



**CONTRACT FOR THE PROVISION OF CR20134 - UPDATED
ASSESSMENT OF GREENHOUSE GAS REMOVAL (GGRS) METHODS
AND THEIR POTENTIAL DEPLOYMENT IN THE UK TO THE
DEPARTMENT FOR BUSINESS, ENERGY AND INDUSTRIAL STRATEGY**

Purchase Order Number: [TBC]

DUNS Number: 73-372-4749

This Contract is dated Friday, 22nd January 2021 and is made between:-

1. **The Secretary of State for Business, Energy and Industrial Strategy ("the Authority")**, of 1 Victoria Street, London SW1H 0ET, acting as part of the Crown;

and
2. **Element Energy Ltd (the "Contractor")**, whose registered office is at Suite 1, Bishop Bateman Court, Thompson's Lane, Cambridge, United Kingdom, CB5 8AQ.

INTRODUCTION

- (A) On Friday 4th December 2020 the Authority issued an invitation to tender for the provision of CR20134 - Updated assessment of Greenhouse Gas Removal (GGRs) methods and their potential deployment in the UK this including the specification a copy of which is set out in Schedule 1 (the "Specification").
- (B) In response the Contractor submitted a proposal dated Monday, 21st December 2020 and entitled CR20134 - Updated assessment of Greenhouse Gas Removal (GGRs) methods and their potential deployment in the UK explaining how it would provide the services a copy of which is set out in Schedule 2 (the "Proposal").

The parties agree as follows:-

1. SUPPLY OF SERVICES AND PRICE

In consideration of payment by the Authority to the Contractor of the sum of £74,284.82 (exclusive of Value Added Tax) (the "Contract Price") and in accordance with (a) the Specification; (b) the Proposal; and (c) the Authority's Standard Terms and Conditions of Contract for Supplies/Services (the "Standard Terms" (a copy of which were issued by the Authority with the Invitation to Tender and are attached at Schedule 3); the Contractor shall provide the Services described in the Specification and the Proposal to the Authority.

2. COMMENCEMENT AND CONTINUATION



This contract shall commence on Friday, 22nd January 2021 and subject to any provisions for earlier termination contained in the Standard Terms shall continue for a period of 5 months and end on Monday, 14th June 2021 - with the possibility of a Contract Extension if required.

3. TERMS AND CONDITIONS

- 3.1 The Standard Terms shall form part of this Contract.
- 3.2 The Contractor's Standard Terms and Conditions of business shall not apply to this Contract.
- 3.3 This Contract is formed of these clauses and the Schedules hereto. Any other attachments are provided for information purposes only and are not intended to be legally binding. In the event of any conflict or inconsistency, the documents prevail in the following order:
 - a) these clauses
 - b) the Standard Terms
 - c) the Specification
 - d) and finally, the Proposal

4. CONTRACTOR'S OBLIGATIONS

- 4.1 Where the Contractor is supplying goods to the Authority these shall be delivered to the Authority in full compliance with the Specification and shall be of satisfactory quality and fit for purpose. Where the Contractor is performing services for the Authority it shall do so in accordance with the Specification and exercise reasonable skill and care.

5. MANAGEMENT AND COMMUNICATIONS

- 5.1 The Contractor shall perform the Services under the direction of the Authority.
- 5.2 Any direction by the Authority may be given by [REDACTED] (the "Contract Manager") who is an officer in the 1 Victoria Street, Westminster, London, SW1H 0ET or such other person as is notified by the Authority to the Contractor in writing.
- 5.3 The Contractor appoints [REDACTED] to be the Contractor's first point of contact for this Contract. All queries to the Contractor from the Authority's Contract Manager shall initially be addressed to the Contractor's first point of contact.



- 5.4 The Contractor's first point of contact and the Contract Manager shall meet as often as either the Contractor or the Authority may require to review the Contractor's performance of the Contract.

6. INVOICES AND PAYMENT

- 6.1 Subject to the Contractor providing the Services to the Authority in accordance with this Contract and submitting invoice/s to the Contract Manager in the manner reasonably required by the Contract Manager payment will be made by the Authority to the Contractor in accordance with (as referred to in Condition 11 of the Standard Terms & Conditions).


7. TRANSPARENCY

- 7.1 The Authority is required to publish information about this contract within the Official Journal of the European Union and through the Governments Transparency website, Contracts Finder.

The Authority's decision not to publish full details of the contract does not however preclude it publishing such information in the future (subject to applicable redactions) and the Authority may be required to disclose such information under the Freedom of Information Act 2000, the Environmental Information Regulations 2004 (EIR) or other legal requirement. In such cases, the Authority would need to consider disclosure in the context of the particular circumstances of the request or requirement concerned.

Signed by the parties' duly authorised representatives:-

For the Secretary of State for Business, Energy and Industrial Strategy

Signature: 

Print Name: 

Job Title: Deputy Director Net Zero & Carbon Budgets

Date: 20/01/2021

For the Contractor Element Energy Ltd 

Signature: 

Print Name: 



Department for
Business, Energy
& Industrial Strategy

Job Title: Director.....

