

21st January 2026

Dear Sir/Madam,

Invitation to Tender for the Concrete Structure Design, Fabrication, Construction, and Delivery Methodologies project for the Floating Wind Joint Industry Programme

You are invited to submit a proposal for the Concrete Structure Design, Fabrication, Construction, and Delivery Methodologies project which is part of the Floating Wind Joint Industry Programme. The key objective of this project is evaluate onshore and afloat concrete substructure fabrication technologies to determine their feasibility and operating limits.

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 Structure Design, Fabrication, Construction, and Delivery Methodologies 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 29th January. Answers to clarification questions will be communicated by 2nd February. 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 6th March 2026.

The timeline of this procurement process is as follows:

Deadline for clarification questions	29th January
Clarification response date	2nd February
Submission of full proposal	6th March 2026
Bidder interviews	w/c 23rd March
Project kick off	3rd April

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 Structure Design, Fabrication, Construction, and Delivery Methodologies 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 Structure Design, Fabrication, Construction, and Delivery Methodologies Project

Description of Tender

Contents

1. Introduction to the Floating Wind Joint Industry Programme	5
2. Background and objective of the CSD project.....	5
3. Tender documents for submission.....	7
4. Scope of Work.....	9
5. Intellectual Property, Knowledge and Input Data	18
6. Bid Pricing	20
7. Tender Evaluation Criteria.....	21
Criterion 1: Approach to Work (Weighting: 35%).....	21
Criterion 2: Experience (Weighting: 35%)	21
Criterion 3: Staff Skills (Weighting: 15%)	21
Criterion 4: Bid Price (Weighting: 15%).....	22
8. Glossary.....	24

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 CSD project

- 2.1. The Floating Wind JIP Partners would like to investigate the use of concrete as a primary material for floating offshore wind (FOW) substructures and its potential advantages when compared to steel alternatives, such as durability, cost, scalability, sustainability and opportunities for local content.

To fully realise the benefits of concrete floaters, regardless of the construction method, the FOW industry must validate the potential cost-effectiveness of material supply, manufacturing, and assembly processes. Although these aspects have been explored at a high level in previous initiatives (such as FOW CoE PR10, PR36, and FLW JIP FIL), they have not been examined in sufficient detail to confirm key assumptions made at the project level.

In addition, the fabrication and handling of concrete floaters for the offshore wind industry will require substantial investment in port infrastructure. To meet the demands of commercial-scale floating wind projects, ports must be equipped to support the construction of these large structures. To address this challenge, floater designers have two alternative approaches to fabricating concrete floaters: onshore fabrication, which will require multiple port upgrades and space, and afloat fabrication, which could reduce the infrastructure requirements onshore, thereby enabling a wider range of ports to participate in concrete floater fabrication and loadout. However, afloat fabrication could impact other port elements such as quay length and quayside water

depths, as well as project timelines. Hence, this study aims to shed light on the potential advantages and drawbacks of afloat fabrication.

This project aims to address critical knowledge gaps that remain unfilled by earlier studies, which have primarily focused on the fundamental technical design of concrete substructures and the engineering and materials science underpinning the primary concrete components.

The main objectives of this work are to:

- Assess the available technologies for both onshore and afloat fabrication of concrete substructures, evaluating their technical feasibility and the potential operating conditions under which they could be deployed.
- Develop 2/3 relevant representative concrete substructure designs for use in FLW JIP projects.
- Enhance understanding of concrete substructure typologies, core fabrication and assembly methodologies and potential for delivery at large scale.
- Assess the operating conditions under which afloat fabrication may be possible and thereby consider the feasibility of this as a solution in different markets.
- Conduct case studies of robust construction programmes and define reliable cost estimates

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-optimal 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 CSD 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: Reference designs development	<p>This WP aims to deliver 3 concrete floater reference designs for a 15 MW+ turbine agreed with FLWJIP partners.</p> <ul style="list-style-type: none"> • Review state-of-the-art concrete floaters designs under consideration to be used by the floating wind industry. This review should include: <ul style="list-style-type: none"> ▪ Concrete structures that can be fabricated through slip-forming and precast methods. ▪ Monolithic concepts and modular floater designs ▪ Engagement with industry stakeholders: <ul style="list-style-type: none"> ○ Concrete manufacturers ○ Floater concepts designers/owners ○ DNV Concrete FLOW JIP ○ ORE Catapult Floating Wind Centre of Excellence • Summarise the findings of the review, highlighting: <ul style="list-style-type: none"> ▪ Strengths and weaknesses of the reviewed designs ▪ Material requirements – concrete grade and quantity, reinforcement, watertightness, and secondary steel needs ▪ Manufacturing and deployment/launch¹ requirements, and current capabilities to construct these floaters • Develop high-level floater concept ideas based on the results of the review • Run a workshop with FLWJIP partners to present the results of the review and present high-level concept ideas. <ul style="list-style-type: none"> ▪ The workshop should aim to allow FLWJIP partners to: <ul style="list-style-type: none"> ○ Gain an understanding of the most relevant designs ○ Understand which concepts could be fabricated and deployed in different world markets ○ Discuss which critical factors, knowledge gaps, and known issues should be considered on concrete floater designs (long-term integrity, deterioration, O&M) ○ Select which concrete floater designs should be developed further into a reference concrete structure design as part of the project. • Develop 3 representative reference concrete substructure designs, based on the research outputs of the workshop feedback.

