

## **Crown Estate Scotland's Response to Scottish Government's *Draft Energy Strategy***

### **Introduction**

Crown Estate Scotland (CES) manages land and property owned by the Monarch in right of the Crown. We ensure that the assets are developed and enjoyed sustainably to deliver benefits to communities and to Scotland as a whole.

The business was set up following the Scotland Act 2016 and pays all revenue profit to the Scottish Government.

Crown Estate Scotland is responsible for managing:

- Leasing of virtually all seabed out to 12 nautical miles covering some 750 fish farming sites and agreements with cables & pipeline operators in Scottish waters
- The rights to offshore renewable energy and gas and carbon storage out to 200 nautical miles around, and in, Scottish waters
- 37,000 hectares of rural land with agricultural tenancies, residential and commercial properties and forestry on four rural estates
- Salmon fishing rights on many Scottish rivers
- Around half the foreshore around Scotland including 5,800 moorings and some ports and harbours
- Retail and office units in Edinburgh

Crown Estate Scotland's work contributes towards several Scottish Government outcomes identified in the National Performance Framework, including:

- We reduce the local and global environmental impact of our consumption and production.
- We live in a Scotland that is the most attractive place for doing business in Europe.
- We value and enjoy our built and natural environment and protect it and enhance it for future generations.

Our comments on the Draft Energy Strategy are based on our knowledge and experience of the development of offshore energy projects and CCS initiatives.

### **Key Points**

- Crown Estate Scotland is generally supportive of the priorities identified in the strategy. We welcome the proposed target to supply the equivalent of 50% of all of Scotland's energy consumption from renewable sources by 2030. In our view, clearer, stronger and more specific actions and/or policies will be required to deliver this target, particularly in terms of the deployment of offshore wind and marine renewables.

- CCS
  - Scotland should aim to deliver one or more small full-chain projects rather than small-scale demonstrators.
  - Scottish Government should seek to actively collaborate with the Oil and Gas Authority to better understand the benefits from retaining and investing in CO2 related infrastructure. There is some urgency to this issue given decommissioning of infrastructure is underway.
  - A full-time resource is needed to facilitate the proposed CCS actions and co-ordinate CCS activities across multiple sectors and organisations.
- Offshore wind
  - Specific actions and support from government are required to deliver the continued deployment of offshore wind in Scottish Waters.
  - Further consideration should be given as to how to incentivise developers to demonstrate innovative solutions in Scottish Waters.
  - We believe that specific commitments to exploring opportunities for the deployment of commercial scale offshore wind in deeper waters, building on the deployment of the three floating wind demonstration projects currently underway, is necessary to build on Scotland's world leading position.
- Marine renewables
  - We welcome the commitment to offer continued support for the sector through REIF and other financial mechanism and would like to see further consideration of how best mechanisms such as the Saltire Prize can be used to deliver marine energy projects.
  - Continued support and a clear strategy for delivery from government remains vital to maintain Scotland's position as a global leader in this field.

## Consultation Question Responses

**1. What are your views on the priorities presented in Chapter 3 for energy supply over the coming decades? In answering, please consider whether the priorities are the right ones for delivering our vision.**

CES are generally supportive of the priorities identified in the strategy. While we believe these are challenging particularly in terms of CCS, new energy sources and increases in renewable energy generation, the 2050 vision needs to be ambitious and the Draft Energy Strategy should provide impetus for action to deliver these priority areas.

**2. What are your views on the actions for Scottish Government set out in Chapter 3 regarding energy supply? In answering, please consider whether the actions are both necessary and sufficient for delivering our vision.**

## **CCS actions (page 36)**

### *Assessing opportunities for small scale CCS demonstration and CO2 utilisation projects:*

There have already been several successful CCS projects completed around the world that demonstrate how to capture CO<sub>2</sub>, how to transport it and inject it and/or how to store it. Given this position, we believe that Scotland should be aiming to support one or more small full-chain projects in preference to part-chain demonstrator projects. Our view assumes that the term “small scale demonstrator” as used in the Draft Strategy refers to a project demonstrating one particular aspect of the CCS process (i.e. capture, injection or storage). Although we recognise that the approach of focusing on demonstration may offer relatively straight-forward short-term support to the CCS industry in Scotland, given that the three elements of CCS have already been successfully demonstrated elsewhere we believe that Scotland should be aiming to deliver projects to take CCS beyond demonstrator scale. In considering timescales, we believe full-scale developments are likely to take between five and ten years from inception to operation.