Date: 18th January 2021.....

The following Schedules form part of this Contract:

Schedule 1	The Authority's Specification
Schedule 2	The Contractor's Proposal
Schedule 3	the Authority's Standard Terms & Conditions of Contract for Supplies/Services
Annex A (GDPR)	



Schedule 1 **The Authority's Specification**

Introduction and summary of requirements

The Department of Business, Energy and Industrial Strategy ("BEIS") wishes to appoint a specialist supplier to provide a detailed analysis of estimated costs and deployment potential of greenhouse gas removal (GGR) methods.

HMG requires an up-to-date assessment of the wider potential of GGR methods to shape the future policy direction on greenhouse gas removals in the UK. As announced in the government's response to the Climate Change Committee's (CCC) 2020 Progress Report, a Net Zero Strategy will be published in 2021 in the lead up to the UN Climate Change Conference, COP26. This research project will inform understanding of possible scenarios for the deployment of GGRs as part of the UK's wider pathways to reach net zero in 2050. To complement efforts to reduce emissions, the CCC has been clear that some GGRs will be required to offset residual emissions in some parts of sectors that are difficult to decarbonise completely, such as heavy industry, agriculture, and aviation.

1. Background

The term 'greenhouse gas removal' (or GGR) encompasses any method which removes greenhouse gases from the atmosphere. There is thus a diverse range of GGR methods, including:

- Afforestation / forest management
- Soil carbon sequestration
- Habitat restoration of wetlands, peatland, and coastal habitats
- Biochar
- Bioenergy with Carbon Capture and Storage (BECCS)
- Direct Air Carbon Capture and Storage (DACCS)
- Wood in construction
- Building with low-carbon concrete
- Enhanced Weathering

While these are currently considered to be the most viable GGR methods (i.e. assessed as being at technology readiness level 3 or above), a report conducted by Vivid Economics¹ noted that there are further GGR options under development which may emerge as viable candidates for deployment in the UK, such as ocean alkalinity and mineral carbonation.

Methods for active removal of greenhouse gases from the atmosphere are variously referred to as 'greenhouse gas removals' (GGRs), 'negative emissions technologies' (NETs), and 'carbon dioxide removal' (CDR) across

¹Vivid Economics for BEIS (2019). Greenhouse Gas Removal policy options.
<https://www.gov.uk/government/publications/greenhouse-gas-removal-policy-options>



the climate change sector. This invitation to tender uses the term 'greenhouse gas removals', which is considered to be the term in most widespread use by stakeholders in the UK.

Potential future costs and the deployment potential of many of these GGRs is subject to considerable uncertainty given that many of these methods are at an early stage of development, currently moving into demonstrator and pilot stages.

The government has been clear on its commitment to position the UK at the forefront of new markets for low carbon technologies and services in the net zero transition. In June, we announced up to £100m innovation funding for GGRs including Direct Air Capture, which will help to improve our understanding of these technologies and reduce their cost. As part of this, BEIS has earmarked £70m funding for Direct Air Capture and other GGR Innovation². The funding seeks to:

- Bring forward a range of different approaches to GGR that could be piloted within the UK;
- Reduce costs and energy inputs of existing technologies;
- Demonstrate feasible GGR approaches at scale.

In addition, more than £30m of funding from UKRI will support GGR research, development and demonstration, better our understanding of the governance and ethics of GGRs, and how to develop and support sustainable solutions.

On Friday, 4th December 2020, the government launched a call for evidence on GGR methods, inviting views from stakeholders on the potential role of government in incentivising the development and deployment of GGRs in the UK over the medium- and longer-term.

The government recognises that GGR methods are at varying stages of development and will vary in potential scale of deployment in the UK. Forecasts about which GGR technologies will be dominant in 2050 are highly uncertain and evolving rapidly. This research project will support HMG in updating our evidence base on the costs and deployment potential of GGRs over time in the UK. It will also build on the findings from the 2019 Vivid report on GGR methods¹, which was carried out before the UK legislated for net zero.

2. Aims and Objectives

The aim of this research will be to build on the Royal Society and Royal Academy of Engineering 2018³ and Vivid 2019 reports¹ on GGRs and update our evidence base on GGRs methods.

²SBRI Greenhouse Gas Removals Innovation Competition

<https://www.contractsfinder.service.gov.uk/Notice/84d44904-0800-4190-89df-7e3e874fe577>

³Royal Society & Royal Academy of Engineering (2018), Greenhouse gas removal.

<https://royalsociety.org/topics-policy/projects/greenhouse-gas-removal/>



It will also support HMG in the analysis of the call for evidence responses, which will also include information on the above (see Methodology section).

Through a combination of original analysis and review of the existing evidence, the study will provide an up-to-date assessment of the wider potential of GGR methods and inform policy decisions on incentives models for these methods.

