MANAGING THE OFFSHORE ENERGY TRANSITION

Newsletter

Meetings and engagement activities

In the March newsletter, I shared a document summarising the discussions held at the in-person meeting in November last year newsletter (document attached to this email). That document identified what we consider to be in-scope activities and how these might be taken forward in the three remaining years of the MOET project. We used this document to develop an engagement plan which I sent out to you all in April.

The first phase of the engagement plan includes a programme of online discussions in Year 3 of the project on specific topics. The first two sessions in this programme will focus on (i) issues of regulation and policy and (ii) technical aspects of offshore low carbon energy technologies. Co-location* and co-existence** of these technologies has been a common theme running throughout so we hope to explore this theme at both sessions.

These first two sessions are likely to be held in September and October 2024 – we are currently in the process of identifying some dates that we hope to share with you soon. Each session will run for 1 ½ hours and will be planned carefully to allow for a deeper discussion on each topic. Invitations will be sent out to all stakeholder to ensure all those interested have the opportunity to join.

* Co-location - where two or more activities take place within the same geographical extent

** Co-existence - where two or more activities operate at the same time

Please don't hesitate to get in touch with Hazel Napier hjb@bgs.ac.uk if you have any questions or would like to share your thoughts on our planned approach to engagement.

Work Package 1 update - Optimal use of subsurface geological resources for storage of H_2 and CO_2

Outputs from the MOET WP1 research in Area 1, southern North Sea, are being finalised and deliverables presented, as guided by MOET engagement with stakeholders:

- Rock physical properties experimental research dataset to be presented to the wider rock physics community to assess and discuss data quality and the impact for CO_2 and H_2 reservoir selection and monitoring, June 2024, Pau, France.
- Priority has been given to the presentation of the microbial limits tool as an online tool and stakeholder access via the MOET website developed in Work Package 4.
- Refined mapped Bunter Sandstone surfaces are now depth converted and are input to regional geomechanical stability modelling of storage operations.
- WP1 rock physics experimental data and geomechanical modelling results are being used to inform assessment of CO_2 and H_2 seismic monitoring from active and passive sources.
- First -pass mapping of Zechstein salt is completed for the Z2 Formation in the nearshore area, to inform salt cavern capacity modelling within 50 km of the coast, for conference presentation September 2024.
- Assessment of halite in the Humber-Tees area indicates that halite is of insufficient thickness south of the Humber to accommodate viable solution-mined gas storage caverns, whereas to the north and offshore cavern development is considered possible.
- Method finalised for the exposure of porous rocks to hydrogen at elevated temperatures and pressures- this is based on protocols developed as part of the IDRIC programme- https://idric.org/project/mip-7-4/
- Mapping of structures that will affect the impact of pressure distribution within the Bunter Sandstone is completed, being written up and being submitted for conference presentation.

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)
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