



Programme Area: Bioenergy

Project: Biomass Logistics in the UK

Title: Biomass Logistics in the UK Request for Proposals

Abstract:

Request for proposals for the Biomass Logistics in the UK project.

Context:

This project will describe existing biomass import / storage / distribution assets and, using findings from BVCM (ETI's Bio Value Chain Model) and other references, will define and test alternative scenarios for different biomass demand levels.

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Request for Proposals (RfP)

Bioenergy Programme: Biomass Logistics in the UK



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Request for Proposals (RfP)	Energy Technologies Institut

SUMMARY OF REQUEST FOR PROPOSAL INFORMATION

Summary of Key Information	
Title of project	Biomass Logistics in the UK
Request issue date	14 March 2016
Non-confidential Briefing Workshop at ETI Loughborough	4 April 2016
Notification of intention to submit a	18 April 2016
Proposal and return of Non-Disclosure Agreement	Notifications must be received before 12:00 noon
Closing date for submission of	29 April 2016
Proposals	Proposals must be received before 12:00 noon
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	Additional documents	Location
1.	Project Commercial and Legal Requirements	http://www.eti.co.uk/wp- content/uploads/2016/03/Commercial-and-Legal- Requirements.pdf
2.	Annex A1 – Due Diligence Information Requirements	http://www.eti.co.uk/wp- content/uploads/2016/03/Annex-A1-Due-Diligence- Information-Requirements.pdf
3.	Annex A2 – General Due Diligence Requirements	http://www.eti.co.uk/wp- content/uploads/2016/03/Annex-A2-General-Due- Diligence-Requirements.pdf
4.	Annex A3 – Statement of Compliance	http://www.eti.co.uk/wp- content/uploads/2016/03/Annex-A3-Statement-of- Compliance.pdf
5.	ETI Non-Disclosure Agreement	http://www.eti.co.uk/wp- content/uploads/2016/03/Biomass-Logistics-in-the- UK-RfP-NDA.pdf
6.	IP Due Diligence for Proposal form for IP Due Diligence	http://www.eti.co.uk/wp-content/uploads/2016/03/IP- Due-Diligence-for-Proposal.pdf

SUMMARY OF KEY PROJECT INFORMATION

Project Summary

Bioenergy can play a significant and valuable role in the future UK energy system. When combined with Carbon Capture and Storage (CCS) bioenergy can deliver net negative emissions of c. -55 million tonnes per year, and meet around 10% of UK energy demand in the 2050s, ultimately reducing the cost of meeting the UK's 2050 greenhouse gas (GHG) emission reduction targets by more than 1% of GDP. Without CCS, bioenergy can still deliver GHG savings and play an important role in the energy system. Delivering the greatest value from bioenergy depends on the UK's ability to source and distribute sufficient biomass from sustainable sources, either domestic or imported.

In recent years supplies of both imported and UK produced biomass for bioenergy (excluding waste) have increased. However, quantities of imported biomass have been growing at a much greater rate and, if this trend continues, will shortly exceed the supply of UK biomass¹. While domestic sources offer the greatest energy security and sustainability benefits in the longer-term, the UK currently doesn't have enough of its own biomass feedstock today to supply a commercially-viable large-scale bioenergy sector. Therefore, the most pragmatic approach is to develop the sector based on near-term increases in biomass imports derived from sustainable sources, such that the key actors in the supply chain can 'learn by doing' in terms of logistics, handling, designing and operating bioenergy conversion technologies. In parallel, support is needed to build up a strong and commercially-viable biomass feedstock supply chain in the UK, such that domestic biomass supplies can continue to play a significant role.

Given the relatively short timescales over which the sector needs to develop and achieve scale (between now and 2050), it is important that the sector is supported to develop in the most efficient and effective way possible, drawing on lessons learned from other sectors where relevant. This is particularly key for developing a national infrastructure to receive and distribute imported biomass feedstocks across the UK, as well as being able to accommodate increasing levels of domestic feedstock into the system over time.

The goals of this Project are to:

- understand the current status of biomass logistics infrastructure in the UK, how it has developed and any further developments planned;
- understand the lessons that can be learned from the development of other relevant sectors such as oil, coal and other commodities;
- understand key future pathways, actions and decision points which would deliver and support sector development out to 2050. It is anticipated that this will be accomplished by an appraisal of options for developing the UK's national biomass logistics infrastructure over the next 30-40 years around four different bioenergy scenarios, taking key years as 2025, 2035 and 2045;
- identify 'scenario-resilient' actions (i.e. low-risk) and key decision points, without which the infrastructure required would not keep pace with demand;

¹ DECC, 2015. DUKES Table 6.1 Commodity Balances: In 2010 the UK produced 1,794 ktoe (thousand tonnes of oil equivalent) and imported 884 ktoe of wood and other plant based biomass. In 2014 this had increased to 2,840 ktoe of UK production and 2,152 ktoe of

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understand how different end users may use the logistics network to satisfy their bioenergy demand.