The 5 key research questions this project should answer are as follows:

1. Building on the evidence presented in the Vivid Economics (2019) report published by BEIS, reviewing, analysing and presenting evidence in relation to **life cycle cost estimates** of GGR methods, considering:
 - a. Input requirements (e.g. water / power / feedstock / land-use), including potential sources for these inputs.
 - b. Infrastructure and capital cost estimates
 - c. Capture efficiency and permanence of removal
 - d. Transport and storage costs / safe disposal or use of end product
 - e. Quantifiable financial co-benefits, e.g. revenue from energy sales for BECCS (see also point 4)

Where possible, the ranges of life cycle cost estimates should be provided over time up to 2050, in 5-year intervals (depending on the available evidence).

2. **Deployment potential and build rate limits of GGR methods**, with a view to presenting deployment scenarios up to 2050. The scenarios will be agreed with BEIS during Task 2 and will draw on inputs developed as part of the project. This should include an assessment of key constraints to GGRs deployment in line with the analysis at point 1).
3. **Estimates of end-to-end life cycle net removal potential (net of emissions) from BECCS and DACCS**, taking into account at a minimum: emissions from extraction and transport of any fuels, emissions associated with any required land-management, emissions associated with installation and decommissioning, emissions associated with the energy required, and removals associated with the technology. Please consider the following scenarios:
 - a. Current UK energy mix
 - b. 2030 energy mix as modelled by energy and emissions



projections⁴

- c. 2040 energy mix as modelled by energy and emissions projections

Accurate measurement of net removals from GGR methods is required to underpin a robust Monitoring, Reporting and Verification framework for negative emissions. In addressing this research question, the contractor should outline any barriers or challenges to accurate measurement. Energy and emissions projections are the UK's best estimates of future energy generation, demand, and emissions and should be used as the basis for assumptions about the future energy mix of the UK.

4. Updated evidence, based on an up-to-date assessment of UK and global activity on GGR development, on **technology readiness levels** of different GGR methods.
5. **Quantification of co-benefits from GGR methods.** This will include quantitative monetisation and qualitative estimation of co-benefits in line with HMT Green Book guidance.

3. Methodology

The contractor will be invited to propose a methodology which would best meet the overall aims and objectives of this project for approval by BEIS, but it is expected that the work will include, at least, the following tasks:

Task 1. Review existing evidence base (including – once available – the submissions to the HMG call for evidence launched on Friday, 4th December 2020) on greenhouse gas removals with a view to build an understanding of GGR methods in relation to the 5 key research questions outlined in Section 3 above.

The contractor should set out by reviewing the evidence currently available on GGR methods in relation to the 5 research questions set out in Section 2 above. Evidence assessed should include peer-reviewed literature, as well as grey literature more broadly. All sources should be reviewed critically, and references should be reported explicitly and in an accessible format.

There is a large and rapidly growing volume of literature addressing the need for, and characteristics, costs and potential scale of, deployment of GGRs. As the main purpose of this project lies in updating the current evidence base, the contractor should aim particularly to capture evidence arising from recent publications. This will build on established sources such as the Royal Society and Royal Academy of Engineering Review published in September 2018⁵,

⁴Projected energy mixes can be found in Annex J – total electricity generation by source (<https://www.gov.uk/government/publications/updated-energy-and-emissions-projections-2019>)
Royal Society & Royal Academy of Engineering (2018), Greenhouse gas removal.
<https://royalsociety.org/topics-policy/projects/greenhouse-gas-removal/>



and Vivid Economics report to Government published in September 2019⁶. We expect the contractor to use these as starting points, with the review concentrating on the research questions listed in Section 2 and going beyond the findings of the 2019 Vivid Report where possible.

The contractor should also engage with the Steering Group that will be established for this research project.

The contractor should also contribute to reviewing stakeholder responses to the call for evidence on GGRs launched by HMG on Friday, 4th December 2020, with a view to integrating this evidence among the sources identified in Task 1. The call for evidence document outlines that submissions will be shared with a third party contractor for the purposes of reviewing responses. With regards to the call for evidence (CfE) we expect the contractor to focus on:

1. Developing a coherent methodology to analyse the CfE responses, which will be reported as described in Task 2. The methodology should include the principles used to critically assess the evidence, as well as the criteria used to consider and report sources and data identified in the CfE.
2. Reviewing the responses received with a view to provide an expert critical assessment of the technical information included. The contractor should use their technical expertise to scrutinise and provide quality assurance of the responses. As part of this review process the contractor should also assess the pool of respondents and produce a concise summary of their characteristics and of the sources at the basis of the evidence provided.
3. Following the quality assurance processes, the information considered valid and robust should be retained and included in the wider evidence base used for Tasks 2-5.

The CfE closes on Friday, 26th February 2021 and will be provided to the contractor shortly after. There is uncertainty regarding the number of responses to the CfE. It is estimated that BEIS will receive 50-100 submissions.

It is expected that the contractor should place a weighting of approximately 30% on the evidence provided through responses to the call for evidence. The remaining 70% weighting should be placed on additional evidence sourced through the contractor's research.

