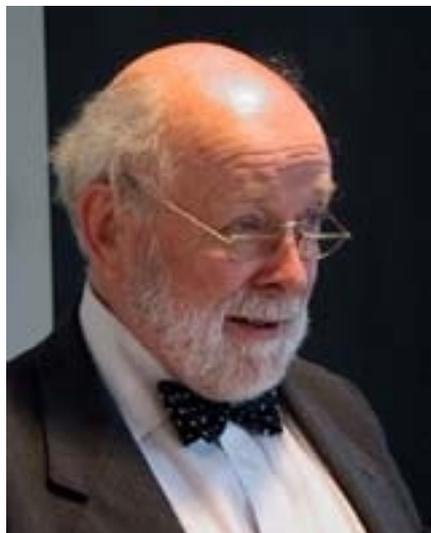


## [Power lunch with Professor Ian Fells](#) [1]

Written by [Dr Eamonn Butler](#) [2] | Thursday 13 December 2007



Newcastle's Professor Ian Fells was our guest at a Power Lunch here yesterday. As an engineer and energy expert, he's flabbergasted at this week's announcement from the government that every home in Britain will be fed by wind energy by 2020, thanks to a new 25-gigawatt wave of offshore wind turbines. Fells points out that most government announcements on energy since around 2000 have been - well, confused, to put it politely.

Quite so. The chance of the UK reaching their targets of 20 percent renewable energy by 2020, or a 60 percent cut in CO2 by 2050 are roughly zero. Presently we have about 1500 wind turbines generating just 1 percent of our electricity. You will need a lot of new turbines to increase that significantly. And when you do build them, remember that you will also have to strengthen parts of the national grid to cope. And planing authorities don't much like the idea of lots of new pylons crossing the landscape.

When it comes to offshore wind power, the costs are largely unknown, and the kit needed to build on that scale doesn't exist. The trouble with wind power is that quite often, the wind isn't blowing; and when it is, it isn't blowing hard enough to make turbines work at peak efficiency. So you need more turbines than you think to generate the power you need. Fells reckons it means erecting ten turbines a day to meet the government targets, and he can't see how that is feasible. After all, they are each bigger than the London Eye, and that took years to build.

Turbines are great for pumping water in Australia, or charging your batteries in Antarctica. But as a power source for an industrialized country that is completely dependent on electricity ? the computers, the waterworks, the tills, the rail signals and just about everything else goes off when the power fails ? it's hardly something we can rely on. So why are we making such grand commitments? Well, politicians want to seem green. And with nine different energy ministers in the last decade, it's probably that none of them really understand the costings and engineering. So they throw £1bn of our money each year on renewables that wouldn't exist without that largesse. We should concentrate on security of supply (and new nuclear capacity is probably the cheapest way of doing that) - then the rest will follow.

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