### *Maintain pressure on the UK Government to align its CCS strategy with Scottish energy priorities:*

Given the key role that UK Government will play in the development of the CCS industry in Scotland (i.e. through policy support and funding), we agree that it is vital to work closely with UK Government to deliver meaningful collaboration with Scottish Government. An important area of focus for Scottish Government should be to undertake economic analysis to demonstrate the benefits of CCS to UK Government in terms of the opportunities it presents. These opportunities include:

- delivering flexible, low carbon power generation;
- decarbonising industry;
- future-proofing our industrial clusters from carbon prices;
- attracting industry to such ‘low-carbon’ zones;
- supporting maximising economic recovery from the UK’s offshore hydrocarbon sector (see below).

UK Government’s recent Industrial Strategy green paper made reference to a review looking at the opportunities to reduce the costs of decarbonisation for the UK. In our response to the green paper, we indicated that this review should include an appraisal of CCS and short-term deployment options for CCS. The results of any such appraisal could inform Scottish Government’s approach and priorities for CCS in the short-term.

### *Work with industry and the OGA to ensure retention of existing critical infrastructure:*

Scottish Government should continue their good work in advocating the case for CCS and in particular should seek to actively collaborate with the Oil & Gas Authority to better understand the net benefits that could be realised from investing in CO<sub>2</sub> related infrastructure. In addition to the economic analysis described above, this could include identifying opportunities for the reuse of existing infrastructure and/or development of ‘no-regrets’ infrastructure. Such an approach would ensure the infrastructure is in place to deliver large volumes of CO<sub>2</sub> to the North Sea which would support opportunities both to use North Sea storage sites and to maximise economic recovery of

hydrocarbons. It should be noted that there needs to be some urgency in terms of retaining existing critical infrastructure as decommissioning of the infrastructure is now ongoing and the introduction of a supporting framework or guidance to deliver this would be welcomed.

### **Additional CCS actions**

We believe that in order to facilitate, coordinate and complement the proposed actions, consideration should be given to identifying a full-time resource/ individual whose role is dedicated to co-ordinating CCS activities across multiple sectors and organisations.

Activities for this role would include:

- Delivering research into and conclusions from the integrated 'case' for CCS set out above;
- Facilitating discussion between key individuals and organisations i.e. co-ordinating the parties with CO<sub>2</sub> to store, those with transport abilities and the storage sectors.
- Identifying opportunities for inward investment and future proofing carbon producing industries in the anticipation that industrial customers will be looking for low-carbon solutions in the near future.
- Consideration of how to co-ordinate distributed sources of CO<sub>2</sub> (including from hydrogen production) for use in CCS.
- Reviewing and championing the opportunities for deployment of CCS in a key industrial hub location such as Grangemouth.
- Supporting low-carbon infrastructure deployment (including CCS) at industrial hubs such as Grangemouth as well as working with UK Government to establishing a mechanism or institution to foster collaboration between other hubs around the UK (e.g. Teeside) will help achieve economies of scale and provide value for money.

In our view, CCS is an area of the strategy which warrants the development of a detailed policy position in terms of targets for numbers and sizes of projects as well as timescales for delivery of these projects. Detailed actions to ensure the delivery of these projects will likely also be required.

### **Comments on proposed actions for offshore wind (page 40)**

While we agree that support for innovation and cost-reduction is vital for further offshore wind development in Scotland, we would like to see this action made clearer, stronger and more targeted. P40 of the Draft Strategy states that "to unlock cost reductions, it is imperative that deployment continues, utilising the rich pipeline of renewable projects in Scotland" and in our view, specific actions will be required to support continued development. Although the offshore wind action refers to support for offshore wind under the Renewables Obligation (Scotland), this closed to new applications on March 31, 2017 and so will not provide any incentive for future new projects. This was a very successful initiative and we would welcome further consideration by Scottish Government of additional opportunities to incentivise developers to demonstrate innovative solutions in Scottish Waters.

