

provides important protection for consumers. There is no guarantee, for example, that natural gas will remain at today's low prices over the long term. Natural gas prices vary over time with changes in supply and demand – just a few years ago electricity from natural gas-fired projects was more expensive than electricity from wind.

Because wind requires no fuel, produces very little waste and consumes barely any water during operation, it also provides a hedge against the risk and uncertain costs of complying with future greenhouse gas emission restrictions and other environmental regulations.

Jurisdictions in Canada and around the world have developed strategies for capturing the value that wind energy brings to a power system. Feed-in tariffs (FIT), used successfully in countries like Germany, Spain, and France, are a well-established way of creating a stable market for renewable energy investment by providing predictable revenue to wind producers and increasing their access to financing. Ontario's FIT program is the first of its kind in North America, and is helping attract billions of dollars in new investment to the province.



WHAT DO THE EXPERTS SAY?

In 2010, the Ontario Power Authority paid electricity resource costs of \$317 million for conservation programs, and \$269 million for renewables. That is a lot of money – but you must realize that it is recovered over a total Ontario consumption in 2010 of 142 terawatt hours (that's 142,000,000,000 kWh), which amounts to 0.4 cents per kWh (split roughly equally between conservation and renewable subsidies). So the cost of conservation and all the renewable subsidies in 2010 amounted to 0.4 cents of the 13 cents we paid for a kWh in our homes.³

“Once the investment is made, you have a secure price for that power over many, many years. So we're looking for certainty in the electricity supply. This is one way to take out some of the volatility in the marketplace.”

Nova Scotia Premier Darrell Dexter, March 2010

The California Energy Commission calculates that a new gas-fired combined cycle power plant has a levelized cost of operation of \$115 per MWh.⁴ Add \$20/MWh to cover the estimated cost of environmental and health damages⁵ and the total is \$135/MWh – exactly the same as Ontario's feed-in tariff rate for onshore, non-community based wind energy.

Interested in learning more?

The Oil Drum, an energy information website, analyzes the cost of wind, the price of wind, the value of wind (www.theoil Drum.com/node/5354). Lazard's Levelized Cost of Energy Analysis (www.blog.cleanenergy.org/files/2009/04/lazard2009_levelizedcostofenergy.pdf) and the World Economic Forum's report on Green Investing 2011 (www.weforum.org/reports/green-investing-2011) compare the cost of some generating technologies.

Sources:

1. Mining coal, mounting costs: The life cycle consequences of coal. Centre for Health and The Global Environment, Harvard Medical School, January 2011
2. Behind the switch: pricing Ontario electricity options, The Pembina Institute, July 2011
3. The True Cost of Renewable Energy and Conservation, Environmental Commissioner of Ontario, March 2011. <http://www.eco.on.ca/blog/2011/03/22/the-true-cost-of-renewable-energy-and-conservation/>
4. Comparative Costs of California Central Station Electricity Generation. (California Energy Commission, January 2010). Table 4, page 3
5. Cost Benefit Analysis: Replacing Ontario's Coal-Fired Electricity Generation. (DSS Management Consultants, RWDI Air Inc; April 2005), page ii.



WINDVISION 2025
POWERING CANADA'S FUTURE

www.canwea.ca



canwea

CANADIAN WIND ENERGY ASSOCIATION | ASSOCIATION CANADIENNE DE L'ÉNERGIE ÉOLIENNE

WIND FACTS



PROPERTY VALUES

Wind energy is generating clean electricity, new jobs and economic development opportunities in communities across the country. While wind energy has enjoyed growing success in many countries for several decades, it is a relatively new contributor to the power system here in Canada. As such, it is natural for people to ask questions. As a responsible industry, we are committed to ensuring Canadians have the most up-to-date factual information on wind energy.



Wind Energy: Providing Significant Local Economic Benefits

There are a number of factors that impact property values and it is difficult to isolate the potential impact of any single variable. What we do know is that multiple studies have consistently found no evidence that wind energy projects around the world are negatively impacting property values. In fact, wind energy projects provide new sources of stable revenue for municipalities and landowners in the form of taxes and lease payments.

A 2010 study conducted in Chatham-Kent, Ontario, found there was no statistically relevant relationship between the presence of a wind project and negative effects on property values.¹

(continued on next page)



WINDVISION 2025
POWERING CANADA'S FUTURE

www.canwea.ca



canwea

CANADIAN WIND ENERGY ASSOCIATION | ASSOCIATION CANADIENNE DE L'ÉNERGIE ÉOLIENNE