

## Kyoto, Canadians, Energy and the Environment

Posted by Stoneleigh on February 22, 2007 - 11:13am in The Oil Drum: Canada Topic: Environment/Sustainability

Tags: climate change, energy efficiency, environment, greenhouse gas emissions, hydrogen economy, kyoto [list all tags]



digg it This is a guest post by Darryl McMahon, author of *The Emperor's New Hydrogen Economy*.



Last week, we learned that Canada's record on greenhouse gas emissions reductions is the worst of the G8. Worse even than the non-signatory to the Kyoto Accord, the United States. This sets a realistic counterpoint to the much hyped greenwash announcements of the Canadian federal government in previous weeks. The Eco-Energy public relations events were primarily recycled hot air from the previous administration; wrapped in Tory blue paper and tied up with green ribbon. The appearance of action while committing to nothing was assailed by political partisans and pundits, but with no effective or constructive criticism. It was a clear victory of symbolism over substance.

If the subject were less serious, these recent Eco-Energy announcements would be amusing for their creative contortions of meaning and underlying irony. Given the fundamental subject is actually the survival of a significant portion of the planet's human population (and by implication, a number of other species), the humour fades quickly.



While the average Canadian appears oblivious to the warning signs, and climate change deniers remain firmly in control of the federal governments in Canada and the U.S., the reality is becoming increasingly stark for those paying attention.

In summary, world peak oil production (conventional oil) is here. North American peak natural gas production is here. Mining the Canadian tar sands is a losing proposition, costing more in environmental impacts, natural gas and fresh water than it is worth. The concept of parking a couple of nuclear reactors in the oil patch to replace the natural gas being used is laughable on multiple levels, not least because we have no plan in place for dealing with the radioactive spent fuel.



Canadians, on the whole, don't give a fig for our environment. We continue to despoil it unabated, assuming that when we make one area uninhabitable, we can simply move on to another. We pave over our productive farmland in order to build our future ghettoes, currently known as suburbia. As a species (homo hydrocarbonus), there can be no doubt that we will consume every drop of recoverable fossil oil we can before we are done, and all the natural gas. We can debate how long that will take, and whether we mitigate the effects to any perceptible extent, but that is petty stuff. More interesting are the questions of how we will accommodate the climate change refugees, and how much of our current economic and cultural practices we can sustain as oil and natural gas rise in price. The case of post-Katrina New Orleans is instructive on how we will deal with climate change refugees, as a best case outcome.

There are a small, but well-connected and vocal group who are working toward the creation of the "hydrogen economy" as the ubiquitous successor to today's hydrocarbon energy paradigm. In my book, *The Emperor's New Hydrogen Economy*, I argue that this is not going to work for a wide variety of reasons. (I don't propose to repeat those here. If you are interested, there is a sampling that pre-dates the book available on my <u>web site</u>). The hydrogen economy is currently the most popular of the never-quite-ready "silver bullet" solutions being proposed to our energy problems. Mirages will not solve the problems; only deflect us from searching for viable solutions.

How do we move forward from this point? First, we need to acknowledge and accept some realities.

- 1. Fossil fuels are finite, and we are consuming them at an accelerating rate. The peak production precipice is upon us. There is little time to start making major adjustments that could avoid or mitigate major economic and societal collapses.
- 2. Governments are unlikely to provide constructive leadership on these matters. The scale is beyond their conception, their track record is not encouraging, and politicians never want to be the bearers of bad news.
- 3. The major multi-nationals in the energy sector have no reason to deliver viable alternatives until they have wrung every penny of profit they can from hydrocarbons, without regard to the consequences which they shed onto the residents of planet earth.
- 4. The only force that can alter the course is the combined power of the consumers in the industrialized and industrializing world. The third world does not consumer enough hydrocarbons to be a factor. The oil companies extract, transport, refine, store and distribute their products because consumers buy them, both directly and indirectly. If the market stops buying, the producers will stop producing.
- 5. There are no silver bullet solutions. The hydrogen economy is hype. Finding more hydrocarbon reserves (e.g., sub-sea methane clathrates) will simply result in more greenhouse gas emissions. Sustainable energy sources (solar, hydro, wind, tidal, geothermal, biomass, etc) are real and they work, but they generally cost more than fossil fuels at current prices, and take time to implement, especially on a scale to replace our current use of fossil hydrocarbons. Intelligent conservation and improved efficiency are the two biggest

 The Oil Drum: Canada | Kyoto, Canadians, Energy and the Environment
 http://canada.theoildrum.com/node/2295

 wins available to us, and the potential is huge, but not enough on their own.

6. A personal energy plan will permit us to take the initiative to reduce our overall energy use, and related costs. It will permit us to substitute sustainable energy sources for finite sources. It will allow us to make the necessary adjustments in a controlled manner that is tailored to our personal circumstances. Collectively, these personal energy plans in aggregate will permit our communities to adjust to higher fossil energy costs while minimizing disruptions.

The real question is, do we have the foresight, fortitude and personal energy to develop a personal energy plan and follow through on it? Based on my personal experience, I think we do, but not if we sit on our hands and wait for someone else to deal with the matter. I speak to this in the second half of my book, *The Emperor's New Hydrogen Economy*. There, I present many ideas there on how you can save on your energy bills with zero or minimal financial investment to get you started, and several ways to substitute sustainable energy into your consumption mix.

It's time to get past the rhetoric that we can't afford to save the environment. If we intend to survive as a species, we can't afford to do otherwise. The good news is that we can do this while improving our own financial situations (though perhaps not that of Exxon-Mobil), and without devastating the economy (though there will be some changes, as is natural in our economy anyway). There are opportunities, if we are prepared to embrace them.



Many Canadians are still leery of compact fluorescent lights, although they will save the consumer money. We resist replacing old refrigerators and freezers, even though potential energy savings of 2/3's or more make a compelling investment case. We can choose more fuel efficient vehicles at replacement time (although the current hybrids are not no-brainers – it depends on your typical driving missions). Low-tech solar energy collection is essentially unknown in Canada, but costeffective if properly implemented (although anachronistic regulations still present some barriers). Electric-assist bicycles were finally legalized in Ontario in the fall of 2006 thanks to years of effort by committed activists. These vehicles provide an energy-efficient, cost-effective, low-noise, zero-emissions transportation solution that does not contribute to urban sprawl. They could help to reduce traffic congestion, especially if integrated into the public transit mix with free, secure lock-ups at transit stations and sufficient carry support (e.g., OC Transpo's Rack'n'Roll equipment) for long journey's where the bike is wanted at both ends of the transit network.

It's time to stop wishing for miracles, and start making positive changes based on what we know today. It's time to stop waiting for leadership and start providing it.

## Darryl McMahon

**EXAMPLE RESERVED** This work is licensed under a <u>Creative Commons Attribution-Share Alike</u> 3.0 United States License.