



**APPENDIX A  
Specification  
for**

**UKRI-2539 Social baseline study  
for Carbon Storage Research  
Facility Project**

## **1 Introduction**

In March 2022, the British Geological Survey (BGS) completed a scoping study to outline investment options for a new deep-borehole based UK carbon storage research facility (CSRF) on behalf of the Natural Environment Research Council (NERC) and UK Research and Innovation (UKRI). The project is now defining the infrastructure options and refining the research questions to inform facility design and conduct technical feasibility studies.

A recent BEIS commissioned report (Wicket-Whyte et al., 2021) recognises that understanding public attitudes towards technologies such as CO<sub>2</sub> Capture and Storage (CCS) is crucial to ensure their effective implementation. This understanding has therefore been identified as a key element of this project.

In order to improve our understanding of public knowledge and attitudes to CCS, the BGS wishes to acquire a national 'social baseline' that provides a snapshot of attitudes to CCS across the UK from a representative sample of the UK population. This baseline of knowledge and attitudes should also provide the opportunity for comparison with future similar activities, should further funding become available, so that changes in social attitudes towards low carbon technologies can be measured over time.

This activity should be informed by, and build on, previous studies e.g. the BEIS Public Dialogue report on CCUS, and should aim to complement and inform any future public engagement programme.

## 2 Aims & Objectives

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### 2.1 Aims & Objectives

To provide a UK-wide 'social baseline' of knowledge and attitudes to carbon capture and storage held by a representative sample of the UK population.

To increase our understanding of the level of knowledge the UK population has of:

- i. what CCS is;
- ii. the role CCS has in reducing carbon emissions;
- iii. how CCS therefore contributes to decarbonisation of the energy system and the transition to net zero

To understand how levels of knowledge impact on attitudes to CCS and how these attitudes may evolve over time in response to increased knowledge and understanding.

We require the following outputs of this study:

- i. To increase our understanding of public attitudes to CCS.
- ii. To contribute to a wider public understanding of CCS and have the potential to shape attitudes and behaviours in the future.
- iii. To inform public engagement initiatives for future large CCS research infrastructure projects and have potential to align with future scientific research.
- iv. To form the basis for future similar studies in order to track evolving attitudes over time.

The Supplier will demonstrate that they are able to apply methodologies that will:

- i. build on existing studies and provide additional information not currently known about.
- ii. include analysis of attitudes of a representative sample of UK public.
- iii. take an interdisciplinary approach and include collaboration with the project team and other UKRI specialists in public engagement.
- iv. describe sampling method and data analysis techniques, to include techniques commonly used in the social sciences.

The Supplier will regularly present progress and findings, including interim results to the CSRF project team.

## **2.2 Outputs**

- a. Progress update
- b. An interim progress report summarising initial progress and findings.
- c. A final written report is required that will summarise:
  - i. Sampling, data collection and data analysis methodology in sufficient detail to allow future repeat surveys to track changes in attitudes with time.
  - ii. Results to support the interpretations and findings.
  - iii. Recommendations to support future public engagement by the project.
- d. A summary presentation of findings and recommendations that can be used by the BGS project team to enable communication of findings and recommendations to non-specialist audiences.
- e. Presentations to be delivered by the supplier at regular project meetings.

### 3 Background to the Requirement

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The British Geological Survey (BGS) is a world-leading geological survey and global geoscience organisation, focused on public-good science for government and research to understand earth and environmental processes. We are the UK's premier provider of objective and authoritative geoscientific data, information and knowledge to help society to use its natural resources responsibly, manage environmental change and be resilient to environmental hazards.

In 2020, the BGS was successful in securing funding to undertake a scoping study to outline investment options for a UK carbon storage research facility (CSRF) on behalf of the Natural Environment Research Council (NERC) and UK Research and Innovation (UKRI). This study was funded through the UKRI Infrastructure Fund and NERC Capital programme. The CO<sub>2</sub> storage scoping study was announced in the UKRI Innovation Strategy as part of the first £50 million portfolio of investments and completed in March 2022.

This scoping study developed a science case through engagement with a range of stakeholders, consideration of operating models and assessment of technical constraints and associated costs. Decisions yet to be made include location of the CSRF and whether it should be placed onshore or on-to-offshore.

