



**Renewable Energy Systems Limited**  
Cedar House, Greenwood Close, Cardiff Gate Business Park  
Cardiff CF23 8RD, United Kingdom  
E [info@res-group.com](mailto:info@res-group.com) [www.res-group.com](http://www.res-group.com)

NDF Team  
Planning Policy Branch  
Welsh Government  
Cathays Park  
Cardiff  
CF10 3NQ

15 November 2019

Dear Sirs,

## **RES response to Welsh Government Consultation Draft National Development Framework 2020-2040**

### **Introduction**

RES is the world's largest independent renewable energy company active in onshore and offshore wind, solar, energy storage and transmission and distribution. A British company, headquartered in the UK, and at the forefront of the industry for over 35 years, RES has delivered more than 16 GW of renewable energy projects across the globe and supports an operational asset portfolio exceeding 3.5 GW worldwide for a large client base.

As a privately-owned British company registered in England and Wales we are committed to developing long term relationships with the communities around our projects and we proactively seek ways to work with, and support, our host communities. From our local office in Cardiff, RES has been at the forefront of wind farm development in Wales since the early 1990s and has developed a number of projects across the country. Our wind farms can provide significant benefits to the host and local communities around them, representing a major inward investment in local areas by generating significant job and supply chain opportunities.

In 2017, RES completed construction of the 34MW Garreg Lwyd Hill Wind Farm in Powys, which resulted in considerable inward investment through the use of local contractors and suppliers, such as main contractors Jones Bros from Ruthin.

Our goal is a future where everyone has access to affordable zero carbon energy.

Given RES' area of expertise, this consultation response focuses on policies 10-13 of the draft National Development Framework (draft NDF), relating to powering and heating places with renewable energy.

## Policy Targets

We welcome the draft NDF and its aims to support the Energy Minister's September 2017 statement setting a target for 70% of Wales' electricity consumption to be generated from renewable energy by 2030. Further significant dates are the 20-year period of the NDF to 2040 and the Welsh Government's commitment to reduce greenhouse gas emissions by 95% by 2050.

The draft NDF notes that generating renewable energy is a key part of Welsh Government's commitment to decarbonisation and tackling the causes of climate change. To maintain momentum and to keep Wales on track in its commitment, we recommend that Welsh Government sets a further renewable energy target for 2040, to coincide with the period of the NDF.

Welsh Government's declaration of a Climate Emergency in May this year clearly demonstrates the urgency with which emissions reduction must be addressed, not least because of its ongoing impact on the health of the population. To help address this Climate Emergency, it will be necessary to decarbonise transport and heating to ensure progress towards a net-zero carbon target in 2050. This decarbonisation will entail a considerable increase in electricity demand, which will require a significant expansion of electricity generation from renewable energy and the NDF must enable this expansion to take place as quickly as possible. However, as it stands, the draft NDF does not enable that expansion to happen as quickly as required.

According to the UK Committee on Climate Change, the commitment from the UK Government to a legally binding target of net-zero carbon emissions by 2050 will require a quadrupling of low-carbon electricity capacity from current levels. The scale of that expansion of renewable energy has not yet been confirmed in Wales in terms of megawatts of additional capacity, but anything like a quadrupling of energy generation between now and 2050 would amount to a very significant number of renewable energy developments. The draft NDF must enable those developments.

By proposing a spatial approach to renewable energy, the draft NDF unnecessarily singles out onshore wind and solar developments from all other energy generating technologies and is also at odds with the strategic approach taken to policies for other forms of major infrastructure. As the cheapest energy generating technology bar none, the restriction this spatial approach puts on the development of onshore wind will only serve to increase the cost of electricity to consumers unfairly and it must be assumed that this is a consequence of the proposed policy which was unintended.

In addition to being the cheapest energy generating technology helping to keep consumer costs down, onshore wind of all scales provides a significant contribution to the Welsh economy. For example, Jones Bros of Ruthin were the main contractors on RES' Garreg Lwyd Hill Wind Farm; their work was worth £15 million to their business and sustained the employment of 95 personnel, all from Mid and North Wales. Furthermore, seven apprentices were taken on as a direct result of the Garegg Lwyd Hill project. Jones Bros were able to spend all £15 million within Mid and North Wales, £3 million of which was spent within the immediate Powys area on suppliers and subcontractors. In addition to the contribution from construction, wind farm operators must also pay business rates based on the capacity of the wind farm installed and, in the case of Garreg Lwyd Hill Wind Farm, business rates will contribute approximately £12m to the Welsh economy during the project's operation. The Garreg Lwyd Wind Farm is one of many examples throughout Wales where, through the normal course of business, the Welsh economy significantly benefits from onshore wind farms.