The key outputs are anticipated to be:

- a review of the current status of, and issues with, biomass distribution networks in the UK covering both imported and domestic feedstock. This should include a review of how biomass logistics have developed in the UK, including the sources and methods of infrastructure financing used, with references made to key examples:
- a review of how other industries, upon which bioenergy may be able to learn, have developed their UK supply and national distribution networks (e.g. oil, coal and/or other commodities);
- an appraisal of options for developing the UK's national biomass logistics infrastructure over the next 30-40 years to enable the most effective and efficient development of the biomass sector in the UK. This will be based around four scenarios provided by the ETI and should include the identification of 'scenario-resilient' actions and key decision points. The appraisal should also examine potential opportunities to use existing infrastructure and examine the role of sector leadership/coordination and cooperation required to cost-effectively deliver the required infrastructure, highlighting potential differences between a coordinated and uncoordinated approach;
- a set of three case studies of different end users in the UK to understand how the national biomass logistics infrastructure could be used by different end users.

Key Dates

Request for Proposal and Selection dates	
Issue of RfP	14 March 2016
Non-confidential Briefing Workshop at ETI Loughborough	04 April 2016
Closing date for Expression of Intention	18 April 2016
to Bid, including Non-Disclosure Agreement	Notifications must be received before 12:00 noon
Closing date for submission of	29 April 2016
Proposals	Proposals must be received before 12:00 noon
Preferred Respondent notified	27 May 2016
Project timescales and anticipated dates	
Agreement execution target date	01 September 2016
Anticipated Project start	12 September 2016
Anticipated Project finish	31 March 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 agreement.

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

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1. 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.

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

The ETI Bioenergy Programme comprises a portfolio of projects across the bioenergy supply chain, which collectively seek to address four key questions/areas:

- How much of the theoretical negative emissions could be realised through bioenergy deployment in the UK?
- What would be the best ways to use this bioenergy in the future UK energy system?
- What are the right combinations of feedstock, pre-processing, and conversion technologies?
- What enabling infrastructure, and market, policy and regulatory support is needed?

Full information of all ETI projects commissioned under the Bioenergy Programme can be found on the ETI website at: http://www.eti.co.uk/programme/bio.

2. **WELCOME TO RESPONDENTS**

We are seeking Respondents who will bring 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. Your Proposal will be given active consideration, recognising the need for compliance with our deliverables, reporting accountabilities and contractual requirements.

We value your enthusiasm, commitment and Proposals from which we can benefit on this strategically important Project. Your investment in time and resources making the Proposal is appreciated.

3. THE REQUIREMENT

3.1 Project Introduction

Use of biomass for energy is growing in the UK. For example, since 2009 generation of bio-electricity has more than doubled with the majority of this increase accounted for by increased use of plant biomass, including wood, straw and energy crops². The introduction of the Renewable Heat Incentive (RHI) has also increased demand for biomass in both the domestic and industrial heat sectors. To source this growing demand for biomass, there have been increases in the quantity of both UK-grown and imported biomass.

At the moment, imports of biomass for bioenergy are growing more rapidly than UK production, with levels of imported biomass expected to exceed UK production in the very near future. The UK is currently the world's largest importer of biomass wood pellets, taking approximately 500,000 tonnes per month from the USA and Canada as well as importing from continental Europe.

Delivering the greatest value from bioenergy in the UK depends on our ability to source and distribute sufficient biomass from sustainable sources, either domestic or imported. While supply has been able to keep up with demand to date, as the bioenergy sector continues to grow further investment will need to be made to ensure sufficient quantities of biomass can be imported, stored, transported, processed and distributed to end users. In order to ensure the commercial viability of the biomass sector and to minimise the cost to the consumer, it is important that the infrastructure for biomass logistics is developed and used efficiently, learning lessons from other sectors where appropriate.

3.2 Project Objectives

The aim of this Project is to develop a UK wide system understanding of the current status of biomass logistics infrastructure in the UK and develop costed and practical infrastructure development pathways to 2050 for a number of scenarios that will enable the efficient rollout and expansion of the UK biomass sector to support the lowest-cost delivery of the UK's 2050 energy and greenhouse gas targets. Looking across these pathways should enable low-risk actions, key decisions points and general principles for biomass logistics infrastructure development to be identified. More specifically, the desired outcomes from this Project are to:

- Understand the current status of biomass logistics infrastructure in the UK, how it has developed and any further developments planned;
- Understand the lessons that can be learned from the development of other relevant sectors such as oil, coal and other commodities;
- Understand key future pathways, actions and decision points which would deliver and support sector development out to 2050. It is anticipated that this will be accomplished by an appraisal of options for developing the UK's national biomass logistics infrastructure over the next 35 years around four different bioenergy scenarios, taking key years as 2025, 2035 and 2045;
- Identify 'scenario-resilient' actions (i.e. low-risk) and key decision points, without which the infrastructure required would not keep pace with demand; and
- Understand how different end users may use the logistics network to satisfy their bioenergy demand.

