

Attention: Julia Douglas – clerk

Submission to Standing Committee on Finance and Economic Affairs

How We Squandered Our Children's Inheritance

"Once a nation parts with the control of its currency and credit, it matters not who makes the nation's laws. Usury, once in control, will wreck any nation" - William Lyon Mackenzie King – Prime Minister of Canada, 1935

In addition to our personal debt, all levels of government in Canada – federal, provincial, regional, and municipal – are now heavily burdened by interest payments owed to the private-for-profit lending institutions on the debt that has been created. Prior to 1974 the Public Bank of Canada was in control of the creation of currency and credit of this country and all interest payments on money borrowed benefited the Canadian people not the shareholders of private for profit lending institutions.

From confederation to 1974, Canada fought two world wars, went through a major depression, constructed major infrastructures such as the St. Lawrence Seaway, Trans-Canada Highway, International airports, Canadian National Railway, and brought in social welfare programs such as Family Allowance, Old Age Security pensions, Canada Pension Plan, Universal Health Care and wound up with a total accumulated debt of only \$21.6 billion dollars.

According to the Frazer Institute Research Bulletin – The Cost of Government Debt in Canada, 2017 - combined federal and provincial net debt has increased from \$833 billion dollars in 2007/08 to a projected \$1.4 trillion dollars in 2016/17. This combined debt equals \$37,476 for every man, woman, and child living in Canada.

Debt accumulation has costs. One major consequence is that governments must make interest payments on their debt. Spending on compound interest payments consumes government revenues and leaves less money available for other important priorities such as infrastructure, health care, education, tax relief and other social needs.

Taxpayers are paying the private-for-profit lending institutions more than \$64 billion dollars each year to service the government's debt—over \$175 million each and every day of the year!

We are NOT growing the economy, we are NOT spending our way into prosperity, we are draining the bank account and bankrupting our children and grandchildren's future. These are tax dollars that could have gone towards infrastructure, health care, education, and other social needs if the Government of Canada used the Public Bank of Canada to create the money to cover its shortfall. Ultimately, the government could pay off the federal debt through the same means.

Since 1975 Canadians have paid one trillion dollars of interest and debt to private for profit lending institutions. As Canadians we are giving up the sovereign creation and control of our currency and credit. Instead of the interest payments on money borrowed for the creation of infrastructure benefiting the Canadian people we are moving toward financial bankruptcy.

Solutions:

1. I realize that recreating the PUBLIC Bank of Canada and creating Canadian currency is a Federal jurisdiction. BUT you could create an Ontario Credit Union so that Ontarians can borrow from ourselves and control the credit necessary for infrastructure projects. In addition interest monies would benefit the Ontario people – not private for profit lending institutions. The recreation of the Public Bank of Canada would need support of the provinces and a grassroots enthusiasm from your party would make you the darlings of the people for years to come. (Consider the popularity of the CCF, later NDP, in Saskatchewan with the creation of Universal Health Care.)

2. All money paid by the people of Ontario for government taxes MUST be direct deposited into the PUBLIC Bank of Ontario. All money collected from provincial taxes - Beer and Wine Tax; Corporations Tax; Capital Tax; Corporate Income Tax; Corporate Minimum Tax; Insurance Premium Tax; Debt Retirement Charge; Disputing Assessments or Disallowances; Employer Health Tax; Estate Administration Tax; Fuel Tax; Gasoline Tax; Goods and Services Tax (Canada Revenue Agency); Gross Revenue Charge; Hydro Payments in Lieu of Provincial Corporations Tax; Land Transfer Tax; Mining Tax; Ontario Health Premium; Payments in Lieu of Additional Municipal and School Taxes; Personal Income Tax; Property Tax; Provincial Land Tax; Provincial Sales Tax; Race Tracks Tax; Retail Sales Tax; Succession Duty; Tire Tax; Tobacco Tax, Carbon Tax...

This would create capital deposits for the PUBLIC Bank of Ontario, so money loaned for government projects would be created and interest payments would benefit the people of Ontario.

