

Energy UK Response to the Scottish Government's Onshore Wind Policy Statement

26th May 2017

About Energy UK

Energy UK is the trade association for the GB energy industry with a membership of over 90 suppliers, generators, and stakeholders with a business interest in the production and supply of electricity and gas for domestic and business consumers. Our membership encompasses the truly diverse nature of the UK's energy industry – from established FTSE 100 companies right through to new, growing suppliers and generators, which now make up over half of our membership.

Our members turn renewable energy sources as well as nuclear, gas and coal into electricity for over 26 million homes and every business in Britain. Over 619,000 people in every corner of the country rely on the sector for their jobs with many of our members providing lifelong employment as well as quality apprenticeships and training for those starting their careers. The energy industry adds £83bn to the British economy, equivalent to 5% of GDP, and pays over £6bn in tax annually to HMT.

Executive Summary

Energy UK welcomes the Scottish Government's ongoing commitment to onshore wind in Scotland. Onshore wind is now the cheapest form of scalable energy generation, and has a substantial role to play in the delivery of Scotland's climate change targets whilst providing low cost, clean electricity to UK customers.

As recognised in Amber Rudd's 2015 'Reset Speech', the wholesale electricity market alone does not provide an investment signal for any generation technology without some form of policy intervention. Even as the cost of technologies comes down, there is a mismatch between a wholesale market based on short run marginal pricing and the capital investment required to deliver low carbon technologies.

Decarbonisation of the power sector at the lowest cost to consumers cannot be achieved without a robust, mature renewables industry and pipeline. The Electricity Market Reform (EMR) programme has provided the right tools to develop such a pipeline and support the transition to a low carbon power system, whilst the competitive auction framework ensures the use of the latest technology in the best locations will deliver the lowest cost to the consumer.

To meet decarbonisation targets through to the 2030s and ensure continued cost reduction the onshore wind industry needs a clear vision of intent and a long-term, sustainable market. We therefore support the Scottish Government's call to the UK Government to provide greater long-term certainty over regulated renewable mechanisms.

Competitive auctions ensure that the market delivers at least cost to the consumer. Despite the UK being one of the most significant international actors in driving the cost-effectiveness of renewable energy through this competition, currently there are significant barriers preventing further deployment. A restricted route to market for established technologies represents one of the biggest barriers in the industry.

The onshore wind sector in Scotland is an exemplar of how the renewable electricity sector can thrive, provided there is a supportive policy environment. Planning policy in particular is central to the deployment and development of new infrastructure and provides an opportunity for the Scottish Government to drive forward its decarbonisation objectives. A planning system that facilitates repowering and life extension proposals is also key to continuing progress towards Scotland

decarbonisation targets, as well as securing the economic and social benefits the onshore wind delivers for communities.

Energy UK and our members are conscious that this consultation represents one of a number which the Scottish Government has issued pertaining to energy and infrastructure. Energy UK has already responded to the Scottish Government consultation on Places, People and Planning as well as the Scottish Energy Strategy consultation and we would ask that our Onshore Wind Policy Statement submission be read in conjunction with these submissions. Our Places, People and Planning response can be found [here](#).

Some of Energy UK's membership is responsible for the deployment of the majority of onshore wind across the UK and in Scotland and will continue to view investment in the UK favourably if supported under a market stabilisation Contract for Difference (CfD). The Scottish Government can be instrumental in tackling barriers to deployment such a planning, grid connections and aviation, which in turn will help to drive down costs. The use of larger turbines is critical for cost reduction, and we welcome this recognition within the draft policy statement. The industry will aim to continue to provide community benefit; however, going forward it will be necessary to reflect the financial viability of the project in any voluntary offer, ensuring that UK consumers benefit from the lowest cost generation.

Energy UK are supportive of a whole-cost approach which ensures that system integration costs are recognised.

