



## **South Lakes Action on Climate Change**

### **Statement on Wind Energy**

1. This document sets out to summarise SLACC's views on the development of large scale wind farms (i.e. wind turbine site installations above 1MW).
2. We (SLACC) recognise that large wind turbines and wind farms (i.e. groups of large wind turbines) can generate a very useful contribution towards meeting the energy demands of the UK. They can do this at an acceptable economic cost and with a much lower carbon cost than conventional electricity generating technologies. The technology is now tried and tested and new capacity can be added far more quickly and cost-effectively than any other form of low carbon electricity generation. Accordingly on-shore wind farms are the most effective way of providing a large scale contribution towards reducing the UK's production of greenhouse gases in the short term and therefore towards tackling the issue of climate change.
3. Cumbria has an excellent wind resource and generally offers a number of good sites for wind turbines. In the interest of tackling the issue of climate change we are therefore, in principle, committed to supporting the expansion of wind farms at suitable sites within Cumbria.
4. We recognise that wind turbines and wind farms can be both welcomed and unwelcomed by the local population. In good locations many people find them visually attractive, however others find them intrusive and consider that they have a detrimental visual effect on the landscape. There can be reasonable objections to them on other grounds such as noise and access issues. It is also true that on some sites (e.g. where large amounts of peat need to be removed ) there can be significant carbon costs resulting from their installation.
5. Accordingly we recognise that it is important that each potential wind farm site is fully evaluated in terms of its overall environmental impact before it goes ahead. The basic principle should be that of striking a balance between the need for more wind farms and the environmental costs of developing each site. We recognise the role of the market and that of developers in encouraging wind farm developments and we recognise the need for developers to be able to make an economic return on their investment. However the economic potential of a site should not be allowed to result in the exploitation of sites which are not environmentally sustainable.

6. Accordingly our position on the development of on-shore wind farms in Cumbria is, in principle, whole hearted support whilst accepting that not all sites selected by developers will necessarily be acceptable. We welcome the recent SPD document on the development of wind farms in Cumbria and generally accept that this should be the basis for assessing potential sites.
7. We recognise that developers can offer (or communities accepting wind farms in their locality may request) some form of direct community benefit as part of the arrangement for hosting a wind farm. This would be in addition to mitigation measures demanded under the planning control system. Examples of benefits might include community part ownership of one or more turbines, a subsidy on energy costs and economic investment in the locality. We are, in principle, in favour of local communities having an element of control or interest in “national interest” developments in their locality (such as wind farms). We also welcome such arrangements to the extent that they may lead to wider acceptance of the location of wind farms in the region. However the need for the rapid expansion of low carbon energy is so urgent that the lack of such arrangements should not be viewed as a reason to reject a wind farm in any particular location.

NOTE:

1. Wind turbines harness the power of the wind to generate electricity. They can vary from tiny “rooftop” units of the order of a few hundred watts, to several mega watts (one megawatt is equivalent to one million watts). It is useful to categorise them roughly as follows:
  - a. “Rooftop/Domestic” – typically rated around 1kW(1 kilowatt)
  - b. Small, mast mounted – typically 2 to 10 kW (“Farm sized”)
  - c. Medium, “Community” sized – typically 15kW to 50kW (or even up to 250kW)
  - d. Utility (Wind Farm) size – typically 500kW(0.5MW – megawatt) to 2 MW (and moving to 5MW)
2. All wind turbines need a good and reliable wind resource in order to be economic. There is now mounting evidence that the small “rooftop” designs currently available provide very disappointing performance except when mounted on a high mast on top of high buildings such as blocks of flats. There are also considerable risks of damage to buildings unless the mountings are properly designed for the buildings concerned. In view of their poor performance and the other risks SLACC should not generally support or promote the widespread installation of these turbines other than for experimental and developmental purposes.
3. Category b.(small, mast mounted) turbines can provide a reasonable output on the right site in locations with a good wind resource such as an upland farm or in open areas such as the grounds of schools, large car parks etc. in upland or coastal regions. They are usually installed individually but may be grouped in small numbers on appropriate

sites. They can be successfully mounted on the roofs of larger buildings in appropriate locations. Noise levels are generally low and can be acceptably sited within about 75 metres of residential buildings (though this is naturally somewhat subjective).

4. Category c. (medium, community) turbines are usually installed singly to provide power for a small community such as a large school, a housing development or a factory.