

# “Windfall” Film Offers Greatest Hits of Misinformation

*Windfall* takes aim at clean, affordable, homegrown wind energy with misinformation.

**As one movie critic said:** "The documentary isn't big on hard data; instead, [Director Laura] Israel allows the majority of her interviewees to deliver anecdotes, speculation, anti-corporate conspiracy theories, and just a few statistics...the movie's case relies more on emotional appeals and frightening images of giant machines than on real, objective number-crunching...the unbridled scare tactics cast too big a shadow over the agit-prop doc Israel ended up making." (Noel Murray, *AV Club*, Feb. 2, 2012)

The following facts set the record straight on the issues that *Windfall* raises:

**Health:** Independent studies conducted around the world, including the U.S. have consistently found that wind farms have no direct impact on physical health.

- Many thousands of people worldwide live near wind farms with no ill effects.
- One example of the many studies that have found wind farms are safe is an independent expert panel established by the Massachusetts Departments of Environmental Protection and Health, which gave wind a clean bill of health based on analyzing all available scientific studies. The agencies stated "we conclude the weight of the evidence suggests no association between noise from wind turbines and measures of psychological distress or mental health problems."
- A major study in Canada of 1,238 homes confirmed this again, stating "No evidence was found to support a link between exposure to wind turbine noise and any of the self-reported illnesses."
- Other forms of energy have documented evidence of health impacts from air and water pollution. Clean, safe wind power helps avoid these health impacts.
- Studies have concluded that a "nocebo" effect can take place, the opposite of the well-known "placebo" effect. The nocebo effect<sup>4</sup> describes a situation in which individuals who are led to expect physical symptoms actually experience these symptoms, whether or not the supposed cause of the symptoms are actually present. In this case, misinformation about wind might actually cause individuals to experience real, negative health effects (headaches, nausea) although no scientific evidence shows wind turbines cause health effects.

**Sound:** Wind farms have minimal sound that can be mitigated.

- Typically, two people can carry on a conversation at normal voice levels even while standing directly below a turbine.
- Often the loudest sound heard is the whooshing sound of the wind hitting the blades—similar to the sound of a flag in the wind.
- Guidelines for locating wind farms as well as local agreements keep turbines at safe distances from homes and businesses.

**Shadows:** Shadow flicker typically occurs for just a few minutes near sunrise and sunset, and can be minimized to a short, harmless period with proven techniques.

- Shadow flicker typically lasts just a few minutes near sunrise and sunset and can be addressed through use of proven mitigation techniques such as screening plantings.
- With modeling based on the sun's angle, turbine location, and the distance to an observer, shadows from moving wind blades are predictable and turbines can be sited to minimize flicker to a few hours a year.
- The rate at which wind turbine shadows flicker is far below the frequency that, according to the Epilepsy Foundation, normally is associated with seizures.
- A 2007 report by an expert panel for the National Academy of Sciences found it to be "harmless to humans."

**Popularity:** *Windfall* is based on a minority of opponents, while the vast majority of Americans support wind energy.



- In a poll conducted in the same state where *Windfall* is set, residents of Lewis, County, N.Y., said by a 4 to 1 margin that the development of a local wind farm had a “positive effect” on the county, and 77% supported its expansion.
- Surveys routinely find that over 70% of Americans support wind power. Many local communities welcome it because of the homegrown jobs the industry creates.

**Developers and communities:** Wind farms sites are typically chosen with public input, and it’s in developers’ best interest to cultivate public support for their projects. That’s often not difficult to do, given that projects can contribute millions in tax revenue to rural communities that often need it most. Wind farms also provide thousands in regular lease payments to farmers, ranchers and other landowners.

**Wind’s contribution:** Wind energy provides much of your electricity and can provide more.

- Over 65,000 megawatts of wind power in the U.S. are in place today, enough to power more than 18 million American homes.
- A report by the Department of Energy found that wind can provide 20% of U.S. electricity by 2030.
- Wind already provides more than a quarter of the electricity for Iowa and South Dakota.

**Tax Incentives:** The tax credit for wind helps it compete on a playing field with energy sources that have been subsidized more heavily for decades.

- Fossil fuels have received many times more in government incentives than renewables. A September 2011 study by industry analysts entitled “What would Jefferson do?” found that fossil fuel received five times the government support during their startup period that renewables are getting today, and nuclear power got 10 times as much. The primary incentive for wind helps level this playing field.
- Wind’s primary incentive is the Production Tax Credit, a performance-based incentive that can pay for itself in federal, state, and local taxes over the life of wind projects.
- The government incentives for fossil fuels are often permanent, while Congress has allowed the temporary wind Production Tax Credit to expire several times, hurting investment.

**Manufacturing:** Wind energy means manufacturing jobs for the U.S.

- With the support of a stable Production Tax Credit, wind energy recently has powered one of America’s fastest growing manufacturing sectors. There are now over 500 facilities in 43 states that manufacture components for wind farms. That has shifted manufacturing jobs from overseas back to the U.S. The majority of the value of a wind farm is now made-in-the-USA.

**Decommissioning:** Wind farm owners have legal and economic reasons to responsibly decommission out-of-use wind farms.

- Decommissioning responsibilities, like equipment removal, are typically covered in legal documents created when a wind farm first goes up. The value of the parts at resale is typically greater than the cost of removal, so wind farmers have an incentive to responsibly decommission their parts.
- With roads, transmission systems, etc. already in place, wind farm sites are likely to get new turbines when old ones reach the end of their lifespan. A single new larger turbine can replace several older, smaller ones. That reduces impacts even further, especially compared with other ways of generating electricity.

**Cost:** Wind energy provides affordable energy for a stable price.

- Numerous studies have confirmed that increasing wind power and other renewable energy is already lowering electricity costs, such as by serving as a hedge against fluctuating natural gas prices. Since a wind turbine’s “fuel” (i.e., the wind) is free throughout the 20-plus-year lifespan of a project, wind energy is inflation-proof, protecting everyone who pays an electric bill.
- The cost of wind energy declined by more than half from 2009 to 2013, according to the Wall Street investment firm Lazard.
- Wind diversifies America’s energy supply with clean, safe, affordable, homegrown electricity.