Response to Questions

2.1	What is your view on the appropriate approach for the inclusion of wind farm efficiency as a material consideration in the Section 36 consents guidance
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Energy UK welcomes this initiative on 'efficiency' but we are concerned that using this term as the headline concept could lead to misunderstandings and unintended consequences.

We support the view that well-sited onshore wind developments, using the latest technologies, including larger turbines, will improve the financial viability of sites. However, this market intervention of setting an 'efficiency' or 'capacity factor' threshold, is potentially problematic as this is only one issue affecting viability and it fails to take into account other factors such as cost and availability of turbines, proximity to grid connections, community benefit payments etc.

However, Energy UK welcomes recognition within the draft policy statement that efficiency is achieved through well-sited wind developments, maximising the wind resource and using the most efficient technologies, including larger turbines where appropriate. However, we believe that the market is best placed to assess and commercialise these factors. The competitive nature of the CfD will ensure that only the best placed projects will be delivered.

Therefore, for maximum clarity, we recommend that the title of this initiative is changed to "maximising onshore wind farm output" and that this principle is the concept that is included as a material consideration in Section 36 (s36) consents guidance.

A potential approach to this initiative is to apply a set of agreed and consulted-upon principles for maximising onshore wind farm output on a site-specific basis. Maximising output is a site specific process on a case by case basis, as the relevant characteristics of individual sites are too numerous and varied for sites to be directly compared.

In a scenario where such an approach is implemented, our members have articulated concerns regarding the commercial confidentiality of data required to assess output. If included as a material consideration within s36, this could inhibit innovation and the provision of commercially sensitive data may undermine the principles of competitive auctions.

We believe there are solutions to these concerns and that these are best addressed through the proposed working group proposed in the consultation. Many of our members are keen to participate in this working group.

Based on our concerns set out above, we do not support the inclusion of wind farm efficiency as a material consideration in the s36 consents process.

2.2	In this chapter, the Scottish Government has identified three areas of activity where it can offer support to a route to market for onshore wind – do you agree with the issues identified?
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To ensure continued onshore wind cost reduction, it is crucial for both the UK and Scottish Government to provide a stable regulatory environment with visibility over future renewable generation delivery plans whilst addressing barriers to deployment.

Facilitating Cost Reductions

We support the desire for planning guidance to accommodate larger turbines and increased tip heights with a view to unlocking cost reduction potential. The "call for consistency of approach across planning authorities" is welcomed however this draft document fails to set out any proposals for achieving this and it is difficult to see how this can be achieved if the focus is solely on Section 36 applications determined by the Scottish Government. We recommend the initiative is widened to include local authority planning determinations as well.

Smarter Planning

Planning policy is central to the deployment and development of new infrastructure and it provides an opportunity for the Scottish Government to drive forward its decarbonisation objectives. We welcome any proposals which provide a clear and consistent approach to planning across Scotland, reducing bureaucracy and deliver a greater emphasis on outcomes and delivery. In particular, a planning system that facilitates repowering and life extension proposals is critical to ensure continuing progress towards Scotland decarbonisation targets, as well as securing the economic and social benefits the onshore wind sector delivers for communities.

Transforming the Grid

Grid transformation and a review of system charging is something which Energy UK has actively supported. We are currently operating under a charging model designed for a transmission and distribution system that is far from what we predict to be required in the future. Addressing the issues holistically is necessary to ensure that the distortions do not manifest themselves in other areas of the electricity system, as failure to do so could result in ever higher costs faced by GB consumers. Full details of Energy UK's position on charging reform can be found in our publication, Electricity Charging Arrangements Report which is available [here](#).

Encouraging Innovation

It is important that innovation is supported where it can provide long term cost reduction and offers value for money for UK consumers. Understanding how innovation works within the current policy frameworks is important, for example co-located storage under the RO or CfD. Where innovation offers future cost reductions it is important that barriers to deployment are reduced.

