THE CARBON TRUST OFFSHORE WIND ACCELERATOR

Invitation to Tender for the "Connecting to converter dominated AC onshore and DC offshore networks." Project

Description of Tender

Contents

IMPORTANT INFORMATION FOR BIDDERS

Publishing

Neither this document, nor any part of it nor any other information supplied in connection with it may, except with the prior written consent of the Carbon Trust, be republished, reproduced, copied, distributed or disclosed to any person for any purpose other than consideration by the recipient of whether or not to submit a tender.

Bid evaluation

The received bids will be evaluated by the Carbon Trust and the OWA Partners against the criteria provided in section 7. A shortlist of Bidders will be created and invited for interview. Carbon Trust will do a vetting of the shortlisted bidders. Carbon Trust may request shortlisted bidders to fill-in a Due Diligence Questionnaire to supply additional information prior to being invited for an interview.

Contracting

Bidders should note that the Scope of Work contained in section 4 of this document does not constitute an offer to contract with the Carbon Trust. It only represents a definition of specific requirements and an invitation to submit a tender addressing these requirements.

Issuance of this Invitation to Tender and the subsequent receipt and evaluation of the tenders by the Carbon Trust does not commit the Carbon Trust to enter into a Contract with any Bidder.

Should Your tender be successful, a Final Scope of Work that builds upon the Scope of Work contained in section 4 of this document and Your Approach to Work will be mutually agreed between You and the Carbon Trust. Once the Final Scope of Work is agreed, Your offer will be formally accepted by the Carbon Trust issuing an Award Letter, the Final Scope of Work, the OWA Stage IV Contractors' Conditions, and any clarifications agreed in writing. The Award Letter, the Final Scope of Work, the OWA Stage IV Contractors' Conditions, and any clarifications agreed in writing will establish the Contract for the Connecting to converter dominated AC onshore and DC offshore networks. project (the "**Contract**") between You and the Carbon Trust. With the exception of any minor amendments to the OWA Stage IV Contractors' Conditions which may be requested by the Bidder, the submission of a tender shall constitute unqualified acceptance of the OWA Stage IV Contractors' Conditions. In the event that minor amendments to the OWA Stage IV Contractors' Conditions are requested, such amendments must be clearly stated and the exact alternative wording must be provided in Annex A of the Tender Certificate. Please note that it is at the sole discretion of the Carbon Trust to accept any of the proposed amendments and that the Carbon Trust reserves the right to require the provision of further information in relation to any such request. No minor changes other than those contained in Annex A of the Tender Certificate at the time of submitting the tender will be considered. No material changes will be considered at any time.

Mechanics of the tender process

Bidders should note that:

- it is at the discretion of the Carbon Trust whether to accept any non-compliant tender or whether to reject any non-compliant tenders without progressing such tenders through the evaluation phase;

- the Carbon Trust reserves the right not to accept the lowest priced tender or any tender whatsoever;
- the Carbon Trust reserves the right to accept more than one tender;
- unless a Bidder makes a formal statement to the contrary, the Carbon Trust reserves the right to accept any part of a Bidder's tender without accepting the remainder;
- formal notification that a tender has been successful will be communicated in writing by the Carbon Trust;
- the costs of tendering are the full responsibility of the Bidder; and
- the pricing set by Bidders shall be valid for a minimum of 90 days.

Bids may be submitted by individuals, companies, organisations or consortia.

Bidders should be aware that dates referred to in this Invitation to Tender may be subject to change where this is necessary in the interests of the Project (such changes will be notified in advance).

The Tender Certificate, Main Bid Document and any correspondence must be written in English. This Invitation to Tender, the Contract, its formation, interpretation and performance is subject to and in accordance with the law of England and Wales.

Conflicts of interest

Bidders should be free of any commercial interests, partnership arrangements or contracts underway or other matters which may present a conflict or potential conflict of interest in respect of the provision of these services. As set out in section 3, if a Bidder thinks that it may have any conflict or potential conflict of interest, the Bidder shall describe the details of this conflict and provide details of whether and how it would propose to manage such a conflict in a satisfactory and robust manner in Annex B of the Tender Certificate. The Carbon Trust reserves the right to require the provision of further information in relation to any conflict or potential conflict of interest.

Disclaimer

The information contained in this Description of Tender document and in any documents or information it refers to or incorporates (the "**Disclosed Information**") has been prepared to assist interested parties in deciding whether to make a bid. The Disclosed Information is not a recommendation by the Carbon Trust. It does not purport to be all inclusive or include all the information that a Bidder may require.