¹To facilitate the literature review, the appointed contractor would be expected to liaise with the appointed Load out of Floating platforms (LFPA) project contractor on the literature review on load out for concrete floaters.

	<ul style="list-style-type: none"> ▪ The FLWJIP will share its existing steel floater reference design as an example of the expected outputs of this WP. As a minimum, the developed reference designs should include: <ul style="list-style-type: none"> ○ Conceptual design report (basis for the design, site conditions, standard and guidelines, operating conditions, mooring/tendon systems used, and generated numerical input files. ○ It would be expected that the metocean conditions would be aligned to the extent possible with those utilised in current FLWJIP steel floater reference designs, but should be discussed and agreed upon alongside FLWJIP partners <ul style="list-style-type: none"> ➢ Conventions and definitions used in the original designs ➢ Codes and standards – if applicable to concrete floaters ➢ Metocean conditions (wind and wave conditions, current conditions, soil conditions for anchoring, water depth etc) ○ The contractor would submit the complete set of modelling files used in the development of the floaters, including the editable files (e.g., CAD models, OrcaFlex files), corresponding to the final configurations.
Project deliverables:	<ul style="list-style-type: none"> - D1.1: Report- Summary of concrete floater review and stakeholder engagement - D1.2: Workshop discussion and output summary - D1.3: 3 concrete floater reference designs conceptual design report - D1.4: 3 concrete floater modelling files - D1.5: Presentation – Presentation to Floating Wind JIP partners.
WP2a: Afloat review	<p>This WP aims to delve into existing information and techniques under development for fabricating afloat concrete structures.</p> <ul style="list-style-type: none"> • Following the review undertaken on WP 1², conduct a thorough literature review on afloat construction methods, including but not limited to: <ul style="list-style-type: none"> ▪ Existing afloat fabrication methods in the offshore wind industry, as well as other offshore industries ▪ Safety considerations and regulatory requirements (e.g. HSE, MCA, port authority, etc.) with afloat fabrication

² Based on the appointed contractor's capabilities, this review may be undertaken in parallel to WP 1

	<ul style="list-style-type: none"> ▪ Technical feasibility of implementing reviewed methods for commercial-scale concrete floater construction ▪ Implications of afloat fabrication through life integrity of a floater (e.g. impact of early concrete submergence on curing and lifetime integrity) ▪ Relative motion criteria under which afloat fabrication can be undertaken ▪ Port infrastructure requirements and required financial investments to develop the required infrastructure ▪ Logistical requirements ▪ Advantages and disadvantages of afloat methods compared to onshore fabrication methods, including high-level cost considerations ▪ Signal which floater types might not be suitable for afloat construction • Engage with stakeholders with experience in the design and application of afloat construction methods to: <ul style="list-style-type: none"> ▪ Discuss literature review findings and the applicability to FOW. ▪ Review the latest afloat fabrication technologies under development – including those that might not yet be part of public-facing literature. ▪ Examine port infrastructure and logistical requirements for afloat construction of floaters, aiming to address gaps in the existing literature with expert knowledge.
Project deliverables <ul style="list-style-type: none"> - D2a.1: Report- Review of afloat construction methods - D2a.2: Presentation – Presentation to Floating Wind JIP partners. 	
WP 2b: Afloat assessment	<p>This WP aims to technically assess the operating conditions of afloat fabrication to determine its feasibility</p> <ul style="list-style-type: none"> • In order to assess afloat construction technology utilisation and limits, the contractor will define 2 or 3 reference cases, including port requirements, metocean conditions, definition of fabrication platform, and suitable concrete substructure manufacturing methods: <ul style="list-style-type: none"> ▪ Conduct a technical analysis of operating conditions required for afloat construction methods utilising OrcaFlex or a similar software against motion criteria and general metocean conditions identified in WP2a. The contractor should identify their modelling capabilities in the proposal and determine if they have the capabilities to run simulations as required. <ul style="list-style-type: none"> ○ Metocean conditions data should be comparable with data from multiple selected ports to assess the potential operational windows for afloat fabrication

