Wind Can Remove 40% of Ontario's Air Pollution

The idea of capturing the wind to create energy is a concept that has been used for generations. From the windmills in the Netherlands to the windmills throughout Europe, windmills have been used for centuries. Now there are more than 10,000 wind farms built with over 12,000 in operation in Europe alone.

Thirty-year-old Geoffery’s installed capacity is produced by the wind, with clusters of half a dozen turbines built in and around hundreds of small hamlets. Geoffery was forced to look for offshore sites to build new wind farms, as the country’s onshore locations were becoming rare; in 2004, the country’s shipping and hydrograph authorities approved the construction of this offshore wind farm.

In support of increasing wind energy in Canada, the federal and provincial governments introduced the Wind Power Production Incentive (WPPI) to provide financial support for the installation of 5,000 megawatts of new capacity until 2007, and in 2004 Thorne (2003) announced extending this to 4,000 megawatts. The 2005 Federal Budget committed to expand the WPPI program to 4,000 MW of wind energy development. In Canada by 2030, provincial governments are now targeting to have a minimum of 9,000 MW of wind energy in place by 2015.

In 2006, Canada has seen projects installed in Alberta, Saskatchewan, Manitoba, Ontario and Nova Scotia. These projects represent a total investment of approximately $565 million and a range of local economic benefits.

Pollution Probe’s ‘A Clean Power Vision and Strategy for Canada’; David Szukics’ report ‘Smart Generation, Powering Ontario with Renewable Energy’; Environment Canada’s a certificates of green power: Bullfrog Power, endorsed by the W and W 15.,” The tiles are just 400 acres from that wind farm, said the land owner, "but it needs to be used to grow grass and greenhouses directly across the road are used to grow green gasses.

Report by Tatjana Sulker

Living Next to Huron Wind

The shores of Lake Huron are home to Ontario’s first commercial wind farm known as Huron Wind. Located in Huron County, just northwest of Tiverton in the municipality of Kincardine, the Huron Wind project was announced in 2001 and was officially in service in 2003. With five 1.8 megawatt wind turbines, Huron Wind is able to supply enough
electricity to the province’s grid to power between 2,000 and 3,000 homes annually.

From ground to blade, the turbines stand 117-metre tall, but residents Rita and Al Babineau said they couldn’t ask for a better neighbour. The Babineaus have been living directly across the wind farm site for five years and they have been sharing their view with the Huron wind farm since the turbines were erected almost four years ago. “I think they’re just last year,” Rita Babineau said of the wind farm that sits just 400 metres from her home. Unlike some wind farms, Babineau’s home is not powered by the turbines, but despite not having the option to hook up, which she would have liked, she is thrilled to have Huron wind up and running.

The 100-acre Huron Wind site had been leased to a farmer. Studies found that once the wind farm was built, 95 per cent of the site was still available for agricultural use. According to Babineau, the wind farm has added a majestic feel and beauty to the Tiverton landscape that captures the eyes of visitors and residents alike. “You would be surprised at the number of people who stop and take pictures,” she said. “I think they look very majestic out there fitting in beautifully with the landscape.”

Babineau said while she doesn’t hear sounds from the windmills all the time, occasionally, when the wind turbines are operating at full power, she can hear them only because the sound bounces off her house, but said the sound is a welcome call. “It doesn’t bother me,” she added. “I think the sound is the wind moving over turbine blades, it doesn’t seem to bother anyone - not even my dogs.” Babineau said the calming sounds make you feel as though you are sitting in the centre of the ocean front, listening to the waves coming in. “It sounds like waves from the ocean. It’s a beautiful sound.” A windmill at 250 metres produces about the same sound level as normal conversation or 43 decibels.

As for the effects that the presence of Huron Wind has had on the wildlife population, Babineau said since the turbines have been erected, she has not seen any significant difference in the number of animals or birds in the area. “It doesn’t affect anything like that. There’s a lot of wildlife here and it doesn’t seem to bother anyone - not even our two dogs.” When the sun goes down, Babineau said the view of the sun setting with the silhouettes of the turbines in the distance, is a sight of sheer beauty. “Huron Wind is beautiful to look at, especially at sunset.”