The sequencing and timing of Tasks 1 and 2 might have to be adjusted due to interaction of these tasks, and to the responses from the CfE potentially becoming available only after the start of the research project.

⁶Vivid Economics for BEIS (2019). Greenhouse Gas Removal policy options.
<https://www.gov.uk/government/publications/greenhouse-gas-removal-policy-options>



Task 2. Scope and develop a methodology to address the 5 research questions for GGR methods, including identifying the relevant data sources.

For this task, the contractor should build on the evidence review to scope out a full methodology to address the 5 research questions set out in Section 2 above. They should also identify data sources, which should be robust and suitable to address the purpose of the project, as well as readily available and accessible to the contractor and government.

The methodology should be developed in a methodological note that will be shared with BEIS at the end of this task. This will be reviewed by BEIS and a cross Whitehall Steering Group. The note will include a list of data sources, as well as a plan to engage stakeholders (including a list of those that are not part of the Steering Group) that could provide additional information to address the research questions and to validate the findings at a later stage. This list should also consider those who replied to the CfE.

The methodology under development should rely on a mix of original analysis and existing evidence, as identified in Task 1. Original analysis should include scenario analysis of deployment potential, costs and broader constraints, as well as quantitative analysis of existing data sources, and of data derived from the analysis.

All stages of the methodology should be devised to account for and report the levels of uncertainty linked to the deployment and technological readiness of GGR methods. The methodology, at a minimum, should include the following steps:

- a. An assessment of the evidence available from whole-system decarbonisation scenarios that should rely on the analysis developed by the CCC for their net zero report and the modelling developed in their forthcoming advice on Carbon Budget 6 (as well as any other recent evidence available in this area). This will help the project to rely on consistent assumptions on the total amount of CO₂ left in hard-to-decarbonise sectors like agriculture, aviation and shipping. The contractor will also validate these assumptions with the Steering Group. The existing modelling will also inform step (b) of the methodology.
- b. An assessment of deployment potential and build out rates that should be carried out based on a mix of original analysis and evidence from Task 1. This should particularly aim at addressing questions 1 and 2 in Section 2. This should cover the following areas:
 - Maximum technical potential by 2050, as well as build out rates and deployment scenarios up to 2050 presented in 5-year intervals (depending on available evidence). This



- assessment should include multiple deployment and cost scenarios. Scenarios should vary in terms of GGRs maximum technical potential by 2050, as well as of deployment trajectories up to 2050 based on build out rates.
- Costs associated with the deployment of GGR methods, split between operational expenditure (OPEX) and capital expenditure (CAPEX). Costs estimates should reference timeframes and should account for uncertainty in their presentation. Potential scenarios on the evolution of costs over time (up to 2050) based on recent and robust assumptions should also be provided. Scenarios should vary, for example, by the extent to which costs might fall as innovation progresses and deployment increases. Where possible, cost components (e.g. capital, energy, operating, and capture costs) should also be outlined. Wider social costs should also be presented either quantitatively or qualitatively depending on the conclusions from the review of the literature. Where applicable, costs estimates should be provided in a standardised format aligned to other ongoing projects in this area – this should be agreed by the Steering Group at the start of the project.
 - Constraints to such deployment, with a focus on wider policy barriers (e.g. gaps in the regulatory framework) and more specific technical barriers such as availability of inputs (e.g. factors such as biomass availability, as well as availability and competitive uses of the transport & storage infrastructure).
- c. An assessment of the co-benefits associated to GGRs, including for example potential volume of, and value of, energy produced through BECCS. This task should deliver a quantitative assessment of monetised benefits from GGR methods, in line with the methodology outlined in the HMT Green Book. Where this is not possible, the task should be carried out qualitatively. The assessment of co-benefits should also address the estimation of economic opportunities, including a quantitative analysis of Gross Value Added for UK businesses and UK-based employment potential linked to the methods and business models under consideration.
- d. An assessment of technology readiness levels of different methods of greenhouse gas removal, based on standard classification (comparable to the one used in the 2019 Vivid Economics GGR report).



- e. The methods used to analyse the returns of the CfE should also be reported in the methodology note. This will include sifting, peer reviewing, and qualitative analysis of the evidence received.

Task 3. Application of the methodology and drafting of report

The contractor should apply the agreed methodology to develop analysis and produce an overview report covering the scope of the project, a high-level presentation of the approach used and key findings. The contractor should summarise their findings and identify lead options, explaining their reasoning. They should also produce the other analytical outputs described in Section 4 (e.g. analytical outputs, data used and versions of charts/data used for the key findings) as well as a report on the findings from the CfE. Where applicable, all products should be delivered in an accessible and modifiable format (e.g. Excel), particularly in the case of analytical outputs, datasets and charts developed by the contractor.

If this Task suggests that supplementary evidence or clarifications on existing materials are still needed, follow-up engagement of stakeholders from HMG, academia and businesses should also be employed ahead of the more formal peer review stage. Early versions of the analysis and drafts of the reports should be shared with the Steering Group to ensure that the project is progressing towards achieving its purposes in a timely fashion.