	<p>within different world regions. This step should help identify where Afloat fabrication could be suitable (i.e.: ports within relatively calm sea regions could utilise afloat fabrication regularly through the year, but ports within rough seas will face suitability constraints).</p> <ul style="list-style-type: none"> ○ Considering afloat fabrication motions in different environmental conditions, to understand the limits of sea states and wind beyond which afloat fabrication can no longer be performed – tolerance assessment. <ul style="list-style-type: none"> (a) The tolerance assessment should be supported by fabrication plans, showcasing elevation requirements of the cranes with the components to ensure visualisation of the concept. (b) Provide clarity on weather downtime and restrictions expected for afloat fabrication which could impact the cost and build-out programme ▪ Compare traditional methods with afloat methods for different wind farm scales, including, but not limited to: <ul style="list-style-type: none"> ○ Infrastructure needs ○ Feasibility of fabrication ○ Logistic requirements ○ Time requirement ○ Costs
<p>Project deliverables:</p> <ul style="list-style-type: none"> - D2b.1: Report – Technical analysis and limits of afloat construction methods within reference cases, including supporting information (model data) - D2b.2: Presentation – Presentation to Floating Wind JIP partners. 	
<p>WP3: Concrete floater manufacturing and construction method statements</p>	<p>This WP aims to provide an understanding of the concrete floater manufacturing construction requirements onshore and afloat</p> <ul style="list-style-type: none"> • To provide clarity on the requirements for fabricating the concrete floater reference designs in WP 1, a detailed method statement for the serial manufacture and assembly of the reference floater cases will be developed. The number of cases to be considered should be defined and agreed upon with FLWJIP partners. The method statement should at a minimum detail: <ul style="list-style-type: none"> ▪ Initial site mobilisation, fabrication facility configuration and post-construction demobilisation ▪ The required materials, including details of flow into the facility from off-site supply ▪ Resources such as lifting requirements, logistics, manufacturing tooling, and labour ▪ Construction programme

	<ul style="list-style-type: none"> • Method statements should be developed for both onshore (land-based) floater production (on-dock & load out, and dry dock & float-out), as well as for afloat production methods where applicable. <ul style="list-style-type: none"> ▪ Liaise with the LFPA project-appointed contractor to integrate findings of the method statement from the LFPA project on concrete floater loadout. • The outputs of the method statements should be utilised to assess the potential impact of afloat technologies on concrete floater fabrication logistics, considering the developed concrete reference designs. • The results of the method statements should include the port requirements for both afloat and onshore fabrication, including but not limited to: <ul style="list-style-type: none"> ▪ Quayside length and strength ▪ Facilities required ▪ Cranage capacity required ▪ Yard/laydown area requirements ▪ The appointed contractor should review and align, if applicable, port requirements defined for concrete floaters as part of the LFPA project.
<p>Project deliverables:</p> <ul style="list-style-type: none"> - D3.1: Method statement(s) – Onshore fabrication - D3.2: Method statement (s) – Afloat fabrication - D3.3: Report – Impact of afloat construction on floater fabrication - D3.4: Presentation – Presentation to Floating Wind JIP partners. 	<p>WP4: Cost estimate tool</p> <p>The objective of this work package is to undertake a complete cost assessment of concrete floater fabrication, assembly, storage, and launch.</p> <ul style="list-style-type: none"> • Utilising outputs from the previous work packages, the contractor should model indicative cost estimates of manufacture, assembly, and launch of the developed baseline concrete floaters, including facility mobilisation/demobilisation, wet storage³ and WTG installation. <ul style="list-style-type: none"> ▪ Cost modelling should be undertaken for each method statement from WP 3. ▪ Cost estimates should be based on common or agreed rates

³ At the discretion of FLWJIP partners, outputs of the Stage 3 Phase 2 Wet Storage Solutions (WSS) project on cost considerations might be shared with the appointed contractor.