Feds Want Renewables Where Consumed

Canada’s federal and provincial governments have taken steps towards using renewable sources of energy from investments to policies of generating a percentage of the country’s energy supply through clean, renewable sources. One of the expectations is for 40 per cent of electricity to come from renewable resources, including wind. The Green Power Procurement allows provincial governments to commit to purchasing a certain percentage of their electricity needs from renewable sources, excluding wind. Alberta and Ontario already have such programs in place. Property tax benefits to limit the development of renewable energy are currently available only in Ontario and B.C. All provincial governments are now considering or implementing specific actions to increase wind energy production. While Canada continues to lag behind European countries who have installed 12,000 wind turbines, according to Carolee Babineau, each wind turbine used instead of burning coal to produce power for 200 homes, greenhouse gas emissions will be reduced by 2,000 tonnes annually. Babineau states that the provincial initiatives currently being pursued could lead to almost a 10-fold increase in Canada’s installed wind energy capacity by 2020. Reported by Tatjana Sulker

Magnetism: Myth or Monster?

To produce wind power, turbines capture the kinetic energy in surface winds and convert it into energy in the form of electricity. To do this, as wind moves over turbine blades, it creates "lift" – the same effect used by airplane wings. Lift makes the blades rotate and the turning blades turn a magnetic field in the generator, which in turn creates electricity. Reports say magnetic energy is lethal to the brain. Is the truth behind the turbines and its effects not transmitted beyond the tower.

There have been studies in Europe and all over - this has never been a concern," said University of Toronto professor, Dr. Shashi Dewan. Large-scale wind generation provides power to the producer's utility grid. It has a large-scale coal, hydro or natural gas electrical generation facilities send power to the grid, so wind energy facilities. A single large-scale wind turbine produces enough energy to power hundreds of homes. Clustered together in a wind farm, turbines can safely produce enough energy for thousands of distant homes and businesses.

Dewan said the amount of magnetic energy created to produce wind energy is less than that in a hydro pole and the magnetic energy created from the pole lines is "no small at 0.46b compared to a regulatory standard of 833mT. "Magnetic energy is coming from the generator at the top," Dewan said. "The generator and converters" magnetic energy larger. "Magnetic energy is coming from the generator at the top," Dewan said. "The generator and converters" magnetic energy larger. "Magnetic energy is coming from the generator at the top," Dewan said. "The generator and converters" magnetic energy larger. "Magnetic energy is coming from the generator at the top," Dewan said. "The generator and converters" magnetic energy larger.
of Orangeville Hydro, said he believes something we have to start doing. "I think people need to get their own information and educate themselves on the grid. "I think they (windmills) are beautiful."

One of the world's leading crystal artists and designers, Mark Raynes Roberts, said, from an artistic point of view, windmills have a "very clean and linear design." Roberts, amongst his many works, created the W inbladdon trophy for Peroni Madness Canada and the W inbladdon Trophy, he has also completed works for Dr. Nelson Mandela, the Archbishop of Canterbury and many more. "To see a windmill, to me, is a far more beautiful and pleasing sight than a tower billowing out smoke," he said. "Windmills have a design which has a linear beauty to it."

Roberts, who has traveled all over the world, said the turbines in Harlem "are a way of creating energy in an aesthetic way. From an energy point of view, we realize that we're depleting the earth's resources," he said.

Gazo agrees. "Harlem is so far ahead of us," she said. "Windmills are the way to go. There are no pollutants to the air or into the ground, so we are responsibly creating our energy from wind. It benefits all of us and those of the future.

Area resident, George Dick is hopeful to see W Indrashegy be successful in its current wind farm proposal for Grand Valley. He too, believes windmills are exceptionally pleasing. Under the current proposal, Dick's new view from his living room window would be of the turbines. "I will see one right outside of my window and I think they're nice to look at. I'll see the windmill but I'll also see trees and grass and everything that I now enjoy," he said.

