



Department  
of Energy &  
Climate Change

# Consultation on additional support for island renewables

September 2013



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The Consultation and Analytical Annex can be found on the Government's website:

<https://www.gov.uk/government/consultations/additional-support-for-scottish-island-renewables>

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# General Information

## Purpose of this consultation

This consultation takes forward the commitment in the Consultation on the draft Electricity Market Reform Delivery Plan (July 2013)<sup>1</sup> to consider how to provide additional support for renewables projects located on islands where these have clearly distinct characteristics to typical mainland projects.

## Territorial extent

EMR will be implemented across the United Kingdom. This consultation contains proposals relating to Contracts for Difference (CfD) and how the strike price in a CfD for particular types of project might be adjusted where particular facts exist relating to a project. The proposal in this consultation is based on facts relating to the Scottish Islands and therefore developers in Scotland are likely to have a specific interest. However, developers elsewhere in the United Kingdom will also have an interest because they will wish to note the proposals and comment on whether the facts underpinning the proposal might arise outside of Scotland.

## How to respond

**Issued:** 18 September 2013

**Respond by:** 30 October 2013

### Enquiries to:

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**Consultation reference:** URN 13D/256

Your response will be most useful if it is framed in direct response to the questions posed, although further comments and evidence are also welcome. Reasoning and evidence to support your answers will be particularly helpful. If you wish to include any long reports as part of your evidence, please identify the relevant sections.

Please send responses to [Scottishislandsrenewablessupport@decc.gsi.gov.uk](mailto:Scottishislandsrenewablessupport@decc.gsi.gov.uk). Alternatively, hard copy replies should be sent to the Renewables Deployment Team at the address above.

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<sup>1</sup> <https://www.gov.uk/government/consultations/consultation-on-the-draft-electricity-market-reform-delivery>

## Consultation Provisions

### Additional Copies

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<https://www.gov.uk/government/consultations/additional-support-for-scottish-island-renewables>

Other versions of the document in Braille, large print or audio-cassette are available on request. Please contact us at [correspondence@decc.gsi.gov.uk](mailto:correspondence@decc.gsi.gov.uk) to request alternative versions.

### Confidentiality and Data Protection

Information provided in response to this consultation, including personal information, may be subject to publication or disclosure in accordance with the access to information legislation (primarily the Freedom of Information Act 2000, the Data Protection Act 1998 and the Environmental Information Regulations 2004).

If you want information that you provide to be treated as confidential please say so clearly in writing when you send your response to the consultation. It would be helpful if you could explain to us why you regard the information you have provided as confidential. If we receive a request for disclosure of the information we will take full account of your explanation, but we cannot give an assurance that confidentiality can be maintained in all circumstances. An automatic confidentiality disclaimer generated by your IT system will not, of itself, be regarded by us as a confidentiality request.

We will summarise all responses and place this summary on our website at <https://www.gov.uk/government/consultations/additional-support-for-scottish-island-renewables>.

This summary will include a list of names or organisations that responded but not people's personal names, addresses or other contact details.

### Quality Assurance

This consultation has been carried out in accordance with the Government's Consultation Principles, which can be found here:

[www.gov.uk/government/publications/consultation-principles-guidance](http://www.gov.uk/government/publications/consultation-principles-guidance)

If you have any complaints about the consultation process (as opposed to comments about the issues which are the subject of the consultation) please address them to:

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Email: [consultation.coordinator@decc.gsi.gov.uk](mailto:consultation.coordinator@decc.gsi.gov.uk)

# Executive Summary

Electricity Market Reform (EMR) will deliver the greener energy and reliable supplies that the country needs, at the lowest possible cost. It will transform the UK electricity sector to one where low-carbon can compete with conventional, fossil-fuel generation.

Contracts for Difference (CfDs) have been designed to provide efficient long-term support for all forms of low carbon electricity generation – including nuclear, renewables and Carbon Capture and Storage. The EMR draft Delivery Plan<sup>2</sup> included a commitment to take forward work to consider how to provide additional support for renewables projects located on islands where these have clearly distinct characteristics to typical mainland projects.

In October 2012, The Rt Hon. Edward Davey and the Scottish Government set up a joint independent study to address concerns that renewable projects on the Scottish islands are not coming forward quickly enough, in part because of the cost of the links required to connect the islands to the main Great Britain transmission network. The work of the study was overseen by a steering group which informed the specification for a study, commissioned by DECC and jointly funded by the Scottish Government. The group was chaired by DECC and included representatives of:

- Scottish Government
- Highlands and Islands Enterprise
- The three islands councils, Comhairle nan Eilean Siar, Orkney Islands Council, and Shetland Islands Council
- National Grid (as GB electricity system operator)
- Scottish Hydro Transmission Ltd (SHE-T) as the local transmission owner
- Ofgem attended meetings in an observer role.