3.3 Project Scope

It is anticipated that this Project will be delivered in four parts (although the Respondent is welcome to propose an alternative approach which they think will better deliver the Project goals):

² DECC, 2015. Digest of UK Energy Statistics - Table 6.1.1

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3.3.1 Part 1. Review and Analysis of Current UK Biomass Infrastructure

This review and analysis should summarise how biomass logistics have developed in the UK and cover the current status of, and issues with, biomass distribution networks in the UK including both:

- Imported feedstocks. This should include details of the type and volume of imports, location of
 imports, method of import (including types of ship), how biomass is handled and stored at ports and
 transport modes used to move biomass to storage and distribution sites and, eventually, to the end
 user.
- Domestic feedstocks. The review should cover feedstock type, volume and location of production as well as details of how UK biomass is processed, stored, moved and sold in the UK.

For both sectors the review should identify key markets and players (referencing key examples where appropriate) and note any planned infrastructure developments.

The review should also detail the sources and methods of infrastructure financing used, including any current issues associated with sourcing finance. It should also identify where biomass logistics are making use of 'generic' infrastructure such as the existing road and rail network and where it has required specific investment for example in trains or in bespoke port handling equipment.

Finally, the review should identify other relevant industries who have developed UK supply and national distribution networks. In particular, industries which have moved from an import based business to an increasingly domestic production base or vice versa (e.g. oil, coal and/or other relevant commodity products) and highlight any lessons from which the bioenergy sector could learn to develop a more efficient logistics network.

3.3.2 Part 2. National Biomass Infrastructure – Scenario Analysis and development of Infrastructure Pathways and Action Plans

The ETI will provide four scenarios for the bioenergy sector out to 2050. In each scenario, by 2050, the bioenergy sector will increase to a size that our Energy System Modelling Environment (ESME) modelling suggests is required to cost effectively meet our 2050 greenhouse gas targets (~130TWh/yr delivered energy)³. The characteristics of the four scenarios are set out in Figure 1. For each scenario the ETI would provide a high level summary (or narrative) of:

- scale and location of biomass pellet imports and domestic crop production for bioenergy; and
- key demand centres for biomass, including the types of conversion plants used (e.g. to heat, electricity, hydrogen both with and without CCS).

The ETI will also provide details of the port import capacity and transport cost assumptions used in our Bioenergy Value Chain Model (BVCM)⁴, which the project team would be expected to review and provide updated data where necessary.

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www.eti.co.uk

³ http://www.eti.co.uk/project/esme/

⁴ http://www.eti.co.uk/bioenergy-overview-of-the-etis-bioenergy-value-chain-model-bvcm-capabilities/

Scenario A: The sector is primarily based on imports with domestic production Increasing levels of UK biomass production ramping up over time, such that they are in roughly equal proportions by 2050. Bio+CCS is deployed from the 2030s driving more of a centralised coastal deployment to power and hydrogen.

Scenario B: The sector is primarily based on imports with domestic production ramping up over time, such that they are in roughly equal proportions by 2050.

No Bio+CCS is developed in the UK, driving more distributed deployment with a larger customer base to heating or CHP in industry, commercial and domestic sectors.

Scenario C: A sector based primarily on imports to 2050 (UK biomass is a niche market only).

Bio+CCS is deployed from the 2030s driving more of a centralised coastal deployment to power and hydrogen.

Scenario D: A sector based primarily on imports to 2050 (UK biomass is a niche market only).

No Bio+CCS is developed in the UK, driving more distributed deployment with a larger customer base to heating or CHP in industry, commercial and domestic sectors.

