

Wind Power is Simply Not Green, According to Energy Expert, H. Douglas Lightfoot

Wind and solar electricity cannot supply more than 10% of electricity on the world's electricity grids, based on the latest research by energy expert H. Douglas Lightfoot.

Montreal, QC ([PRWeb](#)) September 10, 2007 -- H. Douglas Lightfoot of Nobodysfuel.com has announced evidence that there is a limit to the amount of intermittent electricity which can be assimilated by existing electrical grids. He also explains that wind and solar power do not significantly mitigate carbon dioxide emissions. This research is detailed in DVD format, entitled Nobody's Fuel - energy supply is more important than climate change.

"The public is not aware that when any wind power is being delivered to a fossil fuel powered grid, the fossil fuel plant does not shut down because it takes too long to start up again when wind power stops. Thus," Lightfoot explained, "when wind electricity is being delivered, fossil fuel is being burned and carbon dioxide is emitted. This is known as spinning reserve mode. Wind electricity is not green when supplementing a fossil fuel plant."

"Spinning reserve mode is something like having your foot on the brake of your car waiting at a red light," Lightfoot explained. "Your car doesn't move, but the engine is still running. And the engine must run, because when the light turns green, you need the power immediately. Unfortunately, just like your car at a stoplight," Lightfoot explained, "spinning reserve mode consumes energy."

"Many people promoting wind power are not aware that large wind turbine projects and solar arrays can achieve no more than a 10% reduction in energy consumption or carbon dioxide emissions from fossil fuel plants for generating electricity," Lightfoot explained. This is simply because more than 10% of intermittent wind power is too much of a shock to the grid, which becomes vulnerable to power delivery disruption. Furthermore," Lightfoot explained, "wind mills stop turning and producing power if wind speed is too low and stop suddenly when wind speed is too high--they shut down to try to prevent damage from high winds."

"The public is also unaware that every time a windmill is built to increase grid capacity," Lightfoot explained, "a backup system is required because the wind only delivers electricity about one-third of the time. The backup system must use a source of energy that is always available. For example, to increase grid capacity by an average of 100 megawatts (MW) requires 300 MW of installed wind generators. A reliable backup system would be a 100 MW fossil fuel powered plant. The backup system is absolutely essential for wind power to increase grid capacity, but is rarely, if ever, included in the cost of wind electricity."

Hydroelectricity is one source whose output can be changed rapidly to meet demand fluctuations. "But if intermittent electricity, such as wind or solar power, is coupled with hydropower," Lightfoot explained, "it has no value--wind, sun and water are all 'free'. It does not make sense to couple a renewable energy, such as hydropower, which delivers energy when required, with an intermittent renewable energy, such as wind. There would be no reduction in carbon dioxide emissions."

Net-metering is not a solution

"Very often, the concept of net-metering is proposed as a means of adding solar electricity to the grid," Lightfoot explained. "Net-metering is where people with solar power panels on their home can sell their excess electricity to

the public utility and simply buy it back when they need it. In effect, this exploits the public electricity grid capacity for the back-up. However, the flow of electricity to and from the utility is completely unpredictable as people turn on hair dryers, and other appliances, at random times. This variability, together with spinning reserve mode, limits the total contribution of solar power to the electrical grid to less than 10% of annual electricity production. Even if the Earth were covered in solar panels," Lightfoot explained, "solar electricity could only ever supply up to 10% of our needs, simply because the grid cannot handle the fluctuations."

About Nobody's Fuel

Nobody's Fuel was produced to make people aware of impending energy challenges ahead, and to promote a workable plan to provide the energy the world needs, while ameliorating the carbon emission problem. Only through a stable and affordable energy supply can we: lift poor nations out of poverty; adapt to the effects of climate change; protect the environment; and maintain the well-being of everyone on Earth.

The Nobody's fuel DVD explains spinning reserve mode, as well as many other topics concerning energy supply and carbon dioxide mitigation.

DVD title: H. Douglas Lightfoot's Nobody's Fuel - energy supply is more important than climate change.
DVD length: 2 hrs. 25 mins.

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