



Let's talk about ONSHORE WIND

Development of onshore wind is an important part of BWCE's proposed portfolio, but still faces exceptionally rigorous planning requirements. These have stopped almost all onshore wind developments in England over the past five years. There are three ways that you can help:

- **Help stimulate discussion of onshore wind: make the most of every opportunity to talk to people you know about it. Keep it simple, avoid statistics, and stress two main points: it's cheap, and it's popular.**
- **Take part in the current council Local Plan consultations, and contribute to Neighbourhood Plans, if there is one being developed in your area.**
- **Lobby your MP once there is further information on changes to national Planning Policy on energy development later in 2021.**

This briefing provides further information to help you. The first part provides key information about onshore wind as a basis for discussion. The second part covers the planning system, and how you can contribute to local planning policies and processes.

Please click on the links for more information. If you are reading a paper copy, please see the BWCE website. For more in-depth information, see the following resources:

- **'Common Concerns about Wind Power'**, the *Centre for Sustainable Energy*, 2nd edition 2017. 132 pages. Excellent in-depth analysis of peer reviewed sources.
- **'Switching on: How renewables will power the UK'**, *Friends of the Earth*. 2017. 12 pages. A slightly easier read, but with good references, mainly government sources.
- **'Rising to the Climate Crisis'**, *Town and Country Planning Association* 2018.
- **'Neighbourhood Planning in a Climate Emergency'**, *Centre for Sustainable Energy* 2020.



Talking points

- 1. Onshore wind is the cheapest form of new energy installation.** The [Department of Business, Energy and Industrial Strategy](#) (BEIS) has confirmed that costs have fallen dramatically for both on and offshore wind and solar over the past five years. By 2025 electricity from onshore wind and solar is projected to cost half as much as gas fired generation. See the [Carbon Brief summary](#).
- 2. Onshore wind is popular:** 73% of the population support onshore wind; 7% oppose it. ([BEIS survey](#) November 2020.)
- 3. Wind power is crucial in tackling climate change:** [The Energy White Paper](#) (BEIS December 2020 p43) states that *"a low-cost, net zero consistent system is likely to be composed predominantly of wind and solar."* The Climate Change Committee has called for full decarbonisation of electricity generation by 2035, if we are to reach the new zero carbon target set in the Climate Change Act, amended in 2019.
- 4. On and offshore wind and solar: we need it all.** Electricity demand is forecast to double by 2050, due to changes such as the switch to electric cars ([BEIS 2020](#) p42). Achieving these targets is therefore a massive challenge: we can't afford to delay. For Bath and West Community Energy, development of onshore wind is essential to complement solar generation and meet its goal of matching local demand with local renewable energy supply.
- 5. When the wind drops... no problem! The National Grid has set a target of being able to manage a zero carbon grid by 2025** ([Electricity Ten Year Statement, National Grid 2020](#)). It has long been skilled in dealing with peaks in supply and demand (eg during the break in a popular TV programme), and has effectively managed the transformation of the electricity system over the past decade, as renewable generation increased from 8% of supply to as much as 40%. (BEIS [Energy Trends](#) December 2020). It is now increasingly sophisticated in predicting and managing variable electricity supply from

different sources and areas: if the wind isn't blowing or the sun isn't shining near you, it probably is elsewhere in the UK. Interconnectors also allow electricity imports from Europe. Other options include storage (eg batteries, vehicle to grid), and hydrogen, as well as **demand management and flexibility**.

6. **Wind turbines can pay back the energy used to make them in less than a year.** On average, onshore wind turbines generate 18 times the energy used to make, install and maintain them over a 20-25 years lifetime. This compares favourably with fossil fuels, where the energy needed to extract coal, oil or other fuels is increasing as resources become scarce and harder to access.
7. **No power source operates 100% of the time.** The average wind turbine doesn't generate any electricity for about 20% of the time over a year, usually because it's not windy enough, and they will not always be working at peak efficiency the rest of the time. This is either because more energy than needed is being produced, or the local grid connection has reached capacity so no more energy can be uploaded to the grid. In comparison, the most efficient power stations (combined cycle gas turbine and nuclear) achieve an average of around 60-65% of their maximum capacity annually.
8. **Climate change is a much greater threat than wind turbines to birds, bats and other wildlife,** as the **RSPB** points out. Wind turbines do kill birds, but let's put that in perspective. The number killed is far fewer than those killed by cats, cars or from collision with buildings. The key question is what kind of birds are affected: turbines are often sited in wild places, where rare birds of prey, for example, are at risk. So making sure that wind farms are built in the right place is vital: all wind farms have to complete an environmental assessment, including the impact on rare species.
9. **Roll on 'negative subsidies'!** Electricity generation companies in the government's **Contracts for Difference** (CfD) auctions put forward their price to supply electricity. If the cost in the wholesale market falls below this, then the government will make up the difference for a period of 15 years. But if the cost in the wholesale market is higher, then the electricity company will pay the government



(and this should be passed back to consumers). The rationale for this approach is to provide the security needed for investment in a major long-term project. Onshore wind and solar will be able to participate in the next Contracts for Difference auction in 2021, having been excluded in the past. Prices for offshore wind in the last CfD auction in 2019 were around £40 per megawatt hour (MWh), which is cheaper than for existing gas power stations and less than half of the £92.50 per MWh guaranteed for the new nuclear power plant being built at Hinkley Point C in Somerset.