With CCS Without CCS

Figure 1: Description of the four bioenergy scenarios, 2016 – 2050

For each scenario the Project team would be expected to produce an infrastructure development pathway identifying key decision points and actions that would need to be taken between now and 2050, split into decades - i.e. 2025, 2035, 2045, 2050. The pathway should consider (at least) the key elements set out in Figure 2 below



Figure 2: Steps in the biomass logistics chain

Under each of these stages the Project team should consider (at least):

- shipping requirements (imports) the number and type of ships required and their volume;
- port facilities (imports) requirements for unloading, handling, storage and safety;
- UK transport the use of UK road and rail networks, and inland and coastal waterways, identifying the point at which additional investment in the networks would be required. For the purposes of this Project we are making the assumption that no new nationally significant road, rail or waterways infrastructure projects would be commissioned purely to enable biomass logistics. However smaller investments (e.g. rail spurs or roads from a mainline railway to a power plant) could be made. The Project team should include in their analysis any relevant national infrastructure projects planned. This section should also identify additional investment in trains, road vehicles and ships/barges, including information on whether they would need to be bespoke or generic designs;

- pre-processing (UK production) requirements for pre-processing facilities, including their location, volume and the feedstocks they can process. For the purposes of this project we will assume preprocessing is limited to chipping and pelleting;
- aggregation, storage and distribution centres This section should identify the number, location and size of storage and distribution centres;
- transport to end user the additional investment required in vehicles to distribute biomass from distribution centres including information on whether they would need to be bespoke or generic designs.

Given that all the scenarios assume at least an initial reliance on imports the options appraisal will also assess the suitability for different infrastructure development routes to accommodate increasing supplies of domestic biomass across the UK, taking into account the need to process raw domestic feedstocks (as opposed to imported feedstocks which we expect to arrive in pellet form). This could also consider 'intermediate aggregator' facilities where the blending of biomass feedstock (e.g. imported wood pellets with domestically-grown Miscanthus or Short Rotation Forestry (SRF)) could be carried out.

Potential opportunities to use existing infrastructure should be reviewed along the way – e.g. re-purposing of coal-based import, storage and distribution assets which may become available over time as the national energy infrastructure landscape changes.

The pathway development should also cover the role of sector leadership/coordination and cooperation required to cost-effectively deliver the required infrastructure and highlight potential differences between a coordinated and uncoordinated approach. This could include differences in the way infrastructure development is planned, financed and receives revenue.

The operational GHG emissions (i.e. excluding the embodied carbon in road & rail networks and vehicles etc.) should be calculated as a sense check of the overall impact of different biomass infrastructure options (i.e. transport distances and modes) relative to the expected savings from bioenergy.

It is important that the pathways clearly identify the data sources used, assumptions made and methodology used.

3.3.3 Part 3. Identifying Commonalties, Differences and Low-Risk Actions

Using the pathways and action plans developed in Part 2, the Project team should identify commonalties across the scenarios and 'scenario-resilient' actions (i.e. low-risk) and key decision points, without which the infrastructure required would not keep pace with demand. Where appropriate this should also highlight any actions which are critical to some scenarios but not applicable or less important in others to identify key points at which the scenarios diverge.

In addition, the Project team should identify any general principles or 'rules of thumb' for infrastructure development e.g. costs and economics become unsustainable if delivery volumes fall below X; or transport distance goes beyond Y. Ideally these would apply across the scenarios, however where this is not possible the team should highlight the difference in the principles that apply to each scenario and the reasons for these differences.

3.3.4 Part 4. Applying the National Scenarios to Specific Case Studies

Using the findings from Parts 2 and 3, the Project team should apply their findings to the following three case studies of different biomass markets to understand how these markets may use the national logistics network to satisfy their bioenergy demand:

 small to medium sized district heating and CHP users in south-west England (where there are no dominant large power users);

- Yorkshire, where the biomass sector is expected to be dominated by large users and potential CCS shoreline hubs;
- an energy intensive industry sector (e.g. glass or cement) seeking to decarbonise out to 2050.

For each case study the Project team should consider how the end users will be able to access biomass supplies, how they will purchase biomass (e.g. through a long term contract or through ad-hoc purchases from local suppliers), the risks they would need to manage, the investment they may have to make in logistics infrastructure and how this might fit in with the national infrastructure pathway.

These three case studies should be based on the reference case (scenario A) set out in Part 2 but the Project team should note how these scenarios may differ (or not) under scenarios B-D.

3.4 **Deliverables**

Written Project report(s): We believe the requirements above lend themselves to the delivery of one to four written reports (e.g. two reports could be delivered containing two sections). Respondents can offer an alternative. When designing the deliverables process for this Project, Respondents should take into consideration Payment Milestones (see 3.8) and the time it takes to review and accept deliverables (up to 40 business days) to ensure especially that there are no deliverable dependency clashes.

