



SOWEC Projects 2020/21

Summary Paper

Crown Estate Scotland made up to £300,000 available to fund SOWEC deliverables in order to support the development of offshore wind in Scotland. The award of funding was linked to the criteria summarised below:

- Proposals were considered on a first come, first served basis with an initial £100,000 maximum allocated to any one workstream with the initial anticipation that no co-funding for any one project would be required.
- Successful proposals had to demonstrate alignment with at least two of The Offshore Wind Sector Deal, the Supply Chain Development Statement process within ScotWind Leasing and relevant Crown Estate Scotland Corporate Plan objectives.
- Each proposal was required to include deliverables which clearly aligned with the targets within agreed SOWEC Group Roadmaps and to adequately describe how the project would contribute to at least one of the SOWEC Goals.
- Proposals required to be supported by the relevant group lead(s) and the SOWEC Co-Chairs.
- Proposals were required to demonstrate how successful delivery will lead to increased opportunity for collaboration with other industries or sectors; in particular those linked to Energy Transition, Blue Economy, or Net Zero.
- Final deliverables for all projects was required within Financial Year 2020/21.

In total, seven projects were identified by the SOWEC Working Groups and procured by Crown Estate Scotland:

Strategic Investment Assessment (SIA) Working Group Lead and Coordinator

Contractor: Hutcheson Associates

SOWEC Lead: Brian McFarlane (SOWEC co-chair)

The SIA Working Group Lead and Coordinator is tasked with supporting the Chair of the SIA Working Group in the Offshore Wind Strategic Investment Assessment. The Coordinator will help to facilitate the use of an executive committee and working group with the relevant Scottish offshore wind stakeholders and deliver a report detailing recommendations and investment opportunities for Scotland, to include:

- A summary of the current status of the offshore wind supply chain in Scotland (including the recent studies, assessments and industry developments)
- Map of future deployment and consideration of the current status of the offshore wind supply chain in Scotland, determining the supply chain and technology barriers and opportunities both domestically and globally, which provide longevity to the industry in Scotland

- Scenarios of potential economic impact associated with varying levels of investment (infrastructure, supply chain, innovation, skills and cross sector transition)
- Recommendations for immediate action through investment, including detailing means to support investor confidence, to support the industry in Scotland and to maximise economic value

Delivery of the final report is expected in Quarter 2 of 2021.

Output: Final report detailing the Committee recommendations and investment opportunities for Scotland.

TNUoS Charging Report

Contractor: ITP Energised

SOWEC Working Group: Developers

SOWEC Lead: Niall Stuart (Hutcheson Associates)

ITP Energised have been appointed to produce a report which defines the additional costs faced by projects in northern parts of Great Britain in simple and clear terms which can easily be understood by a general and / or a political audience. The final version of the report is expected by the end of January 2021. The report will cover:

- Short summary of TNUoS charging
- Statement of data sources and assumptions used in the analysis
- Figure showing onshore TNUoS charges per kW for zone 1 to 27
- Text summary of key points, including quantification of growth of differential between zones with highest charges and zones with most negative charges over time
- Table showing the following projections for zones 1 to 27 for FY2025-26
- Text summary noting the differential between zones with highest charges and zones with most negative charges, with main emphasis on impact per MWh

Output: The final report will be distributed to a variety of relevant stakeholders, while requesting a meeting to discuss the information set out. A short press release will also be provided to targeted media outlets.

Supply Chain Roadmap

Contractor: BVG Associates

SOWEC Working Group: Supply Chain and Clusters

SOWEC Lead: Stephen Thomson (Global Energy Group)

A programme of work has been commissioned with multiple workstreams in order to secure maximum impact and benefits from the synergies between these intrinsically linked and inter-dependent activities. There are five workstreams identified are:

- **Supply Chain Stakeholder mapping/review**

The review will map all active and interested stakeholders and organisations operating in offshore wind supply chain development and aligned energy transition, highlighting areas of priority activity and commonality - as known - for the period to end 2021. Specific Scottish interests will be highlighted.

- **UK-Scottish contents baseline**

This report will establish an offshore wind 2020 content baseline and develop a route to 60% UK content, identifying areas of relevance to Scotland. This will actively investigate and consider the route to achieving 60% local content in projects, across the three key phases of offshore wind projects: Development, Construction and Operations & Maintenance.

- **Central PQQ Platform**

This commission will research and investigate options to introducing a widely recognised offshore wind industry specific accreditation for a consolidated PQQ process. As part of the study, the consultant will investigate whether the ORE Catapult's F4O project could be developed to award an industry accepted accreditation based on certain criteria. An "Achilles" type model will also be explored, albeit this is a chargeable service with re-qualification required every year or at certain milestones, therefore the study will consider an alternative funding mechanism that does not involve a fee for the supply chain to register and qualify.

- **Standardised General Terms and Conditions of contract for offshore wind**

The consultant will review and investigate options for standardised General T&Cs and contracting procedures within the offshore wind industry, which could be accepted as future norms. This will require working closely with developers and tier 1s to identify specific advantages in order to secure their cooperation and buy-in. The consultant will review the LOGIC model used in Oil & Gas to determine their fit with offshore wind or ascertain the need for an offshore wind specific solution. Rather than working from scratch, there would be an opportunity of finding out which contract formats are currently used and work to standardise an approach.

- **Advertising portal**

The consultant will research and investigate options for an advertising portal to service both near term and longer-term offshore wind deployments. This is proposed to be delivered through desk-based research with consultation with key stakeholders. In line with Crown Estate Scotland's SCDS process and an anticipated increased obligation within the CfD Supply Chain Plan process, an offshore wind advertising platform is expected to deliver a range of functions for developers, contractors and the wider supply chain to ensure opportunities are advertised and available throughout the supply chain.

