

Floating Offshore Wind in the Celtic Sea Programme

Developer Event: October 2022



Market Update - October 2022



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Sector Lead, Floating Wind

Welcome

The purpose of today's webinar is to:

- Share our latest refined areas of search.
- Outline the principles of the competitive leasing process that will launch in mid-2023.
- Discuss our approach to enabling and investment to accelerate deployment.
- Provide an opportunity for a questions and answers session.
- Provide further information on our next steps, including how we will gather further input from you.



Disclaimer

- The content of and positions outlined in these slides and our presentation today reflect our current thinking and are provided for information only.
- The Crown Estate makes no representations in respect of and accepts no duty, liability or responsibility for the content of them.
- Our thinking and the content of and the positions outlined in these slides and our presentation today may change in light of further feedback from you and stakeholders and as our thoughts and positions continue to mature.
- The information contained within this presentation relates to the potential leasing of new floating offshore wind projects in the Celtic Sea only.

The Crown Estate's Role

Floating Offshore Wind Programme Objectives



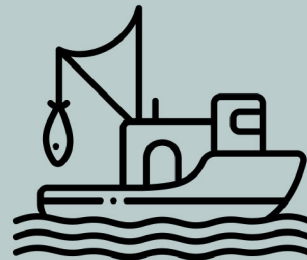
Unlock clean energy in new areas offshore, in support of the UK's net zero target



Help create economic and social value, including through new skills and jobs in the regional supply chain



Support the development of a new floating wind market in the UK, including the cost-reduction of the technology



Balance the needs of the environment, other users of the sea, and the communities onshore



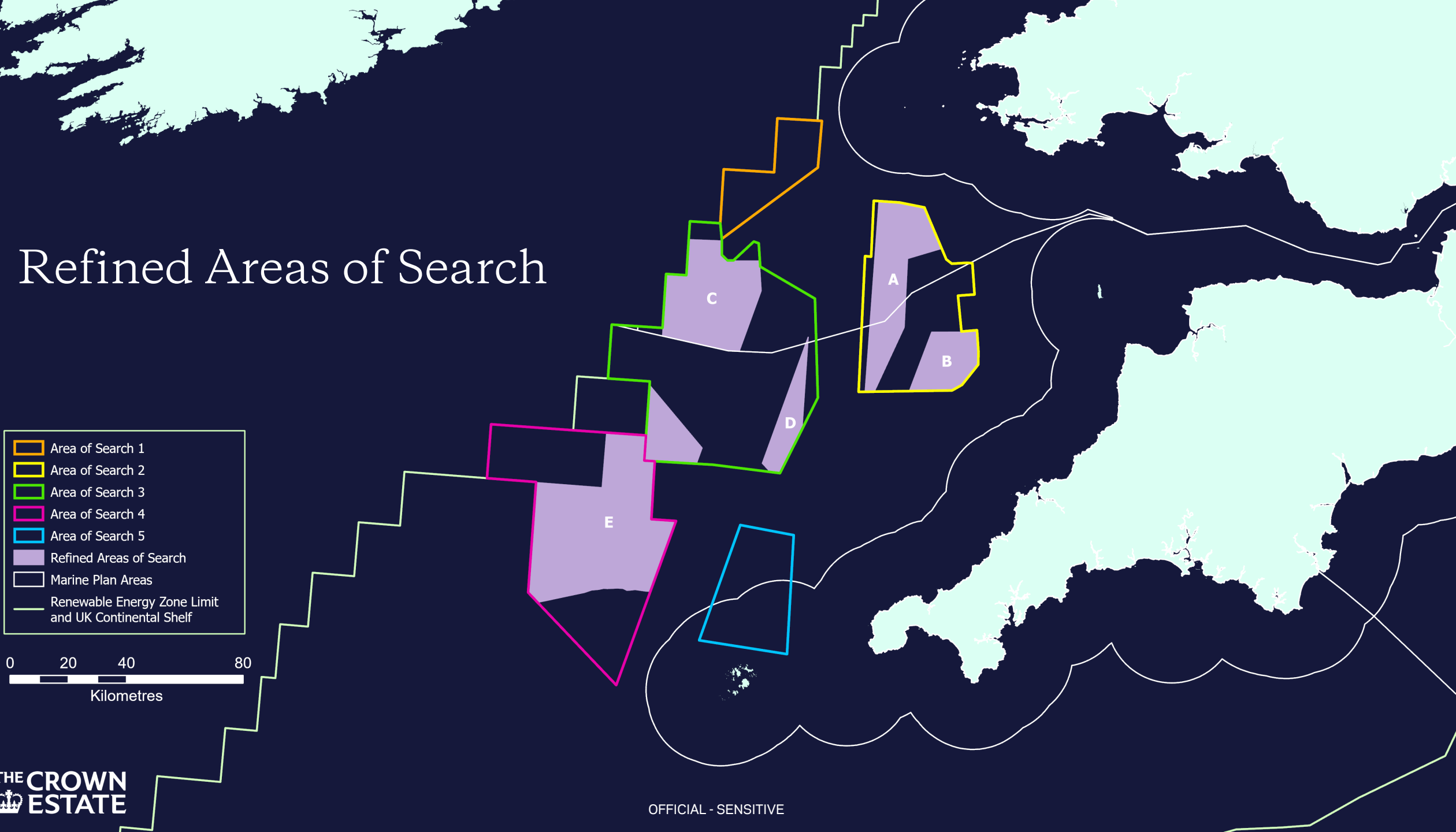
Help incentivise investment in critical enabling infrastructure, such as in UK ports and the electricity grid