The strategy indicates that to meet the target of 50% equivalent of electricity generation by 2030, 11-17GW of renewable energy capacity is required. It is not clear if this figure relates to new capacity or total capacity. Either way, we assume that large scale deployment of new offshore wind projects will be required to meet this target. To achieve this, clear support from Scottish

Government in terms of policy commitment and financial support in whatever form is possible is needed to ensure continued developer interest in Scottish Waters.

New offshore wind capacity is likely to be in deeper waters and specific commitment to exploring opportunities for deepwater technologies as well as consideration as to what support can be provided by Scottish Government within the current regime would be welcomed. Floating wind is an important deepwater technology and there are now three projects in Scotland which are all consented and either under construction or progressing towards construction. As highlighted by the Carbon Trust<sup>1</sup>, the UK now has an opportunity to build on this world leading position and develop its supply chain capability. Scottish Government could undertake research to identify the niche areas in which Scottish firms can most effectively compete and should be targeting. This research could then be used as the basis for decisions about what type of Scottish Government support could most benefit suppliers.

Chapter 3 makes reference to marine planning and the Sectoral Marine Plan for Offshore Wind. In our view, there is a need to review the draft option areas in the Plan. These areas were identified in 2013 and, with technology developing quickly, development may now be possible in deeper water areas. The offshore wind planning process should seek to facilitate development in the most appropriate locations and part of that process involves identifying sites which are suitable for current technology. The most straightforward way to update the plan may be to issue regional locational guidance for deepwater projects given that technology in this field continues to develop. However, for large scale deployment, we appreciate that more detailed planning may be required.

A clear policy position on the validity of the current draft plan option areas together with a statement on any proposed updates or further work would be beneficial for developers seeking to identify new sites. We suggest that if new areas are to be identified, the original areas should be reviewed and withdrawn where appropriate. Overall we are not seeking more areas, simply a review to ensure the areas are appropriate and relevant for current and future technology. From site identification to construction/operation can take from four to ten years depending on the scale of the project and some degree of “future proofing” through a flexible approach which accommodates technological advances would be welcomed.

#### **Comments on proposed actions for marine renewables (page 41)**

We welcome the commitments to continue to offer support through REIF and other financial mechanisms and urge Scottish Government to consider how best mechanisms such as the Saltire Prize can be used to deliver marine energy projects.

We agree that the industrial potential associated with the development of the marine energy industry should remain a priority. Scottish Government could look at how to make it attractive to build machines and components for marine energy in Scotland, ensuring quality is high, utilising expertise from the oil and gas industry for quality assurance purposes.

While there remains huge potential for Scotland in terms of the development of the marine renewables industry, to maintain Scotland’s position as a world leader, continued support and a clear strategy for delivery from government will remain vital.

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<sup>1</sup> Carbon Trust (2017) Floating Wind Joint Industry Project: Policy and Regulatory Appraisal

**Comments on strategic actions (page 46-47)**

We would like to see a clear commitment to consult and engage with BEIS on the next subsidy round for renewable energy, considering its applicability to projects in Scottish Waters. Whilst we acknowledge that this is a policy area reserved to UK government, it is critical for the delivery of the Energy Strategy and its requirement for increased renewable electricity generation. Therefore, liaison between Scottish Government and BEIS regarding what is needed to support the delivery of the strategy is vital.

**3. What are your views on the proposed target to supply the equivalent of 50% of all of Scotland's energy consumption from renewable sources by 2030? In answering, please consider the ambition and feasibility of such a target.**

We are very supportive of the proposed target which we believe is bold and ambitious and positions Scotland as a world leader in terms of renewable energy generation and in terms of moving towards a renewable energy based economy.

Given the ambitious nature of the target, we believe that deployment of new, large scale offshore wind projects and the continued growth of the marine renewables industry will be required to meet it. To achieve the vision and meet the proposed target will require clearer, stronger and more specific actions and/or policies for offshore wind and marine renewables.

**Further information**

Annie Breden, Senior Manager – Policy and Planning  
annie.breden@crownestatescotland.com