



Living with the impact of Windmills

Presented by Chris Luxemburger

A little about me....

- I am a Real Estate Broker with Sutton Group – Professional Realty Inc.
- I am a serving director of the Brampton Real Estate Board and the Chairperson of the Real Estate By-Laws Committee
- I am an active aviation enthusiast and pilot
- I have been involved in the windmill OMB process in Amaranth in 2007 and in East Luther in 2008



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My discussion points

- An overview of how it impacts on aviation safety
- An overview of how land values are established
- An overview of the impact of windmills on land values
- My conclusions



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I am not against renewable energy or wind energy for that matter. I believe the placement of the devices that will create renewable energy is critical!



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Aviation Safety

In Amaranth and East Luther Townships there are over 32 active aerodromes.

We addressed the following concerns;

- Safe landing and departure distances
- Understanding how an aircraft performs
- The impact of wind turbines on aircraft



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Aviation Safety

The fact is that General Aviation Aircraft including ultra lights can travel from speeds of 30 mph to speeds upwards of 250mph.

An aircraft maneuvering at landing approach speeds of 120 mph (such as my aircraft) covers 2 miles every minute.

Using standard turning rates, an aircraft takes 1 minute to conduct a 360 degree turn.



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Aviation Safety

The problem was that in both Amaranth and East Luther Townships they were proposing 200m set backs from adjoining property boundaries. Later they moved this to 400m. That is 0.2miles.

An aircraft would not be able to turn fast enough to avoid this kind of obstacle

The windmills further provide a down draft in their wake. This adds to the turbulence a pilot must overcome on landing or taking off.



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Land Values Argument

In the previous hearings councilors as well as advocates were saying that windmills add a contributor value to a parcel of land and thus increase the land values.

THIS IS UNTRUE!



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Land Values Argument

- Land value can be expressed in many different ways;
 - Reconstruction Value
 - Appraised Value
 - Liquidity Value
 - Market Value
 - ETC.....



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Land Values Argument

- When dealing with the OMB hearing I focused on market value since it is defined as the highest price in terms of money, that the property will bring to a willing seller if exposed for sale on the open market; allowing a reasonable time to find a willing buyer, buying with the knowledge of all the uses to which it is adapted and for which it can be legally used, and with neither buyer or seller acting under necessity, compulsion, nor peculiar and special circumstances.



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Land Values Argument

- There has never been a comprehensive study that looks at land values and the effect of windmills so there were no criteria to follow.
- As such I developed the following criteria;
 - based on appraisal principals; visible structures have an impact on the value of land
 - therefore, divide land where windmills are visible vs not.



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Land Values Argument

- Properties inside Windmill Zones** – Properties within 3nm of a windmill. 3nm was used as a basis since that is the distance one can see is a straight line due to the earth's curvature when on the same horizontal spectrum of the objects in the distance. Pilots use this as a basis for determining weather minima for the similar reason.
- Properties outside Windmill Zones** – These are properties a minimum of 3nm from existing windmills. If the object is not readily visible in the same horizontal plane, one can assume that there would be no impact in perceived value of the property due to the windmills.



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Land Values Findings

• When this was done (based on a sample of 600 properties that sold in the windmill areas over a period of 3 years) the following was discovered.

- The days on market was more than double for those properties inside the windmill zones
- The sold price was on average \$48,000 lower inside the windmill zones than those outside
- The number of homes not absorbed (not sold) was 11% vs 3%



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An illustration...



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My Conclusions

- Renewable energy is an investment our country must invest into
- Windmills can be a useful way to achieve this
- The impact of Windmills must be considered and proper placement and set backs are required
- Aviation Safety must be considered
- The neighbours who bear these devices should ALL be compensated to adjust for the impact on land values.



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QUESTIONS?



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