

Dear Sir/Madam,

Invitation to Tender for the Is 90°C Still the Magic Number project for the Carbon Trust's OWA Programme

You are invited to submit a Tender for the Is 90°C Still the Magic Number project (the "Magic90 project" or "Project") which is part of the Offshore Wind Accelerator (OWA) programme. The key objective of the project is to understand XLPE cable performance beyond normal temperature limits.

The Invitation to Tender (ITT) consists of the following documents:

- Description of Tender (this document);
- OWA Stage IV Contractors' Conditions;
- Tender Certificate (Word template);
- Bid Price Calculation Sheet (Excel template);
- Clarification Document (if applicable¹);
- Project Closeout Form (for information purposes only no need to complete now); and
- OWA Cost Model Input Sheet (for information purposes only no need to complete now).

Unless informed to the contrary, tenders and communications shall be sent by e-mail to the following e-mail address: karolina.zieba@carbontrust.com

Tenders must be submitted before 15 August 2025 16:00 (BST). Any tenders received after this date and time will be deemed non-compliant.

Your Tender must consist of the following, the contents of which are described further below:

- Main Bid Document (pdf) template not provided;
- Signed Tender Certificate (pdf) template provided; and
- Bid Price Calculation Sheet (xls) template provided.

The timeline of this procurement process is as follows:

Deadline for clarification questions	25 July 2025
Clarification Document published ¹	1 August 2025
Submission of full Tender	15 August 2025 16:00 (BST)
Bidder interviews	W/C 1 & 8 September 2025
Successful Contractor announcement	W/C 29 September 2025
Envisaged Contract award date	W/C 6 October 2025

Please e-mail any clarification questions, including questions about the timing of this ITT, to karolina.zieba@carbontrust.com any time before 25 July 2025. The complete set of clarification questions and all answers to clarification questions will be published in the Clarification Document on our

¹ A Clarification Document will not be published if no clarification questions are received in relation to this ITT.



website by 1 August 2025 and will hence be visible to all potential Bidders: https://www.carbontrust.com/news-and-events/tenders

For information about the OWA programme, please see the Carbon Trust's website: https://www.carbontrust.com/our-projects/offshore-wind-accelerator-owa

We look forward to receiving your Tender.

Yours sincerely,

Karolina Zieba For and on behalf of **THE CARBON TRUST**



THE CARBON TRUST OFFSHORE WIND ACCELERATOR

Invitation to Tender for the "Is 90°C Still the Magic Number" Project

Description of Tender

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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.

Tender evaluation

The received tenders will be evaluated by the Carbon Trust and the OWA Partners against the criteria provided in section 7 and the Bidder authorises the Carbon Trust to share its submitted Tender with the OWA Partners for this purpose. 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 Is 90°C Still the Magic Number 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 submit a Tender. 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 Offshore Wind GmbH, ScottishPower Renewables (UK) Limited, Equinor ASA, Vattenfall Vindkraft A/S, EnBW Energie Baden-Württemberg AG, Shell Global Solutions International B.V., TotalEnergies OneTech and bp Low Carbon Development Company Limited.
- 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 Cables.
- 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 Cables 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 Magic90 project

- 2.1 The OWA TWG Cables would like to understand XLPE cable performance above normal temperature limits.
- 2.2 It is informally accepted by many industry players that XLPE HVAC cable systems can dynamically operate beyond the 90°C normal operation limit at some points along the cable for a set period of time. Short term operation at higher temperatures is allowed for defined periods in certain regions, for example under US and Japanese standards. These periods are often limited to 72 hours, which historically suited transmission systems, but is too limiting for offshore wind. There is also a lack of clarity on how any new thermal capability can be qualified.
- 2.3 The main objectives of this work are to:
 - Review the physical response of the XLPE insulation system under temperatures above 90°C.
 - Define the actual performance increase needed in order to actualise value in real projects.
 - Identify the risk factors that need to be investigated in development/qualification tests.
 - Assess the need for qualifying accessories (if not in thermally limiting locations).
 - Produce a harmonised qualification protocol for qualification of cable for Dynamic Operation beyond the Normal Operation Temperature Limit.
- 2.4 The scope is limited to dry-design cables at export voltages. Anything involving water tree retardant materials for wet designs is secondary. Further, the scope includes subsea joints (both factory joints and field joints) but does not focus on end-terminations as these are locations where conductor temperature should not need to increase beyond current limits.
- 2.5 Key bidder experience areas include:
 - Polymer (insulation) science/chemistry
 - Qualification frameworks
 - Subsea cable systems



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). 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 <u>Alternative Work</u> (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 <u>Additional Work</u> (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 Tender 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 approximately 6 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 Magic90 Project, any assumptions will be discussed with the TWG prior to the start of each Work Package.
- 4.9 Engagement with different stakeholders through questionnaires, meetings or workshops is encourages where it is needed. Relevant stakeholders should be engaged at various stages of the project. The Contractor should suggest what kind of stakeholders (who should we engage?) and what level of engagement (how should we engage them?) is needed for the project to succeed. An engagement plan should be clearly defined in the proposal document, including costs.