Refined Areas of Search & Habitats Regulations Assessment



Refined Areas of Search

- Area of Search 1
- Area of Search 2
- Area of Search 3
- Area of Search 4
- Area of Search 5
- Refined Areas of Search
- Marine Plan Areas
- Renewable Energy Zone Limit and UK Continental Shelf



Habitats Regulations Assessment

- HRA is currently underway, running alongside the leasing process.
- Simultaneous management of HRA and leasing allows a saving of approximately a year across the process.
- Early HRA also provides better and timely information for developers.

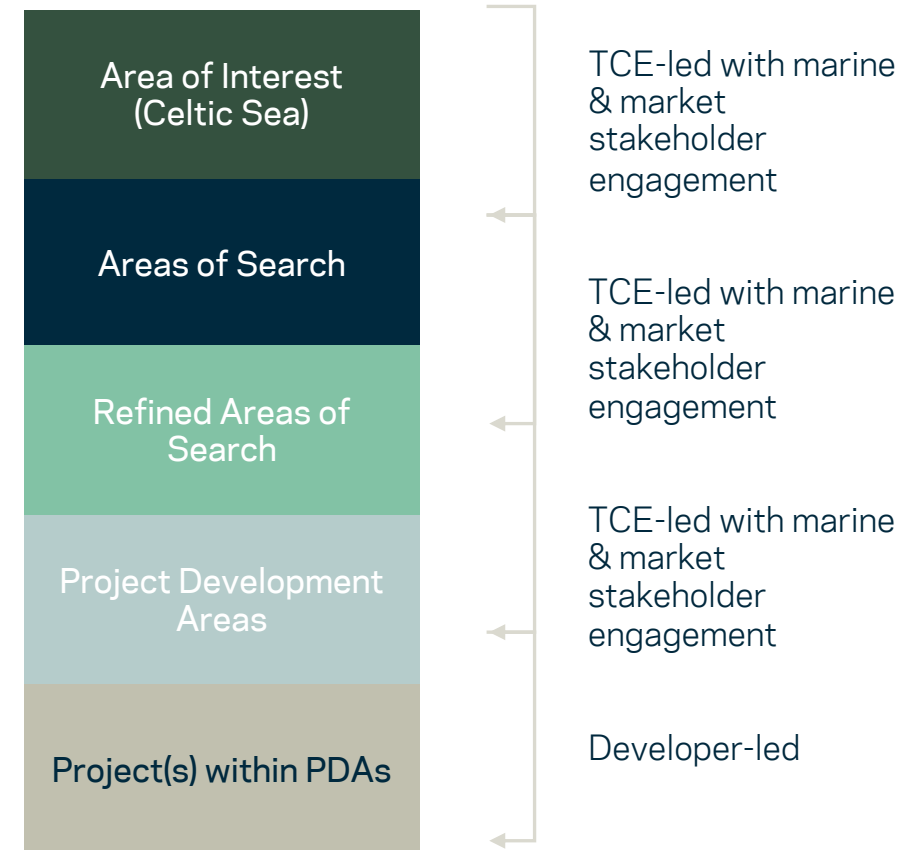


Project Development Areas



Project Development Areas (PDAs)

- The Crown Estate leads the design and definition of PDAs.
- Tender is expected to award 4 PDAs to at least 3 different bidders.
- PDAs will be a fixed size and shape and location.
- Design density ~3MW/km² density.
- Developers lead design of projects within the defined PDAs.
- During AfL period projects will need to be developed at a higher density (to be specified in due course).



Minimum and Maximum Capacity

- 1GW - PDA maximum capacity.
- Within PDA developers may:
- Take 'stepping stone' approach to develop one or more Projects.
- Consent more than one project.
- Have a single consent but can develop the site in multiple phases.
- 300MW minimum size.

Illustrative examples of PDA, Project, and Phase combinations



*Project: A developer can develop multiple Projects (each with a DCO) in 1 PDA
Phase: A project can have multiple construction Phases*

Bidder Entity Formation



Bidder Entity Formation

Bidder types

Bidders may bid as a single legal entity ('Sole Bidder') or as part of a broader consortium of legal entities.

Consortia membership

Membership of multiple consortia is not permitted.

Counterparty status

Both incorporated and unincorporated joint ventures are permitted.

Eligible Scope

- This is a dedicated leasing round for floating wind in the Celtic Sea.
- All wind turbines must utilise floating sub-structures which rely primarily on buoyancy to counteract vertical loading.
- We specifically intend to include offshore hydrogen production and offtake in the Technical Design Envelope.



Leasing Process



Leasing Design - Key Stages

IM
Information
Memorandum

PQQ

Backward look at:

1. Financial strength
2. Technical experience
3. Legal compliance

ITT1

Forward look at:

1. Project delivery
2. HSE competence
3. Financial competence
4. Supply chain
5. Social / environmental value

ITT2

Bidding phase:

