

10 May 2024

Dear Sir/Madam,

Invitation to Tender for the Utilisation of Ballast Systems for Stability Control of Floating Platforms project for the Floating Wind Joint Industry Programme

You are invited to submit a proposal for the Utilisation of Ballast Systems for Stability Control of Floating Platforms project which is part of the Floating Wind Joint Industry Programme. The key objective of this project is to investigate the feasibility of various ballast systems and provide a basis for selection of configuration when considering the systems full lifecycle.

Please be aware that this process is a non-mandatory procurement process, published for transparency and best practice. All timescales are based, as near as possible, on the Open Procedure. However, the dates referred to below may be subject to change where this is necessary in the interests of the project (such changes will be notified in advance).

Should your proposal be successful an Award Letter, the Scope of Work, the Carbon Trust Conditions of Contract ("**Conditions**"), and any clarifications agreed upon in writing, will establish the Contract for the Utilisation of Ballast Systems for Stability Control of Floating Platforms project (the "**Contract**") between you and the Carbon Trust. The Conditions accompany this ITT for your prior review. Please note that in the interests of transparency and fairness, these Conditions are non-negotiable, although we will provide clarifications to any queries you may have prior to submitting your Tender, answers to which will be distributed to all bidders as set out below. Bids that fail to accept the Conditions in their full un-amended form (other than changes explicitly accepted and agreed by the Carbon Trust on the clarifications page) at the time of submission will be considered to be non-compliant and may, at the Carbon Trust's discretion, be excluded from the procurement process.

Clarification questions must be emailed any time before 24 May 2024 to Mary.Harvey@carbontrust.com and FloatingWind@carbontrust.com. Answers to clarification questions will be communicated by email by 30 May 2024. Answers can be found at: <https://www.carbontrust.com/about-us/tenders>.

Unless informed to the contrary, Tenders and communications should be sent by e-mail to the following e-mail address: Mary.Harvey@carbontrust.com and FloatingWind@carbontrust.com.

Please submit your proposal by 17:00 BST 19 June 2024.

The timeline of this procurement process is as follows:

Deadline for clarification questions	24 May 2024
Clarification response date	30 May 2024
Submission of full proposal	17:00 BST 19 June 2024
Bidder interviews	Week commencing 15 July 2024 (to be confirmed)
Project kick off	September 2024

If you have any questions about the timing, please let us know.

We look forward to receiving your Tender.

Yours sincerely,

Mary Harvey
For and on behalf of
THE CARBON TRUST

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 published, 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 Floating Wind JIP Partners against the criteria provided in section 7 and the Bidder authorises the Carbon Trust to share its submitted Tender with the Floating Wind JIP 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 described in this Invitation to Tender (ITT) 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 proposal addressing these requirements.

Issuance of this ITT 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 Floating Wind JIP Stage III Contractors' Conditions, and any clarifications agreed in writing. The Award Letter, the Final Scope of Work, the Floating Wind JIP Stage III Contractors' Conditions, and any clarifications agreed in writing will establish the Contract for the Utilisation of Ballast Systems for Stability Control of Floating Platforms project (the "**Contract**") between You and the Carbon Trust. With the exception of any minor amendments to the Floating Wind JIP Stage III Contractors' Conditions which may be requested by the Bidder, the submission of a Tender shall constitute unqualified acceptance of the Floating Wind JIP Stage III Contractors' Conditions. In the event that minor amendments to the Floating Wind JIP Stage 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 also 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.

Floating Wind Joint Industry Programme

Invitation to Tender for the “Utilisation of Ballast Systems for Stability Control of Floating Platforms” Project

Description of Tender

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1. Introduction to the Floating Wind Joint Industry Programme

1.1. The Floating Wind Joint Industry Programme (“**Floating Wind JIP**”) is a collaborative R&D initiative between the Carbon Trust and participating industry partners bp, EDF Renewables, EnBW, Equinor, Kyuden Mirai Energy, Ocean Winds, Ørsted, Parkwind, RWE Offshore Wind, ScottishPower Renewables, Shell, Skyborn Renewables, SSE Renewables, TEPCO, Tohoku EPCO, TotalEnergies and Vattenfall (the latter are collectively referred to in this document as “**Floating Wind JIP Partners**”), that aims to investigate the challenge and opportunities of developing commercial-scale floating wind farms.