WORK PACKAGES

Work Package	Description of work
WP1: Literature review (completed by Contractor)	To understand the behaviour of XLPE insulation at temperatures above 90°C, the Contractor will conduct a literature review on present state-of- the-art knowledge concerning the thermal properties and degradation mechanisms of XLPE at elevated temperatures. Include a regional comparison of standards to indicate the permitted temperatures in different countries and the rationale behind these agreements.
	Engage with polymer, accessory, and cable manufacturers to gather their perspective on material performance and potential challenges and improvements. <u>This is a key element of the project and should not be</u> <u>underestimated.</u>
	Use the findings of the literature review and engagement to determine permissible temperature levels to evaluate in the following work package. Provide advice on how long and how frequently the temperature can be increased.
	Further the results should include:
	 Ageing models and, if possible, ageing coefficients.
	Consideration of duration-dependent effects, such as different
	ageing behaviours at varying temperatures.
	 Consideration of mechanical and thermal expansion, as well as the relationship between the two.
	• A table outlining which properties of XLPE (behaviour, thermal degradation, etc.) are well known and there is consensus versus those that are not clear. This should include recommendations to the research community about which aspects need attention.
	Discussion on whether there are limiting locations, sections, or elements where temperature should not be elevated
	 The key challenges to qualifying higher thermal limits in sections of the system. This should include a discussion about the overall thermal degradation of the cable as a whole.

Project Deliverables:

- D1.1: Literature review report on the thermal properties and degradation mechanisms of XLPE insulation including a summary of insights and data gathered from polymer suppliers regarding material performance at elevated temperatures.
- D1.2: Presentation of findings to TWG-C.



WP2: Thermal modelling and cost benefit analysis (completed by TWG-C Programme Partners)	TWG-C will use data from projects they have investigated to perform thermal modelling of common thermal bottlenecks on export cable routes to show how frequent or severe the temperature excursions need to be to unlock value (in terms of GBP) for an offshore wind farm.
	 In summary, the TWG-C will answer: If we are only allowed to exceed 90 degrees for restricted periods, how much additional power will enter the market? How much power is being curtailed at other times and what is the value of this relative to the potential CAPEX saving enabled. Does the benefit of increasing temperature (resulting in less curtailment) outweigh the negatives? Or should we consider moving to higher voltage or larger cross section cables at a higher cost? How effective does this capability need to be (in terms of reducing curtailment) before it's worth increasing the thermal limit?
	The TWG-C will compare a baseline where the cable is heated to a maximum of 90°C to an alternative where the cable is sometimes heated above 90°C, minimising curtailment. In summary, the TWG-C will propose an optimised system that promotes the best performance of the cable within conventional design limits. This will be validated through comparison with literature.
	The TWG-C will also include a simple cost-benefit-analysis (CBA) to understand the cost of the cable (smaller or larger cross section) and energy production (less curtailment).
	Consequently, the TWG-C will agree on a 'qualifiable rule' with justification. This 'rule' could be a cycle of overload time and curtailment time. It could also include considerations for rate of loss of life at each temperature, etc.
Project Deliverables	The following work packages will build on the agreed 'rule'.

- D2.1: An agree rule(s), which can be qualified through a qualification programme (stepwise, cyclical, etc.) and backed up with evidence, showing the TWG-C work in a document or PowerPoint. This should include the CBA calculations.
- D2.2: Workshop with the Contractor, where findings are discussed.
- D2.3: Presentation of findings to Contractor.

The Contractor will have access to all deliverables.



WP3: Tests and standards (completed by Contractor)	 The Contractor will review existing testing data and theoretical studies on cable performance at elevated temperatures: Examine current standards and qualification methods for XLPE HVAC cables, focusing on their applicability to operation beyond
	 betermine the full set of requirements for the system to outline why each test is needed. In other words, what parameter is each test gathering and why is that parameter needed? Identify any gaps in the current understanding and propose additional tests or modifications to existing methods if needed.
	This work package should include engagement with cable OEMs, qualification bodies and OFTOs to get their feedback on the 'qualifiable rule' agreed in WP2. Stakeholder feedback should be incorporated into a new revised rule.

