

15 December 2023

Dear Sir/Madam,

**Invitation to Tender for the Offshore H2 production platform concept design project for the Carbon Trust's Integrator Programme**

You are invited to submit a tender for the Offshore H2 production platform concept design project (the "H2PD project" or "Project") which is part of the Integrator programme. The key objective of the Project is to provide a concept design for 4a >500 MW centralised offshore hydrogen production facility suitable for navigating consenting in the UK and Germany, identifying key design uncertainties and related risk mitigation strategies as well as any required market-specific adaptations.

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

- Description of Tender (this document);
- Integrator Phase III Contractors' Conditions;
- Tender Certificate (Word template);
- Bid Price Calculation Sheet (Excel template);
- Clarification Document (if applicable<sup>1</sup>);
- Project Closeout Form (for information purposes only – no need to complete).

Unless informed to the contrary, tenders and communications shall be sent by e-mail to the following e-mail address: [Rob.Bloom@carbontrust.com](mailto:Rob.Bloom@carbontrust.com). Please also cc [karolina.zieba@carbontrust.com](mailto:karolina.zieba@carbontrust.com) to any submissions.

Tenders must be submitted before 9 February 2024 (17:00 GMT). 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	12 January 2024
Clarification Document published <sup>1</sup>	19 January 2024
Submission of full tender	9 February 2024 (17:00 GMT)
Bidder interviews	W/C 19 February 2024
Successful Contractor announcement	W/C 4 March 2024
Envisaged Contract award date	W/C 18 March 2024

Please e-mail any clarification questions, including questions about the timing of this ITT, to [Rob.Bloom@carbontrust.com](mailto:Rob.Bloom@carbontrust.com) (Please also cc [karolina.zieba@carbontrust.com](mailto:karolina.zieba@carbontrust.com)) any time before 12

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 A Clarification Document will not be published if no clarification questions are received in relation to this ITT.

January 2024. The complete set of clarification questions and all answers to clarification questions will be published in the Clarification Document on our website by 19 January 2024 and will hence be visible to all potential Bidders: <https://www.carbontrust.com/news-and-events/tenders>

For information about the Integrator programme, please see the Carbon Trust's website: [The Integrator | The Carbon Trust](#)

We look forward to receiving your tender.

Yours sincerely,

Rob Bloom  
For and on behalf of **THE CARBON TRUST**

# THE CARBON TRUST INTEGRATOR PROGRAMME

Invitation to Tender for the “Offshore H2 production  
platform concept design” 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.

### Bid evaluation

The received bids will be evaluated by the Carbon Trust and the Integrator 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 Integrator Phase III Contractors' Conditions, and any clarifications agreed in writing. The Award Letter, the Final Scope of Work, the Integrator Phase III Contractors' Conditions, and any clarifications agreed in writing will establish the Contract for the Offshore H2 production platform concept design project (the "**Contract**") between You and the Carbon Trust. With the exception of any minor amendments to the Integrator Phase III Contractors' Conditions which may be requested by the Bidder, the submission of a tender shall constitute unqualified acceptance of the Integrator Phase III Contractors' Conditions. In the event that minor amendments to the Integrator Phase III 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 Integrator Programme

- 1.1 The Integrator is an industry-driven collaborative research, development and demonstration programme which was initially launched by the Carbon Trust in 2020 in collaboration with several major offshore wind developers. At the time of issue of this Invitation to Tender the Integrator Partners are: SSE Renewables Services (UK) Limited, ScottishPower Renewables (UK) Limited, Vattenfall Vindkraft A/S, EnBW Energie Baden-Württemberg AG, Shell Global Solutions International B.V. and TotalEnergies OneTech (the “**Integrator Partners**”).
- 1.2 The Integrator is a collaborative industry programme designed to examine the interplay between offshore wind, existing infrastructure, and other technologies and developments to identify real opportunities to innovate and put offshore wind at the forefront in the energy transition. It aims to maximise the contribution of offshore wind to a low cost, flexible, predictable, and low carbon energy future.
- 1.3 The integrator is managed by the Carbon Trust and governed by a Steering Committee (“**SteerCo**”) consisting of representatives of the Integrator Partners. The SteerCo and various technical experts from the Integrator Partners will supervise the Project, provide technical direction and guidance to the Contractor (where needed) and review the Project Deliverables, findings and other outcomes.
- 1.4 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 H2PD project

2.1 The Integrator would like to investigate the design and operational strategy of a centralised offshore hydrogen production platform, aiming to produce a concept design for a scalable, market-tailored platform suitable for navigating consenting in the UK and Germany. This study includes an examination of design uncertainties, risk mitigation strategies, and any required market-specific adaptations, with the goal of delivering a robust and optimized blueprint for the successful development and deployment of offshore hydrogen platforms.