A major gap identified during the scoping study was knowledge of public attitudes to geological storage of carbon dioxide. Knowledge of public attitudes will provide the societal and cultural context to this project and will be important in shaping decisions around location and subsequent development of a CSRF. It will also inform any future public engagement activities and should be integrated with the science programme.

The Preliminary Phase of CSRF project continues the work initiated in the scoping study and is led by the Major Programmes Team in NERC and oversight is provided by a Project Board, comprising senior management from NERC, BGS and BEIS. The project is supported by a Science Advisory Group (SAG).

The supplier will report to the BGS' Geoscience and Society Lead, Hazel Napier, who leads the development of the social science programme within the CSRF Preliminary Phase and will be the Contract Manager. Regular progress meetings will be held with Hazel Napier and with the project's executive management team as required.

## 4 Scope

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In order to create a national 'social baseline' that is representative of attitudes across the UK, the study should be UK-wide and include a representative sample of UK population. The supplier should use a sampling methodology that clearly demonstrates representation across the UK population.

This study must be complete and provide the evidence and analysis needed to achieve all of the stated aims and objectives.

The methodology used, and resulting reports, should be designed to enable results obtained in future studies to be directly and easily compared to the results obtained in this study.

The location of the CSRF is yet to be confirmed, however the methodology used should include a proposal for incorporating an assessment of localised views in this UK-wide study.

The study should focus on attitudes to CCS. However, in order to set CCS in the context of decarbonisation of the whole energy system, reference can be made to the role of CCS within the range of other emission reducing technologies needed to achieve net zero.

### **Period of Agreement:**

31 January 2023 to 31 March 2024 with a progress update delivered by 17 March 2023 and interim report and results to be delivered by 1st May 2023. Final report to be delivered by 17 March 2024.

### **Budget:**

The Contract shall not to exceed £150,000 (excl VAT).

## 5 The Requirement

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This section sets out what is expected of the supplier. Expectations include project planning, relevant previous experience, approach and methods of engagement with project team, tasks to be completed and agreed outputs.

### 5.1 Project Planning

The supplier will provide a work plan which should include:

- i. Milestones (with reference to Section 6 of this Specification) and deliverables
- ii. Engagement activities with wider project team
- iii. Procedures to manage sensitive information and GDPR
- iv. Details of ethical issues that will be addressed

### 5.2 Experience

The supplier will have experience of working on similar projects which may include experience of working with the BGS, NERC, other research councils or similar organisations on related projects, demonstrating their competency in:

- i. application of social science methods to large energy focussed projects.
- ii. UK-wide data collection and analysis using accepted social science methods.
- iii. history of working on projects focussed on geoscience/subsurface role in the energy transition.

The Supplier and/or its partners will have relevant experience of working with the geoscience sector and on issues focussed on the subsurface.

The Supplier will have experience of ensuring compliance with the highest ethical standards in conducting similar social science studies.

### 5.3 Approach

The supplier will take an interdisciplinary approach to the project.

The supplier will agree research questions in discussion with the BGS CSRF project team on award of the contract to ensure value to the wider CSRF project.

The supplier will maintain regular contact with the contract manager via:

- i. Regular weekly virtual meetings with the contract manager
- ii. Monthly progress meetings with the project team including a written report on progress
- iii. Quarterly meetings with wider project staff
- iv. Quarterly written updates to the contract manager

## **5.4 Tasks**

The Supplier will complete the following tasks, some of which will form the basis of the final report to be submitted in March 2024:

- i. literature review of recent relevant research on public attitudes to large energy projects.
- ii. data sampling and collection.
- iii. analysis of data to identify themes using one or more social science research methods.
- iv. project management including progress reporting (see section 6).
- v. attendance at project meetings to present progress on the study as well as interim and final findings, monitoring and evaluation (see section 6).
- vi. generation of outputs, see below.

## **5.5 Outputs**

The supplier will complete a final report which will include the following information:

- i. Executive summary providing an accessible summary of the report and its findings
- ii. Literature review of recent relevant research on public attitudes to large energy projects
- iii. Key research questions that were addressed and rationale for choice of research questions
- iv. Full explanation of data collection methodology to include sampling method and recommended sample size including rationale for chosen method
- v. Data types collected, reason for choice of data and added value where more than one data type is used (e.g. primary and secondary data)
- vi. Data analysis methods (quantitative/qualitative) for assessing public attitudes
- vii. Results of data analysis and interpreted findings



- viii. Recommendations to inform future public engagement activities and strategies by the CSRF team
- ix. Recommendations for ensuring results obtained in future studies could be directly and easily compared to the results obtained in this study.