These submissions should reflect the Project requirements described above:

- A Review of UK Biomass Infrastructure (Part 1 of Project scope) including current and planned investment in infrastructure for imported and UK-grown biomass. This should include relevant examples and should include lessons that could be learned from the development of other sectors.
- National Biomass Infrastructure Scenario Analysis and development of Infrastructure Pathways and Action Plans. Covering Parts 2 and 3 of the Project scope, this should present, for each of the four scenarios, an appraisal of infrastructure options and a pathway of infrastructure development to 2050 including key actions and decision points. The report should clearly set out the methodology used in the options appraisal, key assumptions made and data sources used. In addition this report should compare the four scenarios and identify the key similarities and differences between them highlighting 'scenario-resilient' actions (i.e. low-risk) and key decision points, without which the infrastructure required would not keep pace with demand. Where appropriate, this should also highlight any actions which are critical to some scenarios but not applicable or less important in others to identify key points at which the scenarios diverge. This report should also set out any 'general principles' or rules of thumb for infrastructure development which apply across the scenarios. Where this is not possible, the team should highlight the difference in the principles that apply to each scenario and the reasons for these differences.
- Applying the national scenarios to specific case studies. Using the findings from Parts 2 and 3, this report should apply those findings to the three case studies of different biomass end users to understand how these sectors may interact or influence the national infrastructure plan. These three case studies should be based on the reference case (scenario A) set out in Part 2 but the Project team should comment on how these case studies may differ (or not) under scenarios B-D. The report should set out the key decisions and actions each end user would need to take when converting to biomass, any additional investment they would need to make and key risks in moving to a biomassfuelled business. This report should cover all elements set out in Part 4 of the Project scope.
- Executive summary report. A succinct summary of the key findings and conclusions from the three main reports. This can be provided as a written report in Word (20 pages) or PowerPoint format (30 slides max).

Interim Workshop (with pre-read report) and presentation:

- In this workshop the Project team will present their infrastructure pathways from Part 2 of the Project and initial thinking for their approach to Part 3. The purpose of this workshop is to understand and interrogate the scenarios produced and to discuss the approach to identifying common approaches ahead of the delivery of the second part of the report (or second report).
- The Project team should provide a short pre-read report at least two weeks before the meeting, containing relevant background information and details of the pathways such that attendees can be well prepared in advance of the meeting. The report can be provided in any appropriate format (e.g. Microsoft Word, PowerPoint).

Final Project Review Meeting (expected to be in Loughborough unless otherwise agreed) to present the findings of the Project to the ETI, the reviewing panel and its members. This meeting will include:

- a presentation and discussion on the Project findings by the Project team (the slide set used are to be supplied to the ETI); and
- lessons learned from the Project

The key outcome is that stakeholders have a good and shared understanding of the current logistics infrastructure sector, how it may develop and the low-risk actions that can be taken to ensure supply continues to meet increasing demand.

When describing proposed deliverables in the bid, Respondents should describe each proposed deliverable under the following headings (this is to facilitate rapid Contract completion):

- title;
- deliverable description, scope and content;
- deliverable purpose; and
- deliverable objectives.

All deliverable reports are to be provided electronically in both Microsoft Word or Microsoft PowerPoint (or other by agreement) and PDF formats. Links to all sources (as appropriate) are to be provided. Additionally, electronic copies of any supporting files (e.g. spreadsheets, databases) and any other supporting data developed or used during the Project shall also be provided, with full rights for their use by the ETI and its members.

The Project team are to ensure that all relevant permissions have been obtained to use any copyrighted images used in the deliverables. This is particularly important with respect to, for example, images including tables copied from the internet, from reports and from scientific papers.

3.5 **Timescale and Detail of any Milestones**

The ETI is anticipating that the Project will be delivered within six months after Contract signature. Payment Milestones should be identified by the Respondent and detailed in the proposal. The ETI's preference would be for no more than three Payment Milestones, including one on completion of the Project. There should be an allowance for regular review meetings (below) and a post Project presentation to the ETI to include lessons learned.

3.6 **Key Personnel**

The ETI places great emphasis on two critical roles in the delivery of the Project – the Project Manager and the Chief Technologist – who together will lead the Project on behalf of the Prime Contractor.

The Project Manager (PM) is responsible for leading and managing the Project team, delivering the programme of work to time and cost, and handling information flows and commercial issues.

The Chief Technologist (CT) is responsible (on behalf of the Prime Contractor) for the technical quality and content of the work and ensuring the competence of key technical staff allocated to individual Work Packages.

3.7 Project Meetings and Reviews

During the Project life cycle, there will be regular Project management and technical review meetings with the ETI.

Project kick off meeting to be attended by the ETI's Programme Manager and/or Project Manager; the ETI's Strategy Manager (or substitute); the Project team's Project Manager (PM) and Chief Technologist (CT) plus any other staff as necessary. This meeting will be held in Loughborough and will be held within two weeks of Contract signature.

Fortnightly update meetings by telephone between the ETI Project Manager, ETI Strategy Manager (or substitute) and the Project team's Project Manager and Chief Technologist. These are expected to take up to one hour and will cover both Project management and technical agenda items.

Up to four face to face technical review meetings are anticipated to be held – attendees will include the ETI's Programme Manager and/or Project Manager; the ETI's Strategy Manager (or substitute); the Project team's PM and CT plus any other staff as necessary.