Gazo is participating in discussions for having a number of turbines erected on her property and the energy that would be created by them would not only benefit herself but would also contribute to Ontario's power grid. "I think people need to get their own information and educate themselves on wind energy," he said. "This is something we have to start doing." Dick, who is also the President of Cargondele Hydro, said he believes realizing the proposal by W Indrashegy will lead to numerous benefits for everyone. "I know that within the next 10 years there will be a severe shortage of electricity and we need to access wherever resources we have to generate power," he said.

According to the American Wind Energy Association, the majority of people favour wind energy, and support for wind farms often increases after they are actually installed and operating. "Gas is beautiful, clean, renewable. Energy is the next step. "This is the future for all of us," Gazo states.

Reported by Tatjana Sulker

Infra Sound
Is it There?

According to studies conducted by sound experts, "Windmills bring up the discussion of 'infrasound'." There is no clear distinction between 'low frequency noise' and 'infrasound'. Since human hearing has always been accepted to be within the frequency range of 20 – 20,000 Hz, the general trend is to assign the first of the terms to the range 20 – 100 Hz, while the second, infrasound, has been reserved for noise with frequencies below the 20 Hz limit.

Low frequency noise and ultrasonic are produced by machinery, both rotational and reciprocating, as well as by traffic, machine vibrations and by natural sources such as air turbulence, storms, earthquakes etc.

Noise is attenuated while in the open air mainly by two phenomena: the spread of the energy from the source to the receiver that causes an attenuation of 6 dB per doubling of the distance and by the absorption by the air. While the second mechanism is stronger for higher frequencies, the spreading out of the energy source is the most important decay in the sound pressure with the distance at low frequencies.

Because of the low rotational speeds of the turbine blades, the peak acoustic energy radiated by large wind turbines is in the infrasonic range with a peak in the 8–12 Hz range. The danger of hearing damage from wind turbine low-frequency emissions is remote to nonexistent for two reasons: the ear is not sensitive to low frequencies and the energy contained in this type of radiation is too little to affect the inner ear.

It has been highlighted recently in some publications and websites that low frequency noise and infrasound can be produced by wind turbines at such a level that they are annoying. While this was true of early models (especially with the downwind models), the technology has moved on and modern turbines produce very low levels of noise, including infrasound.

There is a general agreement that effects from low frequency noise and/or infrasound are related to their sound level and their frequency. Therefore, if the sound level is sufficiently low, there is neither perception nor negative effect on people or animals. On the other hand, as mentioned above, the sound level decreases 6 dB with the doubling of the distance. Therefore, by installing the turbines at a distance from the nearest home, the sound levels are kept at values below the allowable limits. In Denmark, this distance has been indicated as 300 metres. If windfarms have indicated the minimum distance of its turbines from a residence will be 400 metres or more, which exceed the requirements of the Ontario Ministry of the Environment regulations.

By Alberto Behar, P.Eng., C.I.H.
The Future is Here

When North Americans walk into a dark room, we instinctively reach for the light switch. When we are irritated by the green blackout, just three years ago, we were joined by the realization that we can no longer take for granted that electricity will be available when we choose to use it. With the constant fluctuation of prices at the pumps in recent months, again, we were reminded of the cost the individual pays for the need for fuel.

"We are huge consumers of energy," said Margo Cooney, economic development officer with Hottasagas Country. "So our concern is, we're going to find ourselves greater and greater in the area of other nations to supply our energy!"

Canada's per capita energy use is one of the highest in the world. According to Environment Canada statistics, in 1996 it was estimated that 72 per cent of Canada's energy came from the combustion of fossil fuels, 12 per cent from hydropower, 10 per cent nuclear power, six per cent wood and a small amount from alternative sources of power including wind and solar energy. Cooney, who has attended numerous presentations about wind energy and its future in Canada, said the country should be looking at renewable sources of energy as other countries have. "Canada is so far behind developing wind energy. Even America, Europe, Germany, Denmark, Spain, France and Sweden are moving forward with this." 