Neither the Carbon Trust nor any of its directors, employees, agents or advisers makes any representation or warranty (express or implied) as to the accuracy, reasonableness or completeness of the Disclosed Information. All such persons or entities expressly disclaim any and all liability (other than in respect of fraudulent misrepresentation) based on or relating to the Disclosed Information or any subsequent communication. The Bidder should conduct its own due diligence and seek its own professional, legal, financial and other advice as appropriate. The only information which will have any legal effect and/or upon which any person may rely will be such information (if any) as has been specifically and expressly represented and/or warranted in writing to the successful Bidder in any written contract that may be entered into with the Carbon Trust.

1. Introduction to the Offshore Wind Accelerator

1.1 The Offshore Wind Accelerator ("**OWA**") is an industry-driven collaborative research, development and demonstration programme which was initially launched by the Carbon Trust in 2008 in collaboration with five offshore wind developers. The programme has since expanded during OWA Stages I, II, III and IV to include currently nine offshore wind developers from various countries within the European Economic Area (the "**OWA Partners**"). At the time of issue of this Invitation to Tender the OWA Partners are: SSE Renewables Developments (UK) Limited, Ørsted Wind Power A/S, RWE Renewables GmbH, ScottishPower Renewables (UK) Limited, Equinor ASA, Vattenfall Vindkraft A/S, EnBW Energie Baden-Württemberg AG, Shell Global Solutions International B.V. and TotalEnergies OneTech.

1.2 OWA Stage IV aims to continue the cost reduction of offshore wind to make it cost competitive with other sources of energy generation, overcome market barriers, develop industry best practice, trigger the development of new industry standards and support the international expansion of offshore wind.

1.3 Research under the OWA currently falls into five research areas: Cables, Electricals, Foundations, Logistics and O&M, and Energy Yield & Performance. Research, development and demonstration projects are carried out in each of the five research areas to address technology challenges. This Invitation to Tender is related to the OWA research area Electricals**.**

1.4 Each of the five research areas is managed by the Carbon Trust and governed by a Technical Working Group ("**TWG**") consisting of technical experts appointed by the OWA Partners. The TWG Electricals**.** will supervise the Project, provide technical direction and guidance to the Contractor (where needed) and review the Project Deliverables, findings and other outcomes.

1.5 Please note, the term "Contractor", where used within this document, refers only to the successful Bidder or, in the event that the Contract is awarded to a consortium, the successful Bidders.

2. Background and objective of the WeakGrid project

2.1 The OWA TWG Electricals would like to investigate like to better prepare developers for connecting into converter dominated areas and reduce the risk of failing to correctly interpret the system stability, by examining the potential implications of inverter-based resource (IBR) dominated systems in conjunction with, or combined with, low fault levels. A coordinated approach to the modelling, design and construction of offshore wind farms connecting into areas with these characteristics should be developed as best practice.

2.2 In addition to this, the group would like to better prepare developers for the transition to an inter-connected HVDC offshore network by examining the potential implications of connecting into these offshore networks. HVDC-connected OWFs are set to be a common solution for future offshore wind development. Both the UK and EU have ambitious plans to build Multi-Terminal (or Meshed) HVDC Networks. The offshore grid is formed by the offshore HVDC converter, then the WTG grid following converters transfer the power using phase locked loop (PLL) to track the offshore grid frequency and phase angle information.

2.3 Due to the absence of synchronous machines, the offshore grid strength is not as strong as the onshore synchronous machine-based power system. This brings challenges for WTG converters to provide stable power conversion.

2.4 There are numerous unknowns around how to analyse and prepare for weak offshore grids. Short Circuit Ratio (SCR)isn't a sufficient metric to analyse weak offshore grids and therefore there is a need to have a more insightful understanding of the offshore weak grid. Furthermore, inertia emulation in the offshore grid, the protection setting in the offshore grid, and the offshore grid connection guide for wind turbines are not clear at this stage.

2.5 The main objectives of this work are to:

a. The identifications of the risks of weak grids, both onshore and offshore.

b. The identifications of the metrics which characterise weak grids, both onshore and offshore.

c. To provide guidance or tools to identify weak grid scenarios.

d. To provide mitigation methods for connecting and operating in these weak grid areas, including the identification of studies and to establish who will undertake the studies/assessments.

e. To create a guideline for developers on how to design model and operate an offshore windfarm in weak grid areas.

