LNG SERIES

Energy in Canadian Foreign Policy: Missing the [LNG] Train

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Successfully harnessing and controlling forms of energy is among the key factors that has shaped human evolution. Mastering fire enabled early humans to cook their food, heat and light their shelters, and eventually to smelter, forge and shape metals for tools, coins and structures. Harnessing wind and water energy led to building ships that sailed and mills that crushed grains. Steam power that converted heat into mechanical energy led to better and faster methods of transportation such as locomotives and steamships, and fuelled the machines that gave rise to the Industrial Revolution. In sum, energy has shaped how humans organized their societies and economies from time immemorial (Bithas and Kalimeris 2016, 6-7). Moreover, there is a strong statistical correlation between higher per capita energy consumption and a higher per capita GDP (European Environment Agency 2019).

The internal combustion engine was a further evolutionary step because products refined from oil – kerosene, gasoline, diesel, etc. – provide vastly more energy per unit to turn into mechanical energy than steam. In the fields of military history and international relations, this “energy density” advantage manifested itself most notably in the early 1900s when the British Royal Navy converted its entire fleet from coal to oil-powered vessels because of the advantages in speed and distance afforded by the use of oil (Dahl 2001). After this came the invention of automobiles, diesel locomotives, airplanes, tanks and trucks, and a vital need to access oil to fuel the new Transportation Revolution. Daniel Yergin’s Pulitzer-winning book The Prize (2008) and his follow-on The Quest (2012) brilliantly document the “epic quest for oil, money & power.”

The previous section serves as a useful segue to some key concepts that underpin this paper: chief among them is that of energy security. The International Energy Agency (IEA) “defines energy security as the uninterrupted availability of energy sources at an affordable price” (IEA 2019). Two subsidiary concepts follow: the first pertains to states that do not have domestic sources of, say, oil, and therefore require uninterrupted availability of oil from foreign sources. States in this predicament seek security of energy supply and use their diplomatic, commercial and, when required, military assets to secure the energy they need to achieve national objectives. States endowed with energy resources can become exporters and therefore seek foreign buyers to earn precious foreign currency; these states are likely to be more concerned with the security of market access, continued demand and stable commodity prices. The interplay between states seeking stable sources of energy supply and those that seek to position their energy endowment to their greatest advantage drives the geopolitics of energy and much of global politics (Bridge and Le Billon 2017).

States that possess enough energy in the form of oil or gas to become exporters have sometimes used their resource endowment as both carrots and sticks. Russia has used its position as an important exporter of hydrocarbons both to secure friends (Cuba, Central and Eastern Europe, and most recently China) and to threaten recalcitrant neighbours (Ukraine). More generally, Russia demonstrates “a proclivity to use its empowered energy position to either grab more resource rents from its immediate neighbours, or to wrest geopolitical or political benefits using energy as a lever” (Jaffe and Soligo 2009, 122). Venezuela under the late president Hugo Chavez
also used its oil wealth to build coalitions of states that opposed U.S. policies in Latin America – he claimed to have helped get Evo Morales elected in Bolivia and Daniel Ortega in Nicaragua (Trinkunas 2009).

In sum, energy – particularly in the form of hydrocarbons which currently fuel 85 per cent of global energy demand (BP 2018, 11) – is one of the main natural resource attributes that contributes to a state’s relative level of power, influence and diplomatic weight in international relations and foreign policy (Hudson 2007; Morin and Paquin 2018). Canada has world-class deposits of these forms of energy and should be a global supplier, satisfying our allies’ thirst for energy security.

**Canada’s supply vs. the world’s demand**

Canada’s proven oil reserves comprise 168 billion barrels of recoverable resource using current technologies and represent the third largest in the world, ranking behind only Venezuela and Saudi Arabia (NRCan 2019). Canada also possesses enormous natural gas reserves and ranks as the fourth largest natural gas producer in the world (NRCan 2019). Canada’s proven reserves amount to 73 trillion cubic feet and even those volumes vastly exceed Canada’s own needs, so most of it can be exported. Western Canadian natural gas plays in the Montney, Duvernay, Horn River and Liard basins are world-class resources that are cost competitive for both North American pipeline and global LNG markets.