Windmills have been in operation for years with more than 12,000 commercial windmills in Europe, recent installations in Alberta and Quebec, and 5 new wind farms now operating in Ontario. "I truly believe windmills are the answer to the energy problem we have today and in the future," said Rita Bechmann, who lives 400 metres from Huron Wind. The reality is that Canadians are continually consuming more electricity per capita than in years past, and with the costs of fuel increasing, the amount of fossil fuels being used rising sharply and the lasting footprints being impressed on our environment for generations to come, the government is now encouraging the use of green power. "If we can harness the wind to power those things in our life, we can become independent in our power both industrially and domestically," Cooney said.

Grand Valley resident, Kristyn Cox said she believes "wind turbines are a symbol of the future." Cox supports sustainable development and suggests that those who think the wind has no impact on existing populations. "It's a fact that the longer wind turbines are up and running, the more people are realizing the importance of them as a renewable energy source."

"Because it's new to the area, I think people are afraid of change. What I like to ask is, "do you like electricity? Do you like your home comfort?" Then we have to look at ways to keep those comforts," she said. "I'm proud because we are helping the environment for the future." 

In recent years, hydro make has been climbing and the government has set cut targets in the Kyoto accord encouraging the use of renewable energy sources to compliment traditional methods of generating power. "I think that windmills are just something people are going to have to get used to," said Mitch Nielsen, owner of Lake Range Realty Ltd. and Mayor of Munro-Kinloss Township where Huron Wind built Ontario's first 130 area wind farm four years ago.

Recep Bail by Jharnica Balkar

Birds Live with the Wind

The sights and sounds of the bird population in Grand Valley have come to be seen as one of the contributing factors to the beauty that attract residents to the area. While people in other countries were initially concerned with birds and how they would live in relation to the installation of turbines, North American studies have shown the number of birds killed by windmills is significantly lower than those killed by other man-made structures.

Windrush Energy's proposed development to build four to six wind turbines at each of its two proposed sites in Huron County Grand Valley will not negatively affect the bird population as experts say, birds are not disturbed by wind turbines.

John Nicholson, President of the Ontario section of the Air & Waste Management Association said wind turbines will not cause any significant harm to the existing bird population. "There have been numerous studies during back to the early 1990's of bird populations and migratory habits," Nicholson said. "It's been shown that and again that wind turbines do not affect bird populations."

Research shows that communications towers, buildings, masts, even house cats, kill more birds than wind turbines and migrating birds fly away above the height of the turbines.

According to Toronto Hydro Energy Services Inc., the incidence of birds colliding with wind turbines is very low; the average rate of bird mortality at wind farms in North America is fewer than two birds per year per turbine. A study which was conducted by Toronto Hydro regarding the bird interference at the Windrush Energy turbine at the N2C grounds in Toronto concluded that although the turbine is located near Lake Ontario where there are many seagulls, only two birds were killed during the first year of its operation.

The Canadian Wind Energy Association (CanWEA) concurs. "Wind turbines have a very limited impact on birds - less than a house cat," said Robert Ronning, President of CanWEA.

While birds occasionally collide with wind turbines, Canada's domestic cat population of about five million kills roughly 140 million birds and small animals each year (28 bird deaths per cat annually) and the average residential home experiences a couple of birds flying into its doors or windows every year. There is currently no regulation to outlaw cats or patio doors.

According to data collected by FLAP (Fatal Light Awareness Project), a Toronto based organization; they encounter 2,000 dead birds each year within the city's financial district alone and estimate that some 10,000 birds collide with the high-rises within the Toronto area. FLAP's executive director, Michael Mesure said 800 to 1,000 birds collide with Toronto's 7,000 towers annually. "About half of those are able to rehabilitate," he said.

"It is not new to Canada to look at wind turbines and greater at the mercy of other nations to supply our energy. "We are huge consumers of energy," said Margo Cooney, economic development officer with Hottasagas Country. "So our concern is, we're going to find ourselves greater and greater in the area of other nations to supply our energy!"

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W ind Energy and Bats

By David Stephenson, M.B.E.