The contractor should also suggest further work, e.g. the development of pilots of policy options, which cannot be accommodated within the resources available to this contract.

Task 4. Peer review of report findings with internal and external stakeholders

The contractor is expected to validate the findings arising from Tasks 1-3 with a group of government and external stakeholders. The list of these stakeholder will be developed in collaboration with the government GGRs team and should be approved by the Steering Group. Peer review should include an ad hoc workshop (convened online or according to any HMG guidelines in place at the time) with the broader stakeholder group, with materials shared in advance of the meeting for review. The contractor should allow for ample time to integrate the comments and review the analysis following the workshop.

Broader engagement with government policy and analytical teams is also a crucial aspect of this work. The contractor should validate all outputs with the Steering Group starting from the kick-off meeting and throughout the course of Task 2 and 3, as well as in a designated final stage (including the workshop mentioned in the paragraph above) to ensure that the outputs and underlying assumptions and methodology have been tested and familiarised across HMG. This engagement is important to enable the contractor to understand wider policy ambitions and constraints which would either limit the deployability of policy options or, conversely, result in co-benefits across policy areas other than tackling climate change; the risk of perverse



incentives, compared to investments in mitigation measures such as energy efficiency; and the type of information which policy teams would find most useful.

Task 5. Quality assurance and finalisation of reports for publication

Ahead of final publication, the contractor should quality assure the products (both the analysis and reports), following the processes laid out in Section 6 and agreed at the start of the project.

The contractor should also present the report (at BEIS or in an online forum depending on policies in place at the time) for internal colleagues. Appropriate stakeholders may be invited to such events.

4. Outputs Required

The key deliverables of this work are:

1. An in-depth methodology report covering, in detail, techniques and sources used to assess deployment/decarbonisation potential, costs and economic opportunities of GGR methods, as well as the methodology used to assess Technology Readiness Levels (TRLs) of these methods and the methodology used to analyse responses to the GGRs CfE.
2. An overall report setting out the project scope, and all findings on the research questions described later in this proposal and based on the methodology described above. This should represent the main output of the project.
3. Analytical outputs and any underlying datasets used in accessible format (incl. assumptions underlying the analysis and sources), following the methodology explained in the report. This should include a report of the quality assurance processes following BEIS standards.
4. A PowerPoint presentation on key findings for dissemination, including findings from the CfE. The presentation should be suitable for presenting the findings to government colleagues including those not already familiar with the work.

5. Ownership and Publication

BEIS will own any Intellectual property rights to utilise the data not subject to commercial sensitivity. The department anticipates that the data will be used to inform policy shaping.

The publicly available copy of the report will be published in similar fashion as other BEIS publications, dependent on forthcoming Ministerial positions on publication and transparency. The draft report should be sent to BEIS according to timelines agreed at the beginning of the project and time allowed for review and agreement of the final version.



6. Quality Assurance

The contractor must state how all of the work on the project will be quality assured by producing a Quality Assurance (QA) plan. A summary of this plan should be included within the proposal. The plan should:

- Ensure that QA is done by individuals who were not directly involved in the research or analysis development.
- Specify who will be responsible for QA before the work is delivered to BEIS.
- Explain how the successful bidder will take responsibility for any work supplied by sub-contractors.

QA processes will be required to match the Aqua Book standards and to adopt the standardised BEIS QA template

Sign-off for the quality assurance must be done by someone of sufficient seniority within the contractor organisation to be able to take responsibility for the work done. BEIS reserves the right to refuse to pay for outputs which do not meet the required standard specified in this invitation to tender.

Draft outputs of the interim and final reports and datasets must be submitted to BEIS by the deadlines given in Section 8 below, and then the contractor should attend a meeting with officials to present the draft interim and final results to the panel at BEIS offices. Verbal and written comments will be collated by the BEIS project manager and submitted to the contractor following these meetings. Invoices for deliverables will only be processed if the submitted officials' comments have been addressed to the standard deemed acceptable by the officials and BEIS project manager. The Contractor should make it clear in writing exactly where and how comments have been addressed.

BEIS officials will scrutinise not only the quality of the data and analysis, but also the quality of the reporting. Reports deemed by BEIS to be poorly written or poorly presented will be returned to the supplier to re-produce to the high standard required before invoices are paid. Invoices will be paid by deliverable and will not be processed unless deliverables are submitted on time and to the standard required. BEIS will withhold a percentage of the cost for each deliverable to dissuade sub-standard and /or late submissions. Further details are provided in clauses 19-21 of the BEIS Terms and Conditions.

The contractor will be expected to produce high quality reports that meet the following criteria:

General:



- Clearly set out findings and supporting evidence, in plain correct English.

Diagrams:

- Clear and appropriate use of diagrams (large enough size, data can be read clearly, caption, unique number).
- All diagrams should be clearly labelled (with unique number), explained and discussed.

