Eco Awareness Society Newsletter

"The world is too dangerous for anything but truth and too small for anything but love."
William Sloane Coffin

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No. 14

Grace Gunn was the winner of our beautiful painting of Brown's Mountain. The painting was donated by Cathy Leeming for our Save Our Mountain campaign.

Looking For Relief From Wind Turbines

Lingan, Nova Scotia – Sitting at their kitchen table Bruce and Janet Fraser stare out the window to see five sleek giants just beyond their backyard, churning in a counter-clockwise direction and changing line with the wind speed 24 hours a day, seven days a week.

It's become the couple's nightmare.

"It's in your face, you can't escape it," Janet Fraser said during an interview in the kitchen of the couple's nine-year-old custom-built, two-storey home. "You can't go outside to relax and you can't stay inside to relax. There's no enjoyment. There's no peace."

The wind farm's seven turbines have lined the shore facing the north Atlantic since 2006…It sits next to the coal-fired Nova Scotia Power Lingan generating station. The turbines were part of the Glace Bay-Lingan wind farm that had been operated by Cape Breton Power Ltd., before being sold to Confederation Power a couple of years ago.

The Frasers say the wind farm has invaded every aspect of their lives.

Janet said between April and September, with the worst period being the July to August time frame, the huge 35-metre long blades which are attached to 65-metre high steel towers create a "strobe effect" as the turbines cast continuous shadows on the house in the early daylight hours.

"It's like a flickering," she said, adding the blades impressive shadow pass through the house 60 times per minute. Bruce described it as a light switch being turned on and off repeatedly in their bedroom with no way to stop it. "It almost feels like we're in an experiment like a mouse in a box," he said.

The constant "swoosh" of the blades makes sleeping difficult leading to sleep deprivation and that worries them as the sound, which becomes more pronounced during humid nights and during wind storms, keeps their two-year-old Harland awake.

They both worry about his development if he continues to have sleepless nights. And even the use of earplugs and face masks haven't helped Bruce and Janet. "It sounds like a baby's heart beat in an ultrasound. It's that whump, whump, whump, and it's high, low, high, low," Bruce said, despite having exterior walls of 2x6 feet with heavy insulation.

Other than sleep deprivation, Janet said the family is dealing mainly with anxiety and their mental health is suffering. **The only solution to their problem is to sell. But the fact real estate agents have said the home is worthless based solely on its proximity to the turbines, it's unlikely that will happen anytime soon, she said.**

The couple says they've remained quiet until now, trying to deal with their problem by writing to Premier Darrell Dexter, and their MLA, Deputy Premier Frank Corbett. They've also complained to municipal officials. [Recently], they presented their concerns to the Cape Breton Regional Municipality's committee of the whole…The committee agreed to have staff review the setbacks and include it in an issue paper at a future meeting.

CBRM planner Malcolm Gillis, who worked to include wind turbines into amendments in the municipal planning strategy and land-use bylaw in 2005…said zoning is not always perfect. "The province does not oblige municipalities to have a land use bylaw. For example, much of Richmond County has no zoning whatsoever so at least we do have a setback…**But the provincial law does go on to state because municipalities aren't obliged to have zoning…they can't be held liable if someone claims they had been adversely affected by a development**."

At the home on Hinchey Avenue, the family has stopped keeping track of the number of light bulbs that have blown out since the turbines began operation. An electromagnetic frequency created from the turbine blades routinely cause interference with an older model television they own and it disrupts radio station frequencies as well.

(Excerpt from "Frasers Looking for Relief from Wind Turbines", Chris Shannon, Cape Breton Post, October 6, 2010)

An Ill Wind Blows Against Denmark's Wind Turbines

Denmark has long been a role model for green activists, but now it has become one of the first countries to turn against the turbines.

U.K. – To green campaigners, it is windfarm heaven…But amid a growing public backlash, Denmark, the world's most windfarm-intensive country, is turning against the turbines.

