Summary of the main findings from the market dialogue on the procurement framework for the commercial co-ownership of the Energy Island in the North Sea

March/April 2021

The Danish Energy Agency has conducted a market dialogue for potential bidders and relevant industries on the procurement framework for the coming Energy Island in the North Sea.

The market dialogue is part of the initial preparations for the coming procurement procedure for co-ownership of the Energy Island in the North Sea. The specific framework for the coming procurement procedure will be established in a subsequent political process.

As part of the market dialogue, the Danish Energy Agency published a discussion paper containing a number of themes and questions relevant to the procurement framework for co-ownership of the Energy Island in the North Sea. The discussion paper has introduced the Energy Island project in terms of expected timetables, possible business case models, corporate structure, construction and technical requirements as well as the possibilities for innovation and commercialization.

The Danish Energy Agency has encouraged all relevant market operators and potential tenderers to submit their written recommendations and answers to the questions raised in the discussion paper. In addition, the Danish Energy Agency has invited relevant market operators to participate in virtual dialogue meetings with the Danish Energy Agency.

The following market operators have participated in the market dialogue through bilateral meetings and/or through written inputs:

- ACCIONA
- AIP Management
- Ballast Nedam
- COMSA Corporación
- Dassault Systèmes
- DEME Group
The main findings from the market dialogue will be outlined in the following. No decisions have been taken regarding these findings. However, they will be a part of the further analysis regarding the procurement framework of the project.

**Early involvement of the contractor**

The discussion paper proposes a timetable in which the tender for the co-ownership and the tender for the construction of the island are divided into two separate tenders, and where the co-ownership is first tendered, followed by the tender for the establishment and construction of the energy island. The market operators involved consistently emphasized during the market dialogue that an early involvement of the contractor is an important prerequisite for ensuring the most optimal result. It is generally pointed out that if the contractor is not involved at an early stage, there will be a risk that the tenders submitted will be incomplete in relation to the construction of the island and that the budget estimates submitted will be too uncertain, meaning that the tenders cannot include a detailed project-specific construction concept and a fixed CAPEX without the involvement of a contractor. Furthermore, the market operators pointed out that the one-step tender also is preferable so that the operators can put together their own consortium, including a contractor, and thereby be able to take the construction- and budget risk.

In addition, it is pointed out by a number of market operators that they would like the soonest possible clarification of whether it will be a one- or two-step tender model so that investors and contractors can initiate the preparation and take part in the relevant consortia.
Timetable

The overall feedback was that the overall timetable for the island's establishment is realistic if relevant data, including MetOcean data, is available at the time of tender.

Related to the specific questions regarding the time for submission of tenders, the feedback was that if the tender must include detailed project-specific construction work descriptions, a longer period would be needed than the time periods stated in the discussion paper. It was further emphasized that the time set aside for submitting the tenders is related to how detailed a project the State wishes to receive. It was also pointed out that the EIA is crucial for the timetable. Several market operators suggested that the EIA process should be optimized. Furthermore, the market operators requested additional dialogue(s) about the project before launch of the tender. Several market operators pointed out that it is necessary to discuss the many uncertainties in the project.

Business case

General input regarding the business case
It was pointed out by the market participants that the energy island must not add to the coming wind farm owners’ costs, and that the energy island’s business model is part of the same economic circuit as that of the wind farm owners. The revenue base for the energy island can, thus, affect how attractive the offshore wind farms will be at a later stage.

Risks and the size of the island
It was emphasized by the market that they desired that the party with the best possibilities of influencing and most effectively managing a risk should be the party bearing a given risk. In general, clarity is desired as to whether the island’s size is dimensioned for 3 or 10 GW, so that this risk is eliminated. In order to be able to implement an optimal risk allocation, the market operators want clarification about the island’s overall size.

Minimum return
It was generally pointed out that irrespective of whether it will be a small or a large island, the case must be feasible. Furthermore, the market operators pointed out that if the private party is to assume a significant turnover risk, they wish to be guaranteed a minimum return, supplemented by a desire for the users to pay rent for use of the island already at the completion of the island and not only at the start of operation of the offshore wind farm and transmission system.
Corporate structure

The share of ownership
Market operators have not expressed a desire to have an ownership share of less than 49.9%.

In relation to the commercial/innovation activities, the market operators wish to be the majority owner or sole owner of these activities. Market participants have indicated that the State can be allocated a share of any gain generated by the commercial activities, provided that the State at the same time takes a share in any loss that may arise. It was further pointed out that the potential of commercial/innovation activities are unknown.

Construction of the island

Timeline
The overall feedback in relation to the construction of the island was that a construction period of five years is realistic (two years of preparation + three years of construction offshore). However, some market operators stated that the offshore construction could take place during two construction seasons, while other operators highlighted that four construction seasons would be needed.

Market operators pointed out that a construction season will be during summer. In relation to optimizing the overall project schedule, the general recommendation was that several of the processes can be carried out in parallel, and that Energinet’s tender and installation of the transmission infrastructure can be implemented before the island is fully established. Further, it was suggested that Energinet should carry out several installations onshore regarding the production of the energy island elements - alternatively offshore on an unfinished island or assembling the HVDC equipment in modules on land while the island is being completed.

Modular expansion
Different views have been expressed on the question of whether a modular expansion of the Energy Island towards the 10 GW is preferred instead of a full expansion from the start.

Among other things, it was emphasized that a full expansion from the start is considered the most optimal solution, as there are significant economies of scale, which will lead to lower costs while at the same time providing full flexibility in relation to innovative activities.

Contrary to the above approach, the benefits of the modular expansion of the Energy Island were also highlighted by other market operators. A modular expansion is generally considered to be able to match the long-term perspective in the energy project.
as well as to match an offshore wind sector in rapid development and can thus create the most future-proof and adaptive design. As the Energy Island is designed to last for many years, events will naturally occur over time, which will lead to continuous changes of the island, and which is why it is pointed out that a modular expansion will be the most optimal solutions.

**Sand resources**
Several market operators have mentioned that it is critical for the establishment of the island to have access to sufficient amounts of sand. It must be possible to extract the sand over the relatively short establishment period. Operators state that it will be difficult or impossible to obtain sufficient sand from commercially available licenses. Access to sand close to the island's location will reduce transportation costs and thus reduce the island's CAPEX. The market operators see it as a prerequisite for the timetable that the State identifies a suitable sand resource and initiates the EIA.

**The further process**
The feedback received from the market operators during the market dialogue is now being examined, and the relevant findings will be incorporated in the further considerations and preparations of defining the final procurement framework. The final procurement framework, including whether it will be a one- or two-step tender, will then be subject to political approval by mid-2021. In case of earlier clarification on whether it will be a one- or two-step tender, the Danish Energy Agency will announce the decision as soon as possible.

The Danish Energy Agency expects to conduct another market dialogue in Q4 2021 specifying in more detail the overall nature and scope of the procurement framework for the co-ownership. The Danish Energy Agency may schedule further market dialogues earlier in the process.