- 1.2. The objective of the Floating Wind JIP is to overcome technological challenges and advance commercialisation of floating offshore wind.
- 1.3. Contractors receive technical direction and data from Floating Wind JIP Partners through the Carbon Trust management team.
- 1.4. Please note, the term “Contractor”, where used within this document, refers only to successful bidders.

2. Background and objective of the BSSC project

- 2.1. The Floating Wind JIP Partners would like to investigate the feasibility of various ballast systems and provide a basis for selection of configuration when considering the full system lifecycle. The project should evaluate the advantages, disadvantages and cost benefit of various ballast systems, with a focus on post-installation phase.
- 2.2. Robust ballast systems help optimise the operation and generation on floating wind platforms by allowing greater control of the motions and better stability properties, hence potentially improving wind turbine generators (WTGs) efficiency. Such a feature is particularly crucial when operating in regions with harsh marine environments, improving stability and safety in rapid dynamic motions driven by fluctuating environmental conditions.

Although ballast systems offer certain advantages, their implementation brings numerous implications and considerations that require further assessment. These include, but are not limited to:

- The cost of hardware and impact on energy consumption;
- Complexity, sensitivity and responsiveness in design;

- Impact on wind turbine generator performance and annual energy production;
- Maintenance requirements, considering failure rates.

The focus of this study should be on the post-installation phase, with a brief discussion on other life cycle phases. It is understood that the benefits of the ballast systems during other stages, such as quayside assembly, load-out, transit and the installation of moorings and cables, have not been fully demonstrated as there is currently no established guidance for the design and specification of ballasting cycles and operations during these stages.

2.3. The main objectives of this work are to:

- Investigate current and emerging state-of-the-art ballast systems for floating offshore wind platforms to understand the advantages, disadvantages and limitations of various advanced systems for different wind turbine platform archetypes;
- Undertake a cost benefit analysis through various stages of the system lifecycle, considering costs associated to risk mitigation, to understand the benefit of active ballast systems compared to passive ballast systems;
- Investigate the requirements and procedures for associated equipment and systems and how these need to be adapted for varying metocean conditions and environments;
- Define an operations and maintenance strategy for the lifetime of the identified ballast 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 Section 7 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 Floating Wind JIP 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 Section 7 Criterion 4 for more details;
 - iv. an explanation of experience and staff skills, and how these are relevant to the Approach to Work – see Section 7 Criteria 2 and 3 for more details; and
 - v. supplementary information to provide experience evidence and skills evidence (e.g. CVs) – see Section 7 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 Section 7 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 Floating Wind JIP Partners. The Carbon Trust and the Floating Wind JIP Partners 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 a team of mixed seniority approximately 10 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 BSSC project, any assumptions will be discussed with the Floating Wind JIP Partners prior to the start of each Work Package.

WORK PACKAGES

Work Package	Description of work
WP1: Literature Review	<ul style="list-style-type: none"> • The contractor should conduct a detailed state-of-the-art literature review to determine the advantages, disadvantages, and need for active (and passive) ballast systems that are currently either deployed or under development for floating offshore wind platforms. • The state-of-the-art review should take a holistic approach and analyse various ballast systems and their working principles. This should include their potential benefits, their limitations such as power consumption, response times, integration complexity, their suitability for various platform archetypes (semi-submersible, spar, TLP, buoy, etc.), their working fluid or material used for ballasting and control, and the potential application of these systems at various stages of operations such as quayside assembly, load-out, transit, and the installation of moorings and cables. • The focus of the work should be systems for application on semi-submersible platforms however other archetypes should not be discounted and novel solutions can be proposed. • This review should consider case studies with varying loading conditions and industry reports on the implementation of ballast systems in recent, ongoing, or future floating offshore wind projects and should be market agnostic. • A key aspect that should be investigated in this work package is the approach to the floating substructure design and compartmentation due to stability requirements (e.g. damaged stability) and the allocation of ballast tanks. • As part of the literature review, the contractor should assess accident reports for ballast system related incidents and summarise the lessons learnt. • The relevant codes and standards for the selected systems and equipment should also be identified. • Based on the literature review, the contractor should select one passive and one active ballast system configuration and a set of scenarios to focus on in more detail in the following work packages, these should be discussed and approved by FLWJIP before the commencement of WP2.
Project Deliverables: <ul style="list-style-type: none"> - D1: Report – Literature review report of state-of-the-art ballast systems. - D2: Technical Note – Ballast system configuration selection for WP2. - D3: Presentation – Summary presentation to the Floating Wind JIP partners. 	
WP2: Cost Benefit Analysis	<ul style="list-style-type: none"> • The contractor should develop a detailed cost breakdown structure for each ballast system type taking into account (but not limited to): <ul style="list-style-type: none"> ○ Capital costs (equipment, materials, installation, etc.), including a comparison between active and passive systems; ○ A comparison of logistical costs during the installation phase; ○ Operation and maintenance costs (personnel, spare parts, power consumption, etc.); ○ Potential decommissioning costs; ○ Costs associated with risks attributable to ballast system related incidents. In particular to what extent do the perceived risks of an active ballast system negate the benefits;

