

Act on Offshore Monitoring

Publieke samenvatting / Public summary

Doelstelling

The primary objective of ACTOM is to develop internationally applicable capabilities for the design and execution of appropriate, rigorous and cost-effective monitoring of offshore carbon storage, aligning industrial, societal and regulative expectations with technological capabilities and limitations. Sub-objectives: Mission Innovation Storage Priority Research Directions PRDS-5 and PRDS-4 -A pre-operational web-based toolkit enabling the derivation of optimal monitoring strategies -Assess how to combine different monitoring technologies -Define tools for detecting anomalies in data streams Mission Innovation Storage Priority Research Directions PRDCC-3: - Assess how to consistently communicate capabilities, limitations, knowledge and uncertainties of monitoring -Apply a Responsible Research and Innovation (RRI) and a Marine Spatial Planning (MSP) framework to evaluate CCUS -To put offshore monitoring strategies in a practicable framework in line with current regulations and standards

Korte omschrijving

The research proposed in ACTOM will work for the advancement of offshore monitoring to ensure alignment of CO2 storage projects with national and international regulations and societal concerns. An interdisciplinary consortium will apply methods to critically assess secure storage as this technology becomes implemented internationally as a key greenhouse gas emissions reductions strategy. The project team will build a web-based toolkit that will, for the first time, collect algorithms for designing

Projectinformatie / Project information

Projectnummer / Project number

ACT18002

Subsidiebedrag / Grant amount

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Algemene informatie / General information

Penvoerder / Secretariat

Nederlandse Organisatie voor toegepast-natuurwetenschappelijk onderzoek TNO

Publicaties en materialen / Publications and attachments

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Eindrapport ACT18002

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optimal monitoring programs for offshore geological storage sites. Routines related to detecting subtle signals of a leak in a highly varying environment will be implemented in the toolkit. Through the interdisciplinary approach, the tool will assist operators in their pre-operational phase in defining assurance monitoring programs that are aligned with regulations. The inevitable uncertainties in all measurements will be assessed, and methods on how to quantify and represent them will be recommended.

Resultaat

The outcome of ACTOM is expected to be a pre-operational web-based toolkit that enables: - the derivation of optimal monitoring strategies tailored to individual offshore storage sites or regions. - an operator to determine how to combine different monitoring technologies and design and update efficient monitoring programs based on assessed risks - the evaluation of metrics and automatic decision and recommendation tools for detecting anomalies in data streams. The impact of ACTOM will be: - An ability for operators and regulators to consistently communicate capabilities, limitations, knowledge and uncertainties of monitoring to governments, stakeholders and the public at large. - A Responsible Research and Innovation (RRI) and a marine spatial planning (MSP) and licensing framework to evaluate CCUS in a social, regulatory and political context - Offshore monitoring strategies placed in a practicable framework in line with current regulations, standards and expectations.

De data in deze applicatie is afkomstig van de Rijksdienst voor Ondernemend Nederland (RVO) en wordt in samenwerking met de Topsector Energie ontsloten.

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