



Programme Area: Carbon Capture and Storage

Project: Thermal Power with CCS

Title: Request for Proposals Thermal Power with CCS

Abstract:

A request for proposals for Thermal Power with CCS.

Context:

The ETI's whole energy system modelling work has shown that CCS is one of the most cost effective technologies to help the UK meet its 2050 CO₂ reduction targets. Without it the energy system cost in 2050 could be £30bn per annum higher. Consequently, ETI invested £650,000 in a nine month project to support the creation of a business case for a large scale gas with CCS power plant, to include an outline scheme and a 'template' power plant design (Combined Cycle Gas Turbine with post combustion capture), identify potential sites in key UK industrial hubs and build a credible cost base for such a scheme, benchmarked as far as possible against actual project data and as-built plant. The ETI appointed engineering and construction group SNC-Lavalin to deliver the project working with global infrastructure services firm AECOM and the University of Sheffield's Energy 2050 Institute.

Disclaimer: The Energy Technologies Institute is making this document available to use under the Energy Technologies Institute Open Licence for Materials. Please refer to the Energy Technologies Institute website for the terms and conditions of this licence. The Information is licensed 'as is' and the Energy Technologies Institute excludes all representations, warranties, obligations and liabilities in relation to the Information to the maximum extent permitted by law. The Energy Technologies Institute is not liable for any errors or omissions in the Information and shall not be liable for any loss, injury or damage of any kind caused by its use. This exclusion of liability includes, but is not limited to, any direct, indirect, special, incidental, consequential, punitive, or exemplary damages in each case such as loss of revenue, data, anticipated profits, and lost business. The Energy Technologies Institute does not guarantee the continued supply of the Information. Notwithstanding any statement to the contrary contained on the face of this document, the Energy Technologies Institute confirms that it has the right to publish this document.

Request for Proposal (RfP)

Title of Services for which Proposals are Requested

Thermal Power with CCS

Request Issue Date

18th June 2015

Update with revised timetable issued 6th August 2015

Deadline for Notification of Intention to Submit a Proposal

4th September 2015

Closing Date

Proposals must be received before 12:00 noon on 12th October 2015

Contact for Enquiries

Andrew Green

Programme Manager

Tel: +44 (0) 1509 202054 or Switchboard +44 (0) 1509 202020

Email: ccs@eti.co.uk

Address for Notifications and Submission of Proposals

Energy Technologies Institute LLP

F.A.O. Andrew Green

Holywell Building

Holywell Way

Loughborough

United Kingdom

LE11 3UZ

Email: ccs@eti.co.uk

Title of project	THERMAL POWER WITH CCS
Request issue date	18 June 2015 Updated 6 August 2015
Closing date	12 October 2015
Deadline for submission of signed NDA	04 September 2015
Contact for enquiries	Andrew Green
email	ccs@eti.co.uk
Telephone	01509 202054
Address for notification and submission of proposals	ENERGY TECHNOLOGIES INSTITUTE Holywell Building Holywell Way Loughborough LE11 3UZ ccs@eti.co.uk

	Additional documents	Location
1.	Annex A1 – Due Diligence Information Requirements	<web address>
2.	Annex A2 – General Due Diligence Requirements	<web address>
3.	Annex A3 – Statement of Compliance	<web address>
4.	ETI Non-Disclosure Agreement	<web address>

1. Summary of key project information

1.1 Project Summary

Through this Request for Proposals, the ETI is proposing to invest up to £2m alongside co-venturing partners in the development of an investable concept for major power generation capacity with CCS, with low cost and low risk. The resulting CCS/power scheme would be expected to form part of the first phase of post-Commercialisation Programme projects, taking early advantage of new CCS infrastructure developed by the first DECC-supported projects and supported by a competitive Contract for Difference (CfD).

Our analysis of the UK energy system clearly identifies the strategic importance of timely development of a sizeable CCS sector. Work by the CCS Cost Reduction Task Force in 2013, confirmed by recent analysis for us by Pöyry and Element Energy, has shown that, whilst initial CCS demonstration projects would require a high strike price, costs fall rapidly for follow on projects (to below £100/MWhr). These cost reductions result from sharing infrastructure, economies of scale, engineering learning and improved investability (i.e. projects which are capable of securing lower-cost sources of finance). Realising these benefits depends critically on building a credible pipeline of investable projects that cut costs and demonstrably deliver value to the UK energy system. In parallel there are opportunities for attractive returns to those making such investments.

DECC is currently funding FEED studies for the Peterhead and White Rose CCS Projects as part of its Commercialisation programme ('Phase 1') and has signalled that it will negotiate appropriate CfDs and other associated support mechanisms to incentivise the establishment of investable 'Phase 2' Projects.

The primary aim of this ETI investment is to stimulate the development of a major new Phase 2 CCS scheme which is specifically scoped and designed to take maximum advantage of the opportunity space opened up by Phase 1 projects. This co-venturing investment by ETI is intended to develop a commercially valuable project concept by laying the technical and commercial foundations for a CCS/power scheme and an evolving commercial vehicle to secure financial backing and move forward into FEED and FID by 2020. It is expected that the project concept developed through this investment will provide the basis for an attractive commercial return to co-investors. Additionally this investment will also develop a generic business case, supported by a series of guidance documents. This will ensure that the learnings can be disseminated and used to support wider roll out of CCS in the UK, particularly during the crucial next phase of investment in the early 2020s.

The ETI and co-investors will adopt a collaborative, co-venturing approach to enable risks to be shared amongst multiple investors and make the CCS/power scheme resilient to loss of individual co-venturers and changing events. In addition to the opportunities opened up by the specific CCS/power scheme, the experience gained by those involved will place them in a competitive position for investing in the wider roll out of CCS, as projected in ETI analysis for the sector.

1.2 Deliverables

This co-investment aims to take the CCS/power scheme through the 'Select' Phase (Concept Development and Selection) of project development. As such, the key deliverable will be a package of technical information and commercial principles and agreements which would enable the scheme to pass through 'Gate 1' (Concept Selection) into its 'Define' Phase (Front End Engineering Design).

Additionally the ETI Project will develop and deliver a generic business case, supported by a series of guidance documents. This will ensure that the learnings and principles can be disseminated and used to support wider roll out of CCS in the UK.

1.3 Project financing/Anticipated value

The ETI expects to invest up to £2million in this project. Co-funding from project participants is expected.

Request for Proposal and Selection dates	
Issue of RfP	18 June 2015
Project briefing workshop	14 July 2015
Closing date for submission of proposals	12 October 2015
Closing date for NDA	04 September 2015
Preferred respondent notified	09 November 2015
Project timescales and anticipated dates	
Agreement execution target date	12 February 2016
Project start	01 March 2016
Project finish	25 August 2017

Respondents shall be wholly responsible for the costs they incur in the preparation and submission of their proposals in response to the RfP. The ETI shall not be responsible for, and shall not pay, any costs and expenses which may be incurred by Respondents in connection with participation in the Project Commissioning Process, including but not limited to any costs or expenses incurred up to and including execution of the Project Contract.

A glossary of terms used in this RfP is provided at **Appendix A**.

Table of Contents

1. Summary of key project information	1
1.1 Project Summary	1
1.2 Deliverables	1
1.3 Project financing/Anticipated value	1
Table of Contents	3
2. ETI Introduction	5
2.1 ETI's Carbon Capture and Storage Programme	5
3. Welcome to Respondents	6
4. The ETI Project	7
4.1 Introduction	7
4.2 Project Objectives	8
4.3 The Investment Opportunity	8
4.4 Scope of work	9
4.5 Value Return	10
5. Project Delivery Requirements	12
5.1 Specific technical considerations	12
5.2 Project Deliverables	12
5.3 Key capabilities required	12
5.4 Critical roles	12
5.5 Project Review Meetings	13
6. Commercial, Legal and HSE Requirements	14
6.1 Project Contract	14
6.2 Value Return	14
6.3 Intellectual Property	14
6.4 Insurance	14
6.5 Participant Contracting Structure	15
6.6 ETI Investment	15
6.7 Project Payment Structure	16
6.8 Health, Safety and Environmental (HSE) Management	16
7. Project Commissioning Process and Estimated Timescales	18
7.1 Open Briefing Workshop	18
7.2 Notification of Intention to Submit a Proposal / NDA	18
7.3 Submissions in Response to the RfP	18
7.4 Questions and Clarifications	18
7.5 Selection Process	19
7.5.1 Selection Criteria	19
7.6 Project Shaping and Contract Negotiation	23

7.7	Estimated Project Commissioning Timeframes.....	23
8.	Important Notices	25
9.	Submission Requirements	27
	Appendix A – Glossary of Terms	28
	Appendix B – Notification of Intention to Submit a Proposal	31
	Appendix C – Non-Disclosure Agreement: Execution Instructions	32
	Appendix D: Project Contract: Key Features.....	34
	Appendix E – Proposal Content and Format	36
	Annex E1 Project Costs – Definition of terms for completing Tables 1 - 3	44

2. ETI Introduction

The Energy Technologies Institute (ETI) is a public-private partnership between global industries – BP, Caterpillar, EDF, Rolls-Royce and Shell – and the UK Government.

Public sector representation is through the administration of the Department for Business, Innovation and Skills, with funding channelled through the Technology Strategy Board and the Engineering and Physical Sciences Research Council. The Department of Energy and Climate Change are observers on the Board of ETI.

Our role is to bring together and invest in projects that accelerate the development, demonstration and eventual commercial deployment of a focused portfolio of affordable energy technologies, which will increase efficiency, reduce greenhouse gas emissions and help meet energy and climate change goals.

We do this by leveraging the skills, capabilities and market access routes to our Members, working with other organisations worldwide to take the most challenging large-scale energy projects to full system demonstration, thereby bridging the gulf between laboratory proven technologies and full-scale commercially tested systems. Our projects also develop knowledge, skills and supply-chains, and inform the development of regulation, standards and policy. Hence we aim to overcome major barriers, de-risk the future development and shorten lead times to market to secure, affordable low carbon energy systems for power, heat and transport.

Our portfolio presently includes programmes in the following areas: Offshore Wind, Marine, Distributed Energy, Buildings, Energy Storage and Distribution, Smart Systems & Heat, Carbon Capture & Storage, Transport and Bioenergy.

We are not a grant-giving body. We are a commercial organisation that makes targeted commercial investments in technology projects, which can involve the ETI funding entire projects or working with Participants or third parties to co-fund project activity.

Further information can be found on our website at www.eti.co.uk.

2.1 ETI's Carbon Capture and Storage Programme

Our energy system modelling work shows that Carbon Capture and Storage (CCS) is one of the most potent levers to help the UK meet its 2050 CO₂ reduction targets: without CCS the total energy system cost in 2050 could be £30bn per annum higher (equivalent to circa 1% of GDP).

Our CCS Programme comprises a portfolio of projects across the CCS chain:

- **Capture.** Projects to assess and develop innovative capture technologies for both coal- and gas-fired power generation;
- **Storage.** Overall assessment of UK Storage capacity, the results of which are now available through The Crown Estate and British Geological Survey (www.CO2Stored.com); supporting strategic saline aquifer appraisal; measurement, monitoring and verification of storage; recently-announced storage project funded by DECC;
- **Hydrogen.** Flexible power through hydrogen generation, storage and generation; safe use of high hydrogen fuels in turbines;
- **Whole System.** Development of a whole-system modelling package for system design and operational appraisal (commercially available through Process Systems Enterprise as gCCS).
- **Policy and Commercial.** Development of concepts to enable access to private sector finance for CCS projects and broader sector development.