This exercise is to consider existing and developing platforms and make recommendations for a Scottish and UK advertising platform proposal, acknowledging accreditation and other industry standards as they are developed.

Output: BVG Associates will deliver one report, encompassing all five workstreams by the end of March 2021.

Assessing Future Approaches to Applying HRA Derogation in Scotland (Scope A)

Contractor: Cameron McKenna, Nabarro and Olswang LLP (CMS)

SOWEC Working Group: Barriers to Deployment

SOWEC Lead: Ben Miller (Scottish Renewables)

This commission provides HRA support services generally and other services within the expertise of the CMS which include the production of a report covering:

- A legal opinion on whether compensation for a site or species identified as being subject to an Adverse Effect on Integrity (AEoI) must be on a 'like-for-like' basis or whether a 'non-like for like' basis can be developed, through which geographic, site or species specific compensation can be developed. When considering this, inclusion of how an 'assemblage' that is part of a designation should also be considered.
- An opinion on whether a broader 'net-gain' approach can be adopted that considers the overall coherence of Natura 2000. Any available case law should be considered as part of this opinion.
- An example of what an 'alternatives' argument for an offshore wind project in Scottish waters (at least 500MW) would look like based on arguments presented in recent UK Decisions and current Scottish energy policy.
- Any recommendations where further policy development from Scottish Government might strengthen the case for the 'no alternatives' case, should Government wish to enable the industry in this regard.

Outputs: Delivery of the report above. Material and minutes of two half-day workshops, identifying next steps.

Assessing Future Approaches to Applying HRA Derogation in Scotland (Scope B)

Contractor: MacArthur Green

SOWEC Working Group: Barriers to Deployment

SOWEC Lead: Ben Miller (Scottish Renewables)

Similar to Scope A, this commission provides HRA support services generally and other services within the expertise of the MacArthur Green and the production of a report covering an assessment and presentation of any options that might be identified for strategic scale, rather than project-specific, forms of compensation for potential Scottish offshore projects at the both the UK and Scottish geographic level.

Outputs: Delivery of the report above. Material and minutes of two half-day workshops, identifying next steps by the end of March 2021.

Repurposing Oil and Gas infrastructure for offshore Hydrogen generation

Contractor: Vysus UK

SOWEC Working Group: Innovation

SOWEC Lead: Chris Pearson (National Subsea Centre, Robert Gordon University)

This project will produce a feasibility study which identifies key risks and opportunities in the repurposing of existing Oil and Gas infrastructure for Hydrogen generation and transmission. Risks and opportunities will be determined through review of processes and engagement with stakeholders. The study will cover:

- Overview of development and consenting processes for a commercial scale offshore Green and Blue Hydrogen production in the UK, utilising existing research and information where possible

- Overview of different Electrolyser technologies, with identification of those most suited for offshore hydrogen production
- Overview of fundamental approach to making best use of existing infrastructure including transmission lines, and platforms for generation and transmission.
- Overview and cost estimation for key enabling Hydrogen Supply Chain capability and infrastructure including existing offshore Oil and Gas infrastructure, electrolyser supply, port and quayside infrastructure, reinforced quayside areas (with services), operation and maintenance marine and quayside operations
- Cost comparison, and benefit analysis of onshore vs offshore Hydrogen production
- Identifying where generic “risks” in this process exist for a project developer, identified through review of process and engagement with relevant stakeholders. Risks relates to areas of uncertainty in terms of process, programme, cost, knowledge, stakeholders, consultation etc.
- Mitigations to the risks identified above to be detailed, their impact scored, and potential actors identified
- Identifying where generic opportunities in this process exist for a project developer. Opportunities relate to the ability for some realistic action to positively impact process, programme, cost, knowledge, stakeholders and consultations by making realistic changes to approach, advance engagement with stakeholders and obtaining required knowledge.
- Capacity of the above to deliver strong pipeline of Hydrogen projects from late 2020s to 2050
- Consideration of desired UK content targets (including where relevant Scottish Government ambition for local content in ScotWind projects)
- Consideration of Industry demand in likely Hydrogen clusters
- Prioritised recommendations for further work, consistent with SOWEC Energy Transition vision

Outputs: Delivery of the report above by the end of March 2021.

Immediate Actions and Opportunities for Floating Offshore Wind in Scotland

Contractor: NIRAS Consulting

SOWEC Working Group: Innovation

SOWEC Lead: Alan Evans (SSE Renewables), Andrew Stormonth-Darling (ORE Catapult)

Production of a report which assesses the immediate needs for Scotland to accelerate the growth of the Floating Offshore Wind sector, including policy, supply chain opportunities and investment requirements to enable Scotland to be an early mover. The report will cover:

- Overview of development and consenting process for a commercial scale (scale TBC) Floating Offshore Wind Farm in Scotland, for context only, utilising existing information where possible
- Overview of the fundamental approach taken to consenting for Offshore Wind and introduce alternative versions including that of a “project envelop” approach
- Current and planned policies for Offshore Wind development

- Current Supply Chain opportunities and roadmap to full Supply Chain engagement
- Identifying where generic opportunities in this process exist, based on more efficient policy and processes. Opportunities relate to the ability for some realistic action to positively impact process, programme, cost, knowledge, stakeholders and consultations by making realistic changes to approach, advance engagement with stakeholders, and obtaining required knowledge. Opportunities to be scored (high, medium, low) and potential factors identified
- Recommendation of investments and timelines required to support the Supply Chain to deliver on Scottish content targets and develop the Scottish Floating Offshore Wind industry
- Recommendations on policy, activities and programmes to be considered by Scottish Government to accelerate national opportunities and interests in the Floating Offshore Wind industry

Output: Delivery of the report above, by the end of March 2021.