Last month, unnoticed in the UK, Denmark's giant state-owned power company, Dong Energy, announced that it would abandon future onshore wind farms in the country. [See September 2010, No.13 issue of the Eco Awareness Society Newsletter – pg. 2 "Danish Energy Firm Gives Up on Land-Based Turbines"] "Every time we were building onshore, the public reacts in a negative way and we had a lot of criticism from neighbours," said a spokesman for the company…

Even as parts of the British Government continues to blow hard for wind, other countries seem to be cooling on the idea. This summer, France brought in new restrictions on wind power which will, according to the French wind lobby, jeopardize more than a quarter of the country's planned windfarm projects.

According to the latest Wind Turbine Price Index…world prices for new wind turbines are down by 15 per cent on their 2008 peak amid a sharp slump in European and global demand…But it is in Denmark, the great windfarm pioneer, where some of the most interesting changes are taking shape. In 1980, the Danish government was Europe's first to bring in large-scale subsidies – on which…the wind industry depends.

The results have been dramatic. According to the Danish Wind Energy Association, there are more than four thousand onshore turbines…Nowhere else has more turbines per head, and Denmark is also a global centre of wind turbine manufacturing – with Vestas, the world's leading turbine firm, based in the country.

Unfortunately, Danish electricity bills have been almost as dramatically affected as the Danish landscape. Thanks in part to the windfarm subsidies, Danes pay some of Europe's highest energy tariffs…Under public pressure, Denmark's ruling Left Party is curbing the handouts to the wind industry.

"Since 2005 alone, 5.1 billion kroner [almost 1 billion Canadian] has been paid to the wind turbine owners. That cost has been borne by businesses and private consumers," says the party's environment spokesman, Lars Christian Lilleholt…"

The subsidy cuts are almost certainly the main reason behind Dong's move out of onshore wind. But public anger is real enough, too. Until recently, there was relatively little opposition to the windmills. But now a threshold appears to have been crossed…

"People are fed up with having their property devalued and sleep ruined by noise from large wind turbines," [said the president of Neighbours of Large Wind Turbines], Boye Jensen Odsherred...

In one typical battle, in the central city of Svendborg [Denmark], the local council set height and number limits on turbines under heavy pressure from locals...

There has also been growing scrutiny of the wind industry's macro claims. **Though wind may indeed generate an amount of electricity equal to about a fifth of Danes' needs, most of that electricity cannot actually be used in Denmark.**

Except with hydropower, electricity cannot be stored in large quantities. The power companies have to generate it at the moment you need to use it. But wind's key disadvantage – in Denmark, as elsewhere – is its unpredictability and uncontrollability. Most of the time, the wind does not blow at the right speed to generate electricity. And even when it does, that is often at times when little electricity is needed – in the middle of the night, for instance.

So most of the wind electricity Denmark generates has to be exported, through interconnection cables – to Germany, to balance the fluctuations in that country's own wind carpet, or to Sweden and Norway, whose entire power system is hydroelectric, and where it can be stored. (The Swedes and Norwegians use it themselves – or sell it back, at a profit, to the Danes…)

"I would interpret the [export] data as showing that the Danes rely on their fossil-fuel plants for their everyday needs," says John Constable, research director for the London-based Renewable Energy Foundation, which has commissioned detailed research on the Danish experience. **"They don't get 20 per cent of their electricity from wind. The truth is that a much larger unit, consisting of Denmark and Germany, has managed to get about 7 per cent – and that only because of a fortuitous link with Norwegian and Swedish hydropower."**

Britain, meanwhile, almost certainly could not manage even that. "Our system is totally different," says Constable. "We are an island grid. We have virtually no interconnectors with other countries, only a very limited amount of hydro, and the British Government simply doesn't know how to integrate the very large fleets of wind turbines that they are blithely introducing…**Britain will almost certainly, in fact, end up having to build as many new fossil-fuelled power stations as it would have done without windfarms, to provide covering power for the fluctuations of the wind."**

