

# Update on the UK-Korea project to identify barriers to geological CO2 storage assessments.

CSLF

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## **Origins and Approach**

#### Origins

- Initiative emerged from the Clean Energy Ministerial CCUS Action Group
- Concern that many countries have not assessed their potential storage capacity in sufficient detail.
- Funded by the UK and Korea

#### Approach

- Project delivered by the British Geological Survey (BGS) with help from IEAGHG
- BGS sent out a questionnaire to a wide range of contacts in March.
- Questions on
  - Storage assessments completed or underway
  - Comparison of methodologies used
  - Plans for, and barriers to, further assessments
- Aim to complete the work this year and present findings at a workshop.



### What assessments have been made

The nature of assessments so far reported varies from theoretical to matched storage.



Most of these assessments have been at a sedimentary basin level (52%), with 38% covering offshore territory.



### Storage assessment methodologies

BGS has reviewed a number of methodologies used for assessing potential storage capacity. The conclusions of this work will appear in the final report.

Most of methodologies used fell into one of the following four categories:

- The total amount of storage space available without considering geological, political or economic constraints (Technically Accessible Storage Resource Assessment, TASR; Heidung, 2013)
- The storage resource available in structural or stratigraphic traps
- The storage resource available without increasing reservoir pressure to unacceptable levels (with a sub-set of methodologies assuming pressure management wells will not be used)
- The storage resource available considering impact on other potential uses of the sub-surface (for example, subsurface volumes where CO<sub>2</sub> storage will not affect hydrocarbon production or exploration)



### Responses to survey to date

Responses have come from across the globe, although there are still some gaps.



All of the responders had some level of storage assessment in their country.



### Invitation to contribute to the survey

- Grateful to those who have returned the BGS questionnaire so far but it would be useful to have more responses to ensure as wide an evidence base as possible.
- It would be particularly helpful if the following could comment: the governments of Australia, China, France, Mexico and the UAE, together with Alstom, the Asian Development Bank, Baker and MacKenzie, Centre for American Progress, CSSA, Duke Energy, GCCSI, Global CCS Unit, ICO2N, Japan Coal Energy Center, Maersk, Scottish Power, Shell, UKCCSRC and the World Bank.
- The questionnaire is available at <a href="https://www.surveymonkey.com/r/9MGFX9F">https://www.surveymonkey.com/r/9MGFX9F</a> Please direct any questions about the survey to the BGS contacts given at the end of this presentation.



Thank you.

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