2.2 Offshore wind (OSW) coupled with hydrogen production potentially offers a sustainable solution for storing and utilising surplus electricity, diversifying revenue streams, reducing curtailment, and aligning with clean energy goals. It represents a promising avenue for offshore wind developers to contribute to the transition towards a low-carbon and renewable energy future.

The absence of well-defined planning and permitting regulations for offshore wind projects that incorporate offshore hydrogen platforms is a significant challenge. This issue arises due to the novelty of offshore hydrogen platforms, regional variations in regulatory frameworks, the need for comprehensive environmental impact assessments, specific safety concerns, resource allocation for regulatory evaluations, and complex stakeholder engagement.

A common concept feasibility design of a commercial offshore hydrogen production platform could be used to better understand the effects of planning and permitting in different markets, and better navigate early-stage development. Some sites are currently looking to include offshore hydrogen platforms; therefore, the challenge is an urgent one.

Carbon Trust's Integrator has delivered work investigating optimal configurations for hydrogen produced using offshore wind. Following techno economic analysis of different archetypes combining offshore wind and hydrogen production (Phase II project), the Integrator is looking for more detailed information for planning and permitting of a centralised offshore platform for hydrogen production. The study takes the focus of new platforms & developments rather than re-purposing existing or previous oil & gas facilities.

2.3 The main objectives of this work are to:

- a. Conduct a comprehensive regulatory analysis and market comparison for offshore hydrogen production identifying critical regulations, guidelines, and market-specific design decisions, equipment selection and overall project execution.
- b. Provide a concept design for a 500 MW or more scale centralised offshore hydrogen production facility as a basis on which to establish concept feasibility and relevant consenting parameters.
- c. Identify design uncertainties, assess their impact on project success, and propose mitigation strategies.

2.4 The expected outcomes of the work are:

- a. A comprehensive report summarising the assessment of various codes and regulations for the UK and Germany. The outcome should include an analysis of the potential

impacts of regulatory variations on project design and execution, with recommendations for addressing these challenges.

- b. Provide a comprehensive design for a centralised offshore hydrogen platform initially tailored for the UK market, considering the following components:
  - i. A detailed design envelope specifying maximum dimensions, platform quantity, distance between platform elements, and layout.
  - ii. Process flow diagrams illustrating the hydrogen production process.
  - iii. Single line diagram.
  - iv. Equipment list.
  - v. General arrangement drawings depicting the platform's physical layout and placement of equipment.
  - vi. Integration of power train, power electronics, and auxiliary systems for efficient and reliable operation.
  - vii. Price estimate of the designed platform.
  - viii. Ensure that the design is rooted in a deep understanding of permitting rules and operational philosophy developed as part of this project.
- c. Identify major uncertainties in the proposed design, assess their potential impact, and propose mitigation strategies for project success. Revisit the design considering deployment in the UK and Germany, assessing any design adaptations needed, and explore cost-effective modifications for alignment with local requirements.

2.5 The expected benefits of this work are:

- a. Partners can leverage the project's regulatory insights to optimize platform design, streamline planning and permitting processes, minimize regulatory hurdles, enhance resource utilization, and ensure long-term operational safety and compliance.
- b. Partners can leverage this work as a foundation for future projects, enabling efficient green hydrogen production, simplifying planning, and permitting through proven designs, boosting stakeholder confidence, and fostering increased investment and innovation in offshore hydrogen production.
- c. Partners can expand their projects into new markets using insights gained from this work, reducing market-entry barriers, and increasing the reach of green hydrogen technologies.