(Excerpt from "An Ill Wind Blows for Denmark's Green Energy Revolution",
Andrew Gilligan, The Telegraph UK, September 12, 2010)

Wind Farm Denied

Idaho – A proposal to allow a wind farm east of Idaho Falls has been denied. After four hours of debate and motions, the Bonneville Planning and Zoning Commission denied the use permit for Ridgeline Energy…

The permit would have allowed Ridgeline to build about 75 wind turbines in the Meadow Creek area…**The commissions based their decision on how the wind turbine[s] could disrupt the scenic view of the foothills and lower property values.**

(Excerpt from "Wind Farm Denied in Bonneville County",
Local News 8, August 25, 2010)

Turbines at Night - Vinalhaven, Maine

Properties 'Virtually Unmarketable'

Wyoming – A survey by a local realtor may have confirmed the worst suspicions of Stan Mundy, whose home is closest to Chevron's wind farm northeast of Casper [Wyoming].

Glen Taylor, of Equity Brokers in Casper, did a real estate survey September 10, 2010, and concluded properties directly adjacent to the Chevron Wind Towers are now "virtually unmarketable" at "any realistic price."

…Taylor wrote, "No reasonable buyer would choose a property close to the wind towers over a property that isn't close to wind towers unless the price is so low that the investment would be a no brainer."

Taylor said in his report that rural property close to town is usually in good demand, and noted he's the agent for one parcel in the area. He has had over 50 inquiries on his listing in about two months, but 40 dropped interest after learning about the location. "In follow-up with the inquiries, the number one reason for not having genuine interest in this property is because of the proximity of the wind towers," Taylor wrote in his report.

Taylor did the survey at the request of Natrona County State Representative Mike Gilmore. Gilmore is a long-time friend of Mundy's, and had asked Taylor for assistance after hearing about Mundy's property situation…

Gilmore said wind energy needed to be developed in Wyoming, and that energy companies have jumped into it now because of generous tax breaks. He then added, "…but the jobs really didn't materialize, and the taxes aren't coming along either…we've devalued our our property…"

(Excerpt from "Properties 'Virtually Unmarketable'",
Greg Fladager, Casper Journal, September 21, 2010)

Agency to Probe Turbine Impact

Ontario – A Wolfe Island couple's upcoming property assessment hearing could jeopardize the future of wind turbine projects across Ontario.

Gail and Ed Kenney have been granted a potentially precedent-setting date with the Ontario Assessment Review Board in November to argue that their property has been devalued by nearby wind turbines. "It's about the industrialization of the area," said Gail Kenney. "We're living in an industrial wind plant, with the noise and lighting – all those issues and many more."

If they win their appeal, it could eventually make it difficult for wind generation companies to find new locations to set up their projects. At the very least, a victory could mean a loss of tax assessment for municipalities where wind farms are located.

"There are 86 wind turbines on Wolfe Island," said John Andrew, a commercial real estate specialist in the School of Urban and Regional Planning at Queen's University. "Any turbine might potentially affect a dozen properties."

…The Kenneys, who live on the northwest side of the island, facing Kingston, can see 28 turbines from the property where they've lived since 1966. The closest is about 750 metres away. Two years ago, their home was assessed at $200,000. It is now valued at $357,000. "At the same time the re-assessment was being done, the wind farm was (under) construction," Gail Kenney said, "yet the wind farm was not considered within the assessment."

…At Queen's, Andrew said the Kenneys are probably revealing information that many landowners on Wolfe Island don't want made public. "They're saying, 'Our property is less valuable,' and that would further stigmatize Wolfe Island properties," Andrew said. "For the township, they're probably worried that this is going to open the floodgates. If the Kenneys get a lower assessment, they're for certain going to get a flood of appeals…

[Gail Kenney said] "I understand [that there are] those property owners [who] agreed to have the turbines. **The problem is, nobody asked the neighbours...We feel we are in an industrial area now with a lot of industrial issues imposed on us**…"

(Excerpt from "Agency to Probe Turbine Impact",
Paul Schliesmann, The Whig-Standard, September 15, 2010)

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Preliminary Study About Wind Power Noise

Japan – The Ministry of the Environment has compiled the results of a questionnaire survey it conducted to ascertain the facts of noise and low-frequency sound caused by wind power facilities installed in Japan…The Ministry intends to conduct the survey on an on-going basis and shed light on the facts of noise and low-frequency sound.