The Programme is supported by world-class energy system modelling, strategic analysis and in-depth understanding of the economic and regulatory barriers to widespread implementation of CCS in the UK.

3. Welcome to Respondents

We are seeking groups of Respondents who will bring together their experience, expertise, innovation and solutions to our Project. The procurement process is designed to offer all Respondents the opportunity to engage in the Project.

All Respondents have an equal opportunity to be successful. We will provide a non-confidential project briefing and ensure that all Respondents can maintain their competitive position whilst providing relevant technical, financial and commercial data that assist our decision making. This will also provide the opportunity for potential Respondents to network to find complementary capabilities. We will also offer confidential briefings on request for potential Respondents who are developing their bids. We view early engagement with Respondents as a critical part of our commissioning process to maximise opportunities on both sides to have strong and competitive bids which meet our requirements.

We will engage in appropriate due diligence as part of your proposal submission: further due diligence will be required for any selected bids.

Proposals will be considered by our appointed Selection Panel who will use the proposal assessment criteria to make their initial findings, followed by in-depth consideration at a panel meeting before a decision on whether and how to proceed is made. This Panel will have the requisite in-house and external representation to consider the commercial and technical project essentials. Depending on the number of proposals we receive, we may undertake an initial down selection before the panel. We will provide constructive feedback on all proposals, whether successful or not.

We value your enthusiasm, commitment and proposals from which we can all benefit on this strategically important project. Your investment in time and resources making the proposal is appreciated.

4. The ETI Project

4.1 Introduction

The ETI's analysis of the UK energy system clearly identifies the strategic importance of timely development of a sizeable CCS sector. Work by the CCS Cost Reduction Task Force in 2013, confirmed by recent analysis by Pöyry and Element Energy for the ETI, has shown that, whilst initial CCS demonstration projects would require a high strike price, costs fall rapidly for follow on projects (to below £100/MWhr). These cost reductions result from sharing infrastructure, economies of scale, engineering learning and improved investability (i.e. projects which are capable of securing lower-cost sources of finance). Furthermore, by providing reliable, low carbon on-demand power, dispatch analysis shows that, as carbon budgets tighten from the mid 2020s, CCS power will replace unabated fossil more efficiently than adding large amounts of additional wind power.

The ETI's recently-published insights document¹ has identified three potential scenarios (and their associated benefits) to build a UK CCS sector equivalent to around 10GW of power plus sizeable industrial CCS projects by 2030. All scenarios depend critically on the ability to build a credible pipeline of investable projects that cut costs and demonstrably deliver value.

DECC is currently funding FEED studies for the Peterhead and White Rose CCS projects as part of its Commercialisation Programme. These 'Phase 1' projects are expected to take Final Investment Decisions (FID) in early 2016, becoming operational around 2020. These projects form a good basis for a future UK CCS system: the next phase of projects ('Phase 2') needs to be developed in parallel if widespread roll out of CCS is to be achieved by 2030. DECC is further supporting these projects by funding the ETI to carry out a storage appraisal project focussed on stores which extend the capacity being developed in the DECC Commercialisation Programme.

DECC has signalled that it will negotiate appropriate Contracts for Difference (CfDs) and other associated support mechanisms to incentivise their establishment. DECC is currently working on the design of these instruments as part of its wider low carbon policy development.

Phase 1 projects provide an opportunity to lay down key infrastructure that can accelerate future schemes and provide opportunities for substantial cost reductions. We have completed work with Pöyry and AECOM to identify the characteristics of a Phase 2 project that takes advantage of the opportunities being opened up by Phase 1.

This ETI Project aims to develop a robust investment case and associated vehicle for a CCS/power scheme which would:

- a) Make a meaningful contribution to the UK's clean energy needs in the 2020s (i.e. > 500MWe);
- b) Lower cost and risk by appropriate selection of technology, location and use of existing assets;
- c) Be attractive to a broad range of developers and investors by avoiding approaches with unnecessary risk and potential for delay;
- d) Be robust to the developing circumstances in CCS, potentially allowing companies to share risk in the resulting CCS scheme through a co-venturing model;
- e) Be in a strong position to negotiate a Phase 2 CfD which would be attractive to investors and DECC;
- f) Act as a catalyst for future CCS roll out, through 'template' projects, transfer of learnings around making a CCS investment case and involvement of a consortium of developers and investors;

¹ <http://www.eti.co.uk/carbon-capture-and-storage-building-the-uk-carbon-capture-and-storage-sector-by-2030/>

- g) Clarify the commercial structuring and risk management approaches for CCS projects, particularly those involving use of shared transport and storage infrastructure.

The business focus of the CCS/power scheme would be on providing investable, low-risk, low-cost, low-carbon power, supported by a CfD. Our analysis has shown that attractive features are likely to include:

- Use of existing/proposed (shared) transport & storage assets to reduce cost, complexity, schedule and scope of the scheme;
- Low planning cost, time and risk, e.g. basing the CCS scheme on a power station with Development Consent Order (DCO) or Section 36 consent; siting the station near pipeline infrastructure;
- Use of 'best proven' technologies, balancing cost against investor risk premium;
- Rapid, low risk project delivery;
- Business models with clear allocation of risk along the CCS chain.

New-build, 'repowering', retrofit or adaptation of unabated schemes are in scope. The exact timing of project implementation is not fixed, but it is anticipated that the station would become operational in the 2022 – 2025 timeframe.

The ETI Project would aim to take the CCS/power scheme through the 'Select' Phase (Concept Development and Selection) of project development, providing a package of commercial and technical information (and partnerships) to pass through 'Gate 1' (Concept Selection) into the 'Define' Phase (Front End Engineering Design).

4.2 Project Objectives

The three key, interlinked objectives of the ETI Thermal Power with CCS Project are:

- To bring forward a package comprising a robust business case, underlying permissions, engineering and the associated development vehicle for a low cost, low risk capital project which has a high likelihood of delivering a GW-scale implementation of a CCS/power scheme, at a level sufficient for the project to pass through a 'Concept Selection' Stage Gate into the Define (FEED) Phase;
- To share learnings and produce a generic business case for power with CCS which will accelerate cost-effective roll out of CCS in the UK;
- To bring together a community of CCS stakeholders to share risk on the scheme and enhance the future supply chain for CCS in the UK..

4.3 The Investment Opportunity

The ETI is prepared to invest up to £2million in its selected Project, and views this as a co-venturing opportunity between the ETI and Project participants. ETI's analysis has shown that a range of opportunities exist to construct new CCS-with-power capacity around the infrastructure to be laid down as part of the DECC Commercialisation programme. With bespoke CfD-based incentives potentially on offer, attractive returns for early investors in CCS are possible. ETI analysis shows that appropriate technology selection, scheme location and contractual relations with the rest of the CCS chain can provide manageable risks, within the appetite of many investors. The co-venturing approach will enable risks to be shared amongst multiple investors.

In addition to the opportunities opened up by the specific CCS/power scheme, the experience gained by those involved will place them in a competitive position for engaging in the wider roll out of CCS, as projected in ETI analysis for the sector.

4.4 Scope of work

The exact scope of work required will depend on the nature of the proposed CCS/power scheme to be developed, but will have two distinct, but linked outcomes.

Specific Business Case for the identified CCS/power scheme

This will be a package of technical and commercial information at a level sufficient for the scheme to pass through a 'Concept Selection' Gate into the Define (FEED) Phase. Precise requirements for this will depend on the proposed scheme, but are expected to include many or all of the following:

- a) Signed Heads of Terms (HoT) for land use;
- b) Generation and capture technologies selected (technology licence agreements, supply HoT and/or direct vendor engagement in the scheme);
- c) Pre-FEED completed, including c. \pm 30% estimate for scheme costs;
- d) Sufficient progress on an Environmental Impact Assessment for the plant and/or connecting CO₂ pipeline (as required);
- e) Sufficient progress made on planning aspects to reduce risk (and time) associated with gaining the required consents in future development stages²;
- f) Outline agreement for CfD;
- g) CO₂ Transport and Storage Capacity Rights (or option) secured, with outline terms and conditions agreed (ideally this should not be specific to the identified CCS/power scheme);
- h) Fuel supply and risk management strategy;
- i) Parameters, partners, financing and delivery structures (e.g. a Special Purpose Vehicle, SPV), to execute the Design (FEED) Stage to prepare for FID, with an initial strategy to secure funding³ for plant construction;
- j) Implementation plan for the CCS/power scheme, through to operation;
- k) Outline financing strategy for FEED and subsequent construction phase;
- l) Letters of intent from other key parties that are key to the scheme proposed (e.g. OEMs, fuel suppliers, site owner);
- m) The proposed basis on which other investors may support the scheme.

Generic Business Case for a power-with-CCS scheme

This will involve pulling together the learnings from the above so the ETI and other stakeholders can apply such learning to other power project opportunities or decisions (whether on CCS or otherwise), and is expected to include:

- a) Review of generation and capture technologies considered and reasoning behind their selection;

² However, the ETI would not expect to fund or underwrite the costs of obtaining planning (e.g. DCO) approval

³ The ETI is working closely with the Ecofin foundation and funding community to develop an understanding of the issues in accessing funding for a CCS project and could potentially provide support to consortia in this area

- b) Non site-specific 'pre-FEED' completed for 'template' plant, including c. $\pm 40\%$ estimate for project costs (likely to be based on the specific scheme design);
- c) Guidance on undertaking Environmental Impact Assessments for CCS plant and/or connecting CO₂ pipeline;
- d) Guidance on planning aspects required to consent 'Power-with-CCS' plant, based on experience in outcome 1 above, but covering a range of alternative options (e.g. new build, retrofit; separate vs integrated power and CCS units; connecting pipeline);
- e) Guidance on the key factors involved in structuring and negotiating a CfD;
- f) Guidance on handling counterparty risk for CCS projects which rely on access to transport and storage infrastructure owned and operated by other parties. If possible non site-specific CO₂ Transport and Storage Capacity Rights (or option) secured;
- g) Guidance on fuel supply approaches (e.g. how to hedge against fuel price changes);
- h) Exploitation plans setting out how the consortium will (individually and collectively) pursue other power with CCS projects.

It is expected that the large majority of the ETI Project resource will be directed towards the Specific Business Case.

4.5 Value Return

Direct financial return

The ETI is seeking a direct financial return on its investment in this Project in the event that the proposed CCS/power scheme (or an alternative arising from this Project) proceeds into FEED and beyond. Participants are required to bring in their own funding to complement the ETI investment. The Value Return will therefore need to be attractive to all investors, recognising each party's risk. The ETI recognises that value, and hence the ETI's return, may only materialise as part of a positive FID.

Examples of direct financial return which the ETI considers appropriate include: (a) a financial payment to the ETI once value has materialised; (b) the ETI's participation as an equity holder in a future Special Purpose Vehicle (SPV) and/or (c) licensing revenue from ETI owned IP generated during the Project; etc. In any case, contractual mechanisms to ensure that the such return is possible will be required and the proposed mechanism will be considered in the Selection Criteria (e.g. S5).

