

Innovative Thinking With Canada's Energy Sector Can Foster Economic Sustainability

A natural tension exists between encouraging oil and gas utilization and export to support oil and gas producers, and recognizing that Canadians are also consumers. Recent history has driven home to all Canadians the economic impact of international price swings in energy, and yet the oil and gas industries are often not recognized as important to the national economy. There is a need to diversify the economy and protect businesses and consumers from the volatile boom/bust economic cycle related to oil and gas. There are also great opportunities to capitalize on the abundant supply of natural gas to promote a greener, more viable and stable economy.

The Canadian Chamber of Commerce (CCC) in their May 2009 Policy Brief, *Canadian Energy: A Valuable Resource* highlighted the importance of energy production as a contributor to the Canadian economy. In 2007, the energy sector accounted for 5.6 percent of the Canadian GDP or almost \$70 billion, with almost 55 percent of the total energy produced in Canada exported for a total of \$91.6 billion. The Western Provinces accounted for the bulk of crude oil and natural gas production, with the eastern provinces producing and exporting hydro and nuclear generated electricity. Canada has the world's largest uranium reserves in Saskatchewan and Ontario.

While Western Canada has a vast potential of bitumen sourced oil, including an estimated ultimate recoverable potential of 6,276 billion cubic meters untapped "unconventional gas", its natural gas production peaked in 2001. According to the ERCB, Alberta's marketable production of natural gas declined by about 15% over the past decade, even while the number of active gas wells more than doubled.

The Canadian Chamber projected that North America will consume 20-25 percent more energy by 2030, with the transportation sector accounting for 31.3% of final demand, with the industrial sector at 30.9%, and residential customers at 16.9%. In the industrial sector, manufacturing accounts for 70.7%, mining and oil and gas extraction 26.0 %, construction 2.5% and forestry 0.8%. Ontario is the largest consumer of energy accounting for 32.3% of the total energy use, followed by Quebec at 20.6% and Alberta at 19.9%.

The Cambridge Energy Research Associates reported in 2007 that the average global decline in currently producing oil fields around the world is 4.5% per year. Demand growth for this same oil in the rapidly expanding economies of the developing world is following an opposite trajectory. The CERA noted that the last year in which the world discovered more conventional crude oil than it consumed was 1981.

As readily available sources of oil and gas become increasingly difficult to extract with higher input costs, and where world demand outstrips supply, it is reasonable to presume that costs will dramatically increase and that there will be supply issues.

Furthermore, the National Energy Board, in their December 2009, *Energy Briefing Note - Attitude and Behavior: Shaping Energy Use*, recognized the importance of Canadians striking a balance between production and consumerism. Their report identified three key areas:

- Energy conservation - promoting behaviors that conserve energy,
- Efficiency - application of new or better technology to reduce the use of energy, and
- Changing energy sources - replacing one form of energy with another.

The strongest motivator for changing Canadians' energy consumption patterns will be the economy and the price of oil and gas products. As Canadians engage more fully in energy conservation, there is a direct economic benefit, in that more energy is available for export.

Recommendations

That the federal government:

1. Enhance and augment programs that encourage and promote the research, development, and commercialization of new technologies that minimize the environmental drawbacks associated with the extraction, production, and consumption of fossil fuels, while boosting the economic viability of our other energy resources, such as wind, solar, geothermal, hydro, and bio fuels, etc.
2. Wherever possible, progress government policies and encourage private sector practices that support domestic preservation of finite fossil fuels through energy conservation and efficiencies.
3. Take a leadership role in pursuing opportunities to capitalize on Canada's natural resources, grow a more robust energy market and promote improved environmental responsibility through exploring the feasibility of adding alternative energy sources such as natural gas and other viable options to government procurement practices, and market this concept to the Canadian public.