The subjects of the survey were wind power facilities… [with] a gross output of at least 20 kw…Responses were received from 186 enterprises.

The survey revealed that the incidence of complaints rose along with the rated output [of the turbines]. The rate of complaint incidence was less than 10% among facilities with an output of less than 1 MW, but increased to about 30% among those of 1 MW or higher output. In terms of the number of wind turbines per facility, almost half of the facilities with 10 or more turbines were getting complaints.

(Excerpt from "Fact-Finding Study About Wind Power Noise", The Denki Shimbun, October 15, 2010)

Editor's Note

Shear Wind has substituted 2.3 MW turbines for the 2 MW turbines that were announced in their Environmental Assessment and Open Houses for their Glen Dhu project. As we see from the above story, "complaints rose along with the rated output" [of the turbines]. Complaints also increased when the number of turbines reached "10 or more". Phase 1 of the Glen Dhu project calls for 27 turbines.

Wind Farm Effects Were Underestimated

New Zealand – A Manawatu wind farm is facing court action amid lingering doubt it is complying with noise limits.

After receiving hundreds of complaints about noise from Te Rere Hau wind farm on the Tararua Range for more than a year, Palmerston North City Council has applied to the Environment Court for stricter rules and better sound monitoring.

Neighbours of the wind farm near Palmerston North have consistently complained about "whining mechanical noise", "droning", "loud humming", "grinding and swishing" and likened the sound to a "roaring train that never arrives"…

For months the council has maintained there is reasonable doubt about the farm's consent compliance and the application to the court calls for greater notice to be taken of the actual experience of nearby residents.

According to New Zealand Windfarms' consent application, many residents were supposed to experience "nil noise effects" from the two-bladed turbines. The council argues that not only do residents hear wind farm noise, they hear tonal noise – considered the most irritating for humans because of its pure pitch.

The council wants the court to impose a five-decibel penalty for tonal noise. If the penalty is imposed, New Zealand Windfarms will have to do something to run a quieter wind farm...

Twenty residents have filed affidavits with the Environment Court and a hearing is likely to be held next year.

Ridgeview Road resident Clel Wallace was pleased to see New Zealand Windfarms being brought to account. "It's about time this action was taken." Mr. Wallace said he would sometimes hear a low rumble, "swish, swish, swish" or high-pitched whine. The noise was worse for many of his neighbours, he said.

New Zealand Windfarms has previously been dismissive of public concern about wind farm noise. Former chief executive Steve Cross told the Manawatu Standard in May that the company did not need to be accountable to the public or the media.

However, the total number of complaints from about 20 households near the farm has climbed to more than 500. The council is arguing New Zealand Windfarms underestimated the effects of wind farm noise on the amenity of the area…

(Excerpt from "Wind Farm Effects Were Underestimated", Grant Miller, Manawatu Standard, October 22, 2010)

Oregon Public Health Office to Study Health Effects of Wind Turbines

...The Oregon Public Health office...announced...that it's embarking on a public health assessment of wind farms, kicking off with three "listening sessions"...to hear residents' health concerns tied to the spinning blades.

The health issues are part of a broader backlash in Oregon and nationwide from critics who complain of negative impacts on scenery, property values, wildlife and tourism.

The growing number of wind farms has led to more complaints about their health effects, said Sujata Joshi, an epidemiologist in the environmental public health office. Health concerns raised to date focus on noise and vibration generated by the huge turbines…

"With any development, you start learning more about potential concerns as more people start experiencing it," Joshi said…

Joshi said she's not sure yet when the health office will complete its work. Updates will be posted at www.oregon.gov/DHS/ph/hia/windenergy.shtml.

