



ITM Power plc
("ITM" or "the Company")

Wind farms blasted by 'clean energy' boss

Wind farms are not the salvation to Britain's 'clean energy' needs, says a leading alternative power expert. For every wind farm built there has to be additional conventional power stations to supply electricity for days when there is no wind. Wind is intermittent and will not bridge the energy gap we are facing.

Jim Heathcote, CEO of ITM Power, said: "Without energy storage capability for power generated when conditions are good, wind and solar energy are virtually useless. This is the vital part of the jigsaw that supporters of clean energy are completely failing to see and it's tragic.

"Renewable energy without storage offers no energy security solution and little in the way of CO2 reduction. There's no point in building 20 new wind farms if you have to simultaneously run back-up power stations in parallel to provide electricity in case the wind drops and the turbines don't turn.

"But if you can store the excess energy produced when conditions are good, then you have a real clean energy solution. And this is what you have with hydrogen and it's the vital link."

Heathcote says that by converting electricity to hydrogen gas through an electrolyser, the gas can be stored to be used on demand. Hydrogen can be burnt as a gas in cookers, domestic boilers and as a fuel for cars, trucks and vans. It can also be easily converted to electricity by using a generator or fuel cell.



ITM Power is Europe's largest electrolyser and fuel cell development company and has recently started pilot production of Home Refuelling Stations at its factory in Sheffield.

Heathcote added: "Buffer storage of hydrogen allows you to use energy when you need it and it's central to any power grid system. But politicians and even some advocates of clean power seem to be blind to this.

"Large scale renewable energy systems (wind and solar photovoltaic) should not be deployed until energy storage solutions have been developed.

"We are developing these for solar and, some time in the next few years, it will be scalable to wind. We should go with solar now and leave wind until the storage technology is ready.

"We are facing an unprecedented energy gap and we must look at new solutions that would also include fossil fuels and nuclear.

"Systems we are developing now provide the answer. We have the solutions for storing solar energy by converting it into clean hydrogen. We can do that on a scale suitable for individual homes. This would allow householders to be self-sufficient for their power needs."

ITM Power will demonstrate a Ford Focus that can run on hydrogen at the GreenFleet Awards conference in London on September 25. The firm has been short-listed in the Industry Innovation category.

ITM Power was founded in 2000 and is listed on the London Stock Exchange's Alternative Investment Market (AIM). It has head offices near Saffron Walden and research and development facilities in Sheffield, and employs around 60 people.

The GreenFleet Awards have been running for 10 years and are dedicated to promoting the use of cleaner fleet vehicles.