

Hatfield-3301: Monitoring carbon capture storage reservoir leaks

Monitoring carbon capture storage reservoir leaks

Challenge

Challenge ID:	HCP-3301	Originator:	Onshore: Hatfield
Title:	Monitoring carbon capture storage reservoir leaks.		
Theme:	ON 3.3: Subsidence monitoring - Reservoir management		
Consortium Lead:	C-CORE	Interviewed Company:	C-CORE
Geography:	ON.REG.00 - Generic onshore		
Challenge Description			
What is not possible / not adequately addressed at present?			
Identification of areas with leaks or pending leaks. These show up as surface displacements or increases in salinity at the surface. Large areas to cover with access challenges especially in farmlands.			
What effect does this challenge have on operations?			
Mitigate environmental damage and reduction of health and safety risk.			
Thematic information requirements:	Land cover Surface motion (horizontal and vertical) Terrain information		
What do you currently do to address this challenge?			
How is this challenge conventionally addressed?			
Run field surveys and contract or acquire data from aerial surveys.			
What kind of solutions do you envisage could address this challenge?			
High-resolution hyperspectral data and InSAR.			
What is your view on the capability of technology to meet this need?			
Are you currently using EO tech? If not, why not?			
Appropriate technology has not been developed for this application yet.			
Challenge Classification			
Impact on Lifecycle (0=none, 4=high):		Climate / Topography / Urgency:	
Pre-license:	2	Climate class:	Generic climate
Exploration:	2	Topographic class:	Not specific
Development:	2	Seasonal variations:	Any season
Production:	3	Impact area:	Environmental, Health and Safety
Decommissioning:	3	Technology urgency:	1 - Mid-Term (5-10 years)
Challenge Information Requirements			
Update frequency:	Quarterly		
Data currently used:	InSAR and surface land surveying		
Spatial resolution:	Basin		
Thematic accuracy:	Not specific		
Required formats:	Not Specific		
Timeliness (Vintage):	Reference data		

Geographic extents:	License
Existing standards:	None

Relevant products

Content by label

There is no content with the specified labels