(Excerpt from, "Oregon Public Health Office Decides it's Time to Study Health Effects of Wind Turbines", Scott Learn, The Oregonian, October 21, 2010)

Costs and Alternatives in Reducing Greenhouse Gases

Ontario - Over the next few years, governments at all levels are going to be laying out ambitious plans to cut greenhouse gas emissions. **But as you look at their proposals, ask yourself: What exactly are they selling: Does the plan substantially reduce CO2 emissions? Does it use markets and price signals to reach the CO2 reduction target at the lowest cost possible? And is it purely an environmental plan, or have more costly political objectives been grafted on?**

Take Ontario's Green Energy Act, for example. It aims to reduce significantly the amount of greenhouse gases generated by the production of electricity.

But the province also wants to create 50,000 jobs. And dramatically increase the output of alternative energy, particularly wind and solar. And subsidize alternative energy producers to locate in Ontario, in the hope of becoming the Silicon Valley of wind turbines and solar cells.

It turns out that the first objective has almost nothing to do with the others, which add up to what looks like an extremely expensive industrial strategy masquerading as an environmental program…

Without much fanfare and using traditional technologies, Ontario has already scaled back its use of dirty coal in electricity generation. Coal used to account for nearly 20 per cent of Ontario's electricity; last year it fell sharply to just 6.6 per cent and it's well on its way to zero by 2014.

Coal is being replaced by natural gas, a cheap fuel that produces only a fraction of the smog-causing chemicals and about half as much CO2. It is also being replaced by conservation – consumers using less energy, thanks to things like rebates to buy efficient appliances...

"Conservation," says the Ontario Power Authority's most recent annual report, can "reduce operating costs, is less expensive than building new supply and leaves a smaller environmental footprint."

The result of gas plus conservation has already yielded a huge climate change win for the province. In one year, at little cost to the consumer, using proven technology, Ontario's electricity system took an already small carbon footprint and reduced it by more than a third...

The electricity fight is largely won. If you want significant further GHG reductions, you will have to look at much more important polluters, such as cars and trucks. But that, unfortunately, does not appear to be how the government of Ontario sees it.

Instead, the province is intending to ramp up a multi-year, umpteen-billion dollar plan to create 50,000 jobs – the McGuinty government never fails to mention the jobs – by heavily subsidizing the private sector to build more wind and solar power.

A key part of this plan is the promise to buy this power at prices ranging from several times the market rate to about 20 times market rates. These additional costs will be passed along to regular customers in the form of higher electricity prices.

"The recent rush to 'green' Ontario's electricity system," wrote former OPA chief executive Jan Carr in *The Journal of Policy Engagement*, "has produced a largely ad hoc approach to the selection and investment in power generation technologies that will unnecessarily increase the cost of electricity with far-reaching economic and social effects."

Questions about the most cost-effective way of running the system and reducing pollution, he added, "cannot be answered when technology and investment decisions result from lobbying efforts by advocacy groups or are guided by public popularity."

When it comes to finding "the most cost-effective way of reducing pollution", the province on the right track is B.C.

A few years ago, Gordon Campbell's conservative Liberal government brought in a carbon tax, which sets an overall pollution reduction target, while leaving it to individuals to find their lowest-cost path to GHG reduction: new technology, efficiencies or the zero-emissions option of conservation...

The tax is levied on all fuels that include carbon, such as gasoline, coal, propane and natural gas...

B.C.'s carbon tax is also what's called revenue neutral: All of the money raised is being returned in the form of lower taxes or rebates. If you're an efficient energy user, you take public transit, you cut back your driving, you replace an old oil furnace with a high efficiency gas furnace. You could end up with several hundred extra dollars in your pocket. If you're inefficient, it'll cost you.