Award of rights determined by price

AfL

Entry into Agreement for Lease with the Preferred Bidders

HRA process: Before ITT

Plan-level HRA

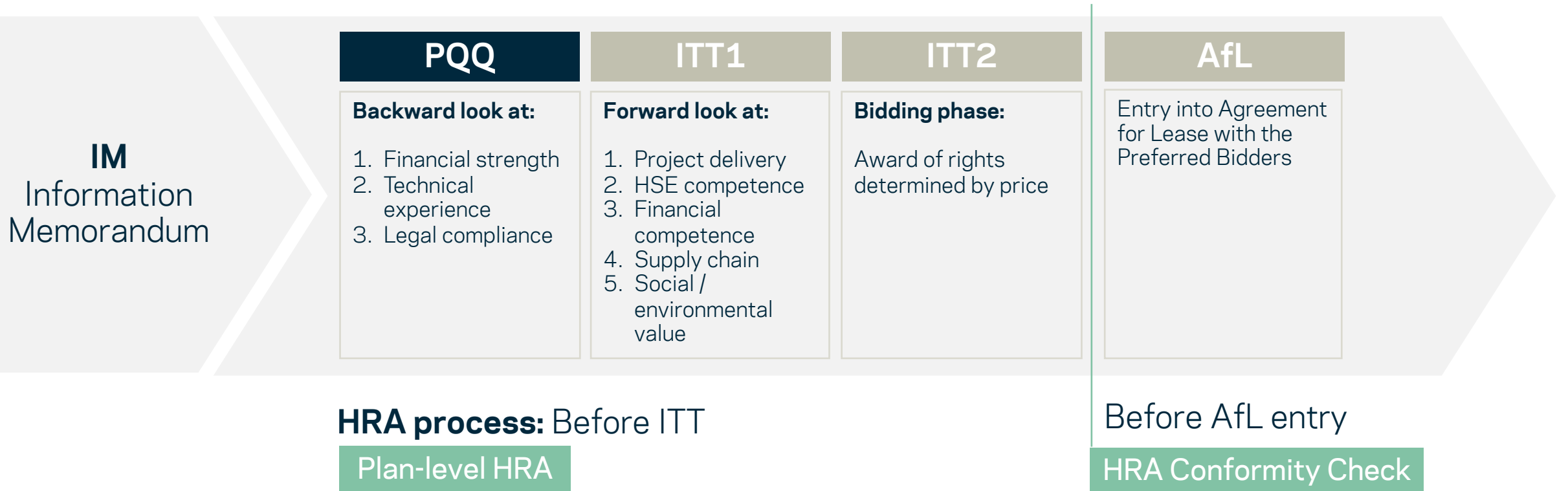
Before AfL entry

HRA Conformity Check

Sample criteria which may be tested

Leasing Design - Key Stages: PQQ

This section describes requirements for bidding entities that want to participate in the leasing process, in terms of corporate structures and PQQ requirements.



Pre-Qualification Criteria - Technical

- Prior floating wind experience not necessary.
