



CO2 Geological Storage Field Development – Application of Baseline, Monitoring and Verification Technology

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The creation of a robust Baseline, Monitoring, and Verification (BMV) plan is key to assuring containment integrity in CO2 geological storage projects. A BMV plan has three main aims: Monitor CO2 movement in the subsurface, Calibrate dynamic earth models and finally, Verify volume of stored CO2. Wide ranges of potential BMV technologies available are currently tested in CCS pilots and industrial scale projects. This paper describes how to optimize the BMV plan design by adopting a risk-based approach and how the value of information (VOI) of specific monitoring technologies needs to be assessed to meet program objectives.