

Offshore Wind Accelerator

OWA Stage IV Year 4 Quantifying Corrosion: Lifecycle Corrosion Condition Assessment and Fatigue Performance (LCCA) project.

Clarification Questions

#	Question	Response
1	Carbon Trust to confirm the scope of work refers predominantly to fixed foundations including monopiles and jackets. Please confirm if floating structures are excluded.	The focus of this project is on fixed bottom foundation types only.
2	Carbon Trust to confirm the scope of work focuses predominantly on weld regions as likely fatigue nucleation locations.	We would like to consider welded regions as well as other regions. It would be helpful for bidders to elaborate on, and make an assessment of, the extent of work required for considering the different regions, in particular welded regions.
3	Carbon Trust to clarify whether the project should be focused on foundations only (i.e. excluding nacelle, turbine, horizontal axis, other metallic components).	This project is focused on foundations only.
4	Carbon Trust to confirm the scope of work includes primary steel components only (i.e. excluding secondary ones).	Primary steel components are the focus; however, we would also like to consider secondary steel components if possible. The bidder should put forwards their proposal with details of which components they would propose to consider.

Carbon Trust to confirm their intention by terminology “early-stage corrosion”. Is this intended to include corrosion effects until complete polarisation of structure becomes effective or else? Please confirm if both GACP and ICCP systems shall be considered to this extent.

Carbon Trust to confirm if the contribution of protective anti-corrosion coating systems in applicable exposure zones shall be considered as part of this scope.

Carbon Trust to confirm if, in terms of lifecycle (focusing on corrosion) we can assume the following phases:

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- a) Atmospheric corrosion (structure in harbour, before installation).
- b) Free corrosion in seawater and in the tidal zone before starting up the CP system.
- c) Service life of the CP system: evaluation of the case where CP is not 100% effective, and some underprotection/overprotection can occur.
- d) Decommissioning, with no CP system working (exhausted galvanic anodes, or ICCP system turned off), but with structure partially polarized and covered with protective scaling.

Carbon Trust to confirm if a particular model case study will be provided at the beginning of the work scope including indicative design on the OW turbine, dimensions, steel grades, welding characteristics, geographical location, water depths, target design life etc or whether BIDDER shall make such reasonable assumptions.

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We would like to consider corrosion throughout the lifecycle of an Offshore Wind Foundation structure; this includes consideration of early-stage corrosion, atmospheric corrosion, free corrosion, corrosion at the decommissioning stage and fully developed corrosion.

The proposal should include assessment of corrosion for the different exposure zones including the atmospheric, tidal, and immersed zones.

We would like the bidder to put forward their proposal and to outline their proposed approach for considering corrosion at these different stages throughout an OWF lifetime. If it is possible, this may include proposing cases for stages which consider the impacts of coating systems and CP. We are happy for bidders to put forward their proposals in this regard.

The focus of this project is on corrosion condition assessment and understanding the relationship between corrosion condition and fatigue performance.

A particular model case study will not be provided. We would like bidders to put forward their proposal and to outline the different parameters and assumptions they would propose to use.

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Could we/are we allowed to bid on individual work packages identified in the description of tender?

We prefer to receive bids for the whole project. If you can only deliver specific work packages, we recommend forming a consortium who together would be able to deliver the whole project.

Bids may be submitted by individuals, companies, organisations or consortia.