## Spatial Planning

Technical Advice Note 8: Planning for Renewable Energy (TAN 8), published in July 2005, stated that *'onshore wind power offers the greatest potential for an increase in the generation of electricity from renewable energy'* and this remains the case today. New onshore wind energy is the cheapest form of large-scale energy generation in the UK, bar none. Unlike most other forms of energy generation, it attracts no subsidy whatsoever and accordingly is the best way to reduce domestic and industrial electricity bills.

TAN 8 also concluded that *'for efficiency and environmental reasons amongst others, large scale (over 25MW) onshore wind developments should be concentrated into particular areas defined as Strategic Search Areas (SSAs)'*.

TAN 8 set a target of 800MW of new onshore wind to be installed within SSAs by 2010. The subsequent 2010 Low Carbon Revolution Energy Policy Statement, clarified by John Griffiths AM in his July 2011 letter, increased that target to almost 1,700MW of onshore wind to be installed within the SSAs by 2015/17. Welsh Government's own figures confirm that by 1 April 2018 just 565MW of onshore wind had been installed, ie less than 1/3 of the target.

The TAN 8 spatial planning policy directed developers to the limited sites within the SSAs. This approach was unpopular with developers, local authorities and residents and those concerns are documented in the consultation responses to the draft TAN 8 in 2004. Those concerns were apparently overlooked when TAN 8 was published in 2005 and resulted in renewable energy generation in Wales falling woefully short of the Welsh Government targets.

We are concerned that continuing with a spatial planning policy risks a similar outcome, with renewable energy generation again falling woefully short of the Welsh Government targets.

We are further concerned that some areas identified in TAN 8 as being suitable for large scale onshore wind - areas which Welsh Government has promoted since 2005 - have now been excluded from the draft NDF Priority Areas. This pulls the rug from under years, and millions of pounds, of investment by developers. This undermines the confidence of investors, who will be unsure whether they can rely on future Welsh Government policies.

Whilst it is acknowledged that draft NDF Policy 11 does not prevent the development of solar and wind projects outside the Priority Areas, our concern is that, in practice, Planning Inspectors will inevitably be asked why a project should be consented outside a Priority Area if there is still undeveloped land within a Priority Area. This will place Planning Inspectors in a very difficult position and potentially lead either to more refusals or to convoluted legal arguments which will delay projects for years, as has occurred under the TAN 8 policy. It is recognised that the decision for projects greater than 10MW will be made by the Welsh Ministers under the DNS process, however it will be Planning Inspectors who will be required to assess the applications and to make recommendations to the Welsh Ministers.

Onshore wind projects are more likely to come forward outside the Priority Areas as the vast majority of land within the Priority Areas is unsuitable for large scale onshore wind development, due to the criteria which have been used in the Arup assessment underpinning the draft NDF. Our own assessment, based on more than 35 years' experience developing onshore wind farms, is that only a small fraction of the Priority Areas is suitable for such developments, and the more suitable areas for onshore wind projects lie outside the Priority Areas.

We understand that the main criterion determining the Priority Areas was the landscape sensitivity assessment and that this assessment was based on wind turbines to a height of 250m above ground level. Whilst it is essential that larger turbines are installed to make them economically viable in the face of a

future without subsidies, it is not the case that all projects will seek to install turbines at that height. It is very likely that turbines well below 250m might be viable and therefore acceptable in areas outside the Priority Areas. To exclude areas outside the Priority Areas, which is essentially what Policy 10 and Policy 11 will bring about, is counter-productive and will lead to fewer onshore wind farms being consented and built in Wales.

An All-Wales landscape assessment is not suitable in this context as it unnecessarily excludes sites which would be suitable and includes sites which would be unsuitable. Site-specific landscape assessments are more precise and will enable more suitable sites to be promoted and ultimately more projects generating renewable electricity.

Paragraph 5.9.17 of Planning Policy Wales, Edition 10, December 2018, recognises the temporary nature of the impact of renewable energy projects and seems at odds with the draft NDF's use of an All-Wales landscape assessment which would limit renewable energy development unnecessarily:

*'... In circumstances where protected landscape, biodiversity and historical designations and buildings are considered in the decision making process, only the direct irreversible impacts on statutorily protected sites and buildings and their settings (where appropriate) should be considered. In all cases, considerable weight should be attached to the need to produce more energy from renewable and low carbon sources, in order for Wales to meet its carbon and renewable targets.'*

Of similar significant importance is a buffer between turbines and dwellings, which was excluded from the Arup assessment. Buffers between wind turbines and dwellings are important to ensure that levels of noise and shadow flicker are acceptable and that residential amenity is retained. The omission of a suitable buffer is the main reason why the vast majority of the Priority Areas will not be developed. The size of a buffer will vary depending on turbine model and the landscape in specific locations. Again, this is a factor which can only be assessed on a site by site basis.

