

WIND POWER FACTS—SIERRA CLUB NIAGARA GROUP

Why wind power?

Wind power is part of the solution for holding back the worst effects of climate change. To maintain life on Earth as we know it, to prevent catastrophes for humans around the planet and prevent mass extinctions of other species, we must completely replace fossil fuels with clean renewable energy. We can meet all our energy needs by 2050 with clean renewable energy, including storage and efficiency changes. **The climate crisis cannot be solved without large-scale renewables.** (Jacobson & DeLucchi, 2010.)

Is wind power a threat to birds?

The Audubon Society, the leading bird conservation non-profit, reported in 2014 that climate change is the greatest threat to birds, with many species facing extinction, and it supports renewable energy and the rapidly advancing technology to protect birds as wind projects increase. <<http://climate.audubon.org>> Among human-related causes of bird deaths, collisions with buildings and cars, cats (outdoor cats kill an average of 14 birds a year, each cat more than 7 wind turbines), pollution from fracking and mining fossil fuels, and habitat loss from development, are the major causes (Erikson, Johnson & Young, 2006.) Wind tower site selection involves thorough studies of birds and other wildlife, including bats, and must be approved by the US Fish and Wildlife Service and the Department of Environmental Conservation to go forward.

Do wind turbines make people sick?

Anti-wind power organizations, some funded by the fossil fuel industry, have invented “wind turbine syndrome,” to scare communities where wind projects are proposed. “Symptoms” include headaches, anxiety, sleep disorders and brain disturbances from “shadow flicker” and “infrasound.” None of these common conditions have been statistically related to living near wind turbines by studies using proper scientific procedures, including control groups of similar communities without wind projects. (Knopper & Olson, 2011) and are best explained by “annoyance” and the “nocebo effect: when people dislike something around them and don’t feel well, they tend to think of the disliked feature as a cause. A review by Rand and Hoen (2017) stated that 70-90% of Americans living near wind projects react to them positively or neutrally. In contrast, seven million premature deaths worldwide and 200,000 in the USA can be attributed to air pollution, which is primarily from burning fossil fuels. (Johannes et al., 2016)

Do wind projects negatively affect property values?

Ten major studies of wind turbines in the U.S. and Canada all show that property values either remain unchanged or increase near turbines (2009 Lawrence Berkeley National Laboratory.) Payments to farmers and landowners increase spendable income and property improvements. More tax revenue to towns and school districts helps infrastructure and the quality of education in the area.

Are wind turbines really effective and economical as sources of energy?

With more than 52,000 utility scale wind turbines generating about 85,000 MW (Megawatts) of electricity, powering the equivalent of 25 million American homes (American Wind Energy Association, 2018) wind power is an efficient and economical power source--there is no fuel cost! There are about 100,000 jobs in the US wind industry, and wind projects are in 41 states plus Puerto Rico; wind also receives far less government subsidies than fossil fuels. Some European countries have days when they are 100% powered by wind. A new frontier in wind power for the US is offshore wind, which is widespread in Europe. The first large-scale offshore wind project is ready for construction off the shore of Long Island and will become a major clean power source for New York City.

This fact page was written by Ellen C. Banks, Climate and Energy Chair, Sierra Club Niagara Group and Conservation Chair, Sierra Club Atlantic Chapter.

References for Wind Power Facts: (All these sources are easily found on the internet)

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