We anticipate that some form of SPV will be created during development of the specific CCS/power scheme. Bearing this in mind, we have identified two options that could provide value. First, the ETI could transfer and/or be obliged to transfer to the SPV the Arising IP resulting from its investment in the Project in return for an equity stake in the SPV. Second, an SPV could be set up an early stage by the ETI (and potentially other co-venturers) and the Arising IP transferred into that. The purchase price of the relevant deliverables would be left outstanding as an intra-group loan to be capitalised at a later stage.

However, we do not wish to constrain bidders by mandating a specific mechanism for direct financial return, and will consider proposals. It is not our intention that our commercial position results in an impediment to the FEED or a positive FID, and constructive and equitable proposals will be welcomed. However, there must be clear value generated to the ETI and the outlined options indicate ETI's expectations in order to realise value from its investment and which will fit within its governance structure. Reaching an equitable position for all co-venturers, including the ETI, will be considered as part of the Selection Criteria (S5)

Given the flexibility of approach, we strongly recommend prospective Respondents discuss options with the ETI early on and prior to submission of a Proposal. Please note that depending on the structure, ETI may have additional requirements from a tax perspective.

Arising IP

In all cases, we expect to own some or all of the Arising IP from the Project, until such time as the required mechanisms are in place to secure our Value Return (e.g. an SPV, sale of Project outputs, licensing agreements etc.). At this point the ETI's IP may be exchanged for other rights or value return (see the examples above). To protect our commercial position, we expect to own some or all of those elements of the Arising IP which are critical to the success of the FEED and preparation for FID: however it is also open to proposals which place obligations on the ETI with regards to this IP in order to protect the commercial positions of the other co-venturers.

In addition, the ETI will wish to own the Arising IP in deliverables to the generic business case that it to be created, in order to ensure effective dissemination.

In any case, the ETI will want to share the Project deliverables with its Members.

Additional Value Return

In addition to a direct financial return on its investment, the ETI can extract value from its projects in a variety of other ways, and these should be highlighted in proposals. Additional opportunities to provide value return in this Project to the ETI and its Members include, for example:

- a) Benefits to the ETI and its Members arising from the experience and knowledge gained during the execution of the Project; increasing investor confidence in future technology deployment; standardisation of approaches and methods; market confidence in long term cost reduction opportunities; development of the supply chain;
- b) Benefits to the ETI and its Members arising from access to and/or value derived from intellectual property rights (including Arising IP and access to Participants Background IP required in order to exploit the Arising IP);
- c) Benefits to the ETI and its Members arising from opportunities to participate as preferred suppliers of technologies, equipment and services to future project owners;
- d) Benefits arising to the UK economy including, as appropriate and without limitation, the development, manufacture and application of the relevant technology in the UK, and in particular wide ranging applicability of any development to a broad range of devices;
- e) Public dissemination of selected/identified generic outputs from this investment.

State Aid

The ETI uses a mix of its public sector funding and private sector funding (from Industry Members) in all of its projects, in accordance with its state aid clearance and state aid rules. The ETI may utilise some public funds in making its investment and early discussions on structure and the value return is required in order to ensure compliance with State aid requirements. Exceptionally for this Project, the ETI may use private funds only from its Industry Members which may increase flexibility to achieve an optimal Value Return structure for all co-venturers. Even in this case, certain core contractual requirements around state aid will remain as set out in the Section 6.

ETI Project exploitation

While the ETI would like to remain actively involved in the future stages of any CCS/power scheme arising from its investment (e.g. as an equity owner in the SPV), it does not expect to invest further funds beyond this Project, and expects to exit (with a return) prior to, or at, the point of FID.

5. Project Delivery Requirements

5.1 Specific technical considerations

The specific technical approach to be taken in the Project is not prescribed, providing the overall objectives and outcomes set out in Section 4 are met. However, as the focus of the ETI Project is on a low risk (technically and commercially) power-with-CCS scheme, predicated on a bespoke CfD, the following are not likely to fall within scope:

- Full chain projects on which the primary business case is based on Enhanced Oil Recovery, EOR (high risk, high complexity commercially)
- Industrial CCS (unless combined with power generation with the prospect of gaining a CfD)
- Step-out CCS technologies (our focus is on 'best proven' technologies).

5.2 Project Deliverables

The exact Deliverables should be defined by the Respondents, but are expected to include:

- Confidential report to the ETI and its Members, fully detailing the specific business case for the identified CCS/power scheme (as set out in Section 4.3 point 1), including confirmation of any third party agreements to take the scheme forward (HoT's etc);
- Full draft shareholder agreement for the SPV (or other mechanism) to take the CCS/power scheme forward, to include the ETI Project Participants (or an appropriate subset) and the ETI, plus other key stakeholders required to deliver and fund the next stages of the CCS/power scheme, with in principle agreement from all key partners;
- Comprehensive public domain report, detailing the generic business case for a power with CCS project (as set out in Section 4.3 point 2).

5.3 Key capabilities required

It is anticipated that the Project will require a group of organisations (and potentially individuals) with complementary capabilities and experience to successfully deliver the outcomes. It is expected that these will include organisations/individuals with proven experience in:

- Development of major infrastructure (preferably power) projects;
- Securing finance for such projects;
- Consenting of projects;
- Early-stage (pre-FEED) engineering and costing of power with CCS projects;
- Commercial experience of operating in UK electricity market and in depth knowledge of the future direction of the market (EMR).

Ownership of, rights to or potential options on a suitable site for the proposed CCS/Power scheme will be viewed positively.

Participants are able to contract with the ETI according to a number of potential project contracting structures: see Section 6.

5.4 Critical roles

The ETI places great emphasis on three critical roles in the delivery of this project – the Project Manager, the Chief Technologist and the Commercial Manager.

The Project Manager is responsible for managing and progressing the Project to time and cost, handling information flows and commercial issues, ensuring effective team-working and the continued engagement and support of key stakeholders. In essence, the Project Manager's responsibility is to make sure that the ETI

benefits from a result at the end of the programme of work that meets the agreed outcomes within time and cost.

The Chief Technologist is responsible for the technical quality and content of the work, ensuring the competence of key technical staff allocated to individual work packages, the effective review of key outputs and the effectiveness of detailed technical planning to ensure that the emerging results of work are fed back into the forward plan. In essence this position has the responsibility to assure the technical quality of the Project and its outcomes.

The Commercial Manager is responsible for ensuring the future commercial success of the CCS/power scheme, including securing project finance, engaging additional development partners, structuring, negotiating and securing contractual commitments, including the shape of the CfD and key interface agreements (e.g. with transport and storage infrastructure providers).

Respondents are required in their Proposals to nominate individuals for each role. The ETI will assess the competence, experience and authority of these three people and their ability to work together as critical to project success. They do not need to be from the same Participant organisation although the Project Manager should be employed or directly contracted by the prospective Prime Contractor or Lead Coordinator, as appropriate.

5.5 Project Review Meetings

Throughout the Project the ETI expects to hold review meetings with the Project Manager, Chief Technologist and Commercial Manager, which may be at the ETI or a Participant's premises, as appropriate. Typically these are held monthly or at such other times as may be agreed between the ETI and the Participant(s). The ETI may involve advisors, external consultants, key industrial stakeholders, or representatives from the Members as appropriate.

The timing and scope of review meetings will be confirmed in discussions once the Participants' plans have been reviewed. It is expected that these will include the following.

- a) **Project Kick Off Meeting.** This will be held within two weeks of the Project start date. The purpose of the meeting between the ETI and the Participants is to review the scope of the project, planned timescales, deliverables, and the Participants' way of working and interfacing with the ETI to ensure a common understanding of how the Project will be delivered in accordance with the Project Contract. It is anticipated that this review will be held at the Participants' premises and take no longer than one day.
- b) **Mobilisation Review Meeting.** This will be held within two months of the Project start date. The purpose of the meeting is to ensure that all residual actions are completed and that each Participant and any Subcontractor(s) are fully mobilised. It is anticipated that this review will be held at a Participant's premises and take no longer than one day.
- c) **Project Reviews.** These will be agreed by the Participant(s) and the ETI at key points during the Project. It is anticipated that these reviews will be held at the ETI's premises and take no longer than one day each. It may be appropriate to include one or more intermediate Stage Gate Reviews within the ETI Project.

6. Commercial, Legal and HSE Requirements

6.1 Project Contract

The ETI expects to use its normal Project Contract for this Project. The key distinctive features in this contract are set out in Appendix D, and a full draft contract will be released on execution of a Non-Disclosure Agreement between Participants and the ETI (see Section 7.2). However, subject to its core contractual requirements being met, we are open to consider other structures for this Project. Early discussion is required and any Proposal submitted on an alternative basis without discussion and ETI's requirements built-in, is not likely to be compliant. ETI's core requirements should be understood to include reporting and project interaction, stage gate process, state aid requirements, IP requirements (for Arising IP, Background IP and Third Party IP) and risk allocation broadly aligned to the ETI's Project Contract requirements.

6.2 Value Return

The funding structure and purpose of the ETI means that it is a strategic investor in technology development. The ETI expects its projects to deliver value in return for its investment. The ETI anticipates sharing the value created by the Project between the ETI, its Members, the Participants, the wider industry and the UK economy. The requirements for this Project are set out in Section 4.5 of the RfP.

6.3 Intellectual Property

Effective management of Intellectual Property (IP) is critical to ensuring all stakeholders achieve the value returns from the Project.

Arising IP

The specific requirements for this Project are set out in Section 4.5, but broadly the ETI expects to own key parts of the Arising IP for this Project as set out in that section.

Participants should note that profit will not generally be paid to a Participant in addition to the grant of a licence of Arising IP to use and exploit Project results.

Background IP

Ownership of Background IP remains with the owner. Where a licence of Background IP is required to carry out the Project and/or for the subsequent exploitation of any Arising IP/Project results, the Prime Contractor or Participants are expected to make such Background IP available on a non-exclusive, royalty-free basis.

If Participants (or their proposed Sub-contractor(s)) fail to meet this expectation, the attractiveness to the ETI of the relevant Proposal may be adversely affected.

Due diligence on Background IP will be required both in the Proposal and during the Project Shaping and Contract Negotiation Stage.

Third Party IP

Where Third Party IP is required to carry out the Project and/or to produce Project outputs, the ETI expects the relevant Prime Contractor or Participant to obtain the relevant licences for usage of the Third Party IP in the Project and by the ETI in line with its rights to use the relevant Project outputs.

As with Background IP, due diligence will be required to ensure that any required Third Party IP will be identified and, if appropriate, the necessary rights secured.

6.4 Insurance

The Respondents should confirm that liability and indemnity insurance cover is held, or will be put in place, and should confirm the current levels of cover and expiry for each. See the **Annex A1 – Due Diligence Information Requirements** document for further detail.

6.5 Participant Contracting Structure

It is expected that more than one organisation will be required to deliver the Project. Respondents may propose either of the following contracting structures.

- Prime Contractor** A single Respondent will enter into the Project Contract with the ETI and act as primary interface with the ETI. Specified parts of the Project will be performed by Sub-contractors (including, as appropriate, companies within the same group as the Respondent). The ETI will require that there are Sub-contracts in place between the Prime Contractor and its Sub-contractors that are consistent in all material respects with the Project Contract. The appointment and use of Sub-contractors by the Prime Contractor will be subject to prior ETI approval and the ETI reserves the right to approve the terms of Sub-contracts.
- Consortium** Respondents form a Consortium to undertake the Project. All Consortium Members enter into the Project Contract with the ETI, although the Consortium will be required to enter into its own Consortium Agreement for internal governance purposes. A Lead Coordinator (a Respondent nominated by other Consortium Members) manages the Project and acts as primary interface with the ETI. The Consortium Agreement will require approval by the ETI before execution of the Project Contract. Consortium Members may choose to sub-contract part of their work.