Whilst we support corporate power purchase agreements (PPAs) in principle, we believe the PPA market is still immature and will not deliver the volume needed to achieve effective decarbonisation. We view the CfD as an effective enabler for decarbonisation and the future development of onshore wind.

Furthermore, references to 'battery storage' in the consultation document are welcomed as it is a rapidly progressing technology with potential to maximise the potential of onshore wind and other intermittent generation. Although, the business case will vary from site to site, battery storage should be promoted as a positive material consideration both for new sites and for proposals where it is planned to be retrofitted to existing sites.

2.3	How can the Scottish Government, with the powers available to it, further facilitate a route to market for onshore wind?
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We believe that affordable decarbonisation must include a route to market for the lowest cost form of low carbon generation at scale, onshore wind. Onshore wind's continued deployment in the 2020s should be based on the development of a mechanism to enable a route to market. One option is a market stabilisation CfD, amongst others, and we recommend that this issue is addressed as soon as possible by engagement between all stakeholders. It is essential this route to market considers repowered sites, allowing the most efficient technology to be deployed in suitable locations.

To grow the UK supply chain the industry needs a clear vision of intent and a long term sustainable market. We estimate that four year visibility of auction volumes and timing is needed. Therefore, we support Scottish Government's call to the UK Government to provide greater long-term certainty over regulated renewable mechanisms.

Within their own policy and legislative remit, the Scottish Government can set out how this low cost low carbon technology can contribute to decarbonisation of the electricity sector in the most cost-effective way, to minimise the total cost to the consumer. The Scottish Government can support a route to market through the following package of measures:

- The planning system – at all levels - should be improved to ensure it is streamlined and recognises the benefits of larger turbines. In addition there should also be a general presumption in favour of life extension, increases in tip heights, repowering and retrofitting electricity storage to existing projects.
- Where they own land, the Scottish Government and local authorities should consider releasing land for future development of onshore wind on a tender basis, with success criteria weighted in favour of the extent to which carbon emissions are.
- Planning advice and guidance should be given to both developers and statutory consultees on how to assess the cumulative impact of new onshore wind farms given a baseline consisting of a large number of consented projects (featuring smaller turbines) that may never be built due to them being unviable.
- Corporate PPAs – albeit currently a limited market - for the purchase of 100% Scottish renewable energy should be encouraged within the Scottish public sector and also promoted to Scottish based businesses. It will be important that the conditions of public sector PPAs are consistent with the market as a whole, to avoid creating market distortions.

We recommend that Scottish Government continues to tackle the barriers to deployment highlighted in this response and continues to discuss the merit of onshore wind in Scotland with the UK Government.

3.1 Do you agree with the Scottish Government’s proposed approach to repowering?

Energy UK and our members note the Scottish Government’s position of Government to adopt and implement a merit-based approach to repowering. We are confident that considering the investment sunk into developments’ connections and consents, that developers will repower as far as is practicable within the current market arrangements. Furthermore, as covered in our response to question 2.1 developers will make the technology choice which is most appropriate for the development considering land-use, connection capacity and extent of community support. In doing so, developers will be able to repower at least cost and best value to the consumer. We and our members believe that repowering sites should go through the normal planning process but that they should do so as a pre-existing wind farm, rather than as a green-field site.

The draft statement recognises that repowering can include a wide range of development proposals; we believe a distinction should be made between the different types of proposals. These include:

- General operation and maintenance activities may fall under the general banner of ‘repowering’ and are minor in nature, therefore these types of works, do not require a new planning application.
- Life extension to projects are essential to ensure that current levels of onshore wind deployment are maintained. Where no change to existing project, these should be consider separately to repowering. We would suggest that where all appropriate asset integrity inspections are complete, and provides evidence that the asset is fit to operate and then there should be no reason why the life extension should not be progressed.
- Proposals which would result in significant changes to the project (e.g. installation of larger turbines). In some cases, these may require a new planning application.

