

Watt's Happening?

Written and photographed by Don Pettit
for Peace Energy Cooperative, Dawson Creek, BC Canada
www.peaceenergy.ca ph 250-782-3882



Report: Clean Energy Canada

Clean Energy Canada, a Vancouver-based think tank, has released a new report on the growth of clean energy in Canada, and the results are surprising. Canada's clean energy capacity has grown by 93 percent over the past 5 years, with direct clean energy jobs in 2013 pulling into the lead ahead of total direct oil sands jobs!

The energy revolution that is sweeping the planet is also sweeping Canada, but mostly thanks to Ontario and Quebec. Unlike our neighbours south of the border, who have moved with China into positions of global leadership in this historic energy transition, our federal government's attitude is best described as "indifferent."

This surprising growth in renewables is good news for jobs, for the economy, and for the environment. I recommend reading, "Tracking the Energy Revolution – Canada" (as well as their earlier "Tracking the Energy Revolution – Global") but here are some tantalizing highlights:

- Total investment in renewables across Canada continued to climb steadily over the last 5 years, reaching \$24 billion in 2013. Most of the dollars went to wind, with one new turbine going up in Canada every 10 hours, but with the fastest relative growth going to solar, spurred by a 60 percent price drop in solar-powered equipment in Canada since 2009.
- Electric vehicles on the road in Canada by 2013 numbered 5,300, a 2000% increase since 2010, with 1,850 public charging stations available. This in spite of the fact that Canada is the only G7 economy

For energy sector jobs with a real future, check out renewables. Even in Canada, which has been slow on the uptake, job opportunities in renewable energy are rapidly expanding and beginning to overtake conventional energy jobs.



without a federal electric vehicle rebate. These are early days for electrics in Canada, but it is anticipated that electrified transportation powered by renewable sources will be a big player in Canada's energy shift, as it is turning out to be elsewhere.

- According to the U.S. International Trade Administration, Canada is seen as the top market for American renewable energy and energy efficiency exports. Under Barack Obama, the U.S. has increased solar generation more than tenfold and tripled wind power. "The world's second-largest carbon polluter is now also the world's second-biggest clean energy producer – trailing only China, the world leader in both categories," says Clean Energy.
- Cross-border potential for collaboration in renewable development is also growing, urged by Washington, mostly ignored by Ottawa. As an example of this potential, Minnesota Power and Manitoba Hydro have recently signed an agreement in which the province could store excess North Dakota wind power in its hydro reservoirs, and then sell that energy back to the Midwest market at times when the winds lessen.
- Who is financing Canada's clean energy transition? Mostly Japan and Germany. "It's great to see that overseas investors have flagged us as a promising market, but Bay Street really needs to get with the program."
- Enough clean energy is produced in Canada to power 37 million homes.
- Four of Canada's five biggest renewable producers are also in the fossil fuel business. The top five producers are Transalta, Brookfield Asset Management, Enbridge, Fiera Axiom Infrastructure, and Transcanada. (This writer would add, to give credit where credit is due, Altagas, who not only built

BC's first commercial wind project, Bear Mountain Wind Park near Dawson Creek, but is also developing run-of-river, geothermal and more wind projects.)

- Ontario was the first jurisdiction in North America to phase out coal power, a change supported by a robust feed-in-tariff (FIT) to spur clean energy development. The province's Long Term Energy Plan lays the groundwork for a shift to renewable energy systems, and the FIT program remains a pillar of their energy and climate policy. Thirty percent of Ontario's power now comes from renewables, and the province estimates that it saves \$3.4 billion per year in health and environmental costs by replacing coal with renewables.
- Ontario and Quebec are currently leading our renewables transition, but Clean Energy Canada suggests that Alberta, with demand poised to surge and a superb renewable resource, could be Canada's next clean energy hotspot.
- Tiny Prince Edward Island has made huge progress in harnessing its wind resource: 10 to 30% of the province's power is now supplied with publicly owned wind turbines.

Canada is making real progress as part of the global shift to renewables, in spite of federal indifference. For details, check out Clean Energy Canada's latest report at www.cleanenergycanada.org.

Finally, I'd like to end this year of *Watt's Happening* with a smile: A man stands up at a climate summit and asks, "What if it's all a big hoax and we create a better world for nothing?"

A thought to ponder over the holidays. *Merry Christmas!*

Quick Fact:

GLOBE AND MAIL REPORTS CANADA'S SOLAR LOOKING UP: Ontario's Green Energy Act has placed Canada among the top ten sun-powered nations, but its support for utility-scale projects ended last year. Even so, things look good for solar in Canada, according to a recent Globe and Mail feature, citing continued decreases in the cost of solar, and the huge future growth potential in untapped markets like Alberta.