Consider the work of Canadian Constitutional lawyer Rocco Galati. The proposed Canada Infrastructure Bank makes crystal clear the urgent need to now concentrate efforts within the political arena. In its arguments, the Crown has contended that the Government's decision to drastically reduce its borrowing from the Bank of Canada was made by the people of Canada through the political process although the changes made were never debated publicly nor in Parliament. This failure of the political process has led to the exponential growth of Canada's debt incurred by all three levels of government due to accumulated deficits and compounded interest charges as well as to significant fiscal restraints on funding government programs and infrastructure expenditures.

North Dakota is an example of a Public Bank that has served the people of that state for the last 100 years. Follow the work of Ellen Brown (author of The Public Bank Solution and Web of Debt) and the financial reform initiated in California and New Jersey.

If we continue to borrow from private-for-profit lending institution at compound interest we will add to our government debt and instead of a prosperous future, we will bankrupt this nation.

IF we recreate the PUBLIC Bank of Canada where the interest paid benefits all the people of this country we will be able to repay the accumulated debt borrowed by all levels of government.

A PUBLIC Bank of Canada benefits all Canadians and the financial wealth created from a public bank allows Canadians to rebuild the infrastructure that made Canada a great place to live, work and play.

A concerned citizen

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Blow Out of Wind and Solar in the Ontario Electricity System

The blow out of wind and solar in the Ontario Electricity System is revealed by production levels that are well below the rated installed capacity.

Ontario can produce power from nuclear, natural gas, hydro, wind, solar and biofuel energy generators. The results are recorded in many ways but the three used here are (A) the total installed capacity of each generator type (what was installed), (B) the forecast capability at outlook peak (what can be produced) and finally the (C) generator output by fuel type for 2017 (production).

According to the IESO report – 18 Month Outlook: An Assessment of the Reliability and Operability of the Ontario Electricity System from October 2017 to March 2019 -p. 17 – Table 4.1 provides (A) total installed capacity and the (B) forecast capability @ outlook peak

Existing Generation Capacity (MW/hr) / Capability @ Peak / Output

Fuel Type	A Total Installed Capacity (MW/hr)	B Forecast Capability @Peak (MW/hr)	C OutPut Jan – Dec 31 2017 (MW/hr)	Production as %
Nuclear	13,009 MW	11,537 MW	7,5452 MW	65% of capability
Hydro	8,480	5,786	3,143	54.3% of capability
Natural Gas	10,277	8,371	489	5.8% of capability
Wind	4,213	533	765	18.2% of installed capacity *
Solar	380	38	45	12% of installed capacity *
Biofuel	495	439	37	7.4%

				of installed capacity *
Total	36,853 MW/hr	26,704 MW/hr	12,031 MW/hr	

(<http://www.ieso.ca/en/sector-participants/planning-and-forecasting/18-month-outlook>)

It is neither possible nor desirable to run the electricity system flat out and some redundancy needs to be built into the system for maintenance and emergencies. The total installed capacity of all fuel types reported is 36,853 MW, but at peak demand the system is capable of producing 26,704 MW of power each hour. The total production that IESO counts on at peak demand is $26,704 / 36,853 = 72\%$ of the energy system potential.

The second column provides the Forecast Capability at Outlook Peak and takes into account deratings, planned outages and “allowances for capability levels below rated installed capacity”. When you compare the installed nameplate capacity for wind and solar with the actual production there is an 80 to 90 % drop in production over nameplate capacity!

The total output for all fuel types (column C) for Jan – Dec 31, 2017 is available on the IESO website – ‘Generator Output by Fuel Type Monthly Report 2017’. The total output from Jan – Dec was 12,031 MW of power produced each hour. According to the IESO the forecast capability of the existing generator stations at outlook peak is 26,704 MW of power each hour. The production from the electricity system was $12,031/26,704 = 45\%$ of the capability. So why did we agree to purchase power from Quebec?

The renewables - wind and solar are intermittent power sources and require back-up power. Natural gas was the choice made for Ontario. Natural gas is a responsive base load fuel that can be ramped up or down quickly. Nineteen natural gas plants have been commissioned in Ontario since 2003. According to the IESO they are capable of producing 8,371 MW of power each hour, yet the natural gas plants only produced 489 MW of power each hour from Jan – Dec. We have gas plants operating at 5.8 % of their potential!! This means that they are being under utilized and sit idle the majority of the time. The private for profit corporate owners are not running a charity so the Ontario ratepayers are paying millions of dollars each month to gas plants paid not to produce power.

Wind and solar on the other hand blew out. They were only able to produce 13.2 to 18% of their nameplate capacity. The production from wind for Jan – Dec 31, 2017 was 765 MW per hour from a name plate capacity of 4,213 MW. A dismal performance with 18%

production from the installed nameplate capacity. According to the IESO the forecast capability for wind at peak demand is 533 MW or 12.7% of the installed capacity. The difference is explained as an “allowance for capability levels below rated installed capacity.” No kidding – considerable distortion exists in the presentation of material when a product has an 80% drop in production over the stated manufacturer nameplate capacity. This is like telling me that my new car is capable of 1000 km on a tank of gasoline and instead it goes 200 km!

According to the IESO the monthly wind capacity contribution values range from 12.6% to 37.8% of the installed capacity (18 – Month Outlook p.19). So the nameplate capacity of an industrial wind turbine is somewhat arbitrary.

To understand the limits of wind power, Glen Schleede explains it best. “Wind turbines have little or no ‘capacity value’ because they are unlikely to be producing electricity at the time of peak electricity demand. Therefore, wind turbines cannot substitute for conventional generating capacity responsible for providing reliable electricity to customers.

Second, a kilowatt-hour (kWh) of electricity from wind has less value than a kWh of electricity from a reliable (dispatchable) generating unit providing base load power – nuclear, natural gas or hydro which can produce electricity whenever the electricity is needed.

According to Schleede, these issues are important because *“wind farm” developers and lobbyists have misled the public, media and government officials by making false claims and by using terms intended to confuse their listeners*

The true capacity value of a wind turbine or ‘wind farm’ is generally less than 10% of nameplate capacity and often 0% or slightly above — simply because, *at the time of peak electricity demand*, the wind isn’t blowing at a speed that will permit the turbine to produce any or much electricity. Claims of wind turbine capacity value have been exaggerated by wind industry officials and lobbyists, by regulatory agencies”, and as we are finding out in Ontario industrial wind turbines generate a minimal amount of electricity.

The IESO hourly wind generator output 2006 – the present provides data on every industrial wind facility in Ontario. If we use the West Lincoln NRWF industrial wind facility as an example we find that the facility is rated at 230 MW nameplated capacity. On average the facility produced less than 30 MW per hour during July, Aug and Sept of 2017, when electricity is generally at its greatest demand. The production was 13% of

the name plated capacity! It never once reached its nameplate capacity of 230 MW and it only went above 200 MW for 20 hours in the last three months.

Hydro – a baseload renewable energy source - produced 3143 MW of power per hour from Jan – Dec, 2017 from a potential of 5786 MW. So we are only using 54% of the potential production from our cleanest, greenest, cheapest energy source. The sad reality for the ratepayers of Ontario is that the hydro plants could easily have been ramped up an additional 850 MW per hour to cover the contribution of wind and solar. Instead we ran the water over the dam.

Using nameplate capacity creates a false sense of the ability of renewables – wind and solar – to provide power. Wind and solar are both intermittent so we can not ramp them up or even depend on them for power because they only produce power when the wind is blowing or the sun is shining.

Consumers know they want the lights kept on, the refrigerator running and the industry rolling. But it is difficult for consumers to make informed decisions about the success or failure of a program when information is presented in such a convoluted manner. The renewable energy initiative in Ontario was a political decision. According to several reports from the Auditor General the Ontario government did not conduct a cost benefit analysis. To continue installing a power system that can not provide power on demand to cover up a bad decision will eventually lead to failure of the total electricity system and will be considered an act of betrayal by the ratepayers that are responsible for the bill.

To accommodate the wind industry, we are paying for hydro power generators to run inefficiently; we are paying for power generators not to produce; we are entering into contracts to purchase power when we are awash with over production and with the “Fair Hydro Plan” we are downloading \$20 to \$40 billion of debt onto our children and grandchildren.

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