Large scale onshore wind repowering proposals may require EIA and consenting through the Electricity Act or Town and Country Planning Act processes. In this instance, scoping opinion should be used to enable the range of issues requiring detailed examination under EIA to normally be less than in the original application. The forthcoming guidance from Scottish Natural Heritage (SNH) on repowering will have a crucial role to play in this.

The Scottish Government’s clear support for the principle of repowering for its potential to make best use of land and energy resources is welcomed, however, it is difficult to see how this can be achieved if the focus is solely on Section 36 applications given that the majority of Scottish developments are <50MW. Energy UK believes that Scottish Government support for repowering should also extend to projects submitted under the Town and Country Planning (Scotland) Act 1997.

We therefore recommend that the policy statement is updated to reflect the different nature of the proposals.

3.2	Are there any further means by which repowering proposals might be facilitated?
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From our members' experience to-date, repowering sites is made more economical through the use of fewer but larger turbines. This is a reflection of economies of scale in the construction of the turbines themselves and the consenting process for new sites. Many local authorities have been supportive of repowering allowing a number of our members to progress with such developments, enabling continued investment in renewable capacity at least cost to the consumer. However, there are a number of locations where the network connections are capable of supporting an uplift in generation from renewable sites which are due for repowering.

The onshore wind industry has seen significant cost reductions in recent years, this trajectory may continue with the correct frameworks in place. Enabling repowering, of the most efficient sites in the best locations, would currently require a market stabilisation mechanism in order to de-risk capital investment and secure project finance. Repowering will ensure progression towards out decarbonisation targets, secure economic and social benefits for rural regions whilst offering low cost generation to customers.

Price stability lowers the risk and associated cost of capital, reducing project costs and benefiting the UK consumer.

Energy UK and our members have concerns regarding the direction of travel of SNH policy and their upcoming guidance on repowering. We believe the Scottish Government needs to provide balanced direction to SNH to ensure that they are aware of the full range of Scottish Government policy objectives, including aspirations on repowering. We would also encourage cognoscence of the fact that more modern, larger turbine types can reduce local environmental effects.

4.1	Do you agree or disagree with the proposal to pursue option 3, a 'locally co-ordinated approach'? Please provide reasons to support your answer.
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We and our members do not support proposals to pursue option 3, a locally coordinated approach. We have concerns about how this 'locally co-ordinated' approach would work in practice. Should the locally coordinated approach be progressed, then developers would need to disclose their business case, likely at a time when a business decision may not be clear and could be impacted by any number of externalities.

It would be difficult for developers to share commercially sensitive information with competitors involved in an auction processes (for example a CfD) and the locally coordinated approach could undermine the principle of competitive auctions. It is also important to recognise the different development approaches taken by the industry, with projects progressing at different speeds and differing structures (for example project vs balance sheet financed), in reality this may limit the scope for greater industry collaboration.

The timing of projects will also inevitably make this approach difficult – it is highly unlikely that the project programmes of multiple developers will be aligned in the way envisaged. Developers are already required to carry out cumulative assessments as part of the environmental impact assessment (EIA) and, where required, Habitats Regulations Assessment (HRA) processes. The development process already involves informal discussions at the pre-scoping and pre-application stages with neighbouring developers to deliver the highest capacity whilst minimising the cumulative environmental impacts. This approach advocates developers deciding and agreeing on what goes where, but still includes the risk of refusal at the planning stage.

There are examples where developers work constructively together, for example on strategic road works where developers share common access routes, this is successful only where there are shared interests and the outcomes are mutually beneficial. Where the situation exists where each developers is essentially a competitor, it would be difficult to leverage agreement.

In addition, this approach does not consider other key parties such as landowners, who are key to the successful development of onshore wind projects.