	<ul style="list-style-type: none"> ▪ An agreed format for the cost estimates (Excel workbook or other tool) to be agreed with FLWJIP partners. ▪ Cost estimates should consider all costs associated with concrete floaters fabrication, assembly, storage, and launch for a GW-scale project (project size to be agreed with FLWJIP partners), including: <ul style="list-style-type: none"> ○ Facility mobilisation / demobilisation costs ○ Material costs – concrete, steel, and other materials included within the method statements. ○ Infrastructure cost ○ Cost of afloat technology - if applicable ○ Labour costs required – including transport of materials and floater fabrication ○ Storage costs of pre-cast parts prior to assembly ○ Floater assembly costs ○ Floater launch cost ○ Cost of vessels required for different operations ○ Wet storage costs ○ WTG marshalling costs ▪ Cost estimates should be provided on a timeline basis to provide clarity on when these costs are expected to be incurred during the lifecycle of floater fabrication to deployment ▪ The contractor would be expected to review the assumptions/variables made within the cost model exercise developed for the LFPA project and incorporate relevant assumptions within the CSD cost model if appropriate. ▪ The main limiting factors that could cause bottlenecks within the process, such as vessel availability or floater fabrication rates, should be indicated, as these will form part of the sensitivity analysis carried out within WP 5.
Project deliverables: <ul style="list-style-type: none"> - D4.1: Report - Cost estimates of baseline floaters - D4.2: Costing tool - D4.3: Presentation – Presentation to Floating Wind JIP partners 	
WP 5: Programme / Cost Sensitivity / Risk Assessment	<p>The objective of this work package is to carry out a sensitivity analysis of cost estimates and conduct a risk assessment covering the full cycle of concrete floater fabrication through to launch.</p> <ul style="list-style-type: none"> • Based on the cost estimates developed on WP 4 and the main limiting factors identified, the contractor will undertake a sensitivity analysis on the main factors' impact on the overall costs. The factors to be analysed will be agreed upon with FLWJIP partners. <ul style="list-style-type: none"> ▪ To the extent possible, the sensitivity analysis should highlight:

	<ul style="list-style-type: none"> ○ Impact of selected parameters on overall cost ○ Impact of these parameters of wind farm build-out on the agreed wind farm size ○ Impact of selected parameters on the overall floater production rate (i.e. how does the reviewed parameter impact the time required to build a floater) ○ Present at a high-level alternatives/workarounds to ameliorate the impact of the parameter under analysis (i.e., if vessel availability delays the wet storing of floaters, are there alternative solutions to move and store a floater short term allowing the next floater to be constructed?) and the economic impact of undertaking the alternative. ● Undertake risk assessment of the overall floater fabrication, construction and delivery. The risk assessment should specify the expected likelihood of the identified risk happening, the overall impact on the floater production schedule and implementable risk reduction strategies.
Project deliverables: <ul style="list-style-type: none"> - D5.1: Report - Cost sensitivity analysis and risk assessment - D5.2: Presentation – Presentation to Floating Wind JIP partners 	
WPA. Project Management	<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); ○ 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 ;

	<ul style="list-style-type: none"> ○ 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). <p>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>
<p>Project Deliverables:</p> <ul style="list-style-type: none"> - DA.1: Monthly flash reports - DA.2: Executive Summary Report - DA.3: Final presentation - DA.4: Delivery of webinar - DA.5: Project Closeout Form - DA.6: Input sheet for Floating Wind JIP Cost Model 	
Expenses	The Bidder should detail the amount of expenses it expects to incur throughout the Project. Expenses will be paid as incurred up to the amount specified and any unused balance will not be paid.

5. Intellectual Property, Knowledge and Input Data

- 5.1. Full details of the intellectual property requirements and conditions can be found in the attached 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) Outputs from Stage 3 Phase 2 Wet Storage Solutions (WSS) project - cost considerations
 - b) Literature review from the Stage 3 year 4 Load out of Floating platforms (LFPA)
- 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 OrcaFlex 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 £200k and £300k.
- 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	<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. 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.</p>
Additional Work	<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>
Project management	<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 to acquire information and manage potentially conflicting relationships.</p>

CRITERION 2: EXPERIENCE (WEIGHTING: 35%)

Description	Information required from Bidders
Experience in floating wind floater design	<p>In the Main Bid Document, Bidders should elaborate on their experience designing floaters for the floating wind industry.</p>
Experience in floater construction methods and programmes	<p>Bidders should also provide examples of relevant previous work, including the specific roles, responsibilities, and activities undertaken, that demonstrate their skills, capabilities, and experience in floater construction methods and programmes, as well as their understanding of the operating conditions associated with floater construction.</p>
Experience in and knowledge of offshore operating conditions	<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
CVs/Resumes	<p>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</p>

	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 manufacturers, floater concepts designers/owners, and DNV's concrete FLOW JIP members 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	<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)⁴. To meet the initial targets that we have set for ourselves, we encourage all our suppliers and sub-contractors to themselves have equivalent plans

⁴ <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 ⁵).
Main Bid Document	Has the meaning given in section 3.1. No template is provided.
Project	The Concrete Structure Design, Fabrication, Construction, and Delivery Methodologies or CSD 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.

⁵ 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.