

Wind does not help fight global warming

ROWE, MASS., MARCH 1, 2007 — Wind power will not help in the fight against global warming, says National Wind Watch, a coalition of individuals and grass-roots groups from around the country. Although many environmentalists look favorably towards large-scale wind power, it has proven to be ineffective and counterproductive.

Wind generated only 0.36 percent of the total electricity produced in the U.S. in 2005, according to the 2007 “Annual Energy Outlook” from the U.S. Energy Information Administration.¹ They project that wind’s share will be only 0.89 percent in 2030. A determined push could increase that number, but with many undesirable consequences for the environment, wildlife, and human health—as documented on the National Wind Watch web site: www.wind-watch.org.

“Even just five percent by 2030 would require 160,000 megawatts of wind, almost ten million acres—most of it rural and wild—turned over to 400-foot-high machines and their motion, noise, and lights,”² says Lloyd Crawford, a director of National Wind Watch. “That’s not a green solution, but a huge disaster any way you look at it.”

Huge impact, very low benefit

There were 7,937 megawatts of wind power operating in the U.S. in 2005, according to industry figures. The figure for their combined output, however, shows that they generated at only 21 percent of capacity: 1,667 megawatts.³ And that low average hides a highly intermittent and variable production pattern that is of little value to the grid. Since it responds only to the wind and rarely corresponds to customer demand, wind power can not be relied on for supplying electricity and adds to the burden of balancing the electricity supply.

Wind is unlikely to cause any fossil fuel plants to shut down. It can not effectively replace other sources, which still have to be available when the wind isn’t blowing just right. Other plants may also operate less efficiently than if wind were not on the system—burning more fuel instead of less, and burning it with more emissions.

“This is a key point,” says National Wind Watch president Eric Rosenbloom. “Wind might sporadically replace the *electricity* from other sources, but it does not necessarily reduce *fuel use* or *emissions* at those sources to anywhere near the same degree.”⁴

Global warming needs real, not symbolic, solutions

The production from commercial wind turbines is small, highly variable, and intermittent. Yet their size, cost, and sprawl are disproportionately huge. Industrializing more of our land and seascapes for wind energy does much more harm than good. It is not an environmentally wise choice.

Sue Sliwinski of Sardinia, New York, who is also a director of National Wind Watch, has written: “Commercial wind power development is an environmental and economic folly, but the true danger lies in the fact that it will divert our attention and resources away from finding *effective* solutions to our very real and urgent problems.”

National Wind Watch information and contacts are available at www.wind-watch.org.

¹www.eia.doe.gov/oiaf/aeo/.

²In the EIA projection for 2030, 0.89% represents 51.85 million megawatt-hours (MWh). Five percent would therefore be 291.29 million MWh. Divided by the 8,760 hours in a year, that represents an average power rate of 33,253 MW, which would require, with an average output of 21%, 158,345 MW of installed wind capacity. The industry rule of thumb is 60 acres per installed megawatt of wind: $158,345 \times 60 = 9,500,700$ open acres. On mountain ridgelines, it would require about 16,000 miles.

³Wind’s reported production was 14.60 million MWh. Dividing by 8,760 hours gives an average rate of 1,667 MW.

⁴An International Energy Agency graph of Danish electricity generation by fuel from 1971 to 2003, for example, clearly shows coal replacing oil in the 1970s but no such effect from the addition of wind since the mid-1990s, especially as electricity generation—and coal use—increased since 2000. www.wind-watch.org/documents/danish-electricity-generation-by-fuel-1971-2003/.