Law Society of Scotland

# Written evidence

## Technological Innovations and Climate Change: Offshore Wind

May 2020

## Introduction

The Law Society of Scotland is the professional body for over 12,000 Scottish solicitors. With our overarching objective of leading legal excellence, we strive to excel and to be a world-class professional body, understanding and serving the needs of our members and the public. We set and uphold standards to ensure the provision of excellent legal services and ensure the public can have confidence in Scotland's solicitor profession.

We have a statutory duty to work in the public interest, a duty which we are strongly committed to achieving through our work to promote a strong, varied and effective solicitor profession working in the interests of the public and protecting and promoting the rule of law. We seek to influence the creation of a fairer and more just society through our active engagement with the Scottish and United Kingdom Governments, Parliaments, wider stakeholders and our membership.

Our Marine Law and Energy Law Sub-committees welcome the opportunity to respond to the UK Parliament's Environmental Audit Committee's inquiry on Technological Innovations and Climate Change: Offshore Wind[1]. We have the following comments to put forward for consideration.

## General remarks

The growth of offshore wind has been successful in the generation of new renewable energy for the UK. In recent years, the costs of construction and operation have fallen to make the sector more attractive for investors.

There have been many licence applications and mostly approvals in UK waters for offshore wind developments. The level of activity in Scottish waters has increased in the past few years. However, we consider that there is still much potential, both in terms of the implementation of existing consents and new licence applications.

Scottish Government has been supportive of offshore wind energy development and the developments have generally not been subject to public or stakeholder opposition in the same way as onshore wind developments. Nevertheless, there may be some concern that the identification and effective engagement of stakeholders is difficult for offshore wind developments.

We consider that the location, distribution and connection of offshore wind farms requires careful, connected and imaginative marine and terrestrial planning. If this is not undertaken as the number of offshore windfarms increase, there is a possibility of significant damaging impacts on the terrestrial and marine environments. We also note that the system for consenting for offshore wind is different in the four parts of the UK. The systems in England, Scotland, Wales and Northern Ireland all include elements of marine planning and

[1] https://committees.parliament.uk/work/249/technological-innovations-and-climate-change-offshore-wind/

terrestrial planning. Our comments on these points relate only to Scotland but are likely to be equally applicable across the UK.

## Written response

### What level of output can the sector deliver in the UK, and what Government support would be needed to achieve this?

It is worth noting that the Allocation Round 3 clearing price for offshore wind was lower than was generally expected at the time (£39.650/MWh for Delivery Year 2023/24 and £41.611/MWh in 2024/25) so the sector is already rising to the challenge of delivering higher capacity for lower cost. In order to continue to be able to do so, the continuation of Contract for Difference support and a generally permissive consenting and regulatory regime is important. One proposal in the recent BEIS consultation on the upcoming Contracts for Difference (CfD) Allocation Round 4 which could be helpful in this respect is to create a separate Pot 3 for offshore wind so that it can continue to develop and be deployed at scale without compromising the development of other less established technologies (for example, floating offshore wind, which is referred to below).

### How might the UK take advantage of further technological advances in offshore wind technology, particularly in relation to floating arrays?

There has been some suggestion in the sector that, at present, floating wind deployment in the UK is being used in shallower water sites than has typically been the case elsewhere in the world. We note that this is not necessarily an issue because the mere fact of a site being in shallower water does not automatically make it suitable for using conventional monopile or jacket foundations because there may be other practical or environmental issues with doing so. In those circumstances, the benefit of floating arrays is that they can be viable even in shallow water sites where conventional offshore wind would not be.

However, the real benefit of floating offshore would be to allow deployment in deeper water sites which are inherently much less suitable for monopile or jacket foundations and, in doing so, to unlock much of the territorial waters around the south west of England and the North Sea for deployment of a new source of offshore renewables generation. We consider that to facilitate this, the proposal in BEIS' recent CfD Allocation Round 4 consultation of making floating offshore a distinct, eligible technology under Pot 2 of the CfD regime is a potentially helpful step (particularly if accompanied by a hypothecated budget pot, or the use of an appropriate *minima*). Government and regulatory support may be made available to develop floating offshore wind demonstration sites.

## What support does the sector require to keep pace with the most cutting-edge innovations, such as in blade technology?