Project Deliverables:

- D3.1: Report on existing testing approaches and theoretical studies related to cable performance at elevated temperatures. Analysis of current standards and qualification methods for XLPE HVAC cables, including their applicability to operation beyond the normal temperature limit. Identification of gaps in current standards and proposed additional tests or modifications to existing methods. Summary of feedback on the previously identified 'qualifiable rule' from qualification bodies and OFTOs. A revised 'qualifiable rule' incorporating feedback from stakeholders, if needed.
- D3.2: Presentation of findings to TWG-C.

WP4: Qualification	Conduct a Failure Mode and Effects Analysis (FMEA) to identify potential
programme (completed	risks associated with operating beyond the normal temperature limit.
by Contractor)	This should include a system breakdown, failure mode analysis, impact assessment, likelihood assessment, and risk prioritisation. <u>The analysis</u> <u>should strictly focus on incremental risk beyond what is seen under the</u> <u>standard condition at present and should not be a comprehensive FMEA</u> <u>covering non-thermal related aspects.</u>
	Design a qualification programme that addresses these risks and concerns. Lay out the necessary next steps to qualification, including stakeholder engagement and a strategy to obtaining necessary buy-in.

Project Deliverables:

- D4.1: Functional analysis report identifying potential additional/amplified risks associated with operating beyond the normal temperature limit compared to conventional 90C operation. Proposed qualification programme design to manage identified risks and ensure reliable cable performance.
- D4.2: Harmonised qualification protocol for the dynamic operation of XLPE HVAC export cables beyond the normal operation temperature limit report.
- D4.3: Presentation of findings to TWG-C.
- D4.4: Dissemination of findings to IEC TC20 / Cigre B1.



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;
	\circ 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.
	Engagement with different stakeholders through questionnaires, meetings or workshops is encouraged where it is needed. Relevant stakeholders should be engaged at various stages of the project. The Contractor should suggest what kind of stakeholders (who should we engage?) and what level of engagement (how should we engage with them?) is needed for the project to succeed. An engagement plan should be clearly defined in the proposal document, including costs. At minimum, this project requires engagement with polymer suppliers in the first stage, cable manufacturers, qualification bodies, and OFTOs in the second stage. The purpose of engaging cable manufacturers is to understand their thoughts on changing the 90°C 'rule'.
Project Deliverables: - DA.1: Monthly flas - DA.2: Executive Su	h reports Immary Report

- DA.3: Final presentation
- DA.4: Delivery of webinar
- DA.5: Project Closeout Form
- DA.6: 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. None.



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 £115k £125k.
- 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

7.1. Technical & Financial Evaluation

Bidders should take the following evaluation criteria into account when preparing and submitting their tenders. In the event of equivalent scores of two or more received Tenders, suppliers and sub-contractors who have committed to decarbonisation targets (see end of this section) will be preferred.

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 1: APPROACH TO WORK (WEIGHTING: 30%)

CRITERION 2: EXPERIENCE (WEIGHTING: 30%)

Description	Information required from Bidders
Experience in polymer (insulation) science/chemistry	In the Main Bid Document, Bidders should elaborate on experience of the criteria described to the left and explain how these past experiences are relevant for this Tender.
Experience in qualification frameworks	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 and knowledge of subsea cable systems	



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 polymer suppliers 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.



7.2. Contractual Evaluation

Bidders are required to state any requested amendments to the OWA Stage IV Contractors' Conditions in their Tender Certificate. Any requests for amendments made after submission of the offer (i.e. not included in the Tender Certificate) shall not be considered by the Carbon Trust. On the basis of any changes requested in the Tender Certificate, the Carbon Trust may reject any bids where they consider there to be a high risk of not agreeing a contract in a timely manner.

The Carbon Trust has committed to reaching Net Zero by 2050. Our associated targets have been validated by the Science Based Targets Initiative (SBTi)². To meet the initial targets that we have set for ourselves, we encourage all our suppliers and sub-contractors to have equivalent plans in place by 2026 at the latest. Measuring your emissions, setting targets, and encouraging others to do so will help push the needle on decarbonisation together.

Accordingly, we have included climate change commitment clauses in the OWA Stage IV Contractors' Conditions. Bidders may submit Tenders even if they cannot meet the defined conditions now, but if this is the case this should be clearly flagged in the Tender Certificate as a requested change to the OWA Stage IV Contractors' Conditions. Please reach out if you need more information on this.

² https://sciencebasedtargets.org/



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 the delivery of 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 ³).
Main Bid Document	Has the meaning given in section 3.1. No template is provided.
Project	The Is 90°C Still the Magic Number or Magic90 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

³ 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	 Bidder's response to this ITT consisting of the following elements: Main Bid Document (proposal); signed Tender Certificate; and Bid Price Calculation Sheet
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.