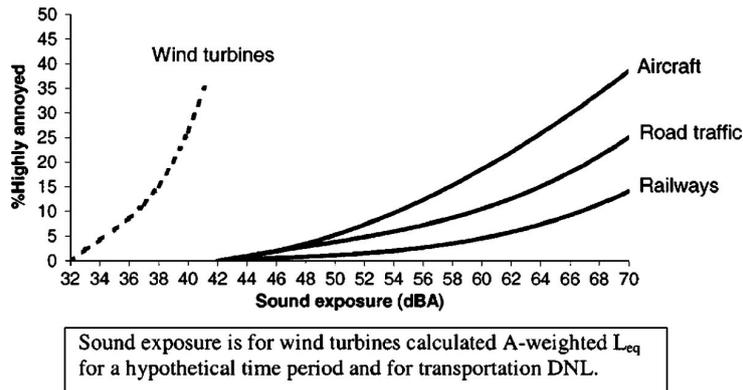


Wind Farm Noise

Across the world, communities complain of noise from wind turbines.

The World Health Organisation in its latest report (1) has shown quite convincingly that wind turbines cause noise problems.

People start to get annoyed at lower levels by wind turbine noise than by any other noise.



This is almost certainly down to the high-level of low-frequency in wind turbine noise. As early as 2006 we wrote in *Location, Location, Location* (2) about the serious impact wind turbine noise was having on some people. The industry has reluctantly admitted there may be noise problems and is talking about mitigation measures or offering people money who live beside turbines. Some governments now insist turbines can only be built within so many miles from the nearest residential property. Distance can deal with the noise but not always. Low-frequency noise can travel further and can penetrate buildings.

Solutions:

- **Use accurate noise guidelines.**

The current method of measuring wind turbine noise is called ETSU-R-97 (3) but it has been heavily criticized (4). Our view is that it should be revised or replaced.

While not 'loud' in the conventional sense, the noise from wind turbines can be particularly disturbing due to the high-level of low-frequency contained in the noise. This, together with the flickering of the blades, can be destabilizing.

- **No turbines within at least one mile of residential properties.** This is the distance recommended by the French Academy of Medicine. The terrain of course will influence how far the noise carries so, if there is nothing to block the noise, the distance should be greater.

- **Close down turbines which cause disturbance.** It is not acceptable to expect people to put up with destabilizing and disturbing noise for decades.

And promote energy sources which do not cause the noise problems that wind does. That is, potentially all other sources: for details, see our report http://www.ukna.org.uk/uploads/4/1/4/5/41458009/noise_audit.pdf

References:

- (1). https://www.euro.who.int/data/assets/pdf_file/0008/383921/noise-guidelines-eng.pdf
- (2). http://www.ukna.org.uk/uploads/4/1/4/5/41458009/wind_farm_report.pdf
- (3). https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/49869/ETSU_Full_copy_Searchable.pdf
- (4). <https://www.dickbowdler.co.uk/content/publications/ETSU-R-97 - The Alternative - Incl figures.pdf>