Data quality:

- Limitations in the research approach must be clearly stated and justified.
- Where the findings are stronger and more robust and where they are not needs to be stated clearly.
- Uncertainty in numerical data should be clearly and comprehensively presented

Referencing

- A comprehensive bibliography of all references must be provided

7. Timetable

A proposed timetable is set out below. This will be reviewed and agreed at the kick-off meeting.

ITT Publication	Friday 4 th December 2020
Clarification question deadline	Thursday, 10 th December 2020 11:00
Clarification question response deadline	Monday, 14 th December 2020
All bids received	Monday, 21 st December 2020 11:00
Evaluation completion & announcement	Tuesday, 12 th January 2021
Contracts exchanged and signed	W/C Monday, 18 th January 2021
Kick-off meeting	W/C Monday, 25 th January 2021
Milestone 1: Project Initiation Document (PID) and presentation to BEIS. The PID should include detailed timelines and plan for the analysis, QA plan, a suggested list of stakeholders for the peer review and a log of risks associated with the project. The PID should be presented and discussed with BEIS.	Friday, 5 th February 2021 (subject to any amendment by contracting authority)
BEIS to provide CfE responses to contractor	W/C Monday, 1 st March 2021
Milestone 2a: Draft methodology report (see output 1)	Friday, 5 th March 2021 (subject to any amendment by contracting authority)



Milestone 2b: Final methodology report (see output 1)	Friday, 26 th March 2021 (subject to any amendment by contracting authority)
Milestone 3a: Outline of overall report (see output 2) and associated analytical products (see output 3)	Friday, 26 th March 2021 (subject to any amendment by contracting authority)
Milestone 3b: Draft overall report (see output 2) and associated analytical products (see output 3)	Friday, 30 th April 2021 (subject to any amendment by contracting authority)
Milestone 3c: Completed stakeholders' workshop, final overall report (see output 2) and associated analytical products (see output 3). The stakeholder workshop should be completed ahead of the final report and its findings integrated in the final report.	Friday, 21 st May 2021 (subject to any amendment by contracting authority)
Milestone 4: Final QA report and presentation on key findings	Tuesday, 8 th June 2021 (subject to any amendment by contracting authority)
Project completion	Monday, 14 th June 2021

8. Challenges

Applicants should identify risks to the successful completion of the work, and mitigation measures.

9. Ethics

Applicants should consider ethical issues and, where necessary, identify and propose arrangements for initial scrutiny and on-going monitoring of ethical issues. The appropriate handling of ethical issues is part of the tender assessment exercise and proposals will be evaluated on this as part of the 'addressing challenges and risks' criterion.

We expect contractors to adhere to the following GSR (Government Social Research) Principles:

1. Sound application and conduct of social research methods and appropriate dissemination and utilisation of findings
2. Participation based on valid consent
3. Enabling participation
4. Avoidance of personal harm
5. Non-disclosure of identity and personal information

Further guidance is available in "Ethical Assurance Guidance for Social research in Government":
<https://www.gov.uk/government/publications/ethical-assurance-guidance-for-social-research-in-government>



10. Working Arrangements

The successful contractor will be expected to identify one named point of contract through whom all enquiries can be filtered. A BEIS project manager will be assigned to the project and will be the central point of contact.

11. Skills and experience

BEIS would like you to demonstrate that you have the experience and capabilities to undertake the project. Your tender response should include a summary of each proposed team members experience and capabilities.

In view of the specialised nature of the work we expect bidders to include experts in GGR research in their project teams. Given the limited number of experts working in the field, it is acceptable for individuals/institutions to be part of more than one bid.

We also expect project teams to include skills in facilitating discussions with policy teams, as a key element of this project will be extensive, focussed engagement with a range of policy teams within BEIS and, potentially, other government departments.

Contractors should propose named members of the project team, and include the tasks and responsibilities of each team member. This should be clearly linked to the work programme, indicating the grade/ seniority of staff and number of days allocated to specific tasks.

Contractors should identify the individual(s) who will be responsible for managing the project.

In addition, Contractors must also complete Declaration 4: Technical and Professional Ability. To note, the Department shall reserve the right to disqualify any bid from the procurement which is not fully completed, or does not include all of the fully completed documentation and declarations requested in this ITT.

12. Consortium Bids

In the case of a consortium tender, only one submission covering all of the partners is required but consortia are advised to make clear the proposed role that each partner will play in performing the contract as per the requirements of the technical specification. We expect the bidder to indicate who in the consortium will be the lead contact for this project, and the organisation and governance associated with the consortia.

Contractors must provide details as to how they will manage any sub-contractors and what percentage of the tendered activity (in terms of monetary value) will be sub-contracted.

If a consortium is not proposing to form a corporate entity, full details of alternative proposed arrangements should be provided in the Annex. However, please note the Department reserves the right to require a successful consortium to form a single



legal entity in accordance with Regulation 28 of the Public Contracts Regulations 2006.

