS)

Maxine Akhurst – WP1 lead (BGS)

Jerry Blackford – WP2 lead and PML Principal Investigator (PML)

Elizabeth Gabe-Thomas – WP3 lead (PML)

Hazel Napier – WP4 lead (BGS)

Angus Best – NOC Principal Investigator (NOC)