Either structure may be acceptable to the ETI, provided that the Respondent(s) can demonstrate that the most effective approach has been followed to manage the Project and associated risks.

Whatever the contracting structure, there must be a single organisation (Prime Contractor or Lead Coordinator) leading and acting as the primary interface with the ETI.

Under the chosen contracting structure, it is critical that the Prime Contractor or Lead Coordinator, as appropriate, is sufficiently empowered to lead the Project and accept accountability for delivery of the Project to the ETI. It is also important that the chosen contracting structure enables sufficient flexibility for ongoing delivery optimisation to maximise Value Return and achieve the Project objectives.

The ETI will need to approve Sub-contractors and will require sight of key sub-contracts to ensure compliance with the ETI's requirements on sub-contracting. Certain requirements around IP, health and safety, audits and confidentiality will be required to be flowed down to all sub-contractors. Exceptionally, the ETI may require collateral warranties or equivalent with key contractors.

The ETI will only select Respondents who have the required skills, experience and capability (either themselves or within their Sub-contractors/Consortium) to complete all parts of the Project.

Alternative contractual structures may be acceptable to the ETI in exceptional circumstances. Any Respondents considering an alternative structure are strongly advised to consult the ETI before making a Submission based on an alternative structure.

6.6 ETI Investment

The ETI has assigned a maximum of £2 million for the ETI Investment in the Project. Whilst, through its unique public-private partnership model, the ETI can potentially fund up to 100% of eligible project costs, it is anticipated that the Respondents will bring additional funding to cover overall project costs, through their own resources (Participant Funding) and/or Third Party Funding.

ETI Investment can be provided according to one of two mechanisms.

Capped Cost: Payment will only be made in respect of Eligible Costs actually incurred by a Participant in the performance of the Project, up to a contractually agreed cap for each accepted Milestone. Where ETI is not the sole funder, this will either be on the basis of identified project costs to be supported by the ETI or an agreed percentage of all Eligible Costs; or

Fixed Price: Agreed fixed payments will be made against each accepted Milestone.

Risks associated with any cost over-run will lie with the Project Participants and the ETI will not be liable for any payment over and above the agreed cap or fixed price. For either mechanism, the ETI will require transparency of cash flow and cost breakdown to ensure value for money, to fully understand financial risks to the Project and to comply with state aid requirements.

Proposals must clearly state the Respondents' proposed Total Project Cost, ETI Investment, the proposed source(s) of funding to address any gap, current status of these funds and plans to secure funding before contract. Any other commercial impacts associated with any proposed reliance on Participant Funding and/or Third Party Funding must also be clearly stated.

6.7 Project Payment Structure

Payments will be made by the ETI against agreed Milestones. Payment for a Milestone will be subject to the Deliverables within the Milestone meeting agreed acceptance criteria and to the Participants complying with the ETI's reporting requirements in relation to the Milestone.

For the Capped Cost mechanism, payment will only be made in respect of Eligible Costs actually incurred by a Participant in the performance of the Project. One or more accountant's reports will be required to support selected financial reports and invoiced amounts, dependent upon the amount of the ETI Investment to be paid to each Participant. The ETI will not pay for the costs of obtaining the accountant's report.

Details of the Project payment structure and related requirements will be set out in the draft Project Contract and agreed during negotiation of the Project Contract (Section 7.6 of the RfP).

6.8 Health, Safety and Environmental (HSE) Management

The ETI's approach to the management of HSE in Projects is based on three key elements:

- Competency Assessment.
- Performance Assurance.
- Project Incident Protocol.

How the ETI applies this approach to a specific Project depends upon the nature and content of the Project.

Respondents should ensure their Proposal makes the nature of the Project clear, demonstrates and evidences their competence to undertake the Project, and describes how they intend to organise themselves and their approach to manage and coordinate health, safety and environmental issues in the Project. Specifically:

- Respondents should advise if any work to be undertaken during the Project is not desk based (e.g. site visits, field trials, experimental or laboratory work).
- Respondents should identify any specific HSE issues related to specific facilities or sites to be used in the Project. To the extent that parts of the Project take place outside of the UK, the Respondents should deal with the analogous issues as they apply in the local laws of the relevant country.
- If relevant, details of the Respondent's proposals to appoint a Construction Design and Management Regulations (CDM) Coordinator and/or a Principal Contractor should be included in the Proposal.
- If relevant, the ETI expects that the Lead Coordinator or Sole/Prime Contractor (as appropriate) will elect to act as Client and details should be included in the Proposal to confirm which Participant will elect to be the Client.
- Respondents should demonstrate their experience of identifying and managing HSE issues in Projects of equivalent complexity and scale, including:
 - coordination of HSE across multiple participants and contractors, if applicable; and
 - incorporating safety into design, if applicable.

- Respondents are required to provide evidence throughout the Project that HSE is being managed and that such arrangements are adequate. The Respondents are required to set out in their Proposal how their management arrangements will enable such evidence to be provided.
- Respondents should set out their approach to managing contractors. This should include key roles and responsibilities of different Participants in the Project.
- Respondents should indicate if the Project will involve the design/manufacture of equipment which will attract the requirements of The Supply of Machinery (Safety) Regulations 2008 (as amended). If relevant, Respondents should outline their procedures for complying with the requirements of the Regulations, particularly with respect to CE marking and/or dealing with declarations of incorporation.

Respondents should note that:

- Specific HSE requirements will be included in the Project Contract including reporting against HSE performance on a periodic basis.
- The ETI will carry out a full HSE competency assessment against the selected Respondents (the Prime Contractor and the members of any Consortium) prior to (and HSE competency being pre-condition of) execution of the Project Contract, except to the extent that a Respondent's proposed scope of work under the Project is entirely desk-based. (See also Section 2a of Annex A1.)

The ETI will wish to explore the management of environmental issues with the Respondent prior to contract award.

This Project is expected to involve desk-based, early stage design only, so is not expected to be CDM notifiable. However, given that, if successful, this Project will result in construction and operation of a major power generating facility, Respondents are required to describe how they will build HSE considerations into the designs and plans produced in the project. The ETI may, at its discretion, undertake Competency Assessment(s) prior to contract.

7. Project Commissioning Process and Estimated Timescales

The ETI is using a two-stage approach to commission the Project:

- RfP Issue and Selection of preferred Respondent(s); and
- Project Shaping and Contract Negotiation.

7.1 Open Briefing Workshop

Potential Respondents are invited to attend a Thermal Power with CCS Project briefing workshop. The objective of this workshop is to further describe the Project requirements and to provide an opportunity to ask questions prior to further development of Respondents' Submissions in response to this RfP. Networking opportunities will be made available throughout the day and potential Respondents will have the opportunity to display capability statements and/or requests for additional capabilities.

This non-confidential workshop will be held at the ETI, Loughborough on **14 July 2015**.

Interested Participants are to notify the ETI with their request to attend the briefing workshop no later than 10 July 2015. Upon notification, a briefing workshop package (including agenda) will be distributed. See Section 7.7 for the full (estimated) Project commissioning timings.

7.2 Notification of Intention to Submit a Proposal / NDA

Prior to making a Submission in response to this RfP, Respondents are required to provide to the ETI

- a) a formal notification of their intention to submit a Proposal, in the form set out at Appendix B, and
- b) a non-disclosure agreement in the form provided in the **Non-Disclosure Agreement** document, signed by all Respondents involved in the Proposal and returned to the ETI in accordance with the instructions at Appendix C.

Both documents must be received by the ETI no later than the date specified on the front page and at Section 7.7 of the RfP. The Non-Disclosure Agreement must be received by the ETI in hard copy by the specified date (see Appendix C for details).

Issue of Draft Project Contract

The ETI will make available a draft Project Contract at least four weeks before the Closing Date to all Respondents who have submitted a Notification of Intention to Submit a Proposal and following full execution of the NDA (see Appendix C). Respondents are required to provide feedback on the draft Project Contract as part of the submission requirements set out in Section 9 and the Statement of Compliance document.

7.3 Submissions in Response to the RfP

Respondents are required to provide Submissions in response to the RfP to the ETI no later than the closing date specified on the front page and at Section 7.7 of the RfP. Submissions shall comprise a Proposal, the form and contents of which are set out in Appendix E and other components set out in Section 9 of the RfP.

7.4 Questions and Clarifications

The ETI will be available to meet with potential Respondents before the Proposal deadline to answer questions and provide further clarifications. Time has been set aside during weeks commencing 10 and 17 August 2015 and 14 September 2015 for such meetings. The opportunity to meet with the ETI may, at the ETI's discretion, be restricted to those Respondents who have indicated their intention to lead a Proposal, and will be conducted in a one to one format. Such meetings will take place at the ETI's premises in Loughborough and/or by telecon, and will be for a maximum of 2 hours.

Respondents should note that the ETI will not meet with Respondents unless they have submitted signed NDAs.

Any advice or clarifications of ETI requirements requested by and provided to any Respondent may (at the ETI's discretion) be made available to all Respondents to ensure parity of information. Respondents should

therefore consider presenting requests for advice and clarifications in a way that the ETI can respond to all Respondents without revealing confidential information.

7.5 Selection Process

Following the closing date for Submissions, the ETI will convene a Selection Panel as part of its evaluation process to recommend which (if any) Respondent(s) should proceed to the Project Shaping and Contract Negotiation Stage. In addition to ETI staff, this panel may include experts selected by the ETI (typically including individuals drawn from ETI Member organisations and third parties) to provide the necessary expertise to consider the technical, commercial, legal and financial aspects of each Submission.

Respondents will be requested to make a presentation to the Selection Panel to support information provided in their submission. The Selection Panel may also request further clarifications following the meeting of the Selection Panel and as part of the Project Shaping and Contract Negotiation Stage.

In the event that the ETI receives a large number of Submissions, the ETI may make an assessment to select a manageable shortlist of Submissions for consideration by the Selection Panel.

In any event, the ETI may at its discretion decide to negotiate with more than one Respondent or group of Respondents (as appropriate) to ensure that all key issues are resolved fully and promptly, before making a final selection decision. This may involve a second Selection Panel.

7.5.1 Selection Criteria

All proposals will be evaluated by the ETI against the Gateway Criteria (Section 7.5.1 (a)) and Selection Criteria (Section 7.5.1 (b)). Gateway Criteria represent the minimum standards against which Proposals will be judged. Proposals which do not meet the Gateway Criteria may not be considered further in the selection process.

Respondents should note that specific, independent and objective evidence of performance, capabilities and experience will carry greater weight than general statements.

a) Gateway Criteria

- G1 The proposed CCS/power scheme will substantially capture CO₂ emissions from the equivalent of at least 500MW electricity generation capacity, with the potential to receive a Contract for Difference as set out in the UK Electricity Market Reform programme
- G2 The Respondents have identified a suitable site (or shortlist of potential sites) for the CCS/power scheme, with expression(s) of interest from the site owner/controller(s) that they wish to proceed with the development of a power-with-CCS scheme
- G3 The proposed site is located within economic reach of the transport and storage infrastructure for the DECC Commercialisation entrants (Peterhead and White Rose) or can demonstrate a similar (or better) cost and risk profile to expansion of either of these infrastructures.

b) Selection Criteria

Proposals will be reviewed and judged primarily against the criteria listed below.