- meeting locations will be on a two way rotation between Loughborough and at the Project team's offices or other appropriate location. These meetings are anticipated to be up to three hours duration;
- in the first technical review meeting to be held within one month of Project start, the Project team are
 to brief the ETI on their scope and approach. In the last technical review meeting prior to submitting
 the final report, the team should be in a position to brief the ETI on their initial findings including how
 they are drawing.

3.8 Payment

The ETI will be commissioning this Project on the basis of a Fixed Price Contract.

Payment will be made according to Payment Milestones as detailed by the Respondent and agreed during negotiation. These Payment Milestones must be based on tangible deliveries that can justify the value of the payment. Please provide clear details in your bid document of your expectations.

COMMERCIAL AND LEGAL REQUIREMENTS 4.

Please refer to the Commercial and Legal Requirements document (see page 1), noting that the following specific requirements apply to this project:

- Value Return refer to the requirements for a Knowledge Gathering Project;
- Intellectual Property the ETI expects to own the Arising IP. (Refer to the requirements for Arising IP and Background IP relating to Knowledge Gathering Projects);
- Background IP and Third Party IP: Bringing together existing work;
- The Respondents will need to identify, prior to submission, any key Background IP and Third Party IP, identify the approach to obtaining permissions and to the extent that any Third Party IP will form a critical part of the Project, have initial discussions about how Third Party IP with the owners of such Third Party IP and whether it can be used in the way proposed in the Respondent's Proposal;
 - Respondents will need to consider and propose its Third Party IP management strategy in their Proposal and to demonstrate this can be done in line with the Project's timescales and budget;
 - The ETI does not expect that Respondents will wish to make use of the Arising IP after the Project. However, if this is the case, Respondents should identify any anticipated use of the Arising IP that they propose. The ETI welcomes proposals for active dissemination of the outputs of the Project.
- Participant Contracting Structure Prime Contractor strongly preferred;
- Form of ETI Investment Fixed Price;
- The requirements of Technology Development and System Demonstration projects are not expected to be relevant to this Project;
- It is expected that this project will be entirely desk-based, so any references in Section 8 of the Commercial and Legal Requirements document to CDM regulations will not apply. The ETI does not anticipate that a formal HSE Competency Assessment will be required;

5. PROPOSAL, FORMAT AND SUBSEQUENT EVALUATION

Your Proposal shall follow the format set out in Appendix D.

All Proposals will be evaluated by the ETI against the selection criteria below.

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

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:

S1A Technical

- Experience of, availability of and inputs from the proposed Chief Technologist;
- Level of experience and completeness of the technical skills amongst the Consortium to deliver the Project, including:
 - understanding of current and planned biomass logistics infrastructure and its development;
 - knowledge of the infrastructure development of other relevant sectors and ability to identify lessons from which the biomass sector could learn;
 - ability to develop and experience in developing scenarios for the purposes of appraising options for logistics infrastructure development. Ability to use these scenarios to clearly and concisely articulate pathways and action plans; ability to identify scenario resilient actions and key decision points;
 - ability to develop and use case studies to examine the role of players within a market (in this case end users of biomass);
 - > ability to articulate project findings and draw clear and robust conclusions.

S1B 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;
- 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;
- Project approach and plan, including Gantt chart, suitable Stage Gates and Payment Milestones; and
- 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.
- S2 Compliance with Technical Requirements:
- Compliance with the requirements set out Section 3 of this RfP
- S3 Value for money with respect to Project Funding:

- Contributions from Participants and third parties (including in-kind support and making their own IP available to the project, (e.g. data, models, previous analysis); and possibly funding)
- · Competitiveness of costs; and
- Willingness and capacity to accept the financial risk profile for the Project.
- 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; and
- Availability and commitment of the necessary technical, legal and financial resources to meet the requirements of ETI's commissioning process.

Demonstration of a credible management plan for use of Background IP and/or Third Party IP including any pre-contract litigation actions.

6. PROJECT COMMISSIONING PROCESS AND ESTIMATED TIMESCALES

6.1 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 formal notification of their intention to submit a Proposal, in the form set out at Appendix B, and (i)
- (ii) a Non-Disclosure Agreement in the form provided on the website alongside this RfP, 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 closing date specified in the Key Dates table at the front of this RfP.

6.2 Submissions in Response to the RfP

The ETI will make available a draft Project Contract to all Respondents who have submitted a Notification of Intention to Submit a Proposal. Respondents are required to provide feedback on the draft Project Contract as part of the submission requirements.