2.6 The expected benefits of this work include increasing clarity on best practices of offshore wind developers connecting into areas of weak grid connections.

3. Tender documents for submission

3.1 In response to this Invitation to Tender, Bidders are required to submit

i. A Main Bid Document (pdf) – no template provided;
ii. The signed Tender Certificate (pdf) – template provided; and
iii. The filled-in Bid Price Calculation Sheet (xls) – template provided.

3.2 The Main Bid Document should be no more than 20 pages excluding appendices and no more than 40 pages including appendices. Font should be clearly legible, and be at least font size 11. The Main Bid Document shall as a minimum include the following information:

i. The Bidder's proposed detailed Approach to Work (see section 4 and criterion 1 for more details). Bidders shall provide Work Package descriptions in the format set out in Annex 2 to this document. The Approach to Work should:

- include a Gantt chart which describes the timeline for the Project, showing when each Work Package will start and finish;
- outline how the Bidder will deliver the Scope of Work and do so on budget and within the allocated time;
- specify any input data, background IP, hardware or other inputs that the Bidder requires the Carbon Trust and/or the OWA Partners to provide;
- specify any Alternative Work (i.e. substitute activities to take place instead of certain activities outlined in the Scope of Work in section 4). If Alternative Work forms part of the Approach to Work, the Bidder is expected to highlight, explain and justify the intended deviation from the Scope of Work. Alternative Work will be considered as non-optional when the tender is evaluated; and
- specify any Additional Work (i.e. activities to take place in addition to the activities outlined in the Scope of Work in section 4). If Additional Work forms part of the Approach to Work, the Bidder is expected to explain and justify why the Additional Work would be beneficial and to provide a separate quotation for these activities. It is at the discretion of the Carbon Trust to consider Additional Work in the evaluation of the tender.

ii. a pdf copy of the filled-in Bid Price Calculation Sheet;
iii. the offered Bid Price, including any cost assumptions deemed relevant by the Bidder – see section 6 and criterion 4 for more details;
iv. an explanation of experience and staff skills, and how these are relevant to the Approach to Work – see criteria 2 and 3 for more details; and
v. supplementary information to provide experience evidence and skills evidence (e.g. CVs) – see criteria 2 and 3 for more details. This information should be provided as appendices to the Main Bid Document.

3.3 The Tender Certificate must be signed by an authorised signatory. Bidders must fill in the provided template.

3.4 The filled-in Bid Price Calculation Sheet must be provided in Excel format in addition to the information provided in the Main Bid Document. See section 6 and criterion 4 for more details.

3.5 The failure by a bidder to submit either the Main Bid Document, the signed Tender Certificate or the filled-in Bid Price Calculation Sheet shall mean that such tender is a non-compliant tender.

4. Scope of Work

4.1 The Scope of Work is provided in this section 4.

4.2 The Scope of Work comprises 4 Work Packages. The Scope of Work sets out the initial ideas on the key activities that the Contractor is expected to deliver for the Project.

4.3 It is expected that the Contractor will report on Project Deliverables to the TWG. The Carbon Trust and TWG shall review and provide feedback on each Project Deliverable. There will be at least one round of review comments to be accommodated by the Contractor for each Project Deliverable.

4.4 The Final Scope of Work will be agreed between the Carbon Trust and the Contractor when entering into the Contract. The Final Scope of Work may reflect any updates, changes or improvements to the Scope of Work as proposed by the Contractor in its Alternative Work or Additional Work and as agreed by the Carbon Trust.

4.5 Due to the breadth of skills and experience required for the Project bidders may decide to build a consortium to successfully meet the objectives of the Project. If a bid is submitted by a consortium it is expected that, in the case that the consortium is selected as the preferred Bidder, Carbon Trust will only enter into a Contract with the Project Coordinator, and that the Project Coordinator will subcontract the other members of the consortium.

4.6 The Carbon Trust appreciates that it will take a small team of mixed seniority approximately 12 months to complete the Project.

4.7 Bidders should use the Scope of Work as set out below to create the Approach to Work. Any Alternative Work or Additional Work shall be stated in the Approach to Work at the end of the relevant Work Package description.

4.8 It is expected that simplifying assumptions will be required to complete the work in the given timeframe. These assumptions should, to the extent possible at the time of tender submission, be clearly stated in the Approach to Work. It is expected that during the execution of the WeakGrid Project, any assumptions will be discussed with the TWG prior to the start of each Work Package.