The analysis involved direct contact with prospective renewable energy developers and other key stakeholders, including evidence sessions on each of the island groups. The report was published by DECC and the Scottish Government on 15 May 2013<sup>3</sup>. The purpose of the report was not to make specific policy recommendations but to outline some policy options.

We have concluded from the report and further analysis that there is considerable potential in the Scottish islands to develop large projects that are cost effective compared to marginal technologies. We believe that this potential can be delivered in a way which meets the Government energy objectives, in particular, in a way which can deliver value for money for consumers.

This potential for renewable projects arises from a particular set of circumstances that exist in relation to projects on the Scottish islands, and in particular in relation to the renewable energy resources on and around the Scottish islands. We consider that these characteristics mean that the development of onshore wind on the Scottish islands constitutes a separate class of renewable generation that warrants separate treatment and potentially a different level of support from other onshore projects. This consultation seeks views on proposals to provide additional support for onshore wind located on islands comprising the local government areas of

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<sup>2</sup>[www.gov.uk/government/consultations/consultation-on-the-draft-electricity-market-reform-delivery](http://www.gov.uk/government/consultations/consultation-on-the-draft-electricity-market-reform-delivery)

<sup>3</sup>[www.gov.uk/government/uploads/system/uploads/attachment\\_data/file/199038/Scottish\\_Islands\\_Renewable\\_Project\\_Baringa\\_TNEI\\_FINAL\\_Report\\_Publication\\_version\\_14May2013\\_2\\_.pdf](http://www.gov.uk/government/uploads/system/uploads/attachment_data/file/199038/Scottish_Islands_Renewable_Project_Baringa_TNEI_FINAL_Report_Publication_version_14May2013_2_.pdf)

Comhairle nan Eilean Siar, Orkney Islands Council, and Shetland Islands Council, in the form of a higher strike price than for other onshore wind projects elsewhere in the UK.

We propose that level of the island onshore wind strike price should be set at £115 per MWh. This strike price would apply from 2017/18 onwards only, as we anticipate projects on the Scottish islands being able to generate from 2018. We are consulting on whether the proposed strike price would provide a sufficient level of support to bring on the more cost effective projects within the range that would be eligible for such support, and would not result in over-compensation of particular projects. We recognise that this level of support may not bring on all of the potential projects, and therefore may not of itself provide sufficient support for all potential transmission links. However this is the case for all technology bands. In addition to the provision of a level of additional support, we propose, working with the Scottish Government, to assess further the issues raised on the Baringa/TNEI report regarding grid access for developers on the islands.

Setting the strike price at a level that would bring on all eligible projects would result in significant overcompensation of the cheaper projects and would lead to higher costs overall than the base case. Our analysis suggests that a differentiated strike price that set different levels for individual island groups could not deliver value for money relative to the base case.

More information is set out in the accompanying impact assessment.

We consider that there is considerable potential for marine projects on the Scottish islands. However, because of the early stage of development for marine technologies, there is considerable uncertainty around the appropriate strike price for marine and the effect of location in remote islands. Therefore we do not propose to set island specific strike prices for wave and tidal energy as part of the first delivery plan. Instead, we will consider again in detail whether Scottish island-specific measures should be put in place, and at what level, as part of the second Delivery Plan period. Meanwhile, we undertake further work to assess grid access issues for developers on the islands.



# 1. Context and Analysis

## Electricity Market Reform

- 1.1 Electricity Market Reform (EMR) will deliver the greener energy and reliable supplies that the country needs, at the lowest possible cost. It will transform the UK electricity sector to one where low-carbon can compete with conventional, fossil-fuel generation.
- 1.2 A fifth of our capacity is due to close by the end of the decade, and consumers are facing rising energy costs due to growing dependence on uncertain supplies of imported fossil fuels, so now is the time to move towards a diverse and low-carbon electricity mix.
- 1.3 This presents a huge opportunity for growth and jobs, with EMR designed to unlock up to £110 billion investment in our energy infrastructure and support up to 250,000 jobs during this decade alone.
- 1.4 Alongside and within the EMR framework for low-carbon support, the Government has made clear its commitment to increasing the deployment of cost-effective renewable energy across the UK in electricity, heat and transport. Our goal is to ensure that 15% of our energy demand is met from renewable sources by 2020 in the most cost effective way.
- 1.5 This will provide long-term energy security, protect consumers from fossil fuel price fluctuations, and drive investment in new jobs and businesses in the renewable energy sector, as well as keeping us on track to meet our carbon reduction objectives for the coming decades. Beyond 2020, further cuts in emissions will be necessary to keep us on a cost effective path to meeting our 2050 commitments for carbon emission reduction.