10. **What's preferable – a few big turbines or many more smaller ones?** **B&NES Council** research has proposed a pathway to net zero that includes 150 gigawatt hour (GWh) of local onshore wind electricity by 2030. This could be achieved by 28 large (2.5 MW) turbines, typically measuring 125 metres to blade tip at their highest point. The alternative would be 100-140 smaller **500 kW turbines** to deliver the same amount, with the number depending on wind speeds: these would still measure 70-90 metres to blade tip.

Planning and onshore wind

1. Overview

Onshore wind currently faces exceptionally rigorous planning requirements. These are set out in the **National Policy Planning Framework** (p45, footnote 49), and require areas for wind development to have been included in Local Plans, to have addressed local concerns and have the support of the local community. The extent of support is not quantified or defined and no other major development faces this hurdle. These requirements increase cost and risk for wind developers, leading to almost no new onshore wind developments since the legislation was introduced in 2015.

Local Plans (county level) are the most effective way to address these constraints. They can designate possible areas for wind development, based on analysis of local wind speeds as well as landscape issues. They also demonstrate community support through the normal Local Plan consultation process, since councils are required to provide a Statement of Community Consultation showing widespread involvement, in order for the plan to be approved by the Inspector.

Neighbourhood Plans (town and parish level) can also support wind development projects in a similar way.

However, they require considerable local work and resources, and not all town or parish councils have been prepared to take this on.

Finally, the Energy White Paper states that **national planning policies** related to energy will be reviewed this year, which may be an opportunity for change.

2. Local Plans

Local Plans are reviewed every five years, and the three councils in the BWCE area have taken this opportunity to re-assess how planning might contribute to addressing the climate emergency. It is vital to show widespread support for onshore wind during consultation on these plans: your feedback is important. This is also an opportunity to comment on other renewable energy, sustainable construction and similar carbon reduction policies. There are different stages of consultation, from an initial review of issues and options, to feedback on the draft plan and at the final hearings by the national inspector. If you want to comment at this final stage, then you must comment on the draft plan first.



Bath and North East Somerset

Public consultation on '**Options**' is from 7 January to 18 February 2021, followed by further consultation on the draft plan in May-June. The final hearings by the national inspector are in winter 2021 and adopted in spring 2022. You can see an overview of how the process works on **B&NES youtube**, with consultation details [here](#). You can also **sign up** to be kept informed. Further background documents include updated research on the **potential for renewable energy in B&NES (2018)**, and two previous research documents, **landscape sensitivity analysis for wind developments (2010)** and **further landscape analysis of areas with technical potential (2011)**.

South Gloucestershire

Consultation on '**Issues and Approaches**' started in November 2020 and runs until 1 March 2021. The policy on Renewable and Low Carbon Energy Systems (p170) states that the existing Renewable Energy Resource Assessment study will be updated and include identification of suitable areas for renewable energy, together with landscape sensitivity assessments. Community ownership is encouraged (Issues and Approaches p171). The **annual renewable energy progress report** provides useful background. You can find more information and take part in the consultation [here](#).

Wiltshire

Consultation starts on 13 January 2021, with online events by town and village until 9 March 2021, as well as the opportunity to comment online. Book your place and sign up to be kept informed [here](#). Consultation on the draft plan will follow in quarter 4. The proposal agreed at the **Cabinet meeting** (appendix 4, p803) in December 2020 states that stand alone renewable energy schemes will be supported, but the onus seems to be on the developer to show that landscape, 'residential amenity' etc have been addressed. There is no specific mention of onshore wind, and the **Local Energy Strategy (2019)** simply lists the constraints to wind as the extent of protected landscape and military areas, as well as low wind speeds. On the other hand, an earlier **report** (section 5, p51) commissioned by the Council in 2011, provides detailed analysis and mapping of the potential for wind, with scope for 160MW.

3. Neighbourhood plans

B&NES: Neighbourhood plans have been completed in *Chew Valley, Claverton, Clutton, Englishcombe, Freshford and Limpley Stoke, Publow with Pensford, Stowey Sutton, Westfield and Whitchurch*. Those in italics include renewable energy policies. They are underway in Bathampton, Batheaston, High Littleton and Hallatrow, Keynsham, Midsomer Norton, Paulton, Timsbury and Stanton Drew.

South Gloucestershire: Neighbourhood plans are being developed in Thornbury, Charfield, Pucklechurch and Oldbury on Severn.

Wiltshire (BWCE area only): Neighbourhood plans have been completed in Bradford on Avon, Corsham, Holt, Hilperton, and Warminster. Holt is the only one to include any renewable energy policy, although others mention climate change.