## 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 Integrator 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 5 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 SteerCo. The Carbon Trust and SteerCo 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 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 team of mixed seniority 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 H2PD Project, any assumptions will be discussed with the SteerCo prior to the start of each Work Package.
- 4.9 The Scope of Work includes 1 Optional Work Package. This is a Work Package that the Integrator SteerCo will reserve the right to execute or dismiss during 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
<p><b>WP1: Basis of Design</b></p>	<p>The contractor should also collaborate with the Integrator SteerCo to establish an operational philosophy that underpins the design and operation of the hydrogen platform.</p> <p>Prioritise key principles, including:</p> <ul style="list-style-type: none"> <li>• Low environmental impact.</li> <li>• Compliance with health and safety standards.</li> <li>• Cost-effectiveness (minimizing CAPEX and OPEX).</li> <li>• Scalability (to 1 and 2 GW).</li> <li>• Low LCOH.</li> </ul> <p>The contractor should then conduct a literature review of available hydrogen platform designs (including those that may be provided by the Integrator SteerCo, or those developed by the contractor themselves) to assess suitability against meeting the as-defined basis of design.</p>
<p><b>Project Deliverables:</b></p> <ul style="list-style-type: none"> <li>- <b>D01: Report clarifying currently available hydrogen platform designs.</b></li> <li>- <b>D02: Report clarifying major design and operational rules for offshore H2 production.</b></li> <li>- <b>D03: Presentation to programme partners.</b></li> </ul>	
<p><b>Decision point: The Integrator SteerCo (with input from the contractor) will decide whether a current hydrogen platform design is suitable or whether a project-specific design is required. If a pre-existing design can be adapted to suit the needs of the project, WP2a will be undertaken. If a project-specific design is required, WP2b will be undertaken instead.</b></p> <p><b>The contractor is encouraged to suggest any other factors or design considerations that may be relevant or beneficial for the successful adaptation of the base design to meet specific partner needs while addressing consenting requirements.</b></p>	
<p><b>WP2a: Concept and feasibility design adaptation</b></p>	<p>The contractor should evaluate their existing design to identify areas where it may need to be changed because of the established operational philosophy. They should also develop strategies to ensure alignment between contractor proposals and project objectives.</p> <p>The contractor should then alter the existing design according to the requirements of the developed operational philosophy.</p>
<p><b>Project Deliverables:</b></p> <ul style="list-style-type: none"> <li>- <b>D04a: Basis of design document with a representative example containing the following:</b> <ul style="list-style-type: none"> <li>i. <b>Assumptions,</b></li> <li>ii. <b>boundary conditions,</b></li> <li>iii. <b>legal frameworks,</b></li> <li>iv. <b>standards.</b></li> </ul> </li> </ul>	

<ul style="list-style-type: none"> <li>- <b>D05a: Drawing documents containing the following:</b> <ul style="list-style-type: none"> <li>i. <b>General arrangement drawing,</b></li> <li>ii. <b>Process flow diagram,</b></li> <li>iii. <b>high level single line diagram.</b></li> <li>iv. <b>Heat and mass balance should be added.</b></li> <li>v. <b>High level maintenance concept should be provided.</b></li> </ul> </li> <li>- <b>D06a: Equipment list spreadsheet including component weight, dimensions, and cost estimate.</b></li> <li>- <b>D07a: Safety studies and constructability/installation review.</b></li> <li>- <b>D08a: Presentation to programme partners.</b></li> </ul>	
<p><b>WP2b: Concept and feasibility design development</b></p>	<p>The contractor should develop from first principles a preliminary design concept for a centralised offshore hydrogen platform based on the developed operational philosophy.</p> <p>The design should prioritise high TRL components.</p>
<p><b>Project Deliverables:</b></p> <ul style="list-style-type: none"> <li>- <b>D04b: Basis of design document with a representative example containing the following:</b> <ul style="list-style-type: none"> <li>i. <b>Assumptions,</b></li> <li>ii. <b>boundary conditions,</b></li> <li>iii. <b>legal frameworks,</b></li> <li>iv. <b>standards.</b></li> </ul> </li> <li>- <b>D05b: Drawing documents containing the following:</b> <ul style="list-style-type: none"> <li>i. <b>General arrangement drawing,</b></li> <li>ii. <b>Process flow diagram,</b></li> <li>iii. <b>high level single line diagram.</b></li> <li>iv. <b>Heat and mass balance should be added.</b></li> <li>v. <b>High level maintenance concept should be provided.</b></li> </ul> </li> <li>- <b>D06b: Equipment list spreadsheet including component weight, dimensions, and cost estimate.</b></li> <li>- <b>D07b: Safety studies and constructability/installation review.</b></li> <li>- <b>D08b: Presentation to programme partners.</b></li> </ul>	
<p><b>WP3: Regulatory Analysis</b></p>	<p>Analyse critical regulations and guidelines related to early stage consenting for offshore hydrogen production in the UK and Germany. This will involve a comprehensive review of the applicable HSE regulation and consenting to identify key requirements and potential variations that may have a significant impact on this project's design and execution.</p> <p>Compare the implications of the above codes and regulations upon possible platform designs for hydrogen as well as regulatory gaps.</p>