## Contracts for Difference

- 1.6 Contracts for Difference (CfDs) have been designed to provide efficient long-term support for all forms of low carbon electricity generation – including nuclear, renewables and Carbon Capture and Storage. CfDs will give greater certainty and stability of revenues by removing exposure to volatile wholesale prices. Consequently, CfDs make the development of low carbon generation cheaper for both investors and consumers. This approach is suitable for all forms of low carbon generation.
- 1.7 Further information on CfDs is provided in the draft Delivery Plan, covering strike prices for the period 2014-18<sup>4</sup>. The proposed strike prices have been set with the aim of maximising the delivery of Government objectives for the electricity system – reducing the carbon intensity of the electricity sector, ensuring the electricity system is contributing appropriately to meeting the Government's renewable energy targets, ensuring affordable energy for consumers and maintaining a secure electricity supply.
- 1.8 The proposed strike prices draw on modelling which uses an extended form of DECC's power sector model, the Dynamic Dispatch Model (DDM), which models both investment in generation capacity, and generation decisions by plant operators. It provides an indication of what different strike prices imply for the levels of deployment and generation achieved, the resultant carbon-intensity of generation, and the implied cost.

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<sup>4</sup> <https://www.gov.uk/government/consultations/consultation-on-the-draft-electricity-market-reform-delivery>

- 1.9 The proposed strike prices are those that we consider best balance performance against the Government's objectives. We propose to set strike prices that will enable sufficient deployment of renewable technologies to contribute to meeting the renewable energy target and to reduce the carbon intensity of the electricity sector, while curbing the cost to consumers by maintaining spend within the Levy Control Framework limits (LCF).
- 1.10 The proposed strike prices also reflect choices on how to set prices that work effectively alongside the Renewables Obligation, and how the profile of strike prices should develop over time.
- 1.11 The recommended strike prices were developed from a default position that strike prices for those years in which developers may choose either scheme should be as attractive to developers as Renewables Obligation support. In making this calculation, we have taken into account our expectation that a CfD provides developers with greater revenue certainty than Renewables Obligation support, which we expect to be reflected in lower costs of capital.
- 1.12 Renewables Obligation-comparable strike prices have been calculated based on the premise that generators will receive the same net total discounted cash flows under CfDs as they would have done under the Renewables Obligation arrangements, while the schemes operate in parallel. The modelling methodology is the same for all technology groups. The methodology has been set to incentivise the same proportion of the supply chain under CfDs that would be incentivised under the Renewables Obligation.

## The Scottish Islands Renewables Project

- 1.13 In October 2012, The Rt Hon. Edward Davey and the Scottish Government set up a joint independent study to address concerns that renewable projects on the Scottish islands (onshore wind and marine) are not coming forward quickly enough, in part because of the cost of the links required to connect the islands to the mainland transmission network. In order to assess whether there is a case for additional support. The study looked at the following:
  - the commercial viability of renewable projects (onshore wind and marine) on the Scottish islands within existing support frameworks including the renewables obligation and the EMR CfDs currently under development;
  - the economic value of renewables projects on the Scottish islands and their potential to make a cost-effective contribution to renewables targets and other objectives, including longer term decarbonisation objectives and regional development and employment objectives;
  - the barriers to development of renewable projects and why more projects are not coming forward; and
  - if barriers were identified, the study looked to identify broadly costed options for actions to tackle them, so that an initial assessment can be made of their value for money compared to alternative sources of renewable and low carbon power.
- 1.14 The evaluation was also to take account of legal issues, including state aid associated with delivering any additional support, along with how any further support mechanisms may vary between projects and technologies.
- 1.15 The work of the study was overseen by a steering group which informed the specification for the independent study to be commissioned by DECC and jointly funded by the Scottish Government. The group was chaired by DECC and included representatives of:

- Scottish Government
- Highlands and Islands Enterprise
- The three islands councils, Comhairle nan Eilean Siar, Orkney Islands Council, and Shetland Islands Council.
- National Grid (as GB electricity system operator)
- Scottish Hydro Transmission Ltd (SHE-T) as the local transmission owner
- Ofgem attended meetings in an observer role.

1.16 The work was independent of, but was required to take account of the emerging conclusions of the Ofgem review of transmission charging (Project Transmit). Ofgem published its preferred approach to both changes to the transmission charging regime and how to include generators on the Scottish Islands on 1 August. This “minded to” statement and an impact assessment is the subject of a consultation that closes on 28 September. Ofgem expects to make a final decision in time to implement the new approach in April 2014.

