

10 February 2025

Dear Sir/Madam,

Invitation to Tender for the Concrete floater analysis and decommissioning project for the Floating Wind Joint Industry Programme

You are invited to submit a proposal for the Concrete floater analysis and decommissioning project which is part of the Floating Wind Joint Industry Programme. The key objective of this project is The main aim of the project is to understand and validate the use of concrete floaters for floating offshore wind turbines.

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, to the Open Procedure. However, 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 in writing, will establish the Contract for the Concrete floater analysis and decommissioning 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 to arturo.andersen@carbontrust.com and FloatingWind@carbontrust.com any time before 26 February 2025. Answers to clarification questions will be communicated by email by 6 March 2025. 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: arturo.andersen@carbontrust.com and FloatingWind@carbontrust.com.

Please submit your proposal by 12:00 pm on the 8 April 2025.

The timeline of this procurement process is as follows:

Deadline for clarification questions	26 February 2025
Clarification response date	6 March 2025
Submission of full proposal	12:00 pm on the 8 April 2025
Bidder interviews	Week commencing 12 May 2025
Project kick off	July 2025

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

We look forward to receiving your Tender.

Yours sincerely,

Arturo Andersen Chinbuah
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 Concrete floater analysis and decommissioning 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 “Concrete floater analysis and decommissioning” 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 Renouvelables, EnBW, Equinor, Kyuden Mirai Energy, Ocean Winds, 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 CFAD project

- 2.1. The Floating Wind JIP Partners would like to investigate key areas related to concrete floater use in the floating offshore wind turbines and gain clarity on the end of life option for concrete floaters.
- 2.2. The floating offshore wind industry is at a pivotal point where large-scale projects are in their pre-development stage after being awarded seabed space. Floating foundations and their cost are a significant element to the successful and cost-effective deployment of large-scale floating wind farms, as such, the industry is showing a substantial interest in the deployment of concrete to build floating foundations as an economical alternative to steel foundations. In the particular case of Europe, existing local supply chain capabilities could significantly provide the regional floating wind industry with economical concrete floaters.

To deploy concrete floaters, the industry must better understand the material requirements and properties of cement and its aggregates, as well as the need for reinforcements. Further, clarity on the structural integrity, reliability, and limitations of concrete floater designs is needed, where key concerns on the use of concrete including degradation mechanisms of concrete, the corrosion of steel and other reinforcements, and the effects of fatigue need to be understood. Given the limited data on these issues, the floating wind industry aims to improve the existing knowledge and incorporate adequate integrity management measures.

Additionally, with the increasing drive to reduce the carbon emissions associated with building offshore wind assets, concrete could offer a less carbon-intensive floater material. However, it is essential to model and account for the carbon intensity of concrete floaters. Current uncertainties, particularly concerning decommissioning and end-of-life strategies applicable in different global regions, necessitate industry research. This research should aim to provide clarity on the carbon emissions associated with different strategies and shed light on the economic costs and risks of various alternatives.

Therefore, a better understanding of the suitability of concrete floaters for floating offshore wind turbines is crucial for guiding its market development. This project aims to fill the knowledge gaps, providing the industry with the insights needed to harness the full potential of concrete in floating wind applications. A successful project in this domain will provide comprehensive information that enables floating wind farm developers to plan, design, execute, operate, and decommission floating wind farms with concrete foundations that are safe, cost-effective, and environmentally friendly. This includes the ability to draft decommissioning plans that address the unique challenges posed by concrete foundations.

2.3. The main objectives of this work are to

- Assess and validate of various types of concrete suitable for floater buildout, with respect to long-term integrity, corrosion of reinforcements, general deterioration, costs, and carbon footprint.
- Evaluate the potential strategies for decommissioning and recycling concrete floaters, considering the associated costs and how methods may differ by region.
- Calculate the carbon footprint of concrete floaters associated with identified decommissioning and end-of-life strategies.
- Comparison of steel and concrete floaters' carbon emissions during their lifetime (construction, operation and maintenance, and decommissioning).
- Utilise results to develop a concrete floater roadmap to deployment

