

Comments File:

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Professional Background of Submitter:

Current: Independent Energy and Engineering Consultant
Former Chair of the Nova Scotia Fuel Safety Board
Member of the Dalhousie University Engineering Education Advisory Board - Faculty of Engineering
Formerly Senior Consultant and Senior Project Manager to Neill and Gunter (Nova Scotia) Limited
Former Consultant in Pipeline Expansion; LNG Development (ACOA Paper 2006); Cogeneration and District Heat; Offshore Design and Construction Projects; Downstream Petroleum...
Former President of Charter Associates Consulting; Certified Management Consultant - Quality Designation: Organizational Redesign; Mediation and Facilitation; Offshore Management Systems (Rowan); CNSOPB, Mobile Oil Corporation Audits, CNSOPB Operations Audits; Energy Consulting...
Former employee Imperial Oil and Texaco Canada: Corporate Merger Team Member Imperial-Texaco Canada Merger - Organizational Redesign; Plant Engineering, Engineering Design; New Ventures; Downstream Operations Management; Marketing Supply (Fuels)....etc.

Current Status:

First line above.

Took six month holiday...first in 19 years...did all those things promised to my wife Sharon and myself ... status 100 %!
I have in the past and will in the future promote responsible Climate Change.
I have provided public and private Cogeneration, District Heat and Climate Change presentations at professional Open Houses, and interactive public and private Climate Change presentations...i.e.. for the Miramichii Annual General Meeting at APEGNB, working closely with data from several NRC and EC consultants. I am invited back to the main AGM at APEGNB in 2008.

General Comments on Energy and Climate Change for Nova Scotia:

- a.. We will soon have no choice but to work the two issues together. They are not mutually exclusive.
- b.. The current initiatives are well meaning, but do lack pragmatic execution. They are too tied up in the proverbial government studies and "systems". The home improvement initiative...for example... there are not enough resources to handle the demand...response is two to three months for an air test...streamline the process...there must be process improvement personnel in government.
- c.. The current home improvement initiative should be developed with a sliding scale benefit like taxes...make more funds available to those less able to finance energy improvements to their homes. The US energy initiatives use sliding scale.
- d.. In contrast to this, set policy to make the most prominent polluters pay...this could be directed at NSPI (strictly because they are the only major business in Nova Scotia in electrical power generation...a tough position to be in...) but also direct this to the industrial manufacturing industry major LFE's and the transportation industry...all trucks...few trains.
- e.. Make the most prominent polluters pay should also apply to large buildings (all disciplines; industrial, government, DND, commercial...no exceptions) grossly oversized homes, SUV's, and recreational vehicles and activities of any kind that use fossil fuels.

Reactions from my Climate Change Sessions:

- a.. Governments should not underestimate the groundswell of knowledge in Climate Change and its connection to Energy...specifically dirty environmental energy. This has been a strategic political mistake in many Countries...sadly including Canada.
- b.. In Nova Scotia the governments should be seriously looking at and working on fall back strategies as this groundswell continues.
- c.. The strategies need to be activity oriented...getting away from the study...study...study routines, and dramatically embrace the "build on current knowledge from anywhere...it does not have to be developed from scratch in NS...try the most likely solutions...adjust the knowledge base, try again...do something...find success...tell the world.
- d.. Climate Change consequences may exponentially sneak up on us. Tipping points in nature can be harsh realities.
- e.. People are willing to pay more for energy...much more...to place Climate Change in check. Their children's future depends on it.
- f.. Informed groups that I have worked with see Climate Change as the next and possibly last world war. No, none of them are extremists...just people worried about their children's and grand children's futures. Quite frankly, so am I. I belong to no extremist group.
- g.. In Power Generation, the biggest CO2 pollution sector in Nova Scotia, I am surprised that Clean Coal Combustion is not on the top of the list rather than the bottom. Realistically, it is Nova Scotia's only "major hedge" against short term Climate Change mitigation. (This should include CO2 separation, sequestration, and the strategy to permanently store

CO2 in the many Nova Scotia coal fields... and other geostable areas...with a balance to study natural gas storage as power generation storage. There is research on CO2 displacing methane in coal strata as well. I believe Stealth Ventures is conducting significant horizontal drilling in several NS coal fields. Is there a fast track solution to be hammered out here? Again...don't start from scratch...find existing research data and build on it. We need not reinvent the wheel here....Try something that looks promising and adjust as you go.

h.. People in Nova Scotia are beginning to realise that Nova Scotia's solutions to Climate Change will not be found in a Provincial answer. We are limited in what we can do due to our current resource base for energy and options in grid design and available alternate energy resources.

i.. We must work the same "do it" strategy mentioned above Regionally..

j.. The 2001 Regional Climate Strategy developed by the NEGCEP group should be put up front. The United Nations would support the initiative as an international example of cooperation. There are no environmental borders...we can not fight Climate Change in isolation.

k.. Regionally, Wind Power would make more sense with a combined wind regime, but needs electrical interconnectivity, and intergovernmental cooperation. These and other regional options including connection to the Lower Churchill hydro power have been studied to death.

What do we do? My opinions...

I realise that there are commercial market competition impacts regardless of what solutions are brought forward;

a.. However government must learn quickly what it means to lead...We need emission caps...not performance levels...true total emission caps; the initiation of a "already-developed-somewhere-else cap and trade system" ... and let the penalties, gains and subsequent reactions fall where they may in a defined energy-environment marketplace.

b.. To leave Clean Energy generation, efficiency, conservation, other initiatives...to a voluntary process...will lead to more of the same short term reactions from across the public spectrum.

c.. Set up the hard caps legislation, enact the regulations and guidelines, and educate society to react to a cause significantly more paramount in defining the future than their short term material gains and comfortable life styles.

d.. Governments must lead...the rest of us will adjust.

I hope these comments will be additive to any new policy deliberations.

It is difficult to stay out of the emotional side of these issues. My apologies; I have a five month old grand daughter to whom I must be accountable. What do I tell her is 20 years...if I live that long. It is a real question...

I used it in the introduction to my public session on Combatting Climate Change at the Miramichi 2007 Regional APEGNB Dinner ...Professional Engineers and their wives, husbands and partners...The seventh powerpoint chart was "What Can We Do?"...I quickly became the facilitator of an extremely polite but dead serious discussion lasting longer than two hours... No one left the dinner...They collectively had a lot to say...from getting their teenagers to stop taking 20 minute showers; methods of heating and insulating their homes...all the way to industry planners in the group discussing using more rail transport for their goods; to the Operations Manager of one of NB's power plants discussing serious conservation initiatives...

People are aware... it's time to act...

Respectfully submitted,

Barry Alexander, P.Eng.