

Windmills: Bigger waste than eHealth

Posted: October 01, 2009, 1:06 AM by NP Editor

Wind reduces CO2 emissions at a subsidy cost of about \$124 per tonne — one of the most expensive plans in the world

By Michael Trebilcock

Ontarians take note. A detailed new Danish study shatters most of the myths that the Danish-based wind turbine industry has been propagating in Canada and around the world as to the virtues of wind power. The study, *Wind Energy: The Case of Denmark* by the Centre for Policy Studies in Copenhagen, strongly reinforces reservations that I have noted in previous op-eds in this newspaper.

While proponents of wind power like to claim that almost 20% of Danish electricity is generated by wind power, in fact over the last five years wind power has accounted for only about 9% of domestic electricity consumption. The other 11% or so — generated when the wind was blowing in the middle of the night or at other times that power was unneeded in Denmark — was exported to Norway and Sweden at spot prices that were substantially lower (often zero) than the subsidized prices guaranteed to Danish wind turbine operators. Meanwhile, when the wind wasn't blowing in conformity with Danish needs, Denmark needed to import balancing power from Norway and Sweden, typically at substantially higher costs.

The main attraction in wind is the elimination of CO2 emissions. To the extent that wind power reduces CO2 emissions in Denmark, this comes as a subsidy cost of about \$124 per tonne of CO2 — one of the most expensive CO2

reduction strategies in the world.

In order to keep industry competitive, the Danish government protects industry at the expense of consumers. Electricity to industry is hardly taxed at all, making for an outsized disparity between what householders and industry pay for their electricity — Danish householders pay 2.5 times more than Danish industry. Even before taxes, the average consumer price for wind-generated electricity is 50% higher than that from fossil fuel generated electricity.

Based on the total subsidies to the Danish wind industry, the average subsidy for the 28,000 workers employed in this sector equals US\$9,000 to US\$14,000 per year per job. However, this average subsidy does not reflect the actual cost of the additional job creation. In most cases, creating a job in the wind sector has only moved that job from another sector and not resulted in any additional job creation. A very optimistic ball park estimate of real net jobs created is around 10% of the total wind power work force, or 2,800 jobs. In this case, the actual subsidy for each additional job created is US\$90,000 to US\$140,000.

The Danish study finds that the energy technology sector in Denmark from 1999 to 2006 underperformed the broader manufacturing sector in Denmark by an average of 13% in terms of value added, reducing Danish GDP by approximately

\$270-million compared to what it would have been if the wind sector workforce was employed elsewhere. The Danish Economic Council concluded in a report in 2006: "The wind power expansion in the 1990s is an example of a policy that was unprofitable from society's point of view, even taking the economic advantages that the wind business enjoyed into consideration." The Centre for Policy Studies study concludes: "Denmark needs a proper debate and a thorough reappraisal of the technologies that need to be invented, developed, and costed before forcing the country into a venture that shows a high risk of turning into an economic black hole."

Partly mesmerized by Danish wind industry propaganda, the Ontario government has embarked upon a similar exercise in economic and environmental folly. When the full costs of this misadventure are revealed — billions of dollars over the next 20 years — the province's recent financial scandals at the Ontario Lottery and Gaming Commission and eHealth will seem trivial in comparison. This is the real political scandal in Ontario, upon which we should all be focusing our attention.

Financial Post

Michael Trebilcock is Professor of Law and Economics, Faculty of Law, University of Toronto, and a director of [Energy Probe Research Foundation](#).

Read more: <http://network.nationalpost.com/np/blogs/fpcomment/archive/2009/10/01/windmills-bigger-waste-than-ehealth.aspx#ixzz0UOjqhrI9>