- S1 CCS/power scheme potential. Materiality, investability and value for money of the proposed CCS/power scheme, including:
 - MW of electricity generating capacity abated by the scheme.
 - Potential to reduce the risk-adjusted LCOE/required Strike Price below £100/MWh
 - Risk profile of the proposed scheme and impact on investability/return on investment, including:
 - Technology risk (generation and capture technology)
 - Construction risk;

- Operational risk;
- Ownership & Contractual risk;
- Policy & Regulatory risk; and
- Permitting & Consent risk.

S2 Location of proposed CCS/power scheme. The suitability of the proposed site for the CCS/power scheme including:

- Size and suitability for construction and operation of the proposed plant;
- Ease of access to fuel supplies and cooling water;
- Ease of access to grid connection;
- Ease of access to any proposed CO₂ export pipeline;
- Current status of consenting and likelihood/complexity of additional consents (plant and export pipeline);
- Current ownership/control and forward plans;
- Extent of engagement by the site owner/controller in the Project.

S3 Resilience, replicability, diversity and openness of the scheme:

- Resilience of the scheme to withdrawal of the main party or key co-venturer(s) – for example loss of site, utilities, grid connection rights or finance;
- Replicability of the scheme in the UK, whether at the identified site for the first scheme or elsewhere;
- The range of investors and utilities to be involved in the scheme, promoting accelerated deployment of CCS and later competition, as well as providing resilience to the initial scheme;
- Ability of the scheme to attract wider/new investor interest after the Project.

S4 Ability of the Participants to deliver the Project, based on evidence provided and presented at the Selection Panel(s). It should be noted that the performance of the Respondents and quality of information provided to the ETI during the commissioning process will be considered by the ETI as an indicator of likely performance during the Project:

S4A Technical

- Experience and availability of the proposed Chief Technologist;
- Level of experience and completeness of the technical skills amongst the consortium or their contractors to deliver the Project, specifically including :
 - power generation technologies;
 - capture technologies;
 - creative integration of core plant elements with utilities;
 - technology risk assessment;
 - planning and scheduling;
- Engagement of key technology owners within the consortium;
- Experience of managing IP, particularly with relation to data and software;

- Availability and stability of deployable resources with the above skills to mobilise sufficiently rapidly and for sufficient durations;

S4B Commercial

- Experience and availability of the proposed Commercial Manager
- Level of experience and completeness of the commercial skills amongst the consortium to deliver the Project, specifically:
 - Securing viable and resilient investor bases for major capital projects;
 - Aligning incentives across wide investor bases which deliver alternative value sets for different investor types but create a coherent whole;
 - Clear and efficient risk-allocation;
 - Strategies, relationships or commitments to manage key commercial risks;
 - Proven experience of value realisation for investors;
- Availability and stability of deployable resources with the above skills to mobilise sufficiently rapidly and for sufficient durations;

S4C Delivery

- Experience and availability of the proposed Project Manager;
- Record and ability in quality, timely and on-budget delivery of projects (of the type requested in this RfP) to the full satisfaction of the main stakeholders;
- Project management systems and expertise appropriate for this sort of project;
- Ability and experience in collaborative working;
- Appropriate health, safety and environmental management systems and experience;
- Effectiveness of the contracting, organisational, governance and control structures and processes proposed for the participating entities / organisations, including interfacing with ETI as it requires, etc;
- Quality, clarity and credibility of the project approach and plan, including Gantt chart, suitable in-Project Stage Gates & Payment Milestones;
- Risk Management. Respondents will need to demonstrate clear evidence of a rigorous, risk-based approach to management of the Project. A register identifying the key risks and how they will be managed is required.

S5 Attractiveness of commercial offer:

- Value and benefits to the ETI, ETI Members and the UK. Respondents should identify the value and the benefits arising from the proposed Project to be delivered to ETI Members (public and private sector). Refer to Section 4.5 for details;
- How equitable the ETI's position is in relation to other investors in the Project, and the alignment of the ETI's interests with other investors;
- The security of the ETI's commercial position and how this is maintained through the legal agreements from transition to future phases (e.g. FEED and FID);
- The simplicity of the commercial offer and hence ease of contracting and implementing;
- The degree to which the ETI's and the other investors' route to value is consistent with stimulating investment in future phases (e.g. FEED and FID).

- S6 Quality, clarity and credibility of exploitation plans:
- Quality, clarity and credibility of the proposed plan to take the CCS/power scheme through to FID and beyond;
 - Completeness and credibility of the consortium delivering the Project in terms of ability to take the CCS/power scheme through to FID and beyond;
 - Existing links to and track record of working with the additional partners required beyond the Project to finance and deliver a successful outcome to the CCS/power scheme (specific relationships will be viewed significantly more positively than general statements around potential future partners);
 - Plans for effective dissemination of the generic business case developed in the Project.
- S7 Value for money with respect to ETI funding:
- Extent to which the desired outcomes listed in Section 4 are planned and expected to be achieved
 - Competitiveness of costs;
 - Extent of co-investment in the Project by Participants (actual investment in Project delivery will be viewed significantly more positively than a 'contribution in kind' based on previous work)⁴;
 - High additionality (ETI investment will provide significant acceleration of the development of the proposed CCS/power scheme; scheme would not proceed without ETI investment);
 - Attractiveness of the scheme for future investors, including those not currently active in CCS;
 - Willingness and capacity to accept the financial risk profile for the Project.
- S8 Risks associated with reaching acceptable agreement with the ETI within the timescales set out in this RfP:
- Respondents' willingness to materially comply with the terms and conditions of the proposed Project Contract or an alternative structure which meets ETI's core requirements;
 - A coherent and credible approach to the contractual framework which meets ETI's requirements and the requirements of co-venturers (likely to be demonstrated through engagement with the ETI);
 - Level of commitment from the host site and risks relating to planning consents and environmental risk management;
 - Availability, security and level of commitment of additional funds (in addition to ETI funding). Relevant Participants will need to provide evidence of where the additional funds required to complete the development programme will be sourced, including any key approval points in the schedule;
 - Availability and commitment of the necessary technical, legal and financial resources to meet the requirements of ETI's commissioning process.

⁴ Though necessary tangible assets (e.g. land, grid connections) will be recognised accordingly

7.6 Project Shaping and Contract Negotiation

Following selection, the ETI will invite the preferred Respondent(s) to enter into negotiations with the ETI to shape the Project and finalise the terms of the Project Contract. An overall period of 12 weeks has been allowed for this Project Shaping and Contract Negotiation Stage. See Section 7.7 for further details relating to anticipated dates.

The ETI may decide to negotiate with more than one Respondent or group of Respondents (as appropriate) to ensure that all key issues are resolved fully and promptly, before making a final selection decision.

The ETI will work closely with selected Respondents during the Project Shaping and Contract Negotiation Stage, which will include the following activities (as required and dependent on the level of detail provided in the Respondent's Proposal):

- a) negotiation and agreement of the detailed Value Return;
- b) detailing of the proposed programme of work, including definition of deliverables and acceptance criteria;
- c) detailing and agreement of any intermediate stage gates within the Project, where Project performance and the business case are critically reviewed and decisions taken on whether to proceed with the Project;
- d) negotiation and agreement of the Project Contract;
- e) detailing and due diligence relating to the breakdown of costs of the Project;
- f) further due diligence activities as required (see **Annex A1** document, Section 2);
- g) agreement (and approval as required by the ETI) to terms of other key contractual arrangements (e.g. Sub-contracts, Consortium Agreement);
- h) gaining all necessary Respondent and ETI approvals to undertake the Project; and
- i) any further information or assessment that may be necessary to meet state aid requirements.

As part of the above process, Respondents may be required by the ETI to present a Final Detailed Offer to the ETI, addressing all technical, commercial, legal and financial issues.

Some initial technical and legal/finance meetings have also been scheduled as per Section 7.7. Further meetings will be required to complete the Project Shaping and Contract Negotiation Stage and Respondents are required to commit to provide legal, technical, commercial and managerial resources as required to achieve the target contract execution date shown.

7.7 Estimated Project Commissioning Timeframes

The following tables outline the anticipated schedule for the Project Commissioning Process. They also include anticipated dates when Project resources will be required to attend Project shaping and contract negotiation meetings with the ETI.

The timing and the sequence of events resulting from this RfP may vary and shall ultimately be determined by the ETI.

Request for Proposal and Selection	Dates
Issue of RfP	18 June 2015
Deadline for submitting to the ETI a request to attend Project briefing workshop	10 July 2015
Project briefing workshop	14 July 2015
Confidential briefing sessions	W/C 10 & 17 August 2015 W/C 14 September 2015
Deadline for <ul style="list-style-type: none"> a) notifying the ETI of an intent to submit a proposal (Appendix B); and b) return of signed Non-Disclosure Agreement (Appendix C) 	03 September 2015
Closing date for submission of Proposals/Submissions	12 October 2015
Preferred Respondent(s) notified	09 November 2015

Project Shaping and Contract Negotiations	Anticipated Dates
Total duration for Project shaping and contract negotiations	12 weeks
Technical/commercial meeting 1	W/C 16 November 2015
Technical/commercial meeting 2	W/C 30 November 2015
Legal/Finance/HSE meeting 1	W/C 23 November 2015
Legal/Finance/HSE meeting 2	W/C 07 December 2015

Project Start	Anticipated Dates
Project Contract signature target date	12 February 2016
Project start	01 March 2016

8. Important Notices

- a) The ETI at its discretion may request clarification of a Proposal, and may reject any Proposal which is unclear.
- b) Neither the issue of any documentation in the Project Commissioning Process nor any of the information presented in it should be regarded as a commitment or representation on the part of the ETI or any other person to enter into a contractual arrangement. The issue of the RfP is not an agreement or offer to purchase goods or services, and the ETI is not bound to enter into any contract with the Respondent. By responding to this Request for Proposals, the Respondent does not commit itself to entering into a contract with the ETI.
- c) All decisions made by the ETI relating to the acceptance, review and selection or otherwise of Proposals are final.
- d) All documents, including Proposals, submitted to the ETI become the property of the ETI. They will be received and held in confidence by the ETI, subject to the terms of the Non-Disclosure Agreement (Appendix C). No part of a Proposal, or other documents provided by Respondents, shall be returned.
- e) The ETI reserves the right to (i) withdraw the RfP at any time; (ii) change the basis and / or requirements of, or the procedures for, the Project Commissioning Process, including the timetable or closing date for receipt by the ETI of Proposals/Submissions, (iii) make modifications to, or alter any of the information within, the RfP at any time until the execution of the Project Contract, (iv) reject any or all of the Proposals received, and (v) not invite any Respondent(s) to proceed further.
- f) Neither the ETI nor any of its agents or advisers accepts any liability or responsibility for the accuracy, adequacy or completeness of any of the information provided or any opinions contained in this RfP or of any other information made available during the Project Commissioning Process. No representation or warranty, express or implied, is or will be given by the ETI or any of its agents or advisers with respect to such information provided or opinion given therein. Any liability is thereby expressly disclaimed.
- g) Respondents must assess the information and terms contained in this RfP independently, having taken professional advice if necessary. Each Respondent will be deemed to have examined all the documents enclosed with this Request for Proposals and by its own independent observations and enquiries will be held to have fully informed itself as to the nature and extent of the requirements of the RfP. Each Respondent must rely on its own enquiries and on the terms and conditions contained in any agreement, when and if finally executed, subject to such limitations and restrictions as may be specified therein.
- h) Respondents shall be wholly responsible for the costs they incur in the preparation and submission of their responses to the RfP. The ETI shall not be responsible for, and shall not pay, any costs and expenses which may be incurred by the Respondent in connection with its participation in the Project Commissioning Process, including but not limited to any costs or expenses incurred up to and including the execution of the Project Contract.
- i) The ETI may, at its discretion, shortlist Respondents for the next stage (Project Shaping and Contract Negotiation Stage). The ETI does not undertake to accept the lowest bid or to accept part or all of any Proposal and the acknowledgement of receipt of any Proposal (and / or any invitation to any Respondent(s) to proceed to the next stage) shall not constitute any actual or implied agreement between the ETI and the Respondent.
- j) The copyright in the documentation and any other materials supplied by the ETI and/or its advisers in this Project Commissioning Process, in whatever format, belongs to the ETI or its appointed advisers. Such documentation and materials may not, either in whole or in part, be copied, reproduced,

distributed or otherwise made available to any other third party or used without the prior written consent of the ETI, except in relation to the preparation of the Proposal in the course of the Project Commissioning Process. All documentation supplied by the ETI in relation to this Project Commissioning Process must be returned on demand, without any copies being retained by the Respondent.