- Past experience assessed across consortium.
- Most can be satisfied through equivalent transferable experience from other sectors / experience of offshore wind development.

Project management

HSE management

HSE regulatory action

**Offshore construction
experience**

Consent

EIA

Pre-Qualification Criteria – Legal and Financial

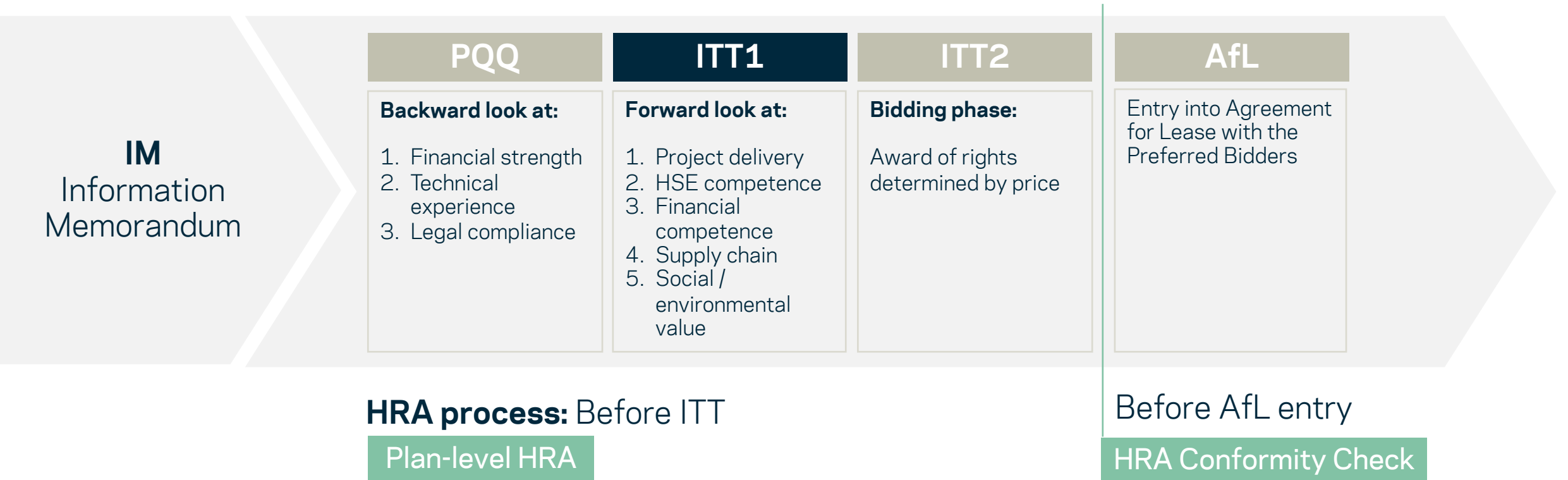
- Test for financial standing to develop projects at this scale.
- Test against mandatory and discretionary exclusion criteria.