The Department recognises that arrangements in relation to consortia may (within limits) be subject to future change. Potential Providers should therefore respond in the light of the arrangements as currently envisaged. Potential Providers are reminded that any future proposed change in relation to consortia must be notified to the Department so that it can make a further assessment by applying the selection criteria to the new information provided.

13. Budget

The maximum budget for this project is £83,333.00 Excluding VAT.

Bidders should provide a full and detailed breakdown of costs. This should include staff (and day rate) allocated to specific tasks. In providing this breakdown of costs, bidders should clearly set out how the costings relate to the 5 tasks set out in the Methodology Section 3 above.

Cost will be a criterion against which bids which will be assessed.

Payments will be linked to delivery of key milestones. The indicative milestones and phasing of payments is as follows.

Deliverable	Date	Proportion of contract cost
Project Initiation Document, Final methodology report, outline of overall report and associated analytical products (see Milestones 1, 2a, 2b, 3a)	31/3/2021	75%
Final overall report and associated analytical products; stakeholders' workshop; final QA report and presentation on key findings (see Milestones 3b, 3c, 4)	14/06/2021	25%

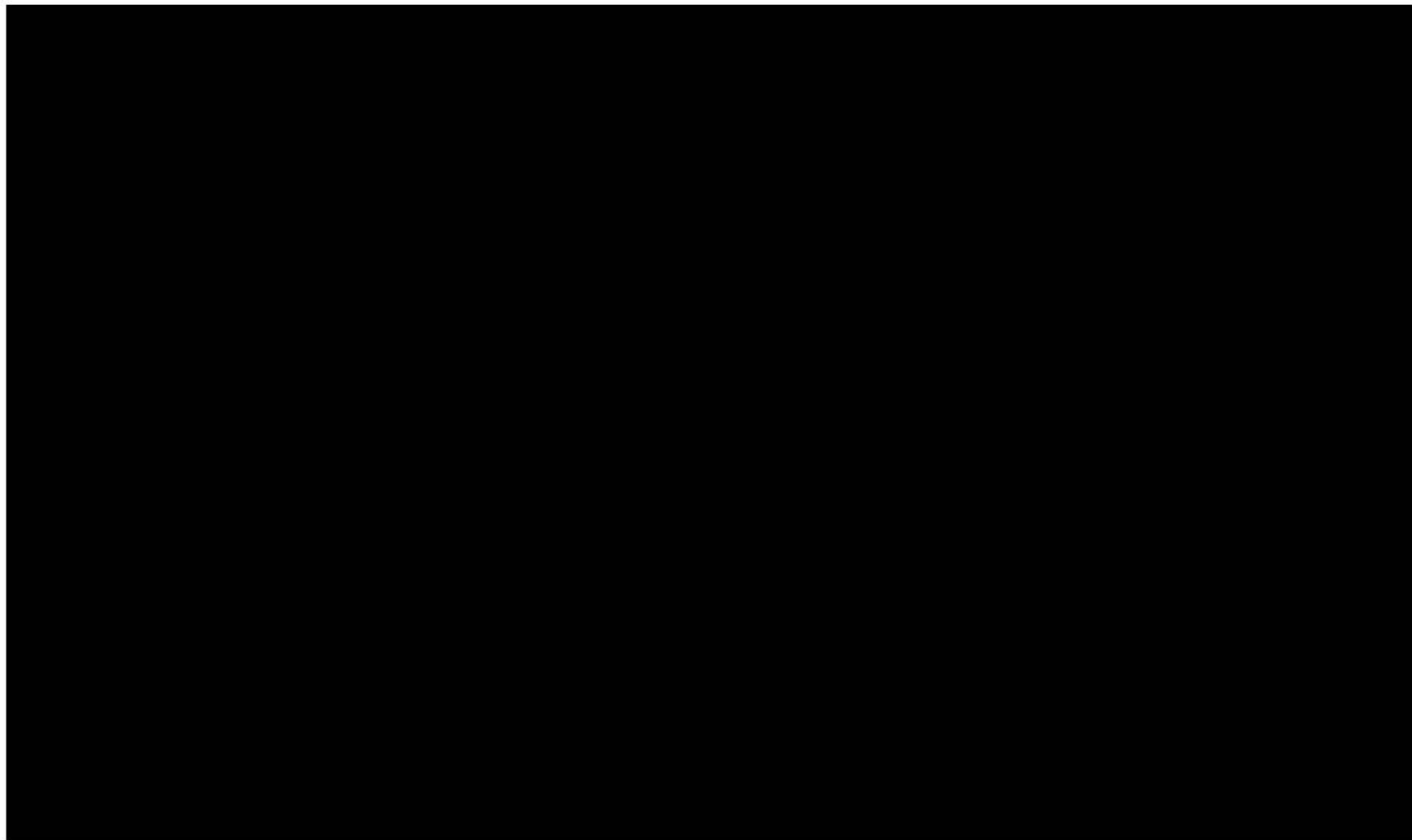
Please advise in your tender response how this breakdown reflects your usual payment processes.