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 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 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 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 18 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 CFAD 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: Review of concrete platforms used offshore	<i>This work package aims to determine the opportunities and challenges of using concrete to build structures offshore</i> • Conduct a literature review on the use of concrete offshore, with a special focus on its use by the oil and gas (O&G) industry. This should include, but not limited to: ▪ Types of concrete used offshore, especially for floating platforms/structures, ▪ Concrete manufacturing of fixed-bottom offshore wind - to explore potential synergies applicable to concrete floater manufacturing and serialised production ▪ Existence of segmented construction techniques – including applicable key learnings from the construction and fabrication of maritime infrastructure and bridge building, ▪ Reliability of concrete structures/platforms offshore, deterioration/degradation of concrete structures with differing reinforcement materials (steel, composite bar, fibres), and existing maintenance and repair strategies, ○ Summarise the main impact on the reliability of concrete options and compare these to steel, highlighting the pros and cons of each ▪ Concrete floating structures loadout and launch methodologies – discuss their applicability to large-scale floater deployment in contrast to current single floater deployment ▪ Decommissioning and end-of-life strategies of concrete platforms. • Carbon emissions from using concrete offshore, ▪ Review work undertaken by other industry bodies such as OREC's floating offshore wind centre of excellence and the Carbon Trust Sustainability JIP ▪ Evaluate any existing industry standards to measure the carbon footprint of concrete and steel floaters, determining if the boundaries of data collection allow direct comparability. • Investigate concrete decarbonisation solutions being implemented by offshore industries, with a particular emphasis on the use of Supplementary Cementitious Materials (SCMs) on concrete structures offshore, especially on floating structures. Identify the maximum levels of SCMs currently used by the industry and review the technical maximum limits of SCMs that can be used on concrete floaters.

	▪ This analysis should include a review of the limitations of each decarbonisation strategy and identify the constraints of using existing and emerging SCMs as well as low carbon/green cement and concrete technology in different sea regions. • A techno-economic comparison of the use of SMCs on concrete should be undertaken where factors such as cost, carbon emissions, corrosion and deterioration, maintenance requirements as well as restrictions for their use in certain global areas should be conducted. This evaluation should be undertaken for a GW scale project. ▪ It is expected that the contractor would undertake this evaluation relying on the literature findings, their knowledge, and one-to-one interviews with industry players such as concrete suppliers and concrete floating foundations designers.
Project Deliverables: - D1.1: Report –Review and analysis of concrete platforms used offshore and their global suitability. - D1.2: Presentation – Presentation to Floating Wind JIP partners.	
WP2: Review of floating offshore wind floater concepts	<i>This work package aims to identify the primary failure modes of concrete FOW floaters and highlight areas where the industry should concentrate its efforts to maximise the benefits of using concrete.</i> • Conduct a review of existing concrete floating offshore wind (FOW) floater concepts (number of floaters to be agreed with FLWJIP partners) in the current market and how these concepts relate to O&G structures identified on WP1. • Identify and review characteristics of FOW concrete floaters which differ from previously developed O&G structures, such as slenderness, segmental connections, dynamics and fatigue. • Describe critical factors influencing FOW concrete floaters such as, but not limited to: ▪ Long-term integrity ▪ Reinforcement corrosion/degradation ▪ General material deterioration ▪ Loading and fatigue throughout the structure's lifecycle • Qualitatively assess FOW floater concepts against the identified critical factors. Review and identify alignment with existing experience highlighting experience gaps. The appointed contractor would be expected to engage with designers and fabricators of concrete floaters to understand how to address identified critical factors. • Research and qualitatively evaluate options for optimising concrete FOW floaters in relation to mitigating identified critical

	factors and improving manufacturability, including materials, and modular construction techniques among other factors. - Based on the above, conduct a simplified structural analysis of a floater, or section of a floater, to investigate and understand the differences between using 'monolithic/singular' vs modular construction techniques, i.e.: conduct structural analysis of a floater pontoon under critical loads condition. - Representative loads may be derived from previous contractors' experience, simplified global analysis models using reference turbines, or from collaboration with a concept designer/owner¹. The analysis shall quantify the difference in wall thickness/concrete grade, rebar and pre-stressing requirements between the two approaches, and potentially establish design or practical limits in terms of slenderness, durability, fatigue or other criteria.
Project Deliverables: D2.1: Report – Summary of findings of the FOW concrete floater review and analysis study D2.2: Presentation – Presentation to Floating Wind JIP partners.	
WP3: Decommissioning and end-of-life strategies and plans	<i>The aim of this work package is to understand and develop decommissioning and disposal/recycling strategies and plans for floating wind farms with concrete floaters, considering costs, and regional dependence</i> Following the learnings of the literature review in WP 1, the contractor should engage with industry stakeholders to investigate current decommissioning and disposal/recycling plans for concrete floaters. This should focus on evaluating the pros and cons of each plan or strategy and their suitability for different world regions, as well as the expected duration of decommissioning, disposal and associated risks. - The appointed contractor would be expected to use the outputs of industry engagement and its own experience to define scenarios for decommissioning and end-of-life of FOW concrete floater concepts, this should include the methodology used to define each scenario and its boundaries. These scenarios should aim to enhance the understanding of carbon footprint, cost, and risk associated with decommissioning concrete floaters. At a minimum, the following scenarios should be considered, although the contractor may also take other factors into account: - Location –e.g., proximity to cement and aggregates sites, floater construction and