According to my research as a senior biologist with Natural Resources Solutions Inc., "flying birds, bats could have direct collisions with wind turbines." However, contrary to the unique nature forest and mountain ridge bat kill event at Back securing Mountain in 2003, bats have a keen navigation skills and generally mortality seems to be less than that of birds (Hawell and Hillman 1999, Strickland et al. 1998). Some researchers suggest that bats are killed far more frequently than birds because they can echolocate and thereby avoid collision. Other studies have shown that bats are also less likely to collide with light structures (Kilian and Mueller 1996). However, bats are at risk at the proposed W ind energy sites. Bats, butterflies, dragonflies and other flying insects are also at very low risk in comparison with wind turbines, particularly at much lower risk than they experience on highways. What studies there are have identified negligible effects to insects (Kilgan 1995) due to the height of the turbine blades above ground level. For example, "terrestrial mammals, reptiles or amphibians are likely to be affected at all by wind turbines." Smaller mammals have been reported living in close proximity to operating turbines (Griffith 1992). The wind turbines will be widely spaced turbines with minimal physical impacts. In some cases, it has been found that the open habitats typically found around the bases of the turbines can be attractive to certain wildlife, and as such, recommendations have been provided in some cases for the management of these habitats. The "opportunity for a sustainable power generation station, the difference is huge," said John Nicholson of the Wind Energy Association Canada. The "environmental benefits of using windmills to produce energy are astounding." Nicholson said while traditional methods of generating power will continue to be a part of Canada, the comparison between traditional methods, and wind energy is fairly different. "We citizens of the province, you have to ask how you want to get your hydro: nuclear, coal or gas fired generation stations, wind power, high and low voltage hydro, co-generation or solar. These are the options you have." Pollution2000 since its 1974 "A Green Power Vision and Strategy for Canada" voices concerns that Nuclear long term disposal issues have been ignored, and that wind power is also a means of taking the carbon out of our atmosphere in a sustainable fashion. Costs that are increasing at the rate of over $0.10/kWh compared to wind at $0.11/kWh. The David Suzuki Foundation has published a report "Smart Generation, Powering Ontario with Renewable Energy" promoting the need for sustainable clean wind energy. Environment Canada provides a certificate of green power to those sources that have the least environmental impact. While is it is eligible for a certificate of green power if you use wind, solar energy or small scale hydro." The federal and provincial governments are encouraging use of wind as a source of producing energy. Building the Limo, Canadian Ecole de calme to the concept of clean energy.) As far as Wind Energy, Canadians are still not ready for renewable energy because it is not a suspect as the towers are grounded deep into the earth and they are lighting rods. What happened? In the past, the towers were within the equipment and extinguished themselves. Firefighters stood by to ensure there were no secondary fires. New installations have automatic fires suppression systems, including those planned for the W indmills Energy project. The industry does not yet have a central record of accidental technical failures. One private website reported 62 events over a five year period from Nov. 1996 to Dec. 2000. These ranged from throwing ice to blade parts and loose bolts to destruction of the blades. Lea and other parts thrown were from older series of units which had 10-30 RPM rotations. In these cases, ice and other parts were reported to be thrown 100-200 meters with an unattainable record of 420 meters. "Why windmills technology is so safer than other methods of generating power, and using wind energy is vastly different. "We citizens of the province, you have to ask how you want to get your hydro: nuclear, coal or gas fired generation stations, wind power, hydro, co-generation or solar. These are the options you have." Reported by Tatjana Sulier
Wind Sounds

The sounds emanating from the blades of a modern wind turbine as it silently rotates have been compared to the tranquil sounds of an ocean's waves.

"It is difficult to describe the sound it makes, but it is definitely not a loud noise," said Scott McKee, an environmental engineer at the National Renewable Energy Laboratory.

According to McKee, the sound produced by wind turbines is a complex mix of mechanical and aerodynamic components.

"The sound is not constant and can be affected by various factors such as wind speed, turbine size, and tower height," he said.

Wind turbines can produce a range of sounds, from low-pitched hums to high-pitched whirs, depending on the type of turbine and its size.

"In general, larger turbines tend to produce higher-pitched sounds than smaller ones," McKee explained.

According to McKee, the sound produced by wind turbines is not only affected by the physical properties of the turbine, but also by the surrounding environment.

"The sound can be altered by factors such as the distance from the turbine, the type of terrain, and the presence of obstacles such as trees," he said.