4.2	Do you agree or disagree with continuation of the Scottish Government's 'business as usual' approach (option 4)? Please provide reasons to support your answer.
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Scotland's planning system has an established process for consenting applications for new developments above and below 50MW. The process has proven itself to be functional and attractive to investment as exhibited in the fact that in 2014 over 60%¹ of the UK's 8GW² of onshore wind capacity has been built in Scotland in recent years. However, to make the Scottish market even more attractive to investment, the process could be reviewed with greater emphasis on process efficiency, outcomes and delivery.

Furthermore, several necessary improvements have been addressed in the January 2017 document - Places, people and planning: A consultation on the future of the Scottish planning system. In short these can be stated as:

- A strengthened role for the National Planning Framework and Scottish Planning Policy
- A streamlined process for the preparation of Local Development plans to be better informed, focus on providing clear spatial strategies, avoid a 'rule book for decision taking approach' and which do not depart from SPP where there is strong local justification.
- Supplementary planning guidance will not form part of the LDP
- A National Infrastructure Investment Plan to feed in to an enhance the NPF.

As set out above, in our response to the above questions, there is opportunity to improve the planning system through the provision of clear guidance on repowering proposals, an acceptance by decision-makers, statutory bodies and other key stakeholders of the benefits of larger, efficient turbines and a pragmatic approach to cumulative assessment and scoping.

5.1	Do you agree with the Scottish Government proposal to facilitate a strategic approach to the access to, and the cost of using, data from civil aviation radar to mitigate impacts of wind development on civil aviation operations?
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Energy UK agrees with this Scottish Government proposal to facilitate a strategic approach to cost-effective civil radar feed mitigation access. However, we consider that this question relates to only one element of the wider civil and military aviation safeguarding issue, namely the cost and time to deploy short term, interim mitigation until such time as the responsibility for procuring wind farm tolerant surveillance systems is assumed by aviation stakeholders. The Scottish Government needs to consider when will aviation stakeholders be required to accept that wind turbines (of any scale) form part of the operational baseline against which they need to specify aviation communications, navigation and surveillance (CNS) infrastructure.

It is now an appropriate time for the aviation and planning authorities to be moving to a position of requiring aviation stakeholders to deploy (at their own cost) surveillance infrastructure that is fit for purpose regarding wind generation as an established technology.

Any financial contributions being sought by aviation stakeholders (civil or military) for mitigation should only apply for so long as aviation stakeholders are required to upgrade legacy infrastructure. Any contributions in the short term should be cost reflective of mitigation upgrades deployed; due to the additional investment to date industry would anticipate these costs reduce over time. Onshore wind is now mainstream generation technology, not a niche sector, and the aviation industry have been alive to these problems for twenty years and have been in receipt of substantial research and development funding (from the wind industry) without satisfactorily addressing the issue. Energy UK believes that a firm position should be taken by the Scottish Government to have the aviation industry take greater responsibility for resolving the impact of wind turbines on aviation radar, as this will incentivise them to innovate whereas, to date they appear to have been unable to do so (or not sufficiently motivated enough to do so). Energy UK is also concerned that, it appears, there is potential for developers to be charged more than once for the same mitigation. A system similar to the 'second comer' rules for recovering grid costs could be considered.

¹ Westminster Parliamentary paper on The Renewable Sector in Scotland - available [here](#).

² Onshore Wind: Economic Impacts in 2014 by Renewable UK – available [here](#).

Given surveillance capital cycles, renewable energy should not be required to make any contribution to surveillance upgrades beyond the mid-2020s. By 2030 at the very latest, each industry should provide its own infrastructure necessary for its operations in the current environment.

In order for aviation stakeholders to be encouraged to purchase surveillance equipment which is fit for purpose in an environment which includes wind turbines, there are two areas in which regulatory changes will be necessary:

- The Civil Aviation Authority should revise CAP 670 to ensure that going forward, aviation stakeholders assume the obligation to procure surveillance systems which are windfarm tolerant.
- Planning rules – while an objection to a planning application by an aviation stakeholder does not constitute a veto, we would argue that where an aviation stakeholder has chosen not to deploy windfarm tolerant surveillance infrastructure, its objection should no longer be viewed as an objection on safety grounds, but rather one on commercial grounds, in that it has chosen not to procure infrastructure which is fit for purpose in the current environment.