### Baringa/TNEI analysis

1.17 The analysis, funded jointly by DECC and the Scottish Government, and undertaken by Baringa Partners and TNEI, involved direct contact with prospective renewable energy developers and other key stakeholders, including evidence sessions on each of the island groups. The report was published by DECC and the Scottish Government on 15 May 2013<sup>5</sup>. The purpose of the report was not to make specific policy recommendations but to outline some policy options.

1.18 The key conclusions of the report were as follows:

- Renewable resources from wind, wave and tidal on the Scottish Islands of the Western Isles, Orkney and Shetland are considerable and could make a significant contribution to Scotland’s and the UK’s 2020 renewables targets.
- The net cost per unit produced in the Scottish islands is significantly higher than comparable projects on the mainland – even accounting for the higher load factors.
- For onshore wind, the difference is around 25% on Orkney and Shetland (levelised cost of energy £103-106/MWh) and over 50% in the Western Isles (c£130/MWh)<sup>6</sup>. This is mainly because of the transmission links that would be required, but also significantly higher operation costs. Importantly, the extent of this differential in levelised costs is such that major developments would be unlikely to be viable at current support levels.
- The UK has the opportunity to be a world leader in wave and tidal renewable generation. Marine renewables are in an earlier stage of their evolution, and the consultants’ analysis confirms that these technologies will continue to require financial support (and other forms of funding) at levels at or above those currently being offered (5 ROCs/MWh). Because of this there is a lack of data available on costs of commercial scale projects. The consultants did not specifically indicate whether additional support for Scottish Island-based marine energy projects would be a key

<sup>5</sup> <https://www.gov.uk/government/publications/scottish-islands-renewable-project-final-report>

<sup>6</sup> This is compared to the 2012 Electricity Generation costs publication, which gives a levelised cost figure of £84/MWh. While updated levelised cost figures are available, the older figures are used as the comparison here to maintain consistency with the Baringa report.

determinant of whether projects would proceed, and highlighted the considerable importance of addressing grid access issues.

- The development of renewable generation on the islands could have significant benefits to the local economies, through direct, indirect and induced jobs. However, it is not clear how much of this impact would be displaced from other locations.
- That renewable generation and associated transmission links could provide local security of supply benefits, and the diversity benefits of developing renewables on the islands (especially marine) could reduce the overall cost of intermittency on the GB system.

1.19 The report identifies four key challenges to be faced by large scale deployment of renewables on the Scottish Islands:

- funding gap
- grid access
- early stage funding for marine projects, and
- supply chain

1.20 This consultation puts forward proposals to address the first of these. We propose to address other issues, including ways of grid access issues islands, in a progress report on the Scottish Islands Renewables project issued jointly by the UK and Scottish Governments.

## Conclusions

1.21 The Baringa/TNEI analysis focused on a comparison of levelised costs for renewable technologies on the Scottish islands with other low carbon generation technologies which may make a contribution to the UK's low carbon energy future. It concluded renewable resources from wind, wave and tidal on the Scottish islands of the Western Isles, Orkney and Shetland are considerable, and renewable generation on the Scottish islands could make a significant and cost effective contribution 2020 renewables targets, as well as playing an important role in longer term decarbonisation objectives. Taking into account the conclusions of the Baringa/TNEI analysis, we have undertaken a further assessment of the need to provide additional support for renewables on the Scottish islands. This further assessment has been undertaken by having regard to the following objectives:

- the potential contribution that can be made to meeting 2020 renewable energy targets and longer-term decarbonisation objectives such as the need to meet the duty in the Climate Change Act 2008 to cut the UK's emissions by 80% when compared to 1990 levels;
- broader economic impacts, including employment/social development and impacts on industry and supply chains;
- value for money for electricity consumers and affordability within Levy Control Framework, the agreed framework for support for renewable and low carbon electricity;
- legal considerations, including compliance with EU law on electricity market regulation, state aid and competition; and
- whether any additional support can be provided in a way which fits within the proposed framework for low carbon energy support under EMR.

1.22 We have concluded from our further analysis that there is considerable potential in the Scottish islands to develop large projects that are more cost effective than more marginal

technologies, such as offshore wind. We believe that this further potential can be delivered in a way which meets the objectives listed above and, in particular, in a way which delivers value for money for consumers.