In conclusion, the sound produced by wind turbines is a complex and multifaceted phenomenon that is influenced by a variety of factors.

"It is important to consider the sound produced by wind turbines when evaluating their impact on the environment and on human health," McKee said.

However, the sound produced by wind turbines is not a cause for concern, as it is not significantly louder than other sources of noise, such as cars and trucks.

"In fact, wind turbines are often considered to be a quiet alternative to fossil fuel power plants," he said.

"While they do produce some noise, the sound levels are typically much lower than those produced by conventional power plants.

In conclusion, wind turbines are an important source of renewable energy and their sound levels are not a significant concern.

"We need to continue to develop and improve the technology to reduce any potential noise impacts, but overall, wind turbines are a valuable contribution to our energy mix," McKee said.
The Ontario Standard Offer Program for Renewable Energy

For the first time in half a century, the newly formed Ontario power Authority has opened the playing field for small groups of investors to enter the renewable energy market. In an effort to encourage development throughout the province and remove barriers to small generators, the Minister of Energy announced in early 2006 a plan to develop the Standard Offer Program ("SOP") similar to successful programs in Europe.

The SOP means that anyone - individuals, municipalities and electricity distributor affiliates - can agree to provide renewable energy at a fixed price of $0.11/kwh, encouraging distributed energy production in smaller communities throughout the province, where the power can be sold to all along the shorelines of the Great Lakes.

As part of the SOP, potential projects must first undertake a Connection Impact Study with HydroOne. Then, to get financing for commercial turbines which each cost about $3.5 million to install, wind & commercial turbines which each cost $10 million to install, each project location. The benefits of the pollution-free, renewable energy will be realized in the communities where the turbines are located, as well as increased employment in Ontario as distributing energy involves local businesses and industries.

The Province of Ontario has set a goal of having 20 per cent of the province's energy generation coming from renewable sources by 2010. The Ministry of Energy's SOP is meant to encourage the development of small generation projects in Ontario and makes the economic viability of a project more easily financed and more easily arranged.

Breathe Easy

Wind power is emission-free, sustainable, and valuable.

Wind energy is clean, with absolutely no emissions, carbon or radioactive by-products to pollute the air. In contrast, power generated by burning fossil fuels and nuclear power plants creates significant environmental impacts, such as acid rain, sulfur dioxide and nitrogen dioxide.

Wind power can help protect the health of generations to come.

Air pollution harms human health.

There was a general trend of increased mortality, hospitalization from asthma, and lung cancer. And the most vulnerable groups are infants, the elderly and those suffering from asthma.

In healthy people, reduced lung function during periods of exercise can be accompanied by symptoms such as tightness of the chest, pain and difficulty breathing, coughing and sneezing. This can make breathing difficult, especially for people who already suffer from asthma or bronchitis.

Asthma on the increase.

The Lung Association notes that the percentage of Canadians with asthma is on the rise. Females between 20 and 24 years of age showed an increase from 8.9% of the population in 1994 to 13.7% in 2001.

Children and it accounts for one quarter of school absenteeism.

Air quality and future health.

A United Nations panel of scientists and over 160 governments agree that the burning of fossil fuels (coal, oil and gas) is causing our climate to change dramatically. Last year the government of the United Kingdom predicted that climate changes will expose many millions of people to the risks of hunger, drought and flooding.

Something needs to be done to protect the health of generations to come. Wind power is emission-free, requires no fuel to mine, transport, or store, no cooling water and it creates no wastes such as ash, sludge, toxic chemicals, heat or radioactive by-products.

Using wind power effectively and efficiently is a must for our health – and for the future.

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Wind Farms
Send Ontario
Real Estate
Values Up!

When potential home buyers have the option of looking up to windmills as a source to power their homes, studies have shown the values of such properties have actually increased. A real estate broker in Huron-Kinloss Township, Michael Twolan, who is also Mayor of the Bruce County Township, said he doesn’t expect property values in Ontario to decrease as a result of wind turbines. “I haven’t seen an issue with windmills as far as real estate values go,” he said.

Wind Energy had Krause, Meeker and Marshall Ltd. Real Estate Appraisers conduct an independent review of real estate values in the Township of Melancthon, the Township of East Luther Grand Valley and the County of Dufferin.