5.2	Do you agree with the Scottish Government proposal that the exclusion zone around the Eskdalemuir array should be set at 15km?
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Energy UK agrees with the Scottish Government proposal that the exclusion zone around the Eskdalemuir array should be set at 15km.

As development continues, the budget is progressively depleted – the closer turbines are to the Array, the more budget they consume; hence the recommendation to extend the exclusion zone. It is important to note that once the current budget is exhausted there will be limited opportunity for further wind turbine development within the 50km safeguarding zone without the removal of existing turbines.

6.1	Do you have any comments regarding our Peatland Policy Statement and the functionality and role of the carbon calculator?
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Energy UK disagrees with the implication in the policy statement that peatlands must remain unchanged (page 2, paragraph 3) which suggests that developments on peatlands, including onshore wind developments, should be precluded. Energy UK view is that peat losses should be minimised to protect the carbon store as far as possible, but that onshore wind development is compatible within peatland with appropriate planning at the design stage and precautionary measures during construction.

7.1	Are our Good Practice Principles for community benefits from onshore renewable energy developments doing what they set out to achieve?
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The good practice principles provide a useful guide for communities to assess whether the community benefit package that they are being offered is appropriate. However, in practice it may not be possible for developers to deliver on all the suggestions. It is also important that communities understand community benefit is a voluntary contribution and not a material consideration in planning.

We recognise that the Scottish Government's guidelines for community benefits were adopted at a time when the UK Government was supportive of onshore wind. However, as the industry drives down costs it may be unlikely that onshore wind will be able to continue to offer this voluntary contribution at the rate that became expected under the ROC regime. The policy statement recognises that future community benefit packages will be required to reflect new business models therefore, Energy UK and our members suggest that it would be beneficial to update the Good Practice Principles to also reflect this as it is unrealistic to expect projects to be able to continue to deliver the same level of community benefits as has historically been the case.

7.2	Are packages of community benefits that were agreed in partnership with communities, being delivered in practice?
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As the trade association which represents the UK energy industry, Energy UK is not in a position to submit a detailed response to this question. However, a number of our members have suggested that it would be useful to have an independent review of some practical aspects of community benefits, as there may be opportunities for improvement, drawing on experience to date. Furthermore, we do not believe that community benefits should be viewed as the only benefit communities receive from onshore wind developments.

8.1	If you represent, or are a member of, a community, are you interested in shared ownership and what do you think are the barriers to achieving shared ownership under a renewable energy scheme?
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As the trade association which represents the UK energy industry, Energy UK is not in a position to submit a response to this question.

8.2	What steps can the Scottish Government take to improve the prospect of further shared ownership development?
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The ambition to deliver further shared ownership is only achievable if there is sufficient local interest, enthusiasm and capacity, and if future onshore wind is both viable and consentable in Scotland. The Scottish Government should set new expectations that communities and Local Authorities should expect to be offered a package of benefits that reflect the financial viability of the windfarm - this type of package could include a community benefit fund and the opportunity to invest. Shared ownership is not relevant on all projects going forward and that it is the community, not the developer, which will ultimately determine the level of uptake of shared ownership.

The Scottish Government could put in place measures to assist communities to develop action plans, used to drive community ambition and would also be available for anticipated investment return that can be used as part of the planning applications. This has been set out as an expectation for developers who wish to include such information in their planning application as a socio economic material benefit. However, there are other organisations that are better placed than onshore wind developers to assist a community to identify and prioritise their needs.

For more detail about the questions posed within the consultation document please refer to the responses submitted by our members.

Should you have any questions regarding this consultation response then please do not hesitate to get in touch via the details below.

I can confirm that this response may be published on the Scottish Government's website.

Yours sincerely,

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