- 1.23 In the Scottish islands there is the potential for large projects, many of which already have planning and other approvals in place. The Baringa/TNEI report developed central deployment scenarios for the islands of over 1.2 GW of renewable capacity in 2020, including over a gigawatt of onshore wind. This capacity could make a material contribution to UK renewables targets (providing approximately 1.5% of electricity generation in 2020). In addition, like all renewable developments, the development of renewable capacity on the islands could deliver significant broader economic benefits.
- 1.24 As noted above, the levelised cost of this energy is such that a large proportion of this potential could be delivered cost effectively compared to more marginal technologies, as well as providing broader benefits.
- 1.25 This potential for renewable projects arises from a particular set of circumstances that exists in relation to projects on the Scottish islands, and in particular in relation to onshore wind projects. The particular characteristics relating to such projects are as follows:
- (a) There are a number of ideal sites which allow for very large scale developments with minimal environmental impact or displacement of other activities such as agriculture, this is shown by the number of sites that have already been subject to environmental scrutiny and have planning approval.
  - (b) Projects on the Scottish islands are expected to operate at load factors at levels considerably above those available even on the best sites in the GB mainland. See Table 1.

(C) Table 1

Location	Expected load factor
Orkney	42%*
Shetland	44%*
Western Isles	35%*
UK onshore	28%**
UK offshore Round 2	38%**

\*Data for Scottish islands onshore wind was published in the Baringa/TNEI report<sup>7</sup>

\*\* Data for UK onshore wind and offshore wind was published in the 2013 Electricity Generation Costs report<sup>8</sup>

- (d) The projects are physically and electrically remote from the high voltage transmission system needed for the export of their generation output and would require long new connections to the Main Interconnected Transmission system based on subsea High Voltage DC cables. Under the transmission charging regimes, they are forecast to be subject to transmission charges (TNUOS) of several times the average for comparable generators located elsewhere in the UK. These are summarised in Table 2 below.

<sup>7</sup>[https://www.gov.uk/government/uploads/system/uploads/attachment\\_data/file/199038/Scottish\\_Islands\\_Renewable\\_Project\\_Baringa\\_TNEI\\_FINAL\\_Report\\_Publication\\_version\\_14May2013\\_2.pdf](https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/199038/Scottish_Islands_Renewable_Project_Baringa_TNEI_FINAL_Report_Publication_version_14May2013_2.pdf)

<sup>8</sup>[https://www.gov.uk/government/uploads/system/uploads/attachment\\_data/file/223940/DECC\\_Electricity\\_Generation\\_Costs\\_for\\_publication\\_-\\_24\\_07\\_13.pdf](https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/223940/DECC_Electricity_Generation_Costs_for_publication_-_24_07_13.pdf)

(e) Table 2

Location	Indicative TNUoS for wind projects £/kW/year
Orkney	80*
Shetland	97*
Western Isles	129*
UK onshore	5**
North Scotland (highest mainland GB)	13-17**
Northern Ireland	5-7***
UK offshore average	40****

\* Data for Scottish islands onshore wind was published in the Baringa/TNEI report<sup>9</sup> and is for projects commissioning in 2020.

\*\* Derived from National Grid, *CMP213 Diversity 1 Indicative tariffs 2014/15*. NB: These are estimates of tariffs if Project Transmit is implemented according to Ofgem minded-to position, and are for 2014/15 only.

\*\*\* Derived from estimates provided by Northern Ireland Department of Enterprise Trade and Investment and are for 2013.

\*\*\*\* Data for UK onshore wind and offshore wind was published in the 2013 Electricity Generation Costs report and is for projects commissioning in 2020.

- 1.26 We consider that the characteristics described above mean that the development of onshore wind on the Scottish islands constitutes a separate class of renewable generation that warrants separate treatment and potentially a different level of support to other onshore projects.
- 1.27 However, we do not consider that additional support can be justified where the cost of support would be equivalent or higher than the marginal renewable electricity technologies such as offshore wind. Marginal renewable electricity technologies are supported at particular levels in order to create the critical mass for learning that will allow costs to reduce. We do not consider that the learning advantages of onshore wind on remote islands are sufficient to justify support at the levels supporting marginal technologies.
- 1.28 Marine energy is a marginal technology and we recognise that the UK has the opportunity to be a world leader in wave and tidal generation. Due to the very early stage of development of the marine energy sector (where current deployment is still at a prototype testing stage), there is a lack of data for wave and tidal energy projects. This has made it difficult for Baringa/TNEI to demonstrate a clear case for island-specific support for marine energy. However we would anticipate that a similar level of additional cost to onshore wind would be associated with Scottish island projects compared to those located on the mainland.
- 1.29 The report suggests that because of the emerging nature of the technology, marine projects on the islands and elsewhere in the UK will require at least the level of support provided by the RO (and the equivalent available under CFDs) for the first commercial scale projects. We also recognise that grid access is a particular challenge for Scottish island-based marine energy projects, and attach considerable importance to addressing grid access issues further.

<sup>9</sup> [https://www.gov.uk/government/uploads/system/uploads/attachment\\_data/file/199038/Scottish\\_Islands\\_Renewable\\_Project\\_Baringa\\_TNEI\\_FINAL\\_Report\\_Publication\\_version\\_14May2013\\_2\\_.pdf](https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/199038/Scottish_Islands_Renewable_Project_Baringa_TNEI_FINAL_Report_Publication_version_14May2013_2_.pdf)



- 1.30 We therefore propose to provide additional support for renewable projects on remote islands which can (a) achieve the Government's objectives in paragraph 1.21; and (b) have the characteristics described in paragraph 1.25. For example, an onshore wind project which can be located in an ideal location, operate at a high load factor and is subject to high transmission costs related to subsea cable links.
- 1.31 From the evidence we have, summarised here, we consider that onshore wind is the only such technology that can be deployed at scale, and which can be delivered at lower cost than offshore wind. We therefore propose to limit the additional support to onshore wind projects on the Scottish Islands comprising the local government areas of Comhairle nan Eilean Siar, Orkney Islands Council and Shetland Islands Council. However, we would welcome your views on whether additional support is warranted outside of the Scottish islands on the basis that such projects are also able to (a) achieve the Government's objectives, as described in paragraph 1.21 and (b) have the characteristics described in paragraph 1.25.

### Consultation Questions

1.	<b>Do you agree with the analysis in Baringa/TNEI report and other sources quoted in this consultation and the conclusions drawn from it? Please provide evidence to support your answer.</b>
2.	<b>Do you agree with our proposal to provide additional support to projects located on the remote Scottish islands where such a project meets the objectives in paragraph 1.21 and have all of the characteristics described in paragraph 1.25?</b>
3.	<b>Do you agree that the Scottish islands comprising the local government areas of Comhairle nan Eilean Siar, Orkney Islands Council, and Shetland Islands Council are unique in being able to develop projects which have all of the characteristics described in paragraph 1.25? Do potential projects on the Scottish islands have other relevant unique characteristics which warrant additional support?</b>
4.	<b>Do you agree with our proposal that additional support should be limited to onshore wind projects, and that the level of support should not exceed that available for offshore wind? In this context how do you consider pre-commercial technologies such as wave and tidal stream should be treated? Please provide evidence to support your answer.</b>

## 2. Delivering additional support for island renewables

### Options for addressing the funding gap for Scottish Islands

- 2.1. The Baringa/TNEI report includes a high level consideration of alternative policy options for delivering additional support to bridge the funding gap. Bridging the gap could be made by reducing costs (particularly transmission costs), or by increasing support.

#### Transmission charges

- 2.2. The approach to charging for the Scottish islands has been considered as part of Ofgem's independent review of the transmission charging regime, Project Transmit, which is nearing a conclusion. Ofgem published its preferred approach for changes to the regime including how to connect generators on the Scottish islands on 1 August. Its minded-to statement and an impact assessment is the subject of a consultation that closes on 28 September and it expects to make a final decision in time to implement the new approach by April 2014. Ofgem's preferred approach for the Scottish islands is the most cost reflective, and for the island developers, the most expensive, of the options that were under consideration.
- 2.3. The regulation of transmission charging, including the outcome of Project Transmit is a matter for Ofgem under the EU Third Energy Package. The Government does not propose to deliver additional support for island renewables by intervening in the transmission charging regime, for example through an order under section 185 of the Energy Act 2004.

#### Renewable support options

- 2.4. Delivery of additional support via the renewable support mechanisms is more transparent than delivering via transmission charging because it would recognise the variations in costs faced by different developers and compensate for these differences rather than introducing a hidden cross-subsidy via the transmission charging system. It would, however, need to be delivered in a way that is consistent with the broader electricity market policy. There would also need to be careful consideration of the impact of any changes to mechanisms to affordability within the Levy Control Framework.
- 2.5. Since the majority of island projects which may come forward can be expected to complete after the expected date for closure to new entrants of the renewables obligation (31 March 2017), additional support through the Renewables Obligation it is not a viable
- 2.6. The draft EMR delivery plan includes proposals for feed-in tariffs based on (CfDs). CfDs will be the main support mechanism for low carbon generation in the future. It is proposed that CfDs will be long term private law contracts that pay generators the difference between an estimate of the market price for electricity (the 'reference price') and an estimate of the long term price needed to bring forward investment in a given technology (the 'strike price'). The additional support which projects on the Scottish islands need to become viable could be delivered via the CfD system currently being developed as part of EMR. Implementing in this way would provide additional support in a transparent way.
- 2.7. Setting a specific strike price for remote island onshore wind projects would recognise that they have characteristics that are significantly different to other renewables projects to the extent that they can be considered as a separate technology band for CfD



purposes. The methodology for setting strike prices would be effectively the same as for other technology bands.

## Proposal

- 2.8. We therefore propose that additional support for onshore wind located on islands comprising the local government areas of Comhairle nan Eilean Siar, Orkney Islands Council, and Shetland Islands Council, which can demonstrate their ability to deliver the objectives in paragraph 1.21 and can show that they have the characteristics described in paragraph 1.25 should receive additional support. This additional support would come in the form of a higher strike price than that provided for other onshore wind projects, i.e. those on mainland Great Britain.
- 2.9. The Government is currently consulting on proposed strike prices for renewable technologies in the draft Delivery Plan consultation. If the proposal in this consultation is implemented it would mean that the final Delivery Plan would have two strike prices for onshore wind projects: one for “ordinary” onshore wind projects and a separate one for those which satisfy the conditions described in the previous paragraph. Strike prices for technologies that are currently supported under the RO and included in the draft Delivery Plan consultation are proposed at a level that ensures that they will provide an equivalent level of support. At present, there is a one-to-one correspondence between RO bands and proposed strike prices. Setting a strike price for island onshore wind would be a departure from this approach, as it would mean that support levels for onshore wind would be determined by characteristics such as those described in paragraph 1.25 and not simply the physical characteristics of the plant such as technology and fuel.
- 2.10. We consider this change would be justified because it will help to deliver the Government’s objectives in relation to reducing the carbon intensity of the electricity sector, ensuring the electricity system is contributing appropriately to meeting the Government’s renewable energy targets, ensuring affordable energy for consumers and maintaining a secure electricity supply.
- 2.11. We consider that the evidence as set out in the Baringa/TNEI report and described in Chapter 1 suggests that our renewable target can be met more cost effectively if we were to provide additional support to onshore wind developments where they are brought forward on the Scottish islands.
- 2.12. We have developed strike prices based on the cost information provided by the independent Baringa/TNEI report, which has been reviewed by DECC analysts against data collected for the RO banding review and other evidence. The proposed strike price has been developed so that it would allow the most cost effective projects to come forward without over-compensation. This was the basis for setting support levels under the RO, which are proposed to be carried forward into the CfD strike prices
- 2.13. We propose that level of the island onshore wind strike price should be set at £115 per MWh from 2017/18, when the first projects are predicted to be able to begin generating. This compares with £95-100 for onshore wind elsewhere in the UK. This is projected to bring online 400MW of generating capacity on the Scottish islands. More information about the predicted effects of the strike price is available in the accompanying impact assessment.
- 2.14. Developers eligible for this rate will be treated in the same way as other CfD eligible developers in all other respects, including in regard to contract length and terms, indexation and treatment in later Delivery Plans.

- 2.15. We believe that these proposed strike prices would provide a sufficient level of support to bring on the more cost effective projects within the range that would be eligible for such support, as identified in the Baringa/TNEI analysis and therefore would represent value for money for consumers and would not result in over-compensation of particular projects.
- 2.16. We recognise that this level of support, on its own, may not bring on all potential projects, and therefore may not, on its own, provide sufficient support for all potential transmission links. However this is the case for all technology bands. Setting a single strike price at a level that would meet the required level of return (as identified in the Baringa/TNEI report) for all eligible projects would result in significant overcompensation of the cheaper projects and would lead to higher costs overall than the base case. A differentiated strike price that set different levels for individual island groups could not deliver value for money relative to the base case.
- 2.17. Our analysis suggests that the resulting generation in 2020 would be 1.5 TWh per year, approximately 0.5% of electricity generation in 2020, which is affordable under the LCF and will provide value for money for consumers. Modelled scenarios are subject to uncertainty, as are all projections of the outcomes of the EMR process. If there is a risk of over-spending within the LCF, this would need to be managed within the overall LCF governance process. For more detail on our analysis of the potential effects, please see the impact assessment.
- 2.18. If following consideration of this issue post consultation the proposal within this consultation is implemented a differentiated strike price for onshore wind projects having the characteristics described in paragraph 1.25 will be incorporated into the final Delivery Plan. The final EMR Delivery Plan is expected to be published in December.
- 2.19. The actual strike price is subject to number of factors that arise as a result of this consultation, the parallel EMR consultation, and other factors, including Ofgem's review of transmission charges. These include the following:
  - The outcome of this consultation and the broader consultation on strike prices as part of the draft Delivery Plan and the final modelling to be undertaken to ensure consistency across the board, meeting of the CfD objectives and consistency with the LCF;
  - The strike prices and the costs from which they are derived are based on our best estimates of the likely transmission costs faced by island developers at the present time. These will be adjusted if necessary as a result of the outcome of Ofgem's review of transmission charges; if, for example, transmission charges turn out lower than expected, strike prices would need to be reduced in order to avoid over-compensation.
  - We need to ensure that the final strike prices are consistent with any applicable laws, for example, EU state aid law.
- 2.20. We also recognise that addressing the funding gap by provision of additional support may only go part of the way to bringing on potential renewable energy projects. Grid access is a particular challenge for Scottish island-based renewable energy projects, particularly smaller scale and community owned projects and/or marine projects. DECC and Scottish Government therefore attach considerable importance to exploring further the issues raised in the Baringa/TNEI report in this area. This should recognise that some beneficial measures have already been taken forward, such as National Grid's implementation in April 2013 of new user commitment rules. We will report on this work and other measures at the same time as the EMR delivery plan publication by the end of 2013.

