

Presenting the facts about industrial wind power

www.wind-watch.org

Common Misconceptions About Commercial Wind Power

Wind power is good for the environment, right?

On a small, residential scale, yes. However, on an industrial level, wind-generated electricity cannot be stored, creating factors that negate most of the environmental benefits. Environmentalists everywhere are now recognizing that commercial wind development is often more harmful than it is beneficial.

But what about global warming?

Because commercial wind turbines need a constant back-up source of power (which most often are the fossil fuel-burning units now in service), they're duplicating rather than replacing electricity. Pollution and $\rm CO_2$ levels aren't reduced, because conventional plants must stay on line, essentially going into a less efficient mode every time the wind blows. In Denmark where almost 20% of their electricity production is wind generated, they *consume* only a small portion of it and $\rm CO_2$ levels there have recently *risen*—in spite of thousands of operating turbines.

But it will reduce our dependence on foreign oil!

Less than 3% of our electricity is produced using oil. Commercial wind power will have no effect on our need for or consumption of foreign oil.

But it's important to diversify, isn't it?

Yes, but wind power has no value when it comes to diversifying because it's not dispatchable, that is, it cannot be dependably called upon when needed since the electricity produced is intermittent and varies with the wind.

But electricity will be cheaper, right?

For every wind farm that gets built, our electricity costs will generally go up to cover the increased balancing and transmission costs and the subsidies given to developers, which for the most part are derived through extra fees and charges on our electric bills.

But jobs will be created and the tax base will increase!

Only a few permanent positions are created with each wind farm, and local tax bases will likely decrease rather than increase. In NY, wind turbines are tax exempt for 15 years (§487, NYS Real Property Tax Law). It's also been documented that local *property values decrease* in wind farm areas. In some cases homes have even been demolished due to noise pollution and other impacts, further reducing the tax base.



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Commercial wind is not cheap and it's not green.

The industry's giant utility-scale wind turbines create enormous impacts on our natural and wild places and on communities where people live. Though convincing propaganda would have you believe otherwise, the benefit of even a thousand turbines is minuscule and in reality does little to address today's energy or air quality problems. And for every wind plant that gets built, our electricity bills go up!

Today's commercial wind amounts to mere green tokenism, yet its impact is actually creating a new kind of pollution. It's an environmental and economic folly that's squandering precious time and resources, and is steering us away from finding true, meaningful solutions to our energy and global warming dilemmas.

For more information, contact National Wind Watch.



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The wind industry routinely overstates benefits and trivializes negative impacts, which can include:

Communication interruption ▶ television and wireless phone signals are often affected by nearby rotating turbine blades.

Risk to quantity and quality of well water ▶ construction of huge foundations can affect local water tables.

Safety issues ▶ including: deteriorating road conditions, insufficient security, increased stray voltage, fire hazards, increased occurrence of lightning strikes.

Loss of wildlife habitat ▶ due to service roads, mechanical structures, and human activity. Industry-commissioned studies are often flawed and inadequate.

Increased traffic ▶ increased chance of auto, pedestrian and bicycle accidents.

Noise ► mechanical and low frequency—caused most often by the aerodynamic slicing motion of the massive turbine blades, generating a near-constant unnatural pulse. NOISE—#1 complaint of nearby residents.

Strobe/flicker effects ▶ which can flood onto properties and into homes when the blades eclipse the rising and/or setting sun—varies with season.

Visual dominance ► close proximity to residences causes huge machines to be the most dominant element in the local experienced living environment; blades cast large rotating shadows; nighttime and daytime strobe lights at top.

Blade tips reaching speeds of up to 200 mph ▶ increasing the danger of ice throw and blade fragmentation; gearbox problems are common.

Loss of natural amenities and visual, quiet enjoyment ▶ the outdoors no longer offers respite, loss of recreation.

Property devaluation ► homes up to two miles away of commercial wind development have suffered significant losses documented to 30% and more and fail to appreciate as they normally would without wind development nearby.

Rethinking Wind Power

Is this what we really want?

<u>Hundreds of thousands of acres</u> spanning 34 states in the US have already been impacted by industrial wind power development. At this moment, thousands of giant turbines churn away, and *together* they'll take the next 25 years to produce electricity that will be consumed in *under 19 days*. (The DOE predicts a 1.8% annual increase in electricity demand, and a 1.4% annual increase in renewable energy over the next 30 years.)

Wind power is pure folly, and causes our expenses to go up, not down. Subsidies, complex grid balancing, and higher transmission costs are all funded through extra fees in our monthly electric bills.

Because of incredible tax advantages, huge corporations have invested heavily in wind power. In 2002 and 2003, Florida Power and Light realized \$2.2 billion in profits but paid <u>NO</u> federal income taxes for either year. Additionally, they add to their earnings by selling 'wind *green tags*' that allow polluters who purchase them to exceed emission limits they otherwise would have to adhere to or face fines.

Because of the presumption of 'greenness,' wind developers are often excused from conducting thorough environmental studies essential to the avoidance of harmful impacts. Bats are dying in unprecedented numbers, yet wind plant owners *refuse to cooperate* with researchers trying to determine the reasons why, and birds of prey continue to die by the thousands because measures have not been implemented to reduce the problem in spite of numerous lawsuits brought by environmental groups.

Human beings will increasingly be impacted, as locations within rural communities continue to be inappropriately targeted for dozens and dozens of grand-scale industrial machines, wildlife of all kinds will be displaced as **hundreds of thousands** of acres of woodlands and forests will be disturbed and fragmented, and hundreds of **natural** landscapes will become **unnatural and inhospitable.**

Contrary to claims made in wind propaganda, turbine technology has **not** advanced much. The main change is the increase in turbine size, bringing with it new risks and dangers. Malfunction and accident events are on the rise, and <u>safety standards advocated by developers are ridiculously inadequate</u>.

Proponents regularly claim that hundreds of jobs are created by wind development, but statistics show 1–2 positions result per 20 MW of capacity.

Commercial wind information is extremely misleading. Problems are mounting worldwide, but the industry does **not** acknowledge them and labels those who oppose them as NIMBYs ('not in my backyard'). Issues brought to the table are thereby routinely trivialized and dismissed.

The *Renewable Portfolio Standard* was designed to counter consumer reluctance to voluntarily purchasing *green* power. Mandates are now the result of intense industry lobbying, creating a **false market** that benefits wind developers, owners, and investors, but adversely impacts ordinary citizens.

Big business wins, small business appears *green*, and **a well meaning but misguided** populace believes they are responsibly addressing critical issues. However, much of the wind power produced **is not even consumed**, as it is often generated when demand is low, forcing the entire grid system to compensate and operate less efficiently. The DOE predicts that wind's overall contribution will *decrease even further* during the next 30 years *in spite of* the explosion of industrial wind development expected, ruining countless natural environments as its destructive path marches across our nation's rural countryside and over and through our pristine wildernesses.

