

Site Identification

Top 10 Tips!

In this note we provide some very basic tips in identifying a potential site for a wind farm. These tips are for large wind turbines (typically 60m high towers with 60m diameter rotors) some of the issues are similar for smaller wind turbines (i.e. 10m towers with 5m diameter rotors) but these tips are not directed at this smaller option.

In broad terms any wind farm must be:

- **Socially acceptable**, covering such issues as land ownership, noise, visual appearance etc.
- **Environmentally acceptable**, covering issues like landscape impact, impact on birds and bats etc.
- **Financially acceptable**, Even a smallish wind cluster will cost £3,000,000 or more so the financial returns will have to be acceptable

These tips are directed at those in Wiltshire that know their 'patch' reasonably well and probably have a 1:25,000 scale map of their area (the ordnance survey 'Explorer' map). The tips are really for 'desk study' use only. If later a site is identified as having potential then we would need to arrange a meeting with the relevant landowner. Please remember that going on to other people's land without permission is trespass, and (at the very least) would probably not give a favourable impression. There are also inherent health and safety risks.

The tips just provide a start, we aim to consider potential sites at future meetings, and hopefully take them forward. Local knowledge is really useful here so please have a go and feedback any ideas either at the next meeting or by email to info@wiltshirewind.org.uk

The advice is directed at Wiltshire, UK only!

The top 10 Tips:

1. **Make sure it is windy** If it is not windy enough then the site will not develop enough energy and will not get investment. Wiltshire Community Wind Energy (WCWE) have done some work on this and as a very course rule of thumb any land below about 90m as shown on ordnance survey maps is probably not very attractive. WCWE can supply more accurate data for any particular site.
2. **Keep away from neighbours...** A wind turbine will probably have to be about at least 400-500m away from the nearest house (unless the house is owned by the landowner on which the turbines could be built). There are noise, visual impact and 'shadow flicker' which mean it cannot be much closer. This constraint has major impacts in Wiltshire.
3. **...But not too remote** If the site is miles from a good road then it will cost a lot to build the access roads to the site. Whilst this may be OK in Scotland where you may have 50 turbines in one wind farm to help pay for it, this is not the case in Wiltshire where the likely number in any one site is probably 3-6. Ideally an 'A' road within 500m would be good. But remember that turbines have to be built at least 100m away from a road.
4. **Landscape Impact** The Wiltshire landscape is one of the best in the country, and this is recognised by much of the county being designated as an 'Area of Outstanding Natural Beauty' with the Cotswold AONB (North and West of Chippenham), North Wessex Downs AONB (East of Devizes) and Cranborne Chase & West Wiltshire Downs AONB (West of Salisbury/South of Warminster). Broadly wind turbines cannot be sited in these areas. These areas are shown at the end of these tips.
5. **Environmental Impact** This is a very wide topic, and every area has to be considered on a site by site basis. Generally you would need to seek advice on this issue from WCWE initially. However a good place to start is the site www.magic.gov.uk, which at least shows the designated sites.
6. **Site orientation and local features** In an ideal world a wind turbines would be sited on flat clear horizontal land at the top of a gently sloping hill. Unfortunately this is rarely the case. If there are major obstructions in the direction of the prevailing wind (i.e. In a south-west direction) for example a large woodland, this is less than ideal.
7. **Grid connection** Whilst individual micro turbines can be attached to batteries (you sometimes see them on canal boats on the Kennet and Avon Canal), major developments require a good grid connection. This is a very site specific issue and depends on how many turbines and the proximity to the grid. However long connections are expensive, so very remote sites are unlikely to be attractive.
8. **Airfields and MOD** at the time of writing we are trying to get more guidance on this issue, as it is complex. Main airfields (i.e. Boscombe Down near Amesbury and Lynham south west of Wootton Bassett) are major constraints, and we are awaiting comments from the MOD on some potential wind turbine sites to identify their attitude. Realistically anything within 5km is almost certainly not acceptable. There are likely to be issues up to 15km. Other airfields have similar issues although

probably not on the same scale. With respect to Salisbury Plain the MOD training area is an obvious constraint. We are not sure about how close the MOD would accept turbines to their training area – but we have asked them!

9. **Ownership** Do you know who owns the land – or do you know somebody who may know? If you know the landowner is likely to be amenable to talking this is a very good start. Generally WCWE would like to get more comprehensive information on any site before any approach was made. Obviously if you know the person there is no harm having an initial chat – but we don't want to set hares running too early!
10. **Use your local knowledge** You can often use local knowledge to help. Perhaps you know a site locally, or know a local farmer who is looking for additional revenue (they can get paid about £5000 per turbine per year for having it on their land). Use your local contacts! Historical clues can be useful – how many Windmill Hills are there in Wiltshire, where do locals go and fly their kites?

The top 10 ten tips are just a start. It would be great if you could feed back any site ideas you have. However we do have to be careful to plan properly, and it is up to the group as a whole to discuss which landowners to approach.

WCWE have a lot of information to help, and we are aiming to hold meetings to discuss sites and plan with maps! So do not hesitate to contact us.

The plan below shows the Areas of Outstanding Natural Beauty (as discussed in tip 4) and the World Heritage Sites in red (Bath, Avebury and Stonehenge). The yellow line is the county boundary.