- k) In this RfP, any phrase introduced by the term “include”, “including”, “in particular”, “for example” or similar expression shall be construed as illustrative and shall not limit the sense of the words preceding that term.
- l) This RfP, and any dispute or claim arising out of or in connection with it (including any dispute or claim relating to non-contractual obligations), shall be governed by and construed in all respects in accordance with the laws of England and Wales and the parties agree that the Courts of England and Wales shall have exclusive jurisdiction to settle any dispute or claim arising out of or in connection with this document (including any non-contractual disputes or claims).
- m) The submission of a Proposal will confirm acceptance of the foregoing provisions by the Respondent without qualification. Any attempt to qualify any of the foregoing provisions in these Important Notices, either expressly or impliedly, may result in a Respondent being disqualified.

9. Submission Requirements

Respondents are required to make a Submission comprising the following components.

- a) Detailed Proposal, in the format set out in Appendix E. The content must clearly demonstrate how the proposed Prime Contractor or Consortium, as appropriate, will meet the requirements and criteria set out in Sections 3 to 7 of this RfP. The Proposal must be written in a succinct manner and must not include imprecise statements, generalities or repetition. The Proposal must be easily readable with appropriate font sizes (10pt or larger), margin widths, and **shall not exceed a maximum of 35 pages, plus supporting information.**
- b) Any supporting information as specifically set out in the Appendix E document.
- c) Risk Register, as described in Appendix E (Risk Management).
- d) Initial due-diligence information, as set out in Section 1 of the **Annex A1 – Due Diligence Information Requirements** document (including in relation to State aid, insurance, intellectual property, health, safety and the environment) and general due diligence, as set out in the **Annex A2 – General Due Diligence Requirements** document.
- e) Statement of Compliance, with supporting information, confirming compliance with or identifying exceptions to the requirements of this RfP and/or the draft Project Contract, as set out in the **Annex A3 - Statement of Compliance** document. This must be signed by each Respondent; if a Consortium structure is proposed, every member organisation of the Consortium must provide a separate Statement of Compliance.

Additional information (such as organisational brochures, etc) may be provided to accompany the Submission, but such additional information will not be taken into account when reviewing Proposals.

The Submission shall consist of three (3) hard copies, with each component separately bound, and an electronic copy, with each component as a separate file. The latter shall be provided in both PDF and Microsoft Word formats.

Appendix A – Glossary of Terms

Term	Definition
Arising IP	Any intellectual property which is created by or for any Participant during the Project or for the purposes of the Project.
Background IP	Any intellectual property which existed prior to any Participant's commencement of the Project and which was created by or for the Participant.
CCS	Carbon Capture and Storage
CCS/power scheme	A commercial project to continue with the design, construction and operation of a power project incorporating carbon capture, as generally described in this RfP
CDM	Construction (Design and Management) Regulations 2015.
Chief Technologist	The individual as described in Section 4.2.
CfD	Contracts for Difference. Key mechanism within the Electricity Market Reform programme to incentivise low carbon power generation by providing a guaranteed feed in tariff over a specified period
Client	As defined by CDM.
Commercial Manager	The individual as described in Section 4.2.
Company Registration Number	Company number as registered at Companies House. Universities should enter their Royal Charter (RC) number in place of the Company Registration Number requested in Schedule 1 of Appendix C.
Consortium	The group of organisations described in Section 4.2 which contract with the ETI to perform the Project. This will not include the ETI itself or any Subcontractors.
Consortium Member	An organisation which forms part of the Consortium.
Consortium Agreement	The agreement to be entered into between the organisations together forming a Consortium, as described in Section 4.2, which governs the execution of the Project within the Consortium.
DECC	The UK Government Department of Energy and Climate Change
Electricity Market Reform (EMR)	DECC programme to reform the UK electricity market, including Contracts for Difference to incentivise low carbon electricity generation
Eligible Costs	As described in Appendix E Annex E1
ETI	The Energy Technologies Institute LLP, a limited liability partnership (Company no. OC333553) whose registered office is at Holywell Building, Holywell Way, Loughborough, Leicestershire LE11 3UZ.
FEED	Front-End Engineering Design
FID	Financial Investment Decision to proceed with detailed design and construction of the CCS/power scheme
Her Majesty's Government	Her Majesty's Government, including but not limited to all of its departments and executive agencies and the devolved administrations of Scotland, Wales and Northern Ireland.

Lead Coordinator	The organisation which is a Consortium Member, and which manages and coordinates the activities of all the Consortium members, and which acts as the primary interface between the Consortium and the ETI, as described in Section 4.2.
Own Funds	Funding sourced by the Respondent's own resources and not dependent in any way on third party lending to either the Respondent or member of the Respondent's group.
Member	The ETI's industry members (as identified on the ETI's website) and Her Majesty's Government (including but not limited to those public sector members identified on the ETI's website (above) from time to time).
Non-Disclosure Agreement	A non-disclosure agreement in the form provided in the Non-Disclosure Agreement document
Participant	Either the Prime Contractor or a Consortium Member.
Payment Milestone	A contract milestone with defined constituent deliverables, associated deliverable acceptance criteria, deliverable value and milestone value (all to be detailed in the Respondent's Proposal and agreed in the Technology Contract which should be completed in order to reach the said milestone, and at which, subject to acceptance by the ETI that the milestone has in fact been reached, payment may be claimed from the ETI.
Prime Contractor	A sole organisation which contracts with the ETI to perform the Project, on its own or (subject to ETI approval) together with Subcontractors.
Programme	The ETI Carbon Capture and Storage Programme that includes the Project.
Programme Manager	The individual appointed by the ETI to manage the overall ETI programme to which this Project is affiliated, and to whom the Project Manager is accountable.
Project	The ETI project for which the purpose, scope of work and other details are described in this Request for Proposals.
Project Commissioning Process	The ETI's process for procuring the Project, as described at Section 7.
Project Contract	The contract, as described in Appendix D, to be entered into between the ETI and the Participants (whether between the Consortium Members or a Prime Contractor).
Project Manager	The individual as described in Section 4.2.
Project Shaping and Contract Negotiation Stage	The project/contract negotiation stage of the Project Commissioning Process, as described at Section 7.6
Project Organisation	The entity or group of entities / organisations, and the contracting and management structure which they adopt, as described in Section 4.2, which together will carry out the Project if commissioned by the ETI and includes any Consortium Members or Prime Contractor and any Subcontractors.

Proposal	The proposal for the Project submitted to the ETI, in response to this Request for Proposals.
Public Funding	Any funding provided by a public authority or agency.
RfP	This Request for Proposals
Respondent	The organisation(s) collectively submitting a Proposal to the ETI.
Review Point	A Project review involving Project Participants and ETI representatives at which the overall progress in Project or a specific Work Package will be critically reviewed and following which a formal decision will be made on the future Project programme.
Stage Gate	A major Project Review Point within the Project, involving Project Participants and ETI representatives at which the overall performance and business case for the Project will be critically reviewed and following which a formal decision will be made whether to continue with the Project, based on whether agreed Stage Gate Criteria have been met.
Selection Criteria	The criteria on which the ETI will base its selection of successful respondents, as set out in Section 7.5.1(b)
Selection Panel	A panel drawn from ETI staff and other experts selected by the ETI (typically including individuals drawn from ETI Member organisations and third parties) to provide the necessary expertise to consider the technical, commercial, legal and financial aspects of each Submission.
Statement of Compliance	The statement of compliance required by the ETI, as described at Annex A3.
Subcontract	A contractual arrangement between a Participant (described in Section 4.2) and another organisation to which work for the Project has been subcontracted.
Subcontractor	An organisation which has a Subcontract.
Submission	The components set out in the Proposal Content and Format document, including the Respondent's Proposal submitted by the Respondent in response to this Request for Proposals.
Task	A significant activity or group of activities (within a Work Package) which results in completion of a deliverable or a significant part of one, or which represents a significant step in the process towards one.
Value Return	The value to be delivered by the Project to the ETI, the Members and the UK economy in return for the ETI's investment in the Project, as generally described in Section 6.
Work Package (WP)	A major section of the Project scope of work, which may be identified in this Request for Proposals or in the Respondent's Proposal, in order to break up the scope of work into separate manageable parts. A Work Package will usually consist of a number of Tasks.

Appendix B – Notification of Intention to Submit a Proposal

The following form is to be completed and received at the address (postal or email) on the front cover no later than the date defined on the front cover and in [insert detail] of this RfP.

Notification of Intention to Submit a Proposal

Respondent Name: [Legal Name]

Address: [Registered Office Address]

Contact:

Email/telephone:

The above named Respondent hereby notifies the ETI of its intention to submit a Proposal in response to the ETI's Request for Proposal entitled [insert Project description], issued on [insert date].

The Respondent submits this notification on its own behalf and on behalf of the following proposed [Consortium Members] [Subcontractors]:

Please list below the legal names of the organisations / entities proposed to deliver the Project.

1. [Enter Name]
2. [Enter Name]
3. [Enter Name]
4. [Enter Name]
5. [Enter Name]
6. [Enter Name]
7. [Enter Name]
8. [Enter Name]
9. [Enter Name]
10. [Enter Name]

Signed: _____

For and on behalf of the Respondent(s).

Name: _____

Date: _____

Appendix C – Non-Disclosure Agreement: Execution Instructions

The Non-Disclosure Agreement (NDA) protects the confidential information of the Respondents and the ETI during the period of the Project Commissioning Process. This specifically includes protection of a Respondent's Technology Information which will be required to enable the ETI to undertake its independent techno-economic assessment should a Respondent be invited to enter Project Shaping, Due Diligence and Contract Negotiation. For the successful Respondent(s), the confidentiality provisions in the Project Contract will supersede this NDA.

Notes

In order to ensure parity across different groups of Respondents, the ETI will not enter into negotiations on the terms of this NDA.

