



# Get the Facts Straight on Wind Energy

*Here's what you should know about how wind turbines work and why expanded wind energy is good for Michigan.*

**Myth:** Wind energy benefits the rest of Michigan, but not the local communities that host the wind parks.

**Fact:** Local communities see significant, substantial benefits in the form of local tax revenue. This revenue provides funding for police, schools, roads, and other vital community services. The three counties in which there is the most active wind development (Gratiot, Huron, and Tuscola) have realized significant increases to their tax bases, ranging from 26 to 38 percent. These three counties have seen the largest increases to their tax bases of Michigan's 83 counties.

**Myth:** Wind turbines generate too much noise when operational.

**Fact:** At the typical 300-meter minimum distance, the sound pressure level generated by a wind turbine is 43 decibels. This is near to the amount of sound generated by singing birds (44 decibels), or a gently babbling brook or light rainfall (40 decibels). Closer to home, the average refrigerator runs at around 40 decibels, and air conditioners can reach 50 decibels.

**Myth:** Wind turbines may pose health risks for area residents

**Fact:** Studies have found that neither noise nor light from wind turbines has any direct effect on physical or mental health.

**Myth:** Wind turbines are prone to break and endanger surrounding homes.

**Fact:** While there is some risk of malfunction or breakage – as there is with any mechanical device – properly installed and maintained wind turbines have low incidence of breaking down. In addition, turbines are installed at appropriate distances from homes and other structures to prevent injury in the unlikely event that one of them experiences a malfunction.

**Myth:** Nothing can be done to minimize the disruption caused by the lights and flickering shadows created by wind turbines.

**Fact:** Although it is true that wind turbines have lights that shine at night for airline safety purposes, and the shadows produced by wind turbines when they are operating can seem to “flicker,” energy companies conduct extensive testing to determine how to minimize the impact of lights and shadow flicker on surrounding homes and communities. Responsible energy companies also work with landowners and communities after turbines are installed to address any concerns that arise.

**Myth:** Wildlife is adversely affected by inappropriate siting of wind turbines.

**Fact:** Great care is taken to minimize impacts on wildlife. Wildlife protection measures, such as the U.S. Fish and Wildlife Service's shoreline buffer guidance, are taken into account when sites are selected for wind parks. Another common concern are bird deaths. Bird deaths from wind turbines are estimated to be less than 0.1% – power lines, or flying into buildings, cars, airplanes, and towers account for 99% of bird deaths attributable to human interaction.

**Myth:** Local areas have limited say in where wind parks are located.

**Fact:** Energy companies follow township and county ordinances, work with landowners who voluntarily lease their land, and take into account roadways and structures that are regularly used by people. Energy companies work hard to be good tenants and neighbors in the communities where they have wind parks.

**Myth:** Wind turbines reduce the productivity of farmland, and after they are no longer profitable and are decommissioned, landowners are responsible for removing them.

**Fact:** Researchers believe that wind power may in fact be beneficial to crops, by circulating the air and reducing overnight dew that can cause fungus, and by reducing temperature extremes that stress crops. When a wind tower needs to be removed, the funds to do so are already there, and DTE will remove the turbines and restore the land.

**Myth:** Wind energy is too expensive to produce.

**Fact:** The cost of generating electricity from wind turbines is significantly lower than generating power from new coal or nuclear facilities, according to the Michigan Public Service Commission. Michigan's existing energy infrastructure is aging, and this means that wind is one of the most affordable and dependable new generation sources available to us.

**Myth:** The presence of wind parks lowers property values.

**Fact:** A number of studies in the U.S. and Canada find no negative impact on property values or even an increase in property values.

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