



Wind Concerns Ontario

www.windconcernsontario.org

Industrial Wind Turbines – Why we need to be cautious

| | Provincial Power Needs | Environmental Conscience | Noise | Physical Safety | Health | Economy |
|---|---|---|---|--|--|--|
| What the Government and Wind Industry say: | Ontario's electrical peak rose 24% in the last 12 years. Even with conservation we expect it to grow a further 24% in the next 19 years. We need wind power. | We have to shutdown coal generators due to their impact on climate change, and the health of people breathing fumes. Wildlife benefits from wind turbines. | Wind turbines make no more noise than a quiet whisper, or rustling leaves. Noise from turbines is masked by ground winds, and is only a mild annoyance. | They are perfectly safe. CANWEA says a setback to lot line of blade radius plus 10 metres (~50 metres) is adequate, and they are experts aren't they? | There is no confirmed evidence of adverse health effects, and it is just that people look for excuses as they do not like the look of wind turbines. | Green jobs will make our economy strong. Investors will pay to put up wind turbines, saving money for consumers. Taxes from turbines will benefit communities. |
| What should be truthfully said: | Reliable generation is needed to match load. No one can tell the winds to blow. Usually, wind turbine output is highest at night when electrical load is low, and lowest when demand is high in daytime. Electricity storage (batteries, hydrogen, or pumped storage) is expensive. Mismatch to load and changes of wind output strain the electrical system. Claims that "the wind always blows somewhere" are not matched by reality. | No dispatchable generating plant (coal or otherwise) has been replaced by wind turbines alone. Wind cannot assure output when needed and requires building expensive storage (non-existing) and/or more new gas or coal generators as load increases. Destroyed enjoyment of local environment, damage to wildlife habitat, and endangering birds and bats are inconsistent with environmental policy in Ontario. | Masking of noise does not occur on the majority of nights as proven changes in wind profile increase wind speed at hub height and lower wind speed at ground. This makes turbines seem to be noisier at night, as if at half the distance to the listener. MOE now recognizes that wind profile may need to be addressed, but guidelines also need to address low frequency sound, and the major annoyance from cyclic noise. | Risk analysis shows current setbacks for wind turbines are inadequate. We need to provide safety for people, roads, hydro lines and property. Tall wind turbines in Ontario have demonstrated blade failure rate about 4x higher than seen on data from turbines in Europe. Blades weigh over 10 tonnes, and pieces have traveled 500 metres from turbines. Ice can blow from turbine blades even when shutdown. | Medical researchers have shown negative health effects from wind turbine noise. Sound measurement using dBA does not show all impact on the human body. Prof. M. Alvez-Pereira (Portugal) shows physiological changes from noise in short periods. She and others including Dr. Amanda Harry (UK), Dr. Nina Pierpont (USA), National Academy of Medicine (France) suggest greater setbacks for health. | Green jobs building wind turbines are mostly in other countries. Consumers pay about 2.5 times more for power from wind turbines than average system price. Taxpayers subsidize wind by grants and tax writeoffs. May have negative effect on municipal tax base as turbines assessed at \$40,000 per MW, so pay little taxes, while community home assessment (and thus taxes) can fall due to nearby turbines. |

Other issues not addressed: Negative effect on rural community life (secrecy of contracts, neighbour pitted against neighbour). Impact on family farms (20+ year binding contracts, wind company has first refusal on farm transfer of ownership). Impact on agricultural productivity (contiguous fields are broken up and drainage patterns are altered by access roads and foundations, buried or overhead electrical cables). Dominating visual impact changes natural rural vistas to industrial.

Protecting rural Ontario for future generations