4.9 The Scope of Work includes NUMBER Optional Work Packages. These are Work Packages that the TWG will reserve the right to execute or dismiss in the course of the Project. The Bidder's Approach to Work should address these Optional Work Packages, but they should be kept and highlighted as optional in the Bidder's Approach to Work.

Work Packages

Work Package	Description of work
WP1: Literature review	The successful contractor should conduct a market and literature review with an overall aim of understanding the characterisation of weak grids beyond low SCR, assessing the effect of weak grids on deployment of interconnected multi-terminal systems, grid forming turbines, controller interactions with other OWFs, interconnectors, thermal plants, dynamic reactive compensation equipment or onshore transmission systems. This should investigate the associated impact on designing wind farms in locations where the grid is weak, as well as current industry best practice. As part of the bidder's proposal, the bidder should consider all sources of literature (including real-world examples) to assess the impact of connecting an offshore wind farm to a weak grid. The bidder may draw experience from related industries (such as onshore wind, solar, etc.). This should build on previous studies and should outline metrics other than SCR to determine 'weak grid' areas with respect to: • Overloading AC lines. • Interactions between controllers. • HVDC OWF causing sub synchronous tortional interaction to nearby thermal plants. • Grid forming control impact and requirements. • Inter-connected offshore network impact. • IBR interactions impact. • Existing standards on connecting an offshore wind farm to a weak grid. • Interactions between HVDC converter and the WTG grid following converters and the phase locked loop (PLL). • Protection settings in the offshore grid • Existing standards on connecting an offshore wind farm to an offshore HVDC grid. • A review of the current standards and regulations (such as grid code) associated with connecting WTGs into the HVDC offshore grid and the responsibilities/ technical requirements on developers to do so. This should, include existing methodologies, technologies, and case studies. The literature review should take an international approach and assess the current methods to operating in areas of weak grids. Please note that the OWA parties may provide additional information relevant for the completion of this work package; however, this should not be assumed during ITT. The bidder should also assume that this information is not at the level of granularity to assist with this work package.

Project Deliverables: - **D01: Market and Literature review report** - **D02: Presentation to TWG-E**	
WP2: Stakeholder engagement and study identification	The successful contractor should undertake a stakeholder engagement exercise, with developers, networks, network operators, manufacturers, and other innovators to assess the current approaches to operating and connecting into weak grid areas, the current metrics and methods used to assess weak grid areas, any current mitigation methods, and what technologies are currently being used and designed for this purpose. To perform this, the contractor is expected to provide a stakeholder. engagement plan to the OWA partners, and this should be agreed with partners prior to proceeding with stakeholder engagement. This should include: • List of stakeholders • List of questions • Method to approach stakeholders • Information that will be shared/discussed. The contractor may propose further engagement throughout the whole project such as: interviews, workshops, questionnaires, and surveys. The modelling to be undertaken in WP3 should be decided in this work package and will be informed throughout the results of Work Packages 1 and 2. These should be proposed to the TWG-E following the assessments performed in these work packages and should be agreed prior to the commencement of WP3. As the scope of works completed within this work package will inform the study conducted in WP3, the contractor should expect to have discussions with the TWG-E on the scope provided and the contractor should develop robust assumptions on which WP3 is based. WP3 should not commence until an agreement has been made between the successful contractor and the TWG-E. As part of this, the contractor should identify and develop the technical scope and methodologies for WP3.
Project Deliverables: - **D03: Stakeholder engagement and management plan** - **D04: Stakeholder workshop** - **D05: Workshop summary report** - **D06: Identification of scenarios to study and scope**	