It's a model that economists love, and most environmentalists too. It's honest, transparent and uses higher prices to get people to change their behaviour. It does not promise a free lunch. And it is almost certainly going to deliver more bang for the buck than Ontario's plan to subsidize the most expensive forms of electricity. B.C.'s carbon tax revenues are returned to citizens, but Ontario's impending higher energy rates are going to be a reflection of producers' higher costs. There will be no money to return to anyone.

(Excerpt from "Mighty Winds and Other Perverse Earth Day Incentives",

Tony Keller, Special to CBC News, April 21, 2010)

Tony Keller has been an editorial writer, columnist and editorial page editor the The Globe and Mail; a columnist for the Toronto Star; managing editor of Maclean's; and editor of The Financial Post Magazine. He is currently a visiting fellow at the Mowat Centre for Policy Innovation.

Cefn Croes, Wales - Before & After Wind Power Plant

Fire Chief Opposes Wind Power Plant

New Hampshire – The town's fire chief opposes a plan to erect wind turbines in Groton because his department lacks the equipment to fight fires on the…ridges of Tenney and Fletcher mountains. Iberdrola Renewables Inc., a wind power company with headquarters in Madrid, Spain, wants to build 24 turbines on the ridge lines…

Houses at Eagle's Nest on Plymouth's Tenney Mountain would be the first residential area to be affected by wildfires from the [wind] park, said Fire Chief Casino Clogston. Clogston said not only was it his responsibility to protect lives and property but also to ensure that his responders can do their jobs as safely as possible.

To do that in this case, he said, area departments would need two Type 6 brush trucks; two, six-person all terrain vehicles; six forestry high pressure portable pumps; and hose, helmets and nozzles to support the equipment… **Absent the equipment and necessary training for his crew, he said, he cannot support the wind…proposal.**

Wind turbines have been known to fail and fall to the ground, sometimes resulting in fires sparked by chemicals used in the structure…Wind companies monitor their turbines remotely and typically dispatch their local crews to the affected site, but local fire departments can have difficulty gaining access…

In his pre-filed testimony before the New Hampshire Site Evaluation Committee, the chief said he has met with the chiefs of Rumney and Groton, Ken Ward and Roger Thompson, respectively, and the forest ranger, Bert Van Dohrmann, to discuss the proposal and the effect a fire in [these mountains] would have on their men, women and equipment. **"I believe the project will have an unreasonable impact upon public health and safety unless all of these issues are addressed to the collective satisfaction of the fire chiefs…" Clogston said…**

(Excerpt from "Plymouth Fire Chief Opposes Wind Park", Paula Tracy, New Hampshire Union Leader, September 28, 2010)

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An MLA was seated next to a little girl on an Air Canada plane. He turned to her and asked, "Do you want to talk? Flights go faster if your strike up a conversation with your fellow passenger."

The little girl, who had just started to read a book replied, "What would you like to talk about?" Smiling, the MLA said "How about global warming, health care, or stimulus packages?"

"OK," she said, "but let me ask you a question first. A horse, a cow, and a deer all eat the same stuff – grass, yet a deer excretes little pellets, a cow turns out a flat patty, and a horse produces clumps. Why do you suppose that is?"

The MLA, surprised by the little girl's intelligence, said "I have no idea." The little girl, stunned by the MLA's lack of an answer replies, "Do you really feel qualified to discuss global warming, health care, or the economy when you don't know shit?" and then, she went back to reading her book.

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If you would like to become a member or for more information on EAS, please go to our website at: www.ecoawarenesssociety.ca

Or contact us at 902-926-2297 or info@ecoawarenesssociety.ca

The Eco Awareness Society is a non-profit organization whose mission is to uphold these principles: that "a subset of society should not be forced to bear the cost of a benefit for the larger society", that a landowner's right to full use and enjoyment of their property be upheld and not taken or hindered for public or private use or development, without just compensation, and that any policy or development with regard to the environment and landscape of Nova Scotia be shown to be effective and based on the principals of environmental sustainability and stewardship of our precious resources.*

*Based on the *Canadian Charter of Rights* and the *Fifth Amendment, U.S. Constitution*