“The most notable difference between these communities is the existence of windmill developments,” is stated in the study. “The Township of Melancthon has demonstrated consistent patterns of growth on most accounts despite being the topic of windmill development, and similar growth to Dufferin County as a whole which included communities absent of this energy characteristic. The Township of Melancthon has further demonstrated superior growth to the Township of East Luther Grand Valley which is devoid of windmill development and which produced inferior growth to Dufferin County statistics.”

The study completed in September, 2006 looked at real estate sales and values between 2002 (just before the Melancthon operation was announced) and August 2006 (a year after the wind farm began operation). It concluded: "The economics and environmental circumstances surrounding this large scale energy initiative therefore are not seen to have diminished property values but rather to have actually enhanced property value by its presence." The annualized average growth rate in East Luther Grand Valley was 7.28%, while Melancthon saw a rate of 9.44% and Dufferin County, 9.63%. "Annualized growth is self-evident as positive conclusions of windmill development on property values," the report states. As examples of home sales in Melancthon, one home valued at $249,000 in December, 2003 jumped to $333,000 by the end of April, 2006 – that’s an increase of more than $84,000. Another property went up in value by $77,000; another by $37,000; another by $24,000 and so on.

It was found that prior to the windmill project, prices levels were significantly lower in Melancthon than in East Luther Grand Valley; at a variance of about 48.9%. Between the dates of the study (2002-2006) resale prices were measurably higher in Melancthon than in Grand Valley, producing a price ratio of about 10.1%. An analysis of real estate market values found a 10.6% increase of Melancthon property values each year over the four-year period studied compared to a 5.9% hike in East Luther Grand Valley.

Wind farms have also increased real estate values in the United States. According to an analytical report known as the Renewable Energy Policy Project (REPP) which was completed in May 2003, the installation of wind developments has not negatively affected property values in the US. The report analyzed every wind development that came online after 1998 with 10 megawatts of installed capacity or greater. For the analysis, the wind developments were considered to have a visual impact on the area within the view shed of turbines and are referred to as the view shed. For all projects that had sufficient data, the REPP conducted a statistical analysis to determine how property values changed over time in the view shed and in a close, comparable community.

The REPP study states "if property values had been harmed by being within the view shed of major wind developments, then we expected that to show up in a majority of the projects analyzed. Instead, to the contrary, we found that for the great majority of projects the property values actually rose more quickly in the view shed after the projects came on-line than they did before. Finally, after projects came online, values increased faster in the view shed than they did in the comparable community. In all, we analyzed 10 projects, looking at 30 individual analyses and found that in 26 of those, property values in the affected view shed performed better than the alternative." Within this REPP study, Case One looked at changes in the view shed and comparable community for the entire period of the study. Of the 10 projects analyzed, property values increased faster in the view shed in eight of the 10 projects. Two wind projects (Cham Lake I and II in Beuna Vista County, IA, found that over the study period from Jan. 1998 to Oct. 2002, the rate of change in average view shed sales prices were 11% greater than the rate of change of the comparable community. Properties in the view shed area increased by $401.86 per month while properties outside of the view shed saw a $341.87 change.

Another case looked at how prices changed in both the view shed and the comparable region, after the projects came on line. Once again, for 9 of the 10 projects analyzed, the property values increased faster in the view shed than they did for the comparable community.

While the township of Huron-Kinloss is currently seeing windmills at several locations, Twolan said potential buyers have been unfazed by the news. "It doesn’t seem to affect buyers," he said. "Some say they’d like to live by windmills. Time will tell they’re majestic." As for Windrush Energy’s Ashton Ridge Golf Course plan to erect up to a dozen windmills, Twolan said with his experience as a realtor, he believes the turbines will not adversely affect real estate sales. "The area has long landscapes and I think (windmills) will blend in." While windmills are not new, with more than 5,000 in Europe and large installations in Alberta and Quebec, Twolan said he thinks the future of wind turbines in Ontario is something people must get used to. "It’s change and people don’t like change," he said. "But, environmentally, it’s a better option."