NDA Execution Process / Instructions

An electronic version of the NDA is available in the **Non-Disclosure Agreement** document for completion and signature by Respondents in accordance with the following instructions:

In the case of a Prime Contractor as Respondent:

- The Prime Contractor should complete Schedule 1 of a single electronic NDA with its company (legal) details and a postal address for return by the ETI of a fully executed NDA.
- The Prime Contractor should print and sign **TWO** paper copies of the NDA. **The NDA must not be dated on the front page.**
- The Prime Contractor should scan a copy of a signed and undated NDA and email it to the ETI at the address on the front of the RfP.
- The Prime Contractor should post both original signed and undated copies to the ETI.
- On receipt, the ETI will countersign and date the two original copies of the NDA. The ETI will retain one of these copies and post the other to the Prime Contractor at the address provided by the Prime Contractor at Schedule 1 of the completed NDA.

In the case of Respondents intending to submit a Proposal as a Consortium, the ETI intends to execute the NDA in counterparts as follows:

- The proposed Lead Coordinator should complete Schedule 1 of a single electronic NDA with the legal company details of all Respondents (the Lead Coordinator and each of the other proposed Consortium Members), together with a **single** postal address for return by the ETI of fully executed NDAs.
- The Lead Coordinator should circulate electronically the NDA with the fully completed Schedule 1 to all Respondents **and to the ETI** (at the email address on the front page of this RfP).
- Each of the Respondents (all proposed Consortium Members including the Lead Coordinator) should print and sign **TWO** paper copies of the NDA. **The NDA must not be dated on the front page.**
- For each Respondent, one of the signed undated counterpart NDAs should be scanned and sent by email to the ETI at the address on the front of this RfP.
- For each Respondent, **ONE** original (hard copy) undated counterpart signed NDA should be sent to the ETI at the address on the front of the RfP (we would recommend using a courier). The ETI recommends that the other original undated signed NDA is sent by the Respondents to the Lead Coordinator so that the Lead Coordinator may hold a complete set of original counterpart NDAs, one signed by each Respondent, on behalf of the Respondents.
- On receipt of a complete set of original counterpart NDAs (one signed by each Respondent), the ETI will sign and date two further counterpart copies of the NDA. The ETI will notify the Lead Coordinator of the date of the NDA (i.e. the date of the ETI's signature) so that the original Respondent

counterparts held by the Lead Coordinator may be dated on the front page. **Note that the ETI will not release confidential information (e.g. the draft Project Contract) until the NDA has been executed by both parties.**

- The ETI will retain one of the original counterpart NDAs signed and dated by the ETI; the ETI will return the other original ETI counterpart NDA to the Lead Coordinator to hold on behalf of the Respondents.
- The ETI and the Lead Coordinator should each then have a complete set of original, dated, counterpart NDAs.

Appendix D: Project Contract: Key Features

The Project will be governed by a Project Contract. A draft Project Contract will be made available to Respondents following receipt by the ETI of a signed NDA in accordance with Appendix C of the RfP.

The Project Contract will be negotiated following selection of the preferred Respondent(s) (Section 7.5 of the RfP), during the Project Shaping and Contract Negotiation Stage of the Project Commissioning Process (Section 7.6 of the RfP).

The Project Contract will comprehensively deal with the project risks, specifically setting out the accountabilities for key risks to be managed by the Prime Contractor or Participants Respondent and exceptionally, risks that may be attributable to ETI and/or risks that should be jointly managed.

Any issues that any Respondent has with the terms of the Project Contract must be set out in the Statement of Compliance to be provided as part of the Proposal/Submission (see the **Annex A3 - Statement of Compliance** document).

The particular aspects of the Project Contract that the ETI would like to highlight for Respondents' initial consideration are as follows. The ETI expects that each of the Respondents will provide an initial detailed view on these aspects in their Proposal, as part of the Statements of Compliance.

1. Intellectual Property

The ETI expects that Respondents will review the ETI's contractual mechanisms for dealing with Arising IP and Background IP in the ETI's Project Contract in relation to their proposed Value Return. The Respondents should provide comments in their Proposal on the ETI's standard mechanisms in the Project Contract to deal with Arising IP and Background IP such as, depending on the project and as set out in the Project Contract, ownership or (sub)licensing of Arising IP to the ETI and its Members, terms for the licensing of Background IP both during the Project and after the Project for the exploitation of Arising IP and requirements under the general IP conditions for protection and maintenance of Arising IP.

If the Respondents have any fundamental issues with these mechanisms, the ETI expects the Respondents to make alternative suggestions regarding how the Arising IP and Background IP will be dealt with under the Project Contract if the standard mechanisms are not appropriate. For any alternatives, early discussions with the ETI are strongly recommended in order for the ETI to advise if the alternatives are possible within ETI's structure and whether they will meet the selection criteria and requirements for the project and to optimize the likelihood of a successful proposal.

2. IP Warranties and Due Diligence

The Project Contract contains a number of warranties and undertakings related to IP. The ETI will conduct an appropriate level of due diligence before the start of the Project which relates to IP and the IP warranties. The wording of any warranties may be amended to reflect IP due diligence performed.

3. Indemnities

The ETI will invest funds in this Project but has no control over any risks and associated liabilities that may arise from the Project. Therefore the Project Contract contains a number of indemnities in favour of the ETI, including for third party claims and for IP infringement. Respondents should review and comment on the indemnity position in their Submission.

As is normal across industries, the ETI will expect the indemnity in respect of third party IP infringement to be uncapped in liability to ensure that the risk is properly allocated to the Project participant. The ETI will work with any down-selected Participants to ensure that the indemnity is appropriately scoped according to the project, IP and due diligence.

The indemnity for third party claims may be capped but any cap must ensure there is a full allocation of risk to the Prime Contractor or Participants. Evidence of the risks (including maximum financial value of any claims under the indemnity) must be provided during down-selection to support any requested cap.

4. Reporting

The ETI requires regular information updates throughout the life of the ETI Project, which includes regular contact and monthly financial and project reporting. These requirements are necessary under ETI's governance. Any questions about the level of reporting should be made early, to enable the reporting costs to be included in the project management costs included in any Proposal.

5. State Aid Requirements

ETI utilises a mix of funds from its Industry Members and Her Majesty's Government. Where the ETI utilises its public funds, such funds will constitute state aid. The ETI has a specific state aid clearance from the European Commission. A copy is available on request. Respondents should note:

- Respondents may be required to provide further information during the Project Commissioning Process to support any specific state aid requirements of the Project, including any applications for further state aid clearance;
- Participants are required to provide full transparency of costs throughout the Project to ensure both the Participant(s) and the ETI comply with EU state aid law;
- Participants are required to agree to certain obligations in the Project Contract related to the state aid requirements including the duration of the retention of records, and obligations to return ETI Investment monies in certain exceptional circumstances (including in the event the European Commission adopts a decision that there has been a grant of illegal state aid or misuse of state aid); and
- Respondents are required to confirm in their Proposals that there are no potential, threatened, pending or outstanding recovery orders by the European Commission in respect of any funding received by any proposed Participant (see the **Annex A1 – Due Diligence Information Requirements** document).

The Project Contract has requirements that relate to State aid (through the provision of public monies to the ETI and therefore to the Project). This includes requirements to return ETI funds in certain exceptional circumstances and record keeping requirements. **Please note, the ETI cannot award a contract to any organisation unwilling to accept these requirements.**

Appendix E – Proposal Content and Format

The Proposal shall be arranged according to the structure defined below and shall explicitly include all the information listed. Proposals will, ideally, be a maximum of 35 pages. Appendices are in addition to this stipulation.

1. Executive Summary

[no more than 2 pages]

This should briefly describe:

- Your organisation and the project organisation structure;
- Your relevant experience and expertise;
- Summary of the proposed CCS/power scheme
- Summary of the proposed work programme, approaches taken and key deliverables;
- Total project cost and investment requested from the ETI, and whether this is on a Capped Cost or Fixed Price basis;
- Value return to the ETI and its Members; and
- Confirmation of compliance with RfP requirements, including the Contract, and any material exceptions/deviations.

2. Background to Proposed Participants and Structure

[no more than 3 pages, plus appendices, if required, to include:]

- Project Participants – including any subcontractors, partners and suppliers of goods/services who have key roles to play in the Project
- Key Individuals and Roles – identify all key roles and all key individuals. It must specifically include the details of the nominated Project Manager, Chief Technologist and Commercial Manager. The estimated proportion of each individual's time to be dedicated to the Project should be identified and their skills and expertise in relation to the Project's deliverables should be summarised. CVs should be included as part of the Supporting Information.
- Project Organisation – include an organisation diagram showing the organisation(s) and their principal roles, complete with key personnel and their roles
- Project contracting structure. This section should briefly explain the intended contracting either a Prime Contractor, or a Consortium with a Lead Coordinator (see Section 6 of the RfP), including justification of why this structure is considered to be the most effective way of delivering and exploiting the Project.

3. Proposed CCS/Power Scheme

[no more than 4 pages]

With reference to Selection Criteria S1 – S3, provide a summary of the proposed scheme which would be developed through and beyond the ETI project. If the proposed site owner is not a Project Participant, include a letter of support from the owner as part of the Supporting Information.

4. ETI Project Description

[no more than 8 pages]

Provide a summary of the proposed ETI Project activities and deliverables, covering the following:

- Project Objectives

- Programme of work
- Project Schedule (Gantt Chart)
- Deliverables and Payment Milestones (see Section 6 of the RfP)

Justification should be provided for how the final package of deliverables will be sufficient to meet the requirements of a Concept Selection Gate.

More detailed information can be provided on a Task by Task basis as part of the Supporting Information.

5. Project Costs and Additionality

[no more than 3 pages]

5.1 Project Costs

Respondents should provide:

- a statement whether the proposal is made on a Capped Cost or Fixed Price basis (see Section 6 of the RfP);
- a figure for the proposed Total Project Cost;
- a figure for the proposed Maximum ETI Investment;
- figures for any proposed Participant Funding and/or Third Party Funding (as appropriate);
- a breakdown of Total Project Cost (a) between Milestones and, in the case of a Consortium Contracting Structure, between Participants against each Milestone, and (b) between Participants and cost categories in the form shown in the tables below.

If there are any assumptions or limitations to this cost, these should be clearly stated. Note that this information is required by the ETI whether the proposal is on a Capped Cost or Fixed Price basis to enable the ETI to undertake a value for money assessment.

During the Project Shaping and Contract Negotiation Stage (prior to Project Contract signature) the ETI will require a more detailed cost breakdown including a schedule of payments against identified Milestones. This will require completion of the ETI's financial monitoring forms. Whilst not compulsory, it is recommended that Participants use these forms to produce the Project costings at proposal stage: these forms are available on request from the ETI.

Guidance on Eligible Costs and the completion of Tables 1 – 3 is provided in Annex E1.

