

UK CCS workshop – CO₂ Storage (including transportation)

Web meeting hosted by UKCCSRC

Date 23rd March 2021, 10 am -12 noon

Chaired by CCSA TWG representative Andy Brown, Progressive Energy

Key UK research needs highlighted through workshop

- Whole system analysis
 - Connectivity from land to storage sites
 - Detailed reservoir modelling
- Thermodynamic research
 - Validating theoretical work with experimental research
 - Developing thermodynamic models
- Repurposing onshore oil and gas (OOG) wells for CO₂ storage (general)
 - Environmental issues both local and regional
 - Associated risks
- Repurposing onshore oil and gas (OOG) wells for CO₂ storage (specific)
 - Including corrosion (existing and induced), injection pressure, wellbore design specification, thermal shock
 - Number and spacing of wells and cumulative impacts (multiple wells with overlapping pressure envelopes)
- Hydrates aspects – improved understanding
 - i.e. how quickly do they melt, do they form quickly enough to realistically block a blowdown valve, is there enhanced corrosion potential where they touch the surface of the pipeline?
 - Scenarios effected by impurity mix
- Repurposing of pipeline infrastructures
 - Including corrosion, equations of state, CO₂ composition and quality, leak detection and modelling and flow metering
- Flow metering
 - Measurement needs identified by [NPL's Energy Transition report](#)