In submitting full tenders, contractors confirm in writing that the price offered will be held for a minimum of 60 calendar days from the date of submission. Any payment conditions applicable to the prime contractor must also be replicated with sub-contractors.



Department for
Business, Energy
& Industrial Strategy

The Department aims to pay all correctly submitted invoices as soon as possible with a target of 10 days from the date of receipt and within 30 days at the latest in line with standard terms and conditions of contract.





Schedule 3

The Authority's Standard Terms & Conditions of Contract for Supplies/Services



CR20092 - DPF31
Terms and Conditions



General Data Protection Regulations (GDPR)

1. Data Protection

The Supplier will be compliant with the Data Protection Legislation, as defined in the terms and conditions applying to this opportunity. A guide to The General Data Protection Regulation published by the Information Commissioner's Office can be found [here](#).

The only processing that the Supplier is authorised to do is listed in Annex 1 by the Contracting Authority and may not be determined by the Supplier.

Annex 1: Processing Personal Data and Data Subjects

(1) The contact details of the Contracting Authority Data Protection Officer are:

The Contracting Authority Data Protection Officer
Department for Business, Energy and Industrial Strategy
1 Victoria Street
London
SW1H 0ET

Email: [REDACTED]

(2) The contact details of the Supplier Data Protection Officer (or if not applicable, details of the person responsible for data protection in the organisation) are:

(3) The Supplier shall comply with any further written instructions with respect to processing by the Contracting Authority.

(4) Any such further instructions shall be incorporated into this Annex 1.

Description	Details
Subject matter of the processing	<p>The processing is needed in order to ensure that the Contractor can effectively deliver the contract to provide "Updated Assessment of Greenhouse Gas Removal Methods and their Potential Deployment in the UK"</p> <p>The processing of names and business contact details of staff of both the Authority and the Contractor will be necessary to deliver the services exchanged during the course of the Contract, and to undertake contract and performance management.</p>



	The Contract itself will include the names and business contact details of staff of both the Authority and the Contractor involved in managing the Contract.
Duration of the processing	Processing will take place from 22/01/2021 for the duration of the Contract. The Contract will end on 14/06/2021 but may be extended until up to 6 months from that date
Nature and purposes of the processing	The nature of processing will include the storage and use of names and business contact details of staff of both the Authority and the Contractor as necessary to deliver the services and to undertake contract and performance management. The Contract itself will include the names and business contact details of staff of both the Authority and the Contractor involved in managing the Contract.
Type of Personal Data	Names, business telephone numbers and email addresses, office location and position of staff of both the Authority and the Contractor as necessary to deliver the services and to undertake contract and performance management. The Contract itself will include the names and business contact details of staff of both the Authority and the Contractor involved in managing the Contract.
Categories of Data Subject	Staff of the Authority and the Contractor, including where those employees are named within the Contract itself or involved within contract management.
Plan for return and destruction of the data once the processing is complete UNLESS requirement under European Union or European member state law to preserve that type of data	The Contractor will delete the Personal Data and erase the Personal Data from any computers, storage devices and storage media that are to be retained by the Contractor after the expiry of the Contract. The Contractor will certify to the Authority that it has completed such deletion. Where Personal Data is contained within the Contract documentation, this will be retained in line with the Department's privacy notice found within the Invitation to Tender.

BEIS will be relying on consent as the relevant legal basis of processing. The Contractor will ensure that all communications requesting the provision on personal data allow for the data subject to provide clear, affirmative, informed, freely given and unambiguous consent, which requires a positive 'opt-in.' The Contractor will have mechanisms in place to ensure that consent is recorded and shown through an audit trail.



In line with HM Government's Cyber Essentials Scheme, the Contractor will hold valid Cyber Essentials certification by the time of contract award. Evidence of the certification must be provided to the Authority in order for the contract to be awarded.

Evidence of renewal of certification must then be provided to the Authority on each anniversary of the first applicable certificate obtained by the Contractor for the duration of the Contract. In the event the Contractor fails to comply, the Authority reserves the right to terminate the Contract for material breach in line with the Standard Terms and Conditions of Contract.

If the Contractor already holds ISO27001 accreditation, no further Cyber Essentials certification will be necessary provided that the certification body carrying out this verification is approved to issue a Cyber Essentials certificate by one of the accreditation bodies.

GDPR Questionnaire

The Supplier agrees that during any term or extension it shall complete and return the attached questionnaire as advised below.

Note: The Contracting Authority also reserves the right to amend or increase these frequencies, as it deems necessary to secure assurance with regards to compliance.

The Contracting Authority requires such interim assurances to ensure that the Supplier is still compliant with the needs of the GDPR Act due to the implications of a breach.

The Supplier shall complete and return the questionnaire to the contact named in the Contract on the anniversary of the commencement of the Contract.

The Supplier agrees that any financial burden associated with the completion and submission of this questionnaire at any time, shall be at the Suppliers cost to do so and will not be reimbursable.



GDPR Assurance
Questionnaire May1