Project Costs – Table 1

	Finish Date	Participant 1 (Lead Coordinator or Prime Contractor)	Participant 2	Participant 3	Participant 4 etc.	Total
Milestone 1						
Milestone 2						
Milestone 3						
Milestone n						
TOTALS						

Project Costs – Table 2

	Participant 1 (Lead Coordinator or Prime Contractor)	Participant/ Major Subcontractor 2	Participant/ Major Subcontractor 3	Participant/ Major Subcontractor 4 etc.	Total
Number of person-days					
Base Labour Costs					
Materials Consumed					
Capital Equipment					
Sub-contracts; Consultancy; Fees including fees for Trial and Testing					
Travel and Subsistence					
Overheads					
Other					
Profit					
TOTAL PROJECT COSTS (ELIGIBLE COSTS)					

Project Funding – Table 3

	Participant 1 (Lead Coordinator or Prime Contractor)	Participant/ Major Subcontractor 2	Participant/ Major Subcontractor 3	Participant/ Major Subcontractor 4 etc.	Total
ETI Investment (Project Contract)					
ETI Investment (%)					
Own Funds (Participant Funding)					
Third Party Funding (Private Funding)					
Third Party Funding (Public Funding)					
ETI Equity Investment (if applicable)					

5.2 ETI Additionality

Respondents should identify the impact that the ETI Investment will have on their activities in developing and implementing thermal power projects in the UK, for example:

- acceleration of implementation of thermal power developments to meet UK market needs;
- incorporation of low cost, low risk CCS into thermal power development plans;
- additional funding from other sources which would be attracted as a result of ETI Investment (for this Project and any potential CCS/power project arising).

Respondents should outline the development path that they would follow in the absence of the ETI Investment.

6. Project Funding

[no more than 2 pages plus, where applicable supporting information, e.g., letters of support]

For all sources of funding or resource to be provided in addition to the ETI Investment, as listed in Table 3, the Respondents should provide full details of such funding, including:

- If the funding is to be made from Participant Funding and/or Third Party Funding, the Respondent should provide evidence of the availability of those funds for the Project;
- if the funding is dependent on Third Party Funding the Respondents should provide details for the sources of the funding, including identifying where any such funding is Public Funding, and the terms and status of such funding; and

If any equity funding is proposed, this should be set out and distinguished from funding to be provided through the Project Contract.

7. Value Return

[no more than 3 pages]

The potential Value Return proposed by the Respondent(s) should be detailed in this section of the Proposal.

As noted in Section 4.5 of the RfP, for this Project the ETI is seeking a direct financial return on its investment in the event that the proposed CCS/power scheme (or an alternative arising from the ETI Project) proceeds. We would anticipate that such return would be realised as part of a positive Final Investment Decision (FID). Respondents should describe their proposals as set out in Section 4.5 of the RfP.

Respondents should consider all other types of 'value' as set out in Section 4.5 of the RfP and should include a table covering the value types (and any other opportunities the Respondents might propose) and the specific mechanisms through which value would be returned.

Respondents should bear in mind that, although detailed negotiation of the Value Return is expected during the Project Shaping, Due Diligence and Contract Negotiation Stage, the ETI can only select preferred Respondents on the basis of information provided in the Submission.

8. Intellectual Property

[maximum 3 pages]

Respondents should read carefully Sections 4.5 and 6.3 of this RfP, and Section 1.4 of Annex A1 (Due Diligence requirements) before completing this section.

Arising IP

Respondents should provide a brief overview of the nature of any anticipated Arising IP from each part of the Project (including where appropriate each Work Package), including the relevant areas of the technology and the form of the anticipated intellectual property rights.

The Proposal should identify the ownership of each item or grouping of Arising IP and the reasons why, bearing in mind the ETI's requirements (Section 4.5).

Respondents should provide details of the anticipated use or licences of Project results / Arising IP by the ETI, the Participants, any SPV and/or any other third party.

Respondents should confirm their acceptance of the ETI's proposed mechanisms in the draft Project Contract for dealing with Project results / Arising IP. Where the Respondents propose any exceptions to these arrangements, they should set details of the exceptions together with (a) reasons for the proposed exceptions and (b) the relevant / alternative Value Return offered to the ETI and its Members.

Respondents should indicate how their proposed Value Return relates to the Arising IP identified in this section.

Background IP and Third Party IP

Respondents should identify and describe any Background IP and/or Third Party IP (e.g. patents, proprietary data, computer algorithms, know-how and other IP) to the extent there is Background IP and/or Third Party IP:

- which is or may be needed (whether by the ETI, a Participant and/or a Subcontractor, or to be licensed from one Participant to another Participant or a Subcontractor, or to be licensed by a Subcontractor to a Participant or to another Subcontractor, or otherwise) to carry out the Project or which may be used during the Project; or
- which may be needed to exploit the Arising IP (whether by the ETI, the Members or any other person, and whether as part of the proposed Value Return or otherwise).

The identification and description of any such Background IP or Third Party IP should detail:

- the nature of the IP (including the legal nature of the IP right);
- rights to that IP;
- ownership and control, whether this is by any of the Project Participants or by any third parties; and

whether there is any reason that such Background IP or Third Party IP (as appropriate) will not be made available as and for the extent needed to carry out the Project and/or exploit the Arising IP or any terms or restrictions that apply.

9. Exploitation Plans

[maximum 2 pages]

Provide details of how the consortium plan to develop the CCS/power scheme beyond the ETI Project through to FID and beyond. The requirements for additional partners (including funders) beyond the ETI Project Participants should be identified, and the current status of any existing relationships with such partners.

Project Participants should also identify how they would propose exploiting the results of the ETI Project to develop further CCS/power schemes.

Project Participants should identify how they will disseminate the generic business case developed in the ETI Project, both during and beyond the ETI Project.

10. Risk Management

[no more than 2 pages, plus Risk Register]

This section should explain which risks will be managed exclusively by the Participant, which risks will be managed by ETI and which risks will be jointly managed between the Participant and ETI.

11. Health, Safety and Environment (HSE) Management

[maximum 2 pages]

Respondents should briefly describe:

- Their approach to managing HSE during the ETI project
- Their approach to building HSE requirements into the design for the proposed CCS/power scheme
- Their expected approach to managing HSE in the FEED and subsequent stages

12. Plan for Project Shaping and Contract Negotiation

[maximum 1 page]

Respondents should identify key issues to resolve during the Project Shaping and Contract Negotiation Stage, before Project Contract execution, for example:

- detailing of the technical proposal: what further actions are needed;
- Project Contract – key provisions to resolve (based on draft Project Contract; see Section 6 of RfP and Appendix D);
- timing sequences for the setting up of the selected Project organisational structure (e.g. subcontracts, Consortium Agreement etc), including any dependencies or other factors which could impact or delay the Project;
- internal approvals - confirm what internal approvals will be required for all Participants in the bid in order to enter into contract.

The plan should be structured and link clearly back to the previous sections set out in this RfP and the proposed timings for meetings set out in Section 7 of the RfP.

Respondents should explicitly confirm that all key technical, commercial and legal resources, across the Participants, required to meet the Project Contract signature target date (see Section 7 of the RfP), will be available to achieve a signed contract by that date. A table should be included providing names and contact details (phone and email addresses) of key contacts for Project Shaping and Contract Negotiation. This should include, for each Participant, the main technical, legal/commercial and finance contacts. In particular the Respondents should confirm the availability of all contacts for all Participants for the kick off meeting for the Project Shaping and Contract Negotiation Stage set out in Section 7 of the RfP.

Any key risks or issues which may impact on meeting the Project Contract signature target date should be identified.

Annex E1 Project Costs – Definition of terms for completing Tables 1 - 3

1. Eligible Costs

Total costs of the project should be split over the following cost categories which describe the main costs that the ETI is prepared to support.

2. Labour Costs

This comprises the direct costs of personnel working directly on the project (i.e. salaries, pension, National Insurance and other direct benefits). For personnel not working 100% of their time on the project, this should be pro-rated according to the number of working days spent on the project. Overheads should be accounted for separately (see below).

3. Materials Consumed

These will be the materials to be consumed on the project, not included in the overheads, purchased from third parties. Materials supplied by subsidiaries or associated companies should exclude the profit element of the value placed on that material. If waste or scrap material has a significant residual/resale value the figures should reflect this. Foreseen cost increases, such as on specific materials, may be considered by the ETI.

4. Capital Equipment

If capital equipment and tools is bought or utilised on the project, eligible cost should be calculated on the basis of [purchase cost (or value at the start of the project if you already own the equipment) less the expected residual value at the end of the project] multiplied by the utilisation within the project. For example, a capital item purchased for £100k which has residual value of £50k at the end of the project and which is 50% utilised by the project and 50% for other activities has an eligible cost of $[100 - 50] \times 50\% = £25k$

5. Sub-contracts; Consultancy; Fees including Fees for Trial and Testing

This category should provide costs for minor subcontractors. The same rules governing the use of subsidiaries and associated organisations with regard to supply of materials apply here. If a Prime Contractor/Subcontractor project structure is proposed, major Subcontractors (i.e. those providing a significant and critical contribution to project delivery) should be considered as Participants and fill in a separate column in the table. Attention will be paid to the size of this contribution when assessing eligibility and level of support.

6. Travel and Subsistence

You should only include reasonable costs that are justified and will be incurred exclusively for progressing this project. Note that if any general travel and subsistence is included in your overhead calculations, this proportion should be subtracted from the Travel and Subsistence expenditure during the claims process.

7. Overheads

Reasonable overheads can be included. Two methods of providing information on overheads are available. You can either complete the overhead calculator worksheet provided with the Project Budget Form or you may submit your own overhead rate. At RfP stage an initial Value for Money assessment will be made of labour and overhead rates. If Respondents are selected to enter the Project Shaping and Contract Negotiation stage, more detailed due diligence will be carried out.

8. Profit

Under certain circumstances the ETI may be prepared to consider profit as an eligible cost, but Respondents should note that under state aid rules profit cannot be paid to Participants if they wish to receive a licence for Arising IP.

9. Other Costs

Other costs should include costs not accounted for in the above sections. Some examples follow. A brief description and justification should be provided for any 'Other Costs' included in the tables.

- **Training Costs:** These costs are eligible for support where they are specific to and necessary for the project. The Programme may consider support for management training specific to the project but will not support ongoing training.
- **Preparation of Technical Report:** For example where the main objective of a project is the support of standards or technology transfer.
- **Market Assessment/ Feasibility Studies:** There is some scope for support, in exceptional circumstances, of "state of the art" studies in areas that will affect the nature and likely outcome of a project. Support may also be given for underpinning research leading to development of a programme, i.e. a suite of projects.
- **Licensing in New Technologies:** Exceptionally, the ETI may consider support where it makes sense to do so, for example, to avoid "reinventing the wheel". Where imported technology makes up a large part of a project (where technology is valued at more than £100,000) then it will be expected that there is development of that technology as part of the project.
- **Patent Costs (SMEs only):** The ETI may support some of the costs of protecting Arising IP for SMEs only up to a total of £5,000 per participant.
- **Project Management:** The costs of project management by the Prime Contractor or Lead Coordinator on behalf of the consortium are eligible and should be included with the labour totals. In cases where management is sub-contracted, a strong case should be made for the necessity and benefits of this approach.
- **Software:** The provision of software licences by members of the project consortium must only reflect the true costs of supplying that software to the project and not the commercial rate, the inclusion of any profit element or the amortisation of previous development costs. The preparation of disks, manuals, installation, customisation, training and lost opportunity costs may be eligible.
- **Legal and accounting costs:** The legal costs of setting up the project or the collaboration and costs associated in conducting audits or applying for funding are ineligible and must not be included as an 'Other Cost'.
- **Insurance costs:** Project specific insurance can be included but general business should be contained within overheads. If insurance is included please describe what it relates to.

© 2015 Energy Technologies Institute LLP. The information in this document is the property of Energy Technologies Institute LLP and may not be copied or communicated to a third party or used for any purpose other than that for which it is supplied without the express written consent of Energy Technologies Institute LLP.