



Residential Wind and Your Neighborhood

Members of a community naturally wonder how a new technology might affect their neighborhood. Here we address some of the most common inquiries from homeowners and neighbors about residential wind in their communities.

Acoustics

The sound from small wind generators typically blends in with common outside sounds like those from cars, airplanes, barking dogs and wind blowing through the trees. According to the U.S. Department of Energy's National Renewable Energy Laboratory (NREL) the sound pressure level generated by a small wind generator is in the range of 40-65 decibels quieter than many common sounds in everyday life.

Visual Impact

Small wind generators are installed on towers similar those commonly-accepted in communities across the country. Because our generators are installed on towers ranging from 35 - 100 ft. tall and have blades ranging from 1 - 5 meters in diameter, they don't look much different than a common light pole or radio tower. Southwest Windpower generators are designed to minimize the visual area and preserve the horizon.

Structure Safety and Climbing Hazard

As with any structure, wind generator towers must meet local building and safety requirements. Towers are installed according to manufacturer and local zoning specifications that ensure structural safety. Small wind generator towers pose no greater climbing risk than other similar poles and towers or even trees. Many wind generator towers have a smooth surface, like a light pole, that is nearly impossible to climb. Those towers that are climbable, can be equipped with devices that prevent falls—as with other climbable towers.

Interference

Small wind generators have no effect on TV or communications signals, as their blades are made from materials (wood, fiberglass, and plastic) that signals can pass through. Nor do small wind generators electromagnetically interfere with telecommunications or radio waves. In fact, one of the major markets for small wind generators is powering military and remote telecommunications sites.

Property Values

There are as many as 20,000 small wind generators installed every year and to date, there has been no documented evidence that small wind generators – or even commercial wind farms -- have ever lowered neighborhood property values. In fact, a 2003 study that examined property values near ten wind farms found that

property values rose faster in those areas as compared to other homes within the region. According to the American Wind Energy Association (AWEA), a survey of 300 California homeowners conducted for the California Energy Commission found that 50% of homeowners surveyed "would be willing to pay more for a home equipped with solar and wind technology." The same study found that 60% of homeowners surveyed "would be more interested in a home that has a renewable energy system already installed versus a home that does not." Also, informal surveys of property values around three small windmills in New York showed that the asking price for most property near residential wind generators was higher than the assessed value.

Sample Letter to Neighbors

Communicating with your neighbors about your plans to install an residential wind generator is a courtesy that can prevent misperceptions. A short letter like the one below can answer most questions, letting your neighbors know you have properly researched the technology.

Dear Neighbor,

You may be interested to learn that I plan to install a small wind energy system on my property at [address]. This modern, non-polluting system will generate electricity for my own use, reducing my dependence on the local utility. Any excess generation will be supplied to the utility system.

I plan to install a [generator make and model] that will be mounted on a [height] ft. wind generator tower, set back [#] ft. from the street and [#] ft. from my [north/east/south/west] property line. This generator uses a [two/three] bladed propeller [#] feet in diameter. It does not turn until the wind speed reaches at least [#] mph. On calm, quiet days the generator will not likely be audible. When the rotor is turning, the sound of the wind passing over the blades will register about [#] decibels (dBA) at a distance of [#] ft., which will barely be audible from neighboring residences over other sounds caused by the wind.

[Manufacturer] has installed [#] of [generator make and model] in the United States [and overseas]. They have a proven track record of producing energy quietly, cleanly, and safely. If you have any questions about the proposed installation, please feel free to contact me.