For the foregoing reasons, it is therefore essential that the final NDF does not include Priority Areas and it is our strong recommendation that these areas be removed from the document and Policies 10 and 11 be merged. Otherwise, the Welsh Government targets for renewable energy generation are highly unlikely to be achieved.

## Solar

Solar projects, like wind projects, must now be developed at large scale to be financially viable in the face of a future without subsidies. In addition, solar projects are typically only viable with a relatively cheap grid solution and it is therefore essential that they are located close to a network connection point (substation). By identifying Priority Areas at great distance from connection points, the draft NDF has drastically limited the opportunities for solar development across Wales.

An All-Wales assessment of landscape impact is not an appropriate criterion for identifying suitable sites for solar development (or for identifying unsuitable areas to be excluded). If this approach is taken, along with the proposed unnecessarily large buffers from AONBs, SSSIs and heritage assets, then many suitable solar sites are likely to be prevented from coming forward. We therefore recommend that these constraints be relaxed and that site-specific assessments be relied upon to enable the scale of solar development which is required in the face of the Climate Emergency.

Policies 10 and 11 should therefore be merged to enable solar development to come forward throughout Wales and not just in the Priority Areas.

## Grid

Our experience of requesting grid connections for our projects, and from meetings we frequently hold with the Distribution Network Operators, confirms that there is very little available capacity on Wales' electricity network to connect electricity generating stations of scale.

Indeed the situation is now worse than in 2005, when TAN 8, Annex C, para 2.13 stated *'There is currently very restricted capacity for further wind-power developments in North and Mid Wales (Scottish Power / Manweb network) and the re-enforcement of the network through the construction of new high voltage distribution and transmission lines is vital to the realisation of any significant additional generating capacity as well as providing a stronger, more reliable network for electricity users in the western mid Wales area. The Assembly Government strongly supports the principle of this scheme.'*

This vital reinforcement of the electricity network has not occurred since TAN 8 was published and will be essential in enabling the Welsh Government renewable energy targets to be achieved. Reinforcement is necessary not just for connecting additional generating stations, but also to support the step change in industrial, commercial and domestic demand which will be created by the electrification of transport and heating throughout the country. Unless the cost of that reinforcement is met by Government or by the network operators, then it will fall to generators to fund. Only large scale wind and nuclear generators will have the access to the investment to support that level of reinforcement, which would, in turn, enable other technologies, including solar, hydro, tidal and community projects, to become feasible.

Those large scale projects require a long development programme and further targets for renewable energy in Wales would give businesses more confidence to invest in projects and support the necessary upgrades to the grid infrastructure.

The work undertaken by ARUP to inform the draft NDF includes a constraint that sites beyond 20km from a grid connection point would not be feasible for onshore wind development. This is an unhelpful and unnecessary constraint. There are several large scale onshore wind farms operating in Wales with grid connections in excess of 20km – for example RES' Garreg Lwyd Hill project in Powys.

Whether or not a site is economically feasible is a decision for developers to make when considering all aspects of a project. The arbitrary 20km distance to a grid connection unnecessarily restricts the potential capacity which could be generated from renewable energy in Wales.

Without urgent reinforcement of the electricity network, the required increase in renewable energy generation, which the NDF seeks to achieve, will simply not happen. The NDF provides a great opportunity to support reinforcement of the electricity network throughout Wales (where devolved responsibility allows) and should include a presumption in favour of such reinforcement.

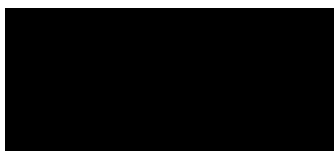
## Summary

1. In the face of Welsh Government's declaration of a Climate Emergency and the implications that Emergency continues to have on the health of the population, it is vital that renewable energy generation from all technologies is urgently expanded. The NDF has a once in a lifetime opportunity to support renewable energy development of an ambitious, but achievable, scale to meet its zero carbon commitment by 2050.
2. We propose that policies 10, 11 and 13 are merged such that there is a presumption in favour of all renewable energy technologies throughout Wales, and an acceptance of landscape change except in the areas identified in policy 12.

3. We recommend that the NDF adopts a policy to support reinforcement of the electricity network to enable the required expansion of renewable energy developments.

If you would like any clarification of this response to the draft NDF, please do not hesitate to be in touch. In the meantime, we look forward to the next steps in the progress of the National Development Framework.

Yours faithfully,



Chris Jackson  
Senior Development Project Manager  
E [chris.jackson@res-group.com](mailto:chris.jackson@res-group.com)

T [Redacted]

[Redacted]