

## **Winds of change – The proposed Big Thunder Wind Park**

The controversy surrounding the plan to build an 18 turbine, 27 Megawatt (MW) wind farm in the Nor'Westers serves to highlight some of the difficult decisions to be made when society is faced with the environmental consequences of energy production.

Thunder Bay and Northwestern Ontario have relied on coal and hydroelectric plants for electricity. The government is planning to phase out coal plants through conservation and development of "green" energy.

The potential of conservation is often underestimated. Much energy is wasted or used inefficiently, especially in buildings. "Conservation" must also include a serious reconsideration of what is necessary and what is excessive. This is not a popular theme to tackle as our current economy thrives on consumption.

Wind energy is one of the most economical forms of green energy, providing a good energy return on the energy invested. It does not produce toxic waste and has a negligible carbon footprint. However, wind energy has some challenges. It has to be built where the wind frequency and intensity are favourable, with access to the power grid. Environmental concerns can include impacts to local wildlife or disturbance of natural settings. When wind farms are built near residential areas, concerns regarding possible impacts on human health, aesthetics, and property values arise.

A recent survey by Pollara Strategic Insights suggests that the Big Thunder Wind Park, to be built by Horizon Wind Inc., has overall community support. Of the 703 people surveyed, 65% were in favour and 28% were opposed. However, it remains a difficult choice between different priorities.

The Big Thunder Wind Park would lessen use of the Thunder Bay coal plant, especially in periods of drought when less hydro-electricity is available. It would contribute to the region's green energy capacity making the area attractive to businesses competing in the future low-carbon economy. The construction and operation of the wind farm will bring economic activity and ongoing financial benefits through taxes and rent fees.

The Nor'Westers are considered by some as too precious a natural setting to allow for such development and should be protected, similar to the Niagara Escarpment. The area includes a number of special wildlife and plant habitats. If so, more needs to be done to establish a government planning process to preserve part or all of the Nor'Wester Range as a unique environment.

Wind energy will be a significant part of the green energy mix. Currently the total capacity of Ontario's wind farms is 1100 MW. In Northwestern Ontario, the Big Thunder Wind Park, another in Shuniah and the Greenwich Wind Farm near Dorion are in the late planning

stages. A large wind farm is also planned for the east side of Lake Nipigon.

It is time to plan strategic use of the wind resources along the north shore of Lake Superior, both on and off shore, as well as small hydro in the region. The need for green energy requires that some of these resources be developed. However, there are areas and rivers which should be set aside. These decisions should not be made in isolation from an energy strategy for the region including issues such as the energy intensity of future industry and conservation.

Corporate-owned wind farms are not the only option. In Europe, many wind-farms are locally owned giving those in the community more control and more benefits. The provincial government could do more to encourage small wind farms and small wind turbines with local ownership.

The status quo of energy production and energy consumption is not acceptable. There are serious known detrimental impacts of the emissions from coal plants. Both the economics of nuclear energy and the production of toxic nuclear waste which needs to be stored safely for at least 250,000 years make it a dubious energy choice for the future. The global climate relies on reducing the production of greenhouse gases within the next few decades.

Ultimately Ontario, and the world, will have to balance the energy it requires with the greenest energy it can generate. Anything else is not sustainable.

The process of reducing our energy needs and changing our energy sources will require compromises but will also bring opportunities and benefits. The decisions that are made today will impact on the lives of future generations.

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