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

- a) Detailed Proposal, arranged according to the structure set out in **Appendix D**. 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 5 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 25 pages, plus supporting information. Supporting information should not exceed a maximum of 25 pages.
- b) Any supporting information as specifically set out in **Appendix D**.
- Initial due-diligence information, as set out in Section 1 of Annex A1 (including in relation to State aid, c) insurance, intellectual property, health, safety and the environment and general due diligence, Annex A2).
- d) 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 Annex A3. 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 be provided in electronic format, in both PDF and Microsoft Word formats, with each component as a separate file.

Questions and Clarifications 6.3

Potential Respondents are invited to attend a non-confidential 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 made available throughout the day. This workshop will be held at the ETI, Loughborough on the date given in the Key Dates table at the front of this RfP. Potential attendees are required to give at least 3 working days' notice of their intention to attend.

The ETI welcome written questions from Respondents for ETI consideration and written responses. The questions are to be submitted no later than the closing date for Expression of Intention to Bid. The ETI will endeavour to provide written answers in a reasonable period, prior to submission of the Proposal, but cannot guarantee doing so.

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.

6.4 Selection Process

Following the closing date for Submissions, the ETI will convene an appropriate decision making unit to consider all proposals that satisfy our criteria.

Respondents may be requested to make a presentation to the Selection Panel to support information provided in their submission, although for this RfP, the ETI does not expect to require Respondents to attend the Selection Panel. Respondents should ensure that all information and evidence that the Proposal meets the Selection Criteria is included in their Proposal

The ETI may also request further clarifications before or after the meeting of the Selection Panel and as part of the Project Shaping, Due Diligence 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 Respondents / Submissions for consideration by the Selection Panel.

7. 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. 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.
- 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.
- 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.
- 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 this Section 7 (Important Notices), either expressly or impliedly, may result in a Respondent being disqualified.

ANNEXES

	Additional Documents
1.	Project Commercial and Legal Requirements
2.	Annex A1 – Due Diligence Information Requirements
3.	Annex A2 – General Due Diligence Requirements
4.	Annex A3 – Statement of Compliance
5.	ETI Non-Disclosure Agreement
6.	IP Due Diligence for Proposal form for IP Due Diligence

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.
BVCM	Bioenergy Value Chain Model
Capped Cost	An ETI investment structure under which 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.
ccs	Carbon Capture and Storage
Chief Technologist	The individual as described in Section 3.6 .
CHP	Combined Heat and Power
Commercial and Legal Requirements	The separate document published with the RfP setting out the ETI's commercial and legal requirements for ETI Projects.
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.
Consortium	The group of organisations 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, which governs the execution of the Project within the Consortium.
Due Diligence Information Requirements	Due Diligence Information Requirements are provided in Annex A1 .
ESME	Energy System Modelling Environment
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.
Fixed Price	An ETI investment structure under which agreed fixed payments will be made against each accepted Milestone.
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.
General Due Diligence Requirements	General Due Diligence Requirements are provided in Annex A2.
IP	Intellectual property.
IP Due Diligence	Separate form as described at Annexes section.

Je-S System	Joint Electronic Submission System, the Research Councils' web- based system used for grant applications and award administration.		
ktoe	Thousand tonnes of oil equivalent		
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.		
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).		
NI	National Insurance		
Non-Disclosure Agreement	A non-disclosure agreement in the form provided at Appendix C .		
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.		
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 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.		
Project Contract	The contract to be entered into between the ETI and the Participants (whether between the Consortium Members or a Prime Contractor).		
Programme	The ETI Bioenergy 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 6 .		
Project Manager	The individual as described in Section 3.6 .		
Project Shaping and Contract Negotiation Stage	The project/contract negotiation stage of the Project Commissioning Process, as described at Section 6 .		
Project Organisation	The entity or group of entities / organisations, and the contracting and management structure which they adopt, 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(s)	The organisation (in the case of a Prime Contractor) or organisations (in the case of a Consortium structure) 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 made on the future Project programme.
SRF	Short Rotation Forestry
Stage Gate	A major Project Review Point 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 Panel	A group of technical specialists who will assess the offer and presentation against the project objectives.
Statement of Compliance	The statement of compliance required by the ETI, as described at Annex A3.
Subcontract	A contractual arrangement between a Participant and another organisation to which work for the Project has been subcontracted.
Subcontractor	An organisation which has a Subcontract.
Submission	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.
Third Party IP	Any intellectual property which is owned by a third party and used during the Project or for the purposes of the Project.
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.
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 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 Biomass Logistics in the UK, issued on 14th March 2016. 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:

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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.

Respondents should note the definition of 'Respondents' in the ETI NDA: for the purpose of the NDA this just refers to named parties signing the NDA. The NDA allows exchange of information received from one party with another, but **not** sharing confidential information with other bidders.