According to Natural Resources Canada (NRCan), we produce about 16.1 billion cubic feet per day (Bcf/d) of natural gas and export just over half of our production to one country – all of Canada’s 8.2 Bcf/d of natural gas exports go to the United States. We also know that shale gas resources exist in vast quantities in British Columbia, Alberta, Saskatchewan, Manitoba, Ontario, Quebec, New Brunswick, Nova Scotia and the Territories. Canadian production could increase significantly if the proper gathering systems and infrastructure existed.

IEA (2018) data show that natural gas supplies 22 per cent of global energy use and 24 per cent of electricity generation, and that global demand for natural gas will increase 44 per cent by 2040, driven primarily by the rapidly expanding Asian economies. Most of the increase in natural gas use will be from liquefied natural gas (LNG) exports from the U.S., Australia and Russia. Figure 1 below shows that the increased LNG exports will go to Asia.

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1 Reserves are said to be “proven” if they can be recovered under existing economic conditions, using existing technology: the U.S. Securities and Exchange Commission (SEC) defines “proved oil and gas reserves” as “those quantities of oil and gas, which, by analysis of geoscience and engineering data, can be estimated with reasonable certainty to be economically producible (...) based on existing economic conditions.” See: [https://www.sec.gov/rules/final/2008/33-8995.pdf](https://www.sec.gov/rules/final/2008/33-8995.pdf), p. 11.

2 The data on NRCan’s website are from 2017.
According to data from the U.S. Energy Information Administration (2017), Japan’s LNG imports come from Australia (27 per cent), Malaysia (18 per cent), Qatar (15 per cent), Russia (nine per cent) and Indonesia (eight per cent). South Korea’s LNG imports come from Qatar (31 per cent), Australia (18 per cent), Oman (11 per cent), Malaysia (10 per cent) and Indonesia (nine per cent) (EIA 2018). Canada’s competitive advantage in shipping distance to these two countries is striking. A round trip from Kitimat, British Columbia to Shanghai, China involves 8,082 nautical miles. By comparison, a return trip from the Arabian Gulf to Shanghai is 13,277 nautical miles and from Nigeria, 21,931 miles. Ironically, we think of Australia, rather than Canada, as an Asia-Pacific country and yet the distance between Prince Rupert, B.C. and Tokyo is 3,700 nautical miles, compared to 3,900 nautical miles between the natural gas fields of Carnarvon in northwestern Australia and Tokyo. Seoul, South Korea is also closer to Prince Rupert (4,000 nm) than to Brisbane, on Australia’s East Coast (4,170 nm).

LNG in Canada’s foreign policy: Missed and missing opportunities

Canada recently ratified the Comprehensive and Progressive Agreement for Trans-Pacific Partnership (CPTPP) with 10 other countries: Australia, Brunei, Chile, Japan, Malaysia, Mexico, New Zealand, Peru, Singapore and Vietnam. Moreover, Canada has had a free trade agreement with South Korea – the Canada-Korea Free Trade Agreement – since 2015. In addition, in 2018 Canada ratified the Canada-EU Comprehensive Economic and Trade Agreement, or CETA. I mention these three specific trade agreements because the world’s largest importer of dry natural gas is Germany, and the two largest importers of liquefied natural gas (LNG) are Japan and South Korea, all three of which are now free-trade partners with Canada. Germany is currently working to increase its security of gas supply by improving regulations, and up to three LNG import terminals are being proposed to achieve this aim (LNG World News 2019). Japan’s Osaka Gas is
building a new LNG receiving facility to be online by 2022 (LNG World News 2018), while South Korea’s Kogas is building another LNG import terminal to meet its demand for the fuel (LNG World News 2017). In summary, Canada has an excess of gas supply and some of our newest free-trade partners are demonstrating their desire to secure more LNG import capacity.

Some of Canada’s new trading partners have expressed strong interest in Canada being a stable and reliable supplier of energy for their needs. For example, in the aftermath of the Fukushima nuclear disaster in 2011, Japan would have been an ideal market for Canadian natural gas, and Japan viewed Canada as a favoured source for supplying the energy it required in the aftermath (Vanderklippe 2014). About five years ago, there were 19 proposals to build LNG terminals along the coast of British Columbia to export energy to Asia and other markets (Prentice and Rioux 2017). Plans for Western Canadian gas to supply countries in the Asia-Pacific were driving a lot of commercial activity in British Columbia a few short years ago.

However, opposition from environmental and Indigenous groups, as well as regulatory and political uncertainty, created barriers and constraints to building LