

B.C. Citizens for Green Energy

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Submission to the B.C. Green Energy Advisory Task Force

Monday, December 28, 2009

B.C. Citizens for Green Energy (BCCGE) would like to thank the Green Energy Advisory Task Force for this opportunity to offer our thoughts and comments and enter them into the record of the public consultation process currently underway.

BCCGE is an advocacy group representing a cross-section of British Columbians who encourage a legacy of clean, renewable electricity, now and for future generations.

BCCGE has been actively speaking out in support of the development of British Columbia's immense green energy potential for over two years. We are pleased that a task force has been assembled to secure and expand British Columbia's leadership in green energy production and the efforts to combat global climate change.

British Columbia's Green Energy Abundance

There are few who would dispute that British Columbia's potential to be the preeminent renewable green energy powerhouse in western North America is enormous. In fact, it is widely recognized that British Columbia is naturally blessed with an overwhelming abundance of clean, renewable green energy resources.

However, British Columbia's potential to be a renewable green energy powerhouse is currently going completely untapped—and the environmental and financial benefits of our province's natural abundance unrealized—even as the devastating impacts of global climate change become more readily apparent each day.

And as paradoxical as it sounds, BC Hydro, which serves 95 per cent of B.C.'s population, has become a net importer of electricity from places like Alberta where their electricity is mostly generated by burning coal which, in the process, releases millions of tonnes of greenhouse gases and other pollutants into the atmosphere.¹

This is a shameful situation for British Columbia to be in given our great natural abundance of renewable energy sources. BCCGE therefore believes strongly that we need to reverse this situation and stand beside provinces like Quebec and Manitoba which are already making substantial amounts of clean, renewable electricity available to their neighbouring provinces and states and contributing significantly to continent-wide greenhouse gas reduction efforts.

The Financial Benefits for the Citizens of British Columbia

If British Columbia's green energy potential was fully harnessed, and an abundance of clean, renewable electricity was made available to our neighbouring provinces and states in western North America, not only would we be helping these neighbouring jurisdictions reduce their dependence on carbon-emitting fossil fuels, we would also be generating considerable financial benefits for the citizens of British Columbia.

¹ BC Hydro's 2008 Annual Report states that, "prior to fiscal 2008, BC Hydro was a net importer of electricity for seven consecutive years due to average or below average system water conditions every year." BC HYDRO 2008 ANNUAL REPORT (for the period April 1, 2007 through March 31, 2008) page 67. And although fiscal 2008 was "an exceptional inflow year, with inflows well above normal," BC Hydro projects fiscal 2009 will see a return to "average inflow conditions" and an expectation that "BC Hydro will once again be a net importer of electricity."

http://www.bchydro.com/etc/medialib/internet/documents/info/pdf/info_annual_report_2008.Par.0001.File.info_annual_report_2008.pdf. As well, BC Hydro serves 95 per cent of B.C.'s population, as noted in BC Hydro's 2009/10–2011/12 Service Plan, and BC Hydro's status as a net importer of electricity can be taken as fairly representative of the current state of affairs in British Columbia (BC Hydro Service Plan 2009/10–2011/12, page 9). Eighty-eight per cent of BC Hydro's approximately 1.8 million customer accounts are residential, with the remainder being either commercial or industrial. Each of these three groups consumes roughly one third of the total electricity supplied by BC Hydro. (http://www.bchydro.com/etc/medialib/internet/documents/info/pdf/service_plan.Par.0001.File.service_plan_2009-10-2011-12.pdf).

British Columbia's abundance of renewable green energy clearly has the potential to generate billions of dollars in revenues for the province and the people of British Columbia through the various taxes, licenses and levies paid by green energy producers. BC Hydro would similarly generate substantial revenues for the people of this province as the entity best situated to shape and market British Columbia's renewable clean energy wealth.²

These direct revenues to the people of British Columbia would be in addition to the billions of dollars in general economic benefits and activity and the tens of thousands of jobs that would also result from the full development of British Columbia's enormous clean generating potential.

The provinces of Quebec and Manitoba are already generating considerable revenues through their exports of clean, renewable electricity and British Columbia can and should be doing the same. In 2008, for example, Hydro-Québec's exports totalled \$1.9 billion, accounting for 8 percent of Hydro-Québec's revenues and 32 percent of its net income of \$977 million, while Manitoba Hydro's electricity export revenues in 2007/08 totalled \$625 million with exports typically accounting for more than 40 percent of Manitoba Hydro's revenues.³

In fact, BCCGE believes that enough revenue could potentially be generated by British Columbia's green energy wealth to wipe out our province's debt and eventually even replace the revenue currently raised through the provincial sales tax. The province of Alberta, which has no debt or provincial sales tax, has already shown very powerfully how this can be done by capitalizing on an abundant natural energy resource.⁴

² As part of the Pacific Gas and Electric (PG&E) BC Renewable Study Phase 1 (June 20, 2008), PG&E examined various potential transaction structures for supplying renewable clean electricity from British Columbia to PG&E. Based on their review, PG&E believes that contracting directly with an entity such as BC Hydro and/or Powerex through a power purchase agreement to deliver an "all-in product" at the US/Canadian border is the most viable option for obtaining clean, renewable electricity from British Columbia's various green energy producers.

³ Since 2001, Quebec's electricity exports have also prevented more than 30 million tonnes of GHGs from being emitted into the atmosphere—a significant contribution to the battle against global climate change and roughly equivalent to the amount of GHGs that would be created in a year by 7,870,000 cars. Over the past 35 years, Manitoba Hydro's exports of clean electricity have also reduced greenhouse gas emissions by 172 million tonnes in the region through the reduced need for thermal electricity generation from coal and gas-fired sources.

⁴ As is widely known, Alberta does not have a provincial sales tax and they do not have any provincial debt either owing to the considerable wealth their non-renewable energy resources have provided over the past several decades.

Green Energy puts British Columbia in the Driver's Seat for a Change

British Columbia's abundance of renewable green energy is something our American neighbours urgently need, and it's a resource we in British Columbia are almost uniquely able to provide. That puts us in the driver's seat for a change and lets us turn the tables in our trading relationship with the US: We've always needed the Americans to buy our products more than they've needed us.

But now, with the climate change crisis upon us, combined with a limited number of viably cost-effective renewable energy sources inside the United States, the trade equation is poised to change drastically in our favour owing to the urgent need to access and develop new sources of clean, renewable electricity.

Interestingly, the question of exporting renewable electricity from British Columbia was discussed very recently on the December 11, 2009 *Cutting Edge of the Leg* segment of the Bill Good Show on CKNW, with Vaughn Palmer and Keith Baldrey, in relation to recently approved green energy projects in British Columbia.

As host Bill Good stated on the show that day: "One thing I don't really understand is the opposition to selling power to the United States. We want to sell as much wood to the United States as we can; we want to sell as much of almost everything as we can. What is the objection to selling power to the United States?"

Vaughn Palmer responded by saying: "I think it's a great idea to be doing it. A couple of Canadian provinces do it already—Quebec, of course—it's a huge source of revenue for them." Palmer then spoke about Alaska's clean energy plans and the opportunity to "wheel" electricity through British Columbia to the lower forty-eight states and said: "Again, I think if we can get that kind of a deal going with the Americans, for British Columbia the long-term opportunity to sell into the United States market is strengthened."

Keith Baldrey agreed with Palmer and added: "... some of the opponents to this, including some New Democrats, forget it was actually the NDP government administration that got BC Hydro into the North American market in terms of selling power to the United States. So this predates the Liberals.... BC Hydro made a heck of a lot of money for the taxpayers of BC through Powerex, its export arm, generating

power in BC and sending it south of the border, without having any negative impact on ratepayers here in this Province. It was all positive.”

The Magnitude of California’s Reliance on Fossil Fuels to Generate Electricity

Although we rarely stop to consider it on a daily basis, 92.8 percent of the electricity generated in British Columbia comes from clean, renewable hydroelectric sources.⁵ But such is not the case in places like California where two-thirds of their electricity comes from carbon-emitting fossil fuels like coal (20.1 percent of electricity generation) and gas (37.7 percent of electricity generation).⁶

When you consider the fact that California’s population of 37 million people is also nearly ten times larger than British Columbia’s population, and that it represents nearly half the population living in western North America, the magnitude of California’s reliance on coal and gas to generate electricity—and the massive amounts of carbon and greenhouse gas emissions these fuel sources generate—comes into alarming focus.

And disgracefully, it’s not just California and the western states that require our help: Alberta generates 78.7 percent of its electricity by burning coal, some of which is imported into British Columbia to top up our alarming, and appalling, shortage of installed clean generating capacity.

Considering the fact that climate change and greenhouse gas emissions do not recognize international or provincial boundaries, BCCGE strongly believes that British Columbia’s enormous green energy potential can and should be put to work to provide clean, renewable green energy to our neighbouring provinces and states in order to help them reduce their reliance on dirty coal-fired and gas-fired sources of electricity (as Quebec and Manitoba are already doing).

⁵ BC Energy Plan – 2004 Total Electricity Production by Source (% of total)
<http://www.energyplan.gov.bc.ca/bcep/default.aspx?hash=7>

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Eliminating British Columbia's Debt and PST

According to the estimates in the September Budget Update 2009 from the Ministry of Finance, British Columbia's provincial debt servicing costs are more than \$2.2 billion per year.⁷

And as is well-known, the steady reduction of Alberta's debt was made possible by revenues generated from Alberta's enormous non-renewable petroleum resources. Being debt free has allowed the Alberta government to save around \$1.5 billion annually in debt servicing costs—dollars that Alberta has been able to redirect to important priorities like healthcare, education, tax cuts, savings and infrastructure.

If British Columbia was debt-free, the money we currently spend to service our provincial debt could be spent instead on vital services like health care and education. For example, the \$2.2 billion we currently spend servicing the province's debt would be enough to build six 300 bed hospitals similar to the new Abbotsford Regional Hospital and Cancer Centre.⁸

If \$2.2 billion was freed up from servicing British Columbia's debt costs each year it could almost fund the entire \$2.5 billion being spent on capital investments in British Columbia health care facilities over the next three years including key projects like:

- ✓ the new 500 bed Royal Jubilee Hospital in Victoria;
- ✓ the new full-service Kelowna Cardiac Centre and expansion of Kelowna General Hospital;
- ✓ construction of a new patient care tower at Vernon Jubilee Hospital (with a new emergency department and new operating rooms);
- ✓ the redevelopment of Surrey Memorial Hospital and the new \$239-million Surrey Outpatient Hospital;
- ✓ construction of a replacement hospital and new residential care facility in Fort St. John;
- ✓ And construction of a new Northern Cancer Centre in Prince George.

⁷ http://www.bcbudget.gov.bc.ca/2009_Sept_Update/estimates/Estimates_Sept_2009.pdf. p. 5.

⁸ <http://www.partnershipsbcc.ca/files/project-abbotsford.html>

Alberta's debt-free status—and the cash reserves they've been able to set aside—have also positioned Alberta to weather the impacts of the recent global economic downturn and the first recession Alberta has faced since 1986. Thanks to the debt elimination measures Alberta undertook over the past 16 years, Alberta has \$18.3 billion in short term savings set aside which is helping to offset the province's current deficit. Alberta also has a "Triple A" credit rating and remains the only province where total financial assets exceed total liabilities.⁹

British Columbia has So Much to Offer

Clean, renewable green energy is a natural resource that British Columbia clearly has in great abundance, and it's a natural resource that could clearly have considerable benefits for the people of British Columbia in terms of environmental and climate change objectives as well as in terms of the province's fiscal and social objectives as the examples of Quebec and Manitoba have shown.

British Columbia's ambitious 2020 greenhouse gas reduction target of 33 per cent shows that our province is serious about climate change and serious about reducing greenhouse gas emissions. But clearly we have even more to offer to the battle against global climate change based on our province's immense untapped potential for generating clean, renewable, green electricity.

Exports are fundamental to the British Columbia economy. They are the fuel that makes our province run. We export our lumber products and we export our non-renewable minerals and metals. Why, then, should we not export our clean, green, renewable electricity? Renewable electricity is a resource just like any other we have and there is a great demand for it.

BCCGE is not saying that every single megawatt of potential clean energy in our province can or even should be tapped into for the battle against climate change.

⁹ <http://www.finance.alberta.ca/business/debt/index.html>. Alberta is expected to return to a surplus position beginning in 2012-13. The deficits currently being experienced in Alberta due to the global economic downturn will be offset by transfers from the province's \$17 billion Sustainability Fund, a fund which helps to protect government programs and infrastructure spending plans from unexpected drops in revenue and the costs of emergencies and disasters. <http://alberta.ca/ACN/200904/2566682130AB8-0A89-15BD-C8BD5275D7430706.html#backgrounder>

What BCCGE is saying is that the urgency of the global climate change crisis means we need to start contributing substantially from British Columbia's unrivalled abundance of green energy in support of continent-wide greenhouse gas reduction efforts, just like Quebec and Manitoba are already doing.

British Columbia is the richest and most blessed province in Canada—we have just not realized it yet.

Thank you.

Submitted on behalf of B.C. Citizens for Green Energy

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