Bidders will be assessed against mandatory and discretionary exclusion criteria



Leasing Design - Key Stages: ITT1

This section describes how the ITT stage would work - including the financial and technical competence assessment.



Invitation To Tender Stage 1: Technical

The ITT Stage 1 – technical information will assess the Bidder's proposed approach to deliver the project.

- Technical design envelope
- Consenting and stakeholder engagement
- Engineering risk assessment
- Project schedule
- HSE management
- Social & Environmental Value Creation
- Supply Chain

Invitation To Tender Stage 1: Commercial

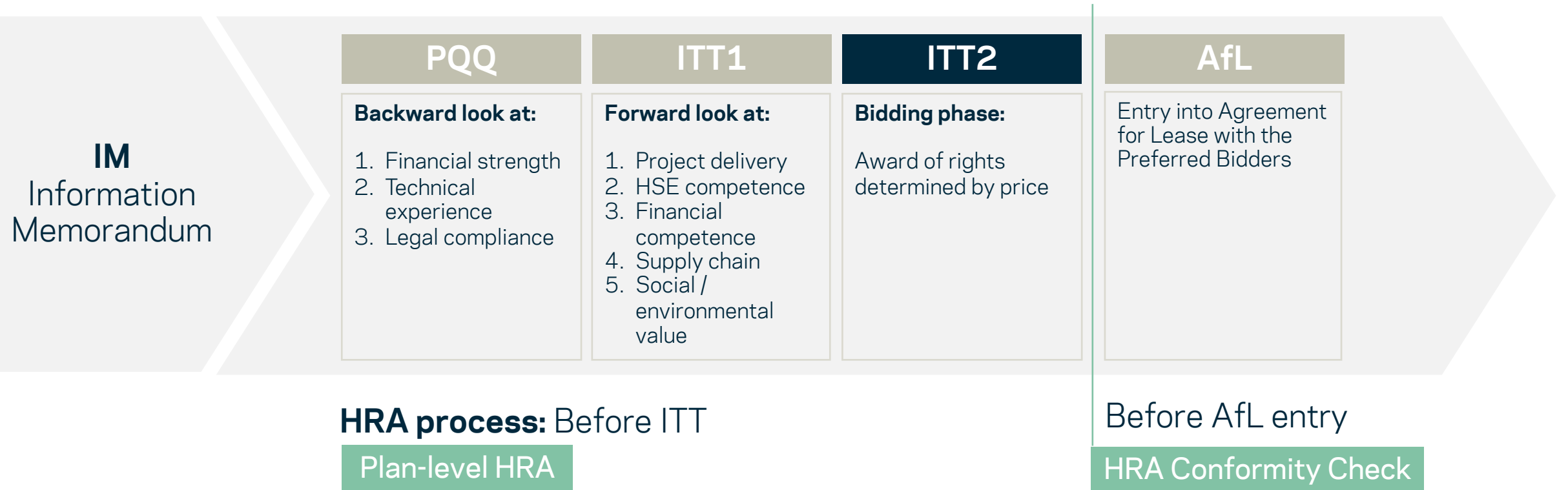
We are likely to assess such factors as the bidder's:

- Cost assumptions for developing the project.
- Cash availability to meet the costs of development and fees over a short timeframe.
- Capital availability relative to the expected costs of development over an extended timeframe.



Leasing Design - Key Stages: Bidding Stage

This section describes how the Bidding Cycles will work, culminating in the Preferred Bidder Letters



Leasing Design - Key Stages - AfL entry

This section describes entry into the AfL stage.

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HRA Conformity Check

Agreement for Lease Principles

Agreement for Lease (AfL) Up to 10 years

- Single AFL for the whole PDA.
- Option to take a seabed lease(s) when consent obtained:
 - 10 AFL year duration.
 - Provides rights to survey.
 - Contains development milestones.