WP3 (optional): Future scenarios modelling	The successful contractor should identify weak grid scenarios and provide a tool or model from which the outcomes will allow offshore wind developers to consider, design and model areas of weak onshore grids and HVDC connected windfarms in future scenarios. As part of this, the contractor should: • Future scenario building and prioritisation of system phenomena to stabilise system. • Modelling of weak grid in different future scenarios • This model should validate the guidelines produced in WP3 on how to connect to and design for these grids. To perform this, the bidder should propose an assessment methodology including software, basis of modelling, and input parameters, etc. Note that this should be agreed with the TWG-E before proceeding with stability assessments. A script of toolbox in a software of choice (like PSCAD) should be investigated. Please note that the OWA parties may provide relevant model(s) for the completion of this work package; however, this would be under NDA, open-source models available to the contractor can be used if relevant.
Project Deliverables: - **D07: Model of weak grids Tool/model** - **D08: Presentation to TWG-E**	
WP4 (optional): Guidelines for developers	The contractor should produce best practice guidelines for developers modelling and designing in weak grid areas and HVDC connected windfarms. The guidelines should include (but not be limited to): • Summary of how to identify weak grid areas and their associated weak grid characteristics, other than SCR. • Existing standards on connecting an offshore wind farm to a weak grid. • Mitigation methods to allow OWFs to operate in weak grid areas, such as: Controller changes required to operate in these networks; Physical hardware changes (Such as design changes and/or additional equipment); and Protection system design required in order to ensure safe operation of the system. • Best practices for how to monitor weak grid conditions. • This should also consider the options of using grid forming technologies. • Existing standards on connecting an offshore wind farm to a HVDC offshore grid. • Guidance on how to treat a grid connection which becomes weaker over time. The contractor should produce an industry roadmap to 2030, providing insight into how to identify, assess, design, operate in and monitor areas of weak grid connection. The roadmap should include a detailed section on the development of technical standards. This should also include a table or matrix within which potential identification metrics of weak grids are identified with the associated risks of each. This should also build on the market review

	and assessment gathered from across industry stakeholders in the WP1 workshop. It should include a review of potential routes to publication of standards, as well as a strategy of the key requirements and suggestion of a working group to devise this.
Project Deliverables: - **D08: Best practice guidelines document** - **D09: Roadmap to 2030** - **D10: Presentation to TWG-E**	
WPB: Identification of areas of further study (additional)	This optional additional work package will identify areas of further research required within the area of connecting to weak onshore grids
Project Deliverables: - **D11: Report on areas for further investigation**	

WPA. Project Management	The Bidder should stipulate how it will manage the Project efficiently and effectively.
	In particular, the following activities should be included (and hence budgeted for)
	• project management time (including sufficient time for review processes);
	• regular update calls with the Carbon Trust Project Manager and/or Technical Working Group as required;
	• the preparation of monthly flash reports (Carbon Trust template) containing key financial data and information of the delivery status of the Project; and
	• towards the end of the Project
	  ○ the production of a 3-10 pages Executive Summary Report for the entire Project (for dissemination within the OWA);
	  ○ the preparation of a Project Closeout Form (Carbon Trust template) which includes a short summary of areas for future research and a documentation of all Project Deliverables;
	  ○ the preparation of a final presentation to the TWG;
	  ○ time dedicated to presenting the main results, findings and outcomes of the Project in the form of a 1-hour webinar to OWA Partners; and
	  ○ the provision of inputs for the OWA Cost Model by completing the OWA Cost Model Input Sheet (Carbon Trust template).
	Bidders should be aware that the Carbon Trust and TWG usually require 2-3 weeks to review and provide feedback on each Project Deliverable, with at least one round of review comments to be accommodated. This should be considered when calculating Your Bid Price.

Project Deliverables: - **D11: Monthly flash reports** - **D12: Executive Summary Report** - **D13: Final presentation** - **D14: Delivery of webinar** - **D15: Project Closeout Form** - **D16: Input sheet for OWA Cost Model**	

Expenses	The Bidder should detail the amount of expenses it expects to incur throughout the Project. Expenses will be paid as incurred up to the amount specified and any unused balance will not be paid.

5. Intellectual Property, Knowledge and Input Data

5.1 Full details of the intellectual property requirements and conditions can be found in the attached OWA Stage IV Contractors' Conditions.

5.2 The Carbon Trust and/or the OWA Partners are able to make available the following input data, background IP or other resources to the successful Bidder for the purposes of the completing the Project, subject to the confidentiality conditions in the OWA Stage IV Contractors' Conditions:

a. Literature reviews from up to seven of TWG-E's previous projects to ensure no duplication of research. An NDA may be required to share certain documents.

6. Bid Pricing

6.1 To provide Bidders with greater clarity on the nature, level and type of work involved in the various Work Packages, the Total Budget for the delivery of this Project is expected to range between £160k and £180k.