NDA Execution Process / Instructions

A separate electronic version of the NDA is available on the ETI Website alongside this RfP 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 - 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 25 of pages. Appendices are in addition to this stipulation.

Executive Summary

[no more than 2 pages]

This should briefly describe:

- Your organisation and the Project Organisation structure (including whether bidding as Prime Contractor or Consortium basis);
- Your relevant experience and expertise;
- Summary of the proposed outcomes, approaches taken and key deliverables;
- Proposed ETI investment, any investment from the Participant(s) (if relevant) and the basis of the ETI investment (i.e. Fixed Price or Capped Cost); and
- Confirmation of compliance with RfP requirements, including the Contract, and any material exceptions/deviations.

Background to Proposed Participants and Structure

[approximately 3-4 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, in addition to key technical and other specialists. It must specifically include the detail of the nominated Project Manager and Chief Technologist. 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 an Appendix;
- Project Organisation include an organisation diagram showing the organisation(s) and their principal roles, complete with key personnel and their roles.

Project Description

[approximately 5-6 pages, plus appendices if required to include:]

- Project Approach;
- Programme of work;
- Project Schedule;
- Milestones and Deliverables;
- Project Management Approach and Activities.

Risk Management

[no more than 2 pages, plus Risk Register]

Respondents should identify the key risks and their approach to managing them. They should explain which risks will be managed exclusively by the Participant(s), which risks will be managed by the ETI and which risks will be jointly managed between the Participant(s) and the ETI.

Health, Safety & Environmental Management

[no more than 1 page]

Respondents should set out how they will meet the requirements of Section 8 of the Commercial and Legal Requirements document, as relevant for the proposed Project approach.

Intellectual Property

[no more than 3 pages]

Respondents should fully familiarise themselves with Section 2 and the Commercial and Legal Requirements the RfP before completing this section.

Background IP and Third Party IP:

Respondents should describe any Background IP (e.g. copyright in reports, proprietary data, computer algorithms, know how or other IP) and Third Party IP (including specifically reports, data or software models) which is needed during the Project or by the ETI in using the outputs of the Project.

Arising IP:

Respondents should confirm that they accept the key concept that the ETI should own the Arising IP. If any other proposal is to be made, early discussion with the ETI should be held to see whether any alternative proposal is capable of meeting the Project objectives.

Dissemination:

It is expected that the primary route for dissemination of the Project Results will be through the ETI. However, the ETI welcomes any proposals for active dissemination from any Respondents and these should be set out, including specifically the areas of the Project outputs that Respondents would seek to disseminate and the strategy. The Project Contract will set out the ETI's publication process.

Project Costs

[approximately 2-3 pages]

The Respondent should provide a breakdown of the total Fixed Price contract value as set out in the following table. If there are any assumptions or limitations to this price, these should be clearly stated.

Respondents should provide:

- 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 statement on whether the offer is made on a Fixed Price or Capped Cost basis, and any assumptions or limitations to the price; and
- a breakdown of Total Project Cost (a) between Milestones and, in the case of a Consortium Contracting Structure, between Participants against each Milestone, (b) between Participants and cost categories and (if relevant) (c) between the ETI investment and other sources of funds, in the form shown in Tables 1 - 3 below.

Notes to Respondents on Category Breakdown table

Base Labour should include direct add-ons (e.g. NI, pension etc.).

If a Prime Contractor/Subcontractor project structure is proposed, major Subcontractors should be considered as Participants and fill in a column in the table.

If a Capped Cost approach is proposed, Participants will be required to provide justification of overhead calculations during the Project Detailing and Contract Negotiation stage. ETI can provide a spreadsheet to calculate overheads on request.

Participants should note that, under state aid rules, profit cannot be paid to Participants if they wish to receive a licence for Arising IP.

Academic Consortium Members should determine their costs using the Je-S System. Note that ETI funds Academic Consortium Members at 100% Full Economic Cost.

Note that during Project Detailing and Contract Negotiation (prior to contract signature) the ETI will require more detailed cost breakdowns, including a schedule of payments against the Payment Milestones. This will require completion of ETI's project budget forms. Whilst not compulsory, it is recommended that Participants use these forms in support of this proposal to produce the project costings, particularly if a Capped Cost approach is proposed. These forms are available from the ETI on request.

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						
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					
Materials Consumed					
Capital Equipment					
Sub-contracts; Consultancy; Fees including fees for Trial and Testing					
Travel and Subsistence					
Other Costs					
Labour Costs					
Profit					
Overheads					
TOTAL PROJECT COSTS (ELIGIBLE COSTS)					

Respondents should note that this breakdown is required even if a Fixed Price is proposed, to enable the ETI to undertake a value for money assessment.

Project Costs – 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)					

Request for Proposals (RfP)	Energy Technologies Institute
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