The supplier will provide the following additional output (see section 2.2):

High-quality presentation, with supporting notes and relevant illustrations, suitable for used by the wider project team in discussions with non-expert stakeholders.

## 5.6 Social Value and Sustainability

Suppliers are expected to align to the principles, obligations and aspirations set out in the Social Value Act (2012)<sup>1</sup> when delivering projects under this Contract.

Based on the Social Value Model<sup>2</sup>, UKRI have outlined the Key Themes relevant to the Agreement and subsequent call off Contracts, in Table 2 below:

**TABLE 2: SOCIAL VALUE KEY THEMES**

Theme:	Policy Outcome:	Delivery Objectives (Activities that):	Reporting Metrics:
<b>Fighting climate change</b>	Effective stewardship of the environment	<p>Deliver additional environmental benefits in the performance of the contract including working towards net zero greenhouse gas emissions.</p> <p>Influence staff, suppliers, customers and communities through the delivery of the contract to support environmental protection and improvement.</p>	<p>Number of people-hours spent protecting and improving the environment under the contract, by UK region.</p> <p>Number of green spaces created under the contract, by UK region.</p> <p>Annual:</p> <p>Reduction in emissions of greenhouse gases arising from the performance of the contract, measured in metric tonnes carbon dioxide equivalents (MTCDE).</p> <p>Reduction in water use arising from the performance of the contract, measured in litres.</p> <p>Reduction in waste to landfill arising from the performance of the contract, measured in metric tonnes.</p>

<sup>1</sup> [Public Services \(Social Value\) Act 2012 \(legislation.gov.uk\)](https://legislation.gov.uk)

Theme:	Policy Outcome:	Delivery Objectives (Activities that):	Reporting Metrics:
Wellbeing	Improve health and wellbeing	<p>Demonstrate action to support the health and wellbeing, including physical and mental health, in the contract workforce.</p> <p>Influence staff, suppliers, customers and communities through the delivery of the contract to support health and wellbeing, including physical and mental health.</p>	<p>Percentage of all companies in the supply chain under the contract to have implemented measures to improve the physical and mental health and wellbeing of employees.</p> <p>Percentage of all companies in the supply chain under the contract to have implemented the 6 standards in the Mental Health at Work commitment.</p> <p>Number of companies in the supply chain under the contract to have implemented the 6 standards in the Mental Health at Work commitment.</p> <p>Percentage of all companies in the supply chain under the contract to have implemented the mental health enhanced standards, for companies with more than 500 employees, in Thriving at Work.</p> <p>Number of companies in the supply chain under the contract to have implemented the mental health enhanced standards, for companies with more than 500 employees, in Thriving at Work.</p>
	Improve community integration	<p>Demonstrate collaboration with users and communities in the codesign and delivery of the contract to support strong integrated communities.</p> <p>Influence staff, suppliers, customers and communities through the delivery of the contract to support strong, integrated communities</p>	<p>Number of people-hours spent supporting local community integration, such as volunteering and other community-led initiatives, under the contract.</p>

<sup>2</sup> [Procurement Policy Note 06/20 – taking account of social value in the award of central government contracts - GOV.UK \(www.gov.uk\)](https://www.gov.uk/government/policies/procurement-policy-note-0620-taking-account-of-social-value-in-the-award-of-central-government-contracts)

## 6 Timetable

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A progress update will be delivered by 17 March 2023.

An interim progress report, summarising initial findings, to be delivered on or before 1 May 2023.

A draft final report will be prepared and submitted on or before 31 October 2023. This will be reviewed by the Project Team, NERC Project Executive and the CSRF Project SAG. A final complete and fully detailed report will be submitted by 17 March 2024.

**Monitoring of progress will be provided through:**

- i. Weekly status updates to the contract manager
- ii. Monthly written reports on progress
- iii. Quarterly written status report to the contract manager and payments made following receipt of reports.

**Payment Schedule to be agreed on award of contract:**

Milestone	Deliverable	Date	Payment
1	Progress update	17 March 2023	20%
2	Interim progress report	1 May 2023	20%
3	Draft final report	31 October 2023	20%
4	Final report and summary presentation for use by the project team	17 March 2024	40%