	<p>Consider UK and German regulatory implications and gaps and suggest how regulation can fill those gaps. Use case studies of successful approaches.</p> <p>Develop a consenting strategy, proposing forward looking design assumptions regarding interfaces to the environment (reject cooling water temperatures, brine concentration, additives, antifouling etc.)</p> <p>Verify proposed design limit assumptions with international best practices and high-level environmental impact assessments.</p>
<p><b>Project Deliverables:</b></p> <ul style="list-style-type: none"> <li>- <b>D09: A report detailing the critical regulations, highlighting key differences and uncertainties and the implications this may have on platform design.</b></li> <li>- <b>D10: Consenting strategy and basis of design proposal regarding environmental interfaces.</b></li> <li>- <b>D11: Presentation to programme partners.</b></li> </ul>	
<p><b>WP4: Recommendations</b></p>	<ul style="list-style-type: none"> <li>• Identify major uncertainties in the proposed design, assess their potential impact, and propose mitigation strategies for project success.</li> <li>• Revisit the design considering deployment in the UK and Germany, assessing adaptations needed, and explore cost-effective modifications for alignment with local requirements.</li> </ul>
<p><b>Project Deliverables:</b></p> <ul style="list-style-type: none"> <li>- <b>D12: Future focused report on outstanding design gaps, regulatory uncertainty, and next steps for adapting the design for the UK and German market.</b></li> <li>- <b>D13: Presentation to programme partners.</b></li> </ul>	
<p><b>WP5 (Optional): Floating facility feasibility</b></p>	<p>The initiation of this work will be subject to a stage gate decision where the project partners will evaluate the results of the proceeding work packages (WP1 to WP4) and determine whether to pursue the additional analysis.</p> <p>Please note that this work package is optional and is not included in the outlined project budget. If the decision is made to proceed, the contractor should provide a separate pricing proposal for this work package when requested.</p> <p>The contractor should assess the feasibility and potential advantages of incorporating floating offshore hydrogen production facilities alongside or instead of the fixed bottom design, which serves as the base case.</p> <ul style="list-style-type: none"> <li>• Evaluate the technical feasibility of floating platforms, including stability, equipment placement, and integration with existing technologies.</li> <li>• Compare the CAPEX and OPEX costs of floating facilities against the fixed-bottom base case, considering factors such as installation, maintenance, and decommissioning.</li> <li>• Assess the potential consenting and environmental impact of floating facilities in comparison to fixed-bottom platforms, including effects on marine ecosystems, navigational routes, and other relevant factors.</li> <li>• Identify and assess potential risks and uncertainties associated with floating facilities for offshore hydrogen production. Propose</li> </ul>

	mitigation strategies to address these risks, ensuring project success and regulatory compliance.
<p><b>Project Deliverables:</b></p> <ul style="list-style-type: none"> <li>- <b>D14: Feasibility assessment reporting addressing safety and regulatory compliance, environmental considerations, and cost estimations. The report should also include potential risks and suggested mitigation strategies.</b></li> <li>- <b>D15: Presentation to programme partners.</b></li> </ul>	
<p><b>WPA. Project Management</b></p>	<p>The Bidder should stipulate how it will manage the Project efficiently and effectively.</p> <p>In particular, the following activities should be included (and hence budgeted for)</p> <ul style="list-style-type: none"> <li>• project management time (including sufficient time for review processes);</li> <li>• regular update calls with the Carbon Trust Project Manager and/or Technical Working Group as required;</li> <li>• the preparation of monthly flash reports (Carbon Trust template) containing key financial data and information of the delivery status of the Project; and</li> <li>• towards the end of the Project <ul style="list-style-type: none"> <li>○ the production of a 3-page Executive Summary Report for the entire Project (for internal SteerCo dissemination);</li> <li>○ time dedicated to presenting the main results, findings and outcomes of the Project in the form of a 1-hour webinar to Integrator Partners.</li> </ul> </li> </ul> <p>Bidders should be aware that the Carbon Trust and the Integrator SteerCo 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.</p>
<p><b>Project Deliverables:</b></p> <ul style="list-style-type: none"> <li>- <b>D16: Monthly flash reports</b></li> <li>- <b>D17: Project executive summary report</b></li> <li>- <b>D18: Delivery of close out webinar</b></li> </ul>	
<p><b>Expenses</b></p>	<p>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.</p>