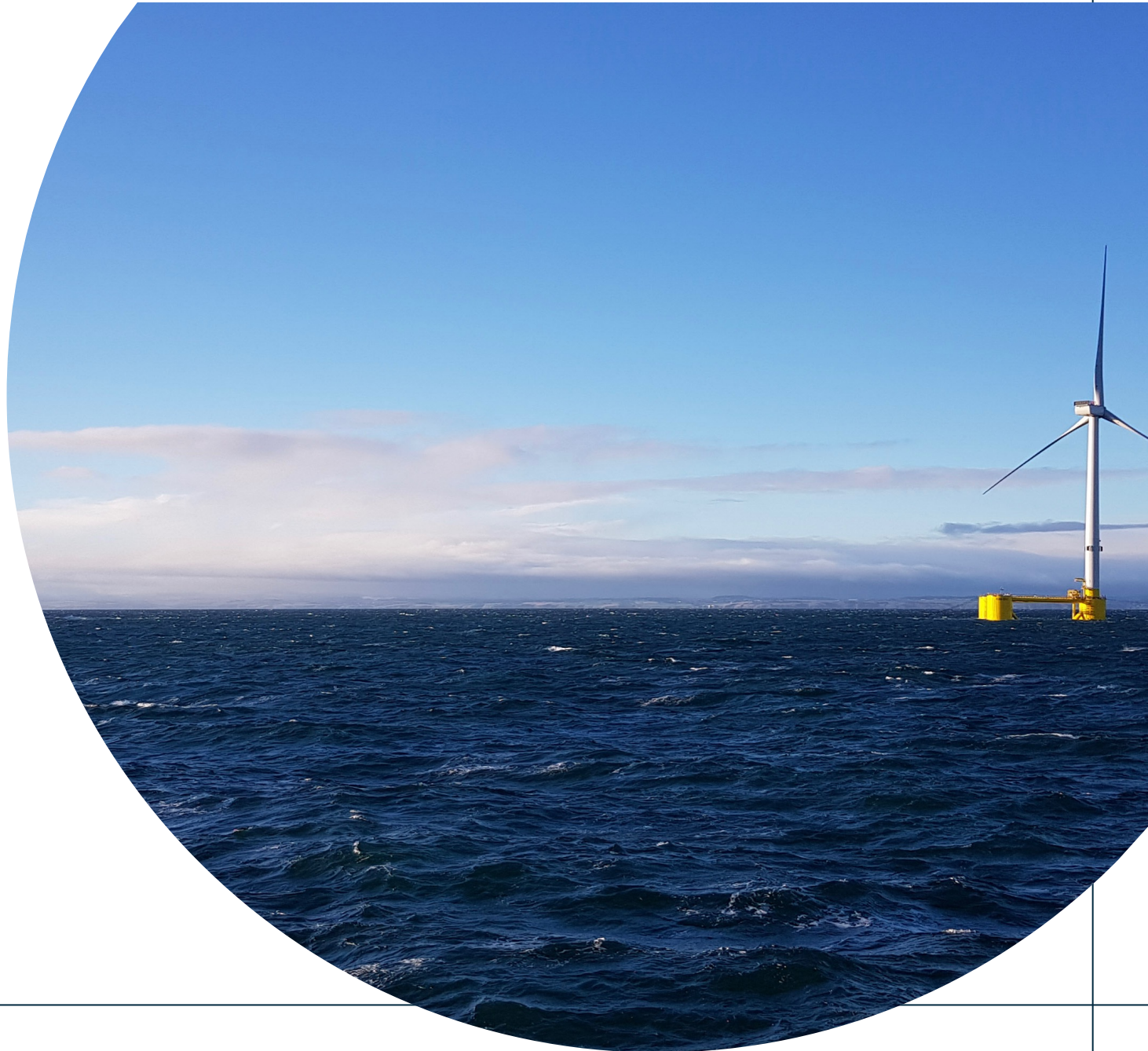


Lease Principles

Lease Up to 60 years

Key features:

- Term of 60 years to enable 2 project lifecycles.
- Requirements to build the project against set milestones.
- Rent payable as proportion of project revenue.
- May be more than one Lease (where there have been multiple consents awarded).
- May be one or more phased leases.