6.2 The Bid Price submitted with the tender must be derived from the cost breakdown in the Bid Price Calculation Sheet, and must include all expenses. The Bid Price is the price for the activities that will address the Scope of Work (and any Alternative Work proposed by the Bidder). The Bid Price Calculation Sheet and the Bid Price shall not include the price of any Additional Work suggested by the Bidder. Instead, the price for such Additional Work Packages shall be stated separately to the Bid Price in the Main Bid Document.

6.3 If the Bid Price exceeds the expected range of the Total Budget as stated under section 6.1, to avoid receiving a lower score for criterion 4, in the Main Bid Document the Bidder should provide a clear and justified reason why the Bid Price exceeds the expected budget.

6.4 All costs and rates quoted in the Main Bid Document and Bid Price Calculation Sheet must be in GBP (£) and all staff rates quoted in the tender must represent the **Day Rate** for employment of staff members.

6.5 Any expenses must be separately included under Expenses.

7. Tender Evaluation Criteria

Bidders should take the following evaluation criteria into account when preparing and submitting their tenders.

CRITERION 1: APPROACH TO WORK (WEIGHTING: 30%)

Description	Information required from Bidders
Proposed Approach	In the Main Bid Document, Bidders are required to provide a clear and detailed description on how they plan to deliver the work for this Project. The description should include an initial overview on the approach followed by a description on how each Work Package and task will be delivered. Also, Bidders need to justify how their proposed approach meets the objectives of the Project.
Additional Work	If there is any Additional Work proposed by the Bidder, these aspects will be evaluated separately. The suggestion of Additional Work by the Bidder will not have a negative impact on the evaluation of the tender.
Project management	Bidders are required to describe how they will manage the Project utilising appropriate resources and describe how they will work with the various stakeholders, such as the relevant OWA TWG, to get information and manage potentially conflicting relationships.

CRITERION 2: EXPERIENCE (WEIGHTING: 30%)

Description	Information required from Bidders
Experience of offshore wind farm design	In the Main Bid Document, Bidders should elaborate on experience of the criteria described and explain how these past experiences are relevant for this tender. In addition, Bidders should provide at least two examples (with reference to specific roles, responsibilities and activities the Bidder undertook) of previous work which illustrates the Bidder's skills, capabilities, and experience in all of these areas (Bidders may wish to make reference to submitted examples of previous work for other clients). Bidders are advised that experience is considered a key important criterion and partnerships with other companies to support certain areas of experience are welcomed. All experience / case studies should be attached as an appendix to the Main Bid Document.
Experience in converter dominated network design	
Experience and knowledge of electrical modelling	

CRITERION 3: STAFF SKILLS (WEIGHTING: 15%)

Description	Information required from Bidders
CVs/Resumes	Bidders are required to provide detailed CVs/Resumes for any key personnel who will be involved with this Contract together with proposed Project structure, intended position of the key personnel in the Project, and main responsibilities. CVs should include professional memberships of proposed staff working on this Project.
Applicable skills	Bidders should elaborate on the most relevant skills of the key personnel that will be involved in the Project.
Prior experience form involved staff	Please include examples of similar work performed by the proposed staff members, explaining how is relevant to the Approach to Work.
Expert engagement	A close working relationship with key stakeholders such as, original equipment manufacturers (OEMs), offshore wind farm developers, transmission networks, transmission system operators, as well as the OWA Technical Working Group are seen relevant to the success of this Project. Please supply ideas of how these groups can be engaged and leveraged.

CRITERION 4: BID PRICE (WEIGHTING: 25%)

Description	Information required from Bidders
Day rates and man hours (man-h) for all staff grades	In the Bid Price Calculation Sheet, Bidders are required to provide day rates for all staff grades and to input the man-h involved in each Work Package.
Price for the delivery of the Project	In the Bid Price Calculation Sheet, Bidders are required to provide a cost breakdown by Work Package, including man hours and day rates of personnel completing the work as specified in section 5. Bidders are required to specify expected expenses separate from the estimated budget for each Work Package. The Bid Price will be assessed on the price for the Approach to Work (which includes the price of the Work Packages in the Scope of Work and any Alternative Work proposed by the Bidder). If there is any Additional Work proposed by the Bidder, this will be evaluated separately. The suggestion of Additional Work by the Bidder will not have a negative impact on the evaluation of the tender. Carbon Trust will reimburse reasonable expenses at cost and receipts may be requested. Pre-approval will be required for travel costs over £150 per return journey and combined hotels & subsistence cost exceeding £200 per day. Bidders will be required to confirm or comment on their ability to carry out the activities detailed in the Scope of Work within the initial term of the Contract and provide an outline plan of work.