¹ Bidders are required to specify in their bid how they will generate representative loads, including the approach they will take, how it will be implemented, the inputs and reference models they will use, and any prior knowledge, experience, or proprietary data they will leverage to develop these representative loads.

	assembly sites, as well as concrete recycling sites ▪ Decommissioning strategy – e.g., disconnection of floater from its offshore station, tow and transport to end-of-life/next-life facilities. ▪ End-of-life strategy: e.g., redeployment, repurposing of floaters, recycling – including new techniques on aggregate separation, disposal of floater material, etc, and how these are impacted by the choice of reinforcement material, presence of coating, impact on ancillaries, material grade etc ▪ Impact of floater concept design – e.g., monolithic concept versus modular construction concepts, reinforcement levels of the floater, nature-positive designs, and other design features that can impact decommissioning. The results of the analysed scenarios should provide an understanding of existing plans and strategies applicable for decommissioning and end-of-life of concrete floaters, allowing FLWJIP partners to understand how this information can be used to draft future decommissioning plans.
Project Deliverables: - D3.1: Report – Report outlining decommissioning and end-of-life strategies/plan suitable for different global regions - D3.2: Presentation – presentation to Floating Wind JIP partners.	
WP4: Carbon cost calculation	<i>This work package aims to provide an understanding of the lifecycle carbon emissions of previously defined decommissioning scenarios</i> • For each scenario developed in WP3, the contractor should calculate the carbon emissions associated with each decommissioning/end-of-life strategy, or the main strategies agreed by FLWJIP partners. The contractor should use the Carbon Trust Sustainability JIP Offshore Wind Industry Product Carbon Footprint Guidance, 2024² for a base case offshore wind farm, as selected by the contractor and agreed by FLWJIP partners, to identify the range of carbon emissions associated with different decommissioning and end-of-life strategies for concrete. If the findings from WP 1 indicate that the carbon emissions of concrete and steel floaters are directly comparable, the contractor will be required to assess and compare the emissions of both materials based on selected decommissioning and end-of-life strategies. Should direct comparability not be feasible, the contractor will need to propose a methodology to estimate and compare the

² The Sustainability JIP Offshore Wind Industry Product Carbon Footprint Guidance, September 2024 is compliant with core standards for product-level assessment of carbon footprints including ISO 14067 and GHGP Product Life Cycle Accounting and Reporting Standard.

	expected emissions of concrete floaters with those of steel floaters. The carbon footprint should consider the entire lifecycle of the wind farm as stated in the Guidance, including: ▪ Production stage (A1- A3) to include upstream emissions and removals from material extraction and processing, material transport and manufacturing activities, components and reinforcement materials used in the development of the floater; ▪ Construction and installation (A4-A5) including emissions arising from transportation of assets, components and materials to the site, fuel and energy usage in vehicles and vessels; ▪ Use of infrastructure (B1-B8) including emissions associated with its operational lifetime including emissions from transport for maintenance, repair and replacement; ▪ End-of-life of infrastructure stage (C1-C5) including emissions arising from fuel and energy usage, emissions from waste processing and treatment of materials deemed ready for disposal or recovery (reuse, recycling and energy recovery). • The contractor should supply FLWJIP partners with the calculation sheet with floater and decommissioning emission data, defining variables and assumptions made to allow FLWJIP partners to calculate emissions with their individual project data. • For each scenario the contractor should also include decommissioning expenditure (DECEX) and risk assessment. • The results should compare the expected carbon emissions of concrete floaters with those of steel floaters. Additionally, they should account for any anticipated industry changes that could affect these emissions, such as the adoption of “green steel” or “green concrete.”
Project Deliverables: - D4.1: Summary of carbon emission calculations, outlining assumptions and results for different concrete types in different world regions. - D4.2: Carbon emission calculation sheet - D4.3: Presentation – presentation to Floating Wind JIP partners.	
WP5: Roadmap to deployment	<i>The aim of this work package is to provide developers with a credible roadmap to deployment of concrete floaters.</i> • Based on the outputs of WP1 to WP4, provide conclusions which include producing a roadmap for the next steps required to deploy concrete floaters in different global regions. • This roadmap should reference which concrete floater type could be deployed in which region in the context of findings from WP3, highlighting the main recommended decommissioning strategy in

	each region, the main challenges the industry will need to resolve to allow large-scale concrete floater deployment, and expected deployment timeline. The roadmap should evaluate how implementing concrete floaters could support the industry's decarbonisation efforts compared to more established steel designs. It should also highlight any scenarios where steel/green steel might have a lower carbon footprint than concrete in the long run.
Project Deliverables: - D5.1: Report – Detailing a roadmap for potential future implementation of concrete floaters - D5.2: Presentation – Presentation to Floating Wind JIP partners.	
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 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 ○ the production of a 3-10 pages Executive Summary Report for the entire Project (for dissemination within the Floating Wind JIP); ○ 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). 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.
Project Deliverables: - DA.1: Monthly flash reports - DA.2: Executive Summary Report - DA.3: Final presentation - DA.4: Delivery of webinar - DA.5: Project Closeout Form	

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.
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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) None
- 5.3. **Subcontractors and consortium bids:** It is the discretion of the bidder if they choose to engage third parties to support delivery of a prospective project. The bidder is responsible for agreeing and enforcing any required contractual agreements related to project delivery, which include the flow down of the contractors' conditions assigned to this ITT
- 5.4. **Access to modelling data & previous project deliverables:** Unless specifically stated within the scope of work the bidder should not anticipate receiving previous Floating Wind JIP deliverables to support with their delivery of the project and should cost their bid submissions accordingly. For projects requiring modelling, the Floating Wind JIP 15MW reference turbine files will be shared with the bidder to support with delivery. It should be assumed that no further modelling files or data sets will be shared unless otherwise stated in the scope of work and bidders should cost their bid submissions accordingly.
- 5.5. **Stakeholder Engagement:** As outlined within criterion 3 contractors are required to have relevant relationships to enable delivery of the project. Although the Floating Wind JIP partners as well as organisations within the Floating Wind Advisory Group will provide some form of engagement to the project this should not be relied upon solely. The bidder should have the necessary contacts in place to ensure they are able to obtain the required input to ensure delivery of the project. When engaging with third parties (including innovators) the bidder is required to ensure sufficient data sharing and non-disclosure agreements are in place to meet the requirements of the scope of work.

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 £150k and £180k.
- 6.2. The Bid Price submitted with the Tender must be derived from the cost breakdown in the Bid Price Calculation Sheet, and must include all expenses. The Bid Price is the price for the activities that will address the Scope of Work (and any Alternative Work proposed by the Bidder). The Bid Price Calculation Sheet and the Bid Price shall not include the price of any Additional Work suggested by the Bidder. Instead, the price for such Additional Work Packages shall be stated separately to the Bid Price in the Main Bid Document.
- 6.3. If the Bid Price exceeds the expected range of the Total Budget as stated under section 6.1, to avoid receiving a lower score for criterion 4, in the Main Bid Document the Bidder should provide a clear and justified reason why the Bid Price exceeds the expected budget.
- 6.4. All costs and rates quoted in the Main Bid Document and Bid Price Calculation Sheet must be in GBP (£) and all staff rates quoted in the Tender must represent the Day Rate for employment of staff members.
- 6.5. Any expenses must be separately included under Expenses.

7. Tender Evaluation Criteria

Bidders should take the following evaluation criteria into account when preparing and submitting their Tenders. 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: 30%)

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

CRITERION 2: EXPERIENCE (WEIGHTING: 35%)

Description	Information required from Bidders
Experience in the use of concrete offshore	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. 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 concrete floater design	
Experience in and knowledge of concrete structures decommissioning and end of life strategies	

CRITERION 3: STAFF SKILLS (WEIGHTING: 20%)

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 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 concrete suppliers, floating foundations designers, fabricators of concrete floaters 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: 15%)

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 4. 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.

The Carbon Trust has committed to reaching Net Zero by 2050. Our associated targets have been validated by the Science Based Targets Initiative (SBTi)³. To meet the initial targets that we have set for ourselves, we encourage all our suppliers and sub-contractors to themselves have equivalent plans

³ <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 ⁴).
Main Bid Document	Has the meaning given in section 3.1. No template is provided.
Project	The Concrete floater analysis and decommissioning or CFAD 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.

⁴ 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: - 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.