Tender Supply Chain Component



Tender Supply Chain Component

Minded to:

- Full and fair procurement practices.
- 'Statement of Intent' aligned with the Sector Deal.
- At ITT1 Supply Chain *Investment Plan*.
- For successful bidders, Periodic update of the Supply Chain Investment plan during option period.
- Seeking alignment with BEIS CfD supply chain arrangements.



Grid and Offtake Arrangements



Grid and Holistic Network Design (HND)

- HNDFUE Scope includes 4GW of Celtic Sea capacity using TCE spatial design information.
- HNDFUE expected Q1 2023.
- Close collaboration with Energy System Operator and National Grid Electricity Transmission.
- Expect Ofgem to clarify delivery models.



Enabling and Investment



Marine Enabling & Investment

Areas of focus:

- Explore “Hub” Ports for foundation manufacture and deployment.
- Support Supply chain and skills development.
- Support the ESO and NGET on their concept Holistic Network Design.
- Acquire data and evidence to accelerate design and consenting activity.
- Identify opportunities to address strategic environmental challenges.



Summary and Next Steps



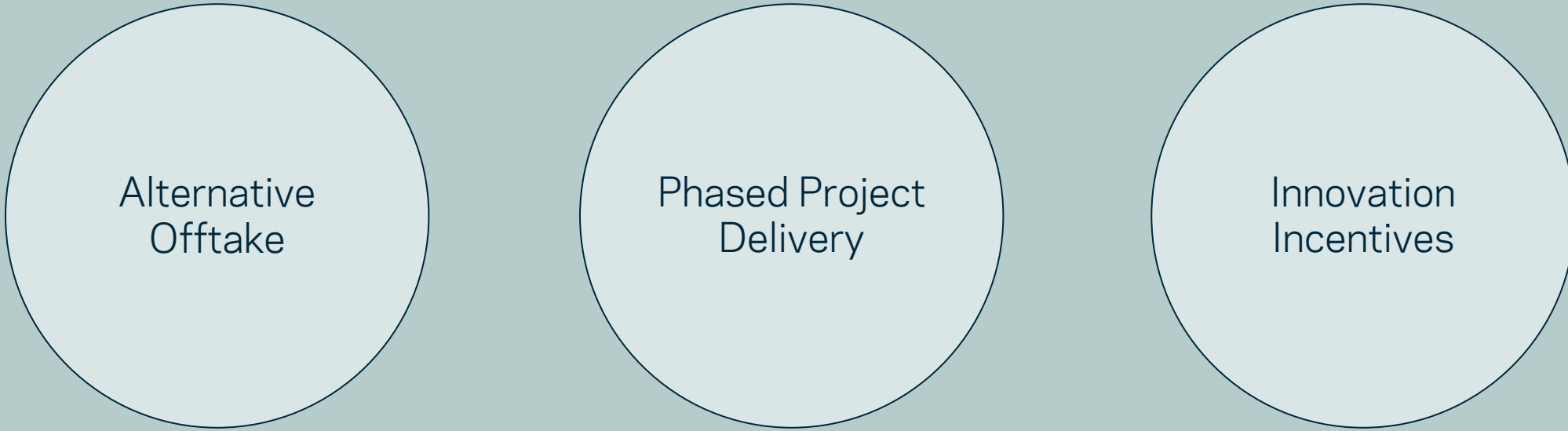
Opportunity Summary

- 4GW total for build out 2030-2035.
- 4 in number 1GW projects awarded to at least 3 separate bidders.
- Project Development Areas defined by TCE.
- FLOW technologies only.
- Both power and H2 offtake.
- Supply chain investment plans.
- Final tender stage uses price to determine award of rights.
- Tender will be launched in 2023.



Tender Timeline

Next Steps: We Want To Hear From You



Alternative
Offtake

Phased Project
Delivery

Innovation
Incentives

Floating Offshore Wind in the Celtic Sea Programme



Photographs courtesy of BW Ideol and V.Joncheray; Principle Power; Joshua Bauer for NREL; James Armes; Suksan Phaseeda

Q&A Session



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