	<ul style="list-style-type: none"> ○ Estimate the potential benefits associated with each ballast system type, including: <ul style="list-style-type: none"> ▪ Enhanced platform stability and motion reduction; ▪ Improved power generation efficiency and production uptime; ▪ Reduced risk of structural damage and accidents; ▪ O&M cost savings through optimized maintenance strategies. ● The potential benefits and increased difference in time and resource during various stages of operations such as quayside assembly, load-out, transit, and the installation of moorings and cables should also be assessed for the various ballast systems identified. ● A comparison in logistical costs should be made between the various systems assessed. <p>Where applicable, the contractor is encouraged to propose additional factors to assess the cost benefit of proposed ballast systems.</p> <ul style="list-style-type: none"> ● The contractor should subsequently aim to validate the benefits and increase in energy production, by means of simulation, when compared with passive ballast systems. This is expected to take place using a programme such as OrcaFlex or OpenFAST. <ul style="list-style-type: none"> ○ 15 MW turbine, platform reference designs and site conditions will be provided by the Carbon Trust. ● The performance of active and passive ballast systems in accidental flooding scenarios, e.g., vessel collision damage, or fatigue cracks, should also be assessed.
<p>Project Deliverables:</p> <ul style="list-style-type: none"> - D4: Report – Cost benefit analysis report. - D5: Report – Report detailing the findings from the simulation modelling. - D6: Model – Access to the model simulation (e.g. OrcaFlex, OpenFAST or other). - D7: Presentation - Summary presentation to the Floating Wind JIP partners. 	
<p>WP3: Equipment and Systems Specification</p>	<ul style="list-style-type: none"> ● The contractor should develop comprehensive technical specifications for the equipment and systems required within the previously identified ballast systems and the requirement for the specifications to be altered or tailored for varying metocean conditions or specific environments. The types of equipment that should be specified are as follows but not limited to: <ul style="list-style-type: none"> ○ Pumps, valves, and piping; ○ Tanks and compartments for ballast water storage; ○ Sensors and monitoring instrumentation; ○ Control systems and software (for active systems), also with respect to WTG control. ● The location and configuration of the equipment should also be considered, in relation to the philosophy and timeline of the operation of the ballast systems. For example, for passive systems, all ballast control components may be fully hosted on support vessels or permanently housed within the floating platform. The contractor should assess the implications on the platform geometry and configuration due to the hosting of the ballast systems already specified. ● The contractor should also specify the equipment to be installed, considering timelines and procedures, for various phases such as quayside assembly,

	<p>load-out, transit, or installation phases, along with the type of personnel required to perform these tasks.</p> <ul style="list-style-type: none"> To carry out this work package, it is anticipated that the contractor will generate data sheets and drawings related to ballast system equipment and platform geometries. These supplementary documents should be delivered along with the final report.
<p>Project Deliverables:</p> <ul style="list-style-type: none"> D8: Report – Equipment and systems specification report. D9: Supplementary documents – Specified equipment/platform data sheets and drawings. D10: Presentation – Summary presentation to the Floating Wind JIP partners. 	
<p>WP4: O&M Optimisation and Planning Strategy</p>	<ul style="list-style-type: none"> The contractor should define an operations and maintenance strategy based on what is deemed to be required and necessary over the lifetime of the ballast systems (according to existing standards and guidance) discussed in previous work packages. An assessment of the O&M implications when utilising active and passive ballast systems should be defined and include: <ul style="list-style-type: none"> Inspection and maintenance procedures; Logistics and accessibility issues; Personnel training and skill requirements, including safety considerations for when working in confined spaces etc, including potential mitigation strategies for the perceived risks; Developed O&M plans and strategies tailored for platforms incorporating ballast control systems; Typical O&M activities for floating wind turbines, including inspections, maintenance, and repairs. This should include the respective tools, cost, and length of time to undertake these activities; Identify how active and passive ballast systems influence O&M requirements (e.g., access needs, complexity of maintenance); A preliminary O&M plan for each ballast system type, considering inspection intervals, failure rates for potential failure modes, and mitigation strategies.
<p>Project Deliverables:</p> <ul style="list-style-type: none"> D11: Report – Operations and Maintenance optimisation and planning strategy report. D12: Presentation – Summary presentation to the Floating Wind JIP partners. 	
<p>WPA. Project Management</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"> Project management time (including sufficient time for review processes); Regular update calls with the Carbon Trust Project Manager and/or Floating Wind JIP Parties 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: <ul style="list-style-type: none"> the production of a 3-10 pages Executive Summary Report for the entire Project (for dissemination within the Floating Wind JIP);

	<ul style="list-style-type: none"> ○ 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 Floating Wind JIP Parties; ○ time dedicated to presenting the main results, findings and outcomes of the Project in the form of a 1-hour webinar to the Floating Wind JIP Parties; and ○ the provision of inputs for the Floating Wind JIP Cost Model by completing the Floating Wind JIP Cost Model Input Sheet (Carbon Trust template). <ul style="list-style-type: none"> ● Bidders should be aware that the Carbon Trust and the Floating Wind JIP Parties 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>Project Deliverables:</p> <ul style="list-style-type: none"> - D13: Monthly flash reports - D14: Executive Summary Report - D15: Final presentation - D16: Delivery of webinar - D17: Project Closeout Form - D18: Input sheet for Floating Wind JIP Cost Model 	
<p>Expenses</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 Floating Wind JIP Stage III Contractors' Conditions.
- 5.2. The Carbon Trust and/or the Floating Wind JIP 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 Floating Wind JIP Stage III Contractors' Conditions:
 - a) Conceptually defined reference floater designs developed for the Floating Wind JIP, based on a 15 MW turbine size. These can be provided as numerical model input files for OpenFAST and Orcaflex software.

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 and £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

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.

CRITERION 1: APPROACH TO WORK (WEIGHTING: 35%)

Description	Information required from bidders
Proposed Approach	In the Main Bid Document, Bidders are required to provide a clear and detailed description of how they plan to deliver the work for this Project. The description should include an initial overview of the approach followed by a description of 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 how they will work with the various stakeholders to acquire information and manage potentially conflicting relationships.

CRITERION 2: EXPERIENCE (WEIGHTING: 30%)

Description	Information required from Bidders
Experience in hydrodynamic modelling	In the Main Bid Document, Bidders should elaborate on the experience of the criteria described to the left and explain how these past experiences are relevant to this Tender.
Experience in floating offshore wind system costs	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 refer to submitted examples of previous work for other clients).
Experience in and knowledge of ballast systems for floating offshore wind platforms	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.

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 the 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 from 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 floating offshore wind platform designers as well as the Floating Wind JIP Parties 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: 20%)

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	<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 4.</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 £150 per return journey and combined hotels & subsistence cost exceeding £200 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>

The Carbon Trust has committed to reaching Net Zero by 2050. Our associated targets have been validated by the Science Based Targets Initiative (SBTi)¹. To meet the initial targets that we have set for ourselves, we encourage all our suppliers and sub-contractors to themselves have equivalent plans

¹ <https://sciencebasedtargets.org/>

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 Floating Wind JIP Stage III 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 Floating Wind JIP Stage III Contractors' Conditions. Please reach out if you need more information on this.

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 Floating Wind JIP Stage 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 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 Floating Wind JIP 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.
Floating Wind JIP	Floating Wind Joint Industry Programme
Floating Wind JIP Partners	A group of leading offshore wind farm developers supporting the Floating Wind JIP.
Floating Wind JIP 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.
Floating Wind JIP Cost Model Input Sheet	A form (to be provided by Carbon Trust) which the Contractor should complete in WPA to provide input into the Floating Wind JIP Cost Model. I
Invitation to Tender (ITT)	The following group of documents: Description of Tender (this document); Floating Wind JIP Stage III 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 Utilisation of Ballast Systems for Stability Control of Floating Platforms or BSSC 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.

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

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	Bidder's response to this ITT consisting of the following elements: <ul style="list-style-type: none"> - 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 Floating Wind JIP 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.