8. Glossary

Approach to Work	Has the meaning set out in section 3.1.
Additional Work	Any activities that are proposed by the Bidder in addition to those in the Scope of Work. It is at the discretion of the Carbon Trust to consider Additional Work in the evaluation of the tender. The suggestion of Additional Work by the Bidder will not have a negative impact on the evaluation of the tender.
Alternative Work	Deviations from the Scope of Work that are proposed by the Bidder, which replace work or tasks in the Scope of Work. Alternative Work will be treated as non-optional in the evaluation of the tender.
Award Letter	A letter, issued by Carbon Trust, informing the Contractor about the award of the Contract. The Award Letter is issued together with the Final Scope of Work and the OWA Stage IV Contractors' Conditions.
Bidder	An individual, a company, an organisation or a consortium submitting a bid for the Project.
Bid Price	The total price for the Bidder to complete the Project in line with the Approach to Work. The Bid Price shall include the price for all Work Packages described in the Scope of Work and any Alternative work proposed by the Bidder. The Bid Price shall not include the price of any Additional Work suggested by the Bidder.
Bid Price Calculation Sheet	An Excel template provided by the Carbon Trust that is to be provided by the Bidder in addition to the Main Bid Document.
Carbon Trust Project Manager	The Carbon Trust employee who serves as first point of contact in relation to this ITT and the Project.
Clarification Document	A document containing all received clarification questions and Carbon Trust's responses to these questions.
Contract	A document consisting of the Award Letter, the Final Scope of Work, the OWA Stage IV Contractors' Conditions, and any clarifications agreed in writing.

Contractor	The Bidder (or in the case of a consortium, Bidders) selected for the delivery of the Project.
Description of Tender	This document.
Due Diligence Questionnaire	A questionnaire that is to be completed by shortlisted Bidders should Carbon Trust's bidders vetting process give reason to conduct a due diligence. In case of a consortium, the Due Diligence Questionnaire is to be filled-in by the designated Project Coordinator.
Executive Summary Report	A 3-10 pages report containing a high-level description of the Work Programme and a summary of the relevant results, findings and conclusions of the Project. Information can be taken from summaries written for previous Work Packages
Final Scope of Work	The agreed Work Programme for the Project, based on the Scope of Work and the Approach to Work, which is mutually agreed between the Carbon Trust and the Contractor.
Flash Report	A template provided by the Carbon Trust at Project start.
Invitation to Tender (ITT)	The following group of documents: Description of Tender (this document); OWA Stage IV Contractors' Conditions; Tender Certificate template; Bid Price Calculation Sheet template; and Clarification Document (if applicable[2]).
Main Bid Document	Has the meaning given in section 3.1. No template is provided.
Project	The Connecting to converter dominated AC onshore and DC offshore networks. or WeakGrid project.
Project Closeout Form	A template provided by the Carbon Trust towards the end of the Project.
Project Deliverables	The individual deliverables including, but not limited to, any reports, technical notes, documents, drawings, models, data, webinars to be produced by the Contractor according to the Scope of Work (see section 4) or as otherwise agreed in the Final Scope of Work.
OWA	Offshore Wind Accelerator

[2] A Clarification Document will not be published if no clarification questions are received in relation to this ITT.

OWA Partners	A group of leading offshore wind farm developers supporting the OWA.
OWA Cost Model	The Contractor is not expected to produce a cost model of its own, but rather provide an estimate, with appropriate explanation, for potential cost implications of the research undertaken within the frame of the delivered project. The Carbon Trust will provide a template to assist the Contractor in this process.
OWA Cost Model Input Sheet	A form (to be provided by Carbon Trust) which the Contractor should complete in WPA to provide input into the OWA Cost Model.
Scope of Work	The (preliminary) Work Programme for the Project as defined in section 4 of this document. At Contract award, the Scope of Work will be replaced by the Final Scope of Work.
Technical Working Group (TWG)	A group consisting of technical experts appointed by the OWA Partners. The TWG will supervise the Project.
Tender Certificate	A declaration that is to be provided by the Bidder (in case of a consortium: by the designated Project Coordinator) in addition to the Main Bid Document.
Total Budget	The expected amount of money available that will be made available from the OWA programme to the Contractor for the delivery the Project.
Work Package	A group of related tasks to be delivered under the Project.
Work Programme	The entirety of all Work Packages.