## Treatment of wave and tidal energy deployment

2.21. As set out in Chapter 1, because of the early stage of development of the technology, there is considerable uncertainty around the appropriate strike price for marine and the effect of location in remote islands. Further, we do not expect that there will be any commercial scale projects deployed during the lifetime of the first EMR delivery plan. Therefore we do not propose to set island specific strike prices for wave and tidal energy as part of the first delivery plan. This is appropriately dealt with by way of the generic support levels for wave and tidal (subject to consultation as part of the main EMR consultation). However, we are aware that it is likely that, given progress of the marine energy sector towards early commercial deployment, projects may be developed during the second Delivery Plan period. We would, therefore, intend to consider again in detail whether Scottish Island-specific measures should be put in place, and at what level, as part of the second Delivery Plan period.

### Consultation Questions

5.	<b>Do you agree that the appropriate vehicle for providing additional support for onshore wind on the Scottish Islands (comprising the local government areas of Comhairle nan Eilean Siar, Orkney Islands Council, and Shetland Islands Council) is by a specific CFD strike price within the first EMR delivery plan?</b>
6.	<b>Do you agree with the proposal to provide a strike price for island onshore wind projects having the characteristics, described in paragraph 1.25, of £115 per MWh beginning in 2017/18, compared with £95-100 per MWh for onshore wind elsewhere in the UK? Please provide evidence to support your answer.</b>
7.	<b>Do you agree that we should not provide additional support for wave and tidal within the first delivery plan? Do you agree that the need for and levels of additional support for marine energy should be considered as part of the second EMR delivery plan (subject to progress towards early-commercial deployment)?</b>

# Catalogue of consultation questions

1.	Do you agree with the analysis in Baringa/TNEI report and other sources quoted in this consultation and the conclusions drawn from it? Please provide evidence to support your answer.
2.	Do you agree with our proposal to provide additional support to projects located on the remote Scottish islands where such a project meets the objectives in paragraph 1.21 and have all of the characteristics described in paragraph 1.25?
3.	Do you agree that the Scottish islands comprising the local government areas of Comhairle nan Eilean Siar, Orkney Islands Council, and Shetland Islands Council are unique in being able to develop projects which have all of the characteristics described in paragraph 1.25? Do potential projects on the Scottish Islands have other relevant unique characteristics which warrant additional support?
4.	Do you agree with our proposal that additional support should be limited to onshore wind projects, and that the level of support should not exceed that available for offshore wind? In this context how do you consider pre-commercial technologies such as wave and tidal stream should be treated? Please provide evidence to support your answer.
5.	Do you agree that the appropriate vehicle for providing additional support for onshore wind on the Scottish islands (comprising the local government areas of Comhairle nan Eilean Siar, Orkney Islands Council, and Shetland Islands Council) is by a specific CFD strike price within the first EMR delivery plan?
6.	Do you agree with the proposal to provide a strike price for island onshore wind projects having the characteristics, described in paragraph 1.25, of £115 per MWh beginning in 2017/18, compared with £95-100 per MWh for onshore wind elsewhere in the UK? Please provide evidence to support your answer.
7.	Do you agree that we should not provide additional support for wave and tidal within the first delivery plan? Do you agree that the need for and levels of additional support for marine energy should be considered as part of the second EMR delivery plan (subject to progress towards early-commercial deployment)?

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