## 5. Intellectual Property, Knowledge and Input Data

- 5.1 Full details of the intellectual property requirements and conditions can be found in the attached Integrator Phase III Contractors' Conditions.
- 5.2 The Carbon Trust and/or the Integrator SteerCo can 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 Integrator Phase III Contractors' Conditions:
  - a. We may provide a Phase II project focusing on Hydrogen from offshore wind, pending approval from the SteerCo.

## 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 £100k-£250k. This wide budget range is designed to cover the eventuality that the contractor has an in-house hydrogen platform design that can be adapted to align with the basis of design. If the contractor does not have a pre-existing design or if adjustments are needed to align with the basis of design, we would expect the bid price to be closer to £250k. The basis of design is to be collaboratively agreed upon between the partners and the contractor in WP1.
- 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
<b>Proposed Approach</b>	<p>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.</p> <p>The description should include an initial overview on the approach followed by a description on how each Work Package and task will be delivered.</p> <p>Also, Bidders need to justify how their proposed approach meets the objectives of the Project.</p>
<b>Additional Work</b>	<p>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.</p>
<b>Project management</b>	<p>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 Integrator SteerCo, to get information and manage potentially conflicting relationships.</p>

### CRITERION 2: EXPERIENCE (WEIGHTING: 30%)

Description	Information required from Bidders
<p>Proven track record in concept and FEED stage design of large scale (&gt;500MW) hydrogen production plants including electrolysis, purification, compression, and utilities.</p> <p>Proven track record in concept and FEED stage design of offshore platform topsides which include large scale process engineering packages.</p> <p>Experience in and understanding of the development, engineering design, and operational realities of hydrogen production facilities.</p>	<p>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.</p> <p>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 these areas (Bidders may wish to refer to submitted examples of previous work for other clients).</p> <p>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.</p>

### CRITERION 3: STAFF SKILLS (WEIGHTING: 15%)

Description	Information required from Bidders
<b>CVs/Resumes</b>	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.
<b>Applicable skills</b>	Bidders should elaborate on the most relevant skills of the key personnel that will be involved in the Project.
<b>Prior experience form involved staff</b>	Please include examples of similar work performed by the proposed staff members, explaining how is relevant to the Approach to Work.
<b>Expert engagement</b>	A close working relationship with key stakeholders such as, but not limited to regulatory and consenting bodies, technology and equipment suppliers, energy grid operators, as well as the Integrator SteerCo 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
<b>Day rates and man hours (man-h) for all staff grades</b>	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.
<b>Price for the delivery of the Project</b>	<p>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.</p> <p>Bidders are required to specify expected expenses separate from the estimated budget for each Work Package.</p> <p>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).</p> <p>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.</p> <p>Carbon Trust will reimburse reasonable expenses at cost and receipts may be requested. Pre-approval will be required for travel costs over £200 per return journey and combined hotels &amp; subsistence cost exceeding £250 per day.</p> <p>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.</p>

## 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 Integrator Phase III 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 Integrator Phase III 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-page 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); Integrator Phase III Contractors' Conditions; Tender Certificate template; Bid Price Calculation Sheet template; and Clarification Document (if applicable <sup>2</sup> ).
Integrator	The Integrator research and development joint industry programme
Integrator Partners	A group of leading offshore wind farm developers supporting the Integrator.
Integrator SteerCo	Governing body for the Integrator consisting of representatives of the Integrator Partners.
Main Bid Document	Has the meaning given in section 3.1. No template is provided.
Project	The Offshore H2 production platform concept design or H2PD project.
Project Closeout Form	A template provided by the Carbon Trust towards the end of the Project.

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<sup>2</sup> A Clarification Document will not be published if no clarification questions are received in relation to this ITT.

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.
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.
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 Integrator 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.