

Are Wind Turbines Efficient? They Sure are Ugly!

Are the monstrously ugly wind turbines (windmills) dotting the otherwise beautiful countryside efficient? You can probably tell I don't approve of them. I am reminded how much I don't believe in their efficiency or practicality every time I drive to [my favourite farm](#).

That's because there is an enormous north-south swath of them crossing highway 43 near the intersection of county road 11, the last leg of our trip from Ottawa to the farm in Eastern Ontario.



My last venture in that direction that was no exception. My four year old grandson, my travelling partner that day, summed up my feelings pretty well with a loud "whoa, what the heck is that big thing?" When I explained that it was a windmill,

there to gather energy from the wind, he was quick to point out “but it’s not even moving!”

Exactly! During my last visit none of the windmills were operational. I mentioned this to my uncle upon arriving at his farm; apparently they were just installed. This time, a month or so later, maybe fifty percent were in motion. Not exactly a great track record.

How do Windmills Generate Electricity?

This YouTube video posted on [Good Energy in the UK](#) explains how well the windmills are working, especially within the north-western corner of Europe where it is almost always windy:

Are Windmills Efficient?

In reducing carbon footprints, these windmills are efficient, actually one of the smallest footprints in current practices of renewable generators. That’s because they do not release emissions of any sort into the atmosphere. However, their actual physical footprint is enormous, taking up huge amounts of land.

Optimal sites for wind farms are in remote locations due to the amount of space they require. The problem with this is that (expensive) transmission lines must be established to get the electricity from the remote locations to the big cities that use the most electricity. This however can be lucrative in the form of extra income for the owners of remote properties since the owners of wind power plants pay rent to the landowners, often farmers or ranchers, for the use of their land.

A windmill or wind turbine is typically only a maximum of 50% efficient when the wind is at a peak level. Wind, however, is typically inconsistent; very few global locations would have consistent winds to maximize the efficiency level.

Theoretically wind power is cost-effective because the electricity generated can be sold at a fixed price over many years, unlike the price of gas and oil which fluctuates like our Canadian weather. Wind turbines are exorbitantly expensive to make, install, and maintain, then only last on average 25 years. The wind is the inexpensive part, as it is a (free) natural resource.

Esthetics and Dangers of Wind Turbines

Not only are wind turbines hideous to look at, but they have also proven to be annoyingly noisy (when they work) as well as harmful, often fatal to birds. Hundreds of thousands of birds and bats are killed annually, in collisions with the massive rotating (and sedentary) arms of the wind turbines.



[photo credit](#)

Conclusions

I like to think I am open-minded as well as a proponent of green energy. Why then, do these wind turbines bother me so much? Probably because I am also a proponent of sensibility,

natural beauty, and efficiency, especially cost-efficiency.

[photo credit](#)