It appears that the large original equipment manufacturers (OEMs) are looking at how to deploy at scale technology which will generate the most electricity at the lowest possible installation and operation and maintenance (O&M) costs. As an example, GE's Haliade-X turbine (which is referred to as the biggest turbine ever built) now has a substantial order book, including the Dogger Bank project.

We consider that two areas which are essential to the UK being able to keep pace with, and maximise opportunities from, technological developments are to focus on: (i) skills in the supply chain; and (ii) research collaborations between (amongst others) UK industry and academia and the large OEMs and to finding suitable funding for this following the UK's exit from the EU and post-Horizon 2020.

Many of the large offshore wind turbine OEMs are based in continental Europe and it is important that the UK supply chain is able to develop the necessary skills to provide vessel support, O&M activity etc. An option may be for the UK Government to incentivise OEMs and large developers to base O&M operations in the UK and to provide, for example, apprenticeship and other training support to local workforces.

We consider that research collaboration is very important because engagement into wider European research efforts gives a good opportunity to develop knowledge and skills of new technology in the UK.

## What is the UK industry doing to promote the sustainability of offshore wind arrays throughout their entire life-cycle from development through to decommissioning, and to improve maintenance and end-of-life repair?

Two areas that stand out in particular are:

(i) Looking to utilise both service operation vessels (SOVs) and drones and robotics technologies to minimise the number of potentially dangerous trips made to carry out repairs and to use robotics and autonomous technology to diagnose turbine damage (and in the long term, perhaps even to make some simple repairs); and

(ii) Taking key learnings on both maintenance and decommissioning from the UK oil and gas sector.

The sector is pushing forward with measures such as these. In terms of possible Government support, we consider that it is important that the sector's ability to continue innovating and trying new approaches is not limited by unduly restrictive regulation. In addition, we consider it would be beneficial if support and incentivisation was available for demonstration and testing of such approaches.

## Other remarks

### Integration of marine and terrestrial planning

We consider that more effective implementation of the marine planning system and better integration of the marine and terrestrial planning system could address some of the existing and future issues related to the planning and consenting processes for offshore wind in Scottish waters.

Locations for offshore wind farms are first identified by Crown Estate Scotland via licensing rounds. This is currently being consolidated into a Sectoral Marine Plan for Offshore Wind Energy[2]. This process will identify potential sites from a partial analysis of criteria, seen as most appropriate, from the perspective of Crown Estate Scotland.

### Cumulative impact

One issue of potential concern is the concept of cumulative impact which is designed to assess the overall impact of the accumulated windfarm capacity as it is permitted and constructed. This leads to a first come, first served approach to provision of capacity, but not to the ideal distribution of wind farms by location and size. In this way, an efficient and environmentally acceptable windfarm application may be refused permission because it is at the 'back of the queue', while less efficient and poorly located windfarms may already have been permitted and developed.

We consider that the cumulative impact problem could be solved through the marine planning process. The purpose of marine plans is to identify locations for new developments, including new windfarms, and allocate them based on comprehensive impact analysis. At present in Scotland, the Sectoral Marine Plan for Offshore Wind Energy is separate to Scotland's Marine Plan. It does not, however, ensure that its sites provide the best distribution and quantity of wind power required by Scotland/UK. We consider that this should be undertaken by the marine planning process and that it is essential that there is coordination between marine planning across the UK, as well as with The Crown Estate and Crown Estate Scotland.

### Grid connections

We consider that there is also an issue with coordination of electricity connections from wind farms to the onshore grid. The issue of connection requires the coordination of marine plans and development plans (National Planning Framework and Local Development Plans) which identifies the location of connections in relation to the best sites for offshore windfarms. This could include the provision of marine interconnectors that would pick up connections from the offshore wind farms and strategically make landfall in the best locations from a national perspective. We suggest that as well as the landfill issues being addressed in terrestrial plans, we consider that these should also be identified and allocated in the marine plans.

[2] See the recent consultation on this draft plan - https://consult.gov.scot/marine-scotland/draft-sectoral-marine-plan-for-offshore-wind/

Too much cabling is likely to impact fishing grounds, unnecessarily effect the amenity of rural areas with new electricity substations and overhead lines and create unnecessary complexity in the UK electricity grid infrastructure. These problems can be resolved through more robust planning in both marine and terrestrial plans. The system currently exists and only requires more connectivity between the regimes.

**For further information, please contact:**
Alison McNab
Policy Team
Law Society of Scotland
DD: 0131 476 8109
alisonmcnab@lawscot.org.uk