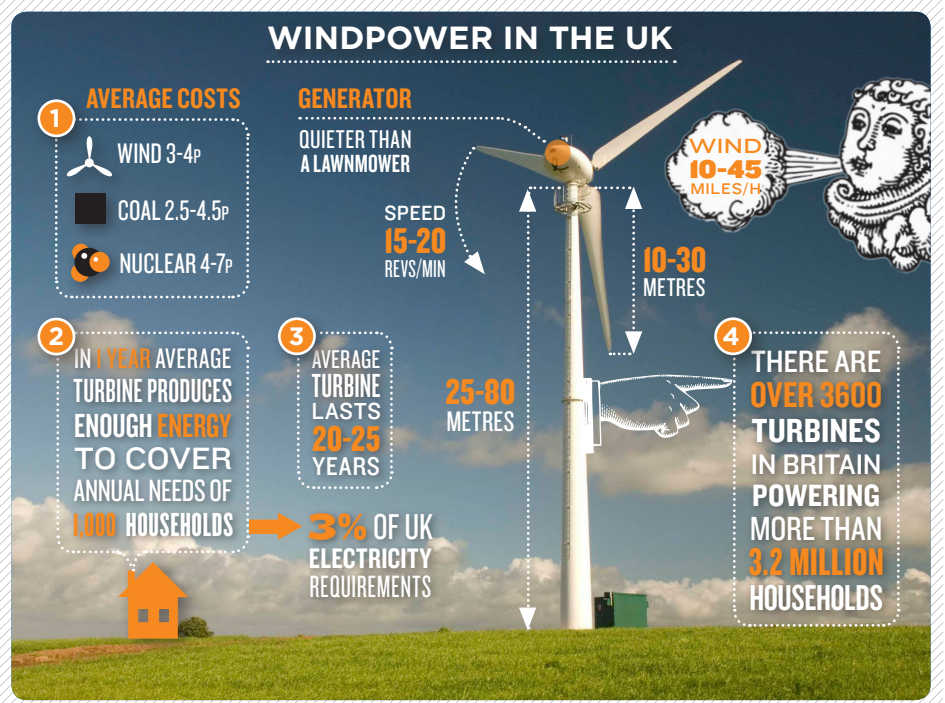


New wind farms face stiffening gale of opposition

A fresh poll shows that the number of Britons who would 'strongly oppose' a new wind farm has tripled in the space of two years. The bitter debate has split the environmental movement.



SCIENCE
GEOGRAPHY



Global warming caused by carbon dioxide emissions is now generally accepted to be one of the most worrying long term threats that we face today. To prevent catastrophic temperature rises, scientists and environmentalists are fighting all over the world to get people to use less carbon-emitting fossil fuel and switch to more renewable sources of energy.

In one key battleground, however, a new poll suggests that the fight will be very bitter indeed. A survey of the British public, published yesterday, shows that new wind farms face 'strong opposition' from more than one in five people.

Moreover, that number is growing fast: there were three times as many 'strong' opponents this year as there were in the last survey, done two years before.

Wind is the most plentiful renewable energy source in Britain. If fully harnessed for energy, the gusts that blow in off the Atlantic Ocean and the North Sea could, in theory, power the whole

country three times over. So why do wind farms get such a chilly reception?

Some opposition is due to technical worries: although wind energy is plentiful, it is not reliable. A country with lots of wind farms still needs backup energy sources – otherwise everything would shut down every time there was a calm day.

And wind turbines cost a lot to put up – in both money and energy. In fact, one report even controversially suggested that wind power produces as much CO₂ (through installation costs and backup costs) as it saves.

But most people who object to wind farms are not worried about their effectiveness. In fact, many objectors support renewable energy – at least in general terms. The problem is the impact wind farms have on the natural landscape. Individual turbines can be 100 metres tall from base to tip; they interfere with wildlife and are dangerous to birds; they come with an accompanying network of

high voltage cables and access roads.

And, of course, the areas where there is most wind are rugged coasts and remote highlands: exactly the sorts of beautiful and wild places which conservationists are generally most anxious to preserve.

DEFENDING THE WILD

Mainstream environmentalists say such objections are criminally short-sighted. You can understand, they admit, why people don't want to see a huge turbine going up next door, but the future of the planet is at stake. Surely stopping global warming is more important than preserving an unspoilt view?

But there are some who passionately disagree. True environmentalism, they argue, means defending the natural world against human interference, whatever the cost. Building wind farms is, in the end, just another way to keep the lights on and the TV sets blaring while, as always, nature pays the price.

Q & A

Q Will we all have to put wind farms up in our gardens?

A The EU is committed to getting 20% of its energy from renewable sources by 2020, and even more in the decades after that. So yes, wind farms are going to become a lot

more common. They may not all have to be in anyone's garden though.

Q Really?

A As technology gets better, a lot of wind power could come from huge turbines built far out at sea. At the moment, wind farms can only be constructed in shallow water, but there are several prototypes being tested at the moment which could lead

to floating wind farms that could sit much further off shore.

SOME PEOPLE SAY...

'The good of humanity is more important than preserving natural beauty.'

WHAT DO YOU THINK?

► New wind farms face stiffening gale of opposition

WORD WATCH

Renewable – The Earth's reserves of fossil fuels like oil, gas and coal are huge, but not unlimited. At current rates of consumption, most supplies are expected to run out within the next century or so. Renewable energy is energy that comes from a source that will never run out, like the wind or the sun.

One report – The suggestion was made by the Civitas think tank, and was hotly disputed by other scientists and by renewable energy companies. However, energy costs of 'variability' in wind power remain very much a valid concern.

Turbine – A turbine is anything that transforms the flow of gas or liquid into a turning motion.

An old-fashioned windmill is a classic example. Modern wind turbines use huge blades to turn magnets inside a generator, producing electricity.

Next door – People who approve of wind turbines in general but disapprove of wind turbines being built nearby are sometimes disparagingly called NIMBYs. The letters stand for Not In My Back Yard.

YOU DECIDE

1. Would you allow a huge wind farm to be built next door to you?
2. If there were no humans left on Earth, would it matter if the planet was destroyed? If so, why?

ACTIVITIES

1. People often worry about wind farms spoiling their view, or ruining the beauty of landscapes. Sketch a design for a wind turbine that would look beautiful as well as generating power.

2. Research the advantages and disadvantages of ONE alternative energy source that might provide clean power in the future. Possibilities include solar, geothermal, hydroelectric, tidal, wave, nuclear, biomass and fusion. Present your findings to your class. Which source ends up sounding most promising?

 **BECOME AN EXPERT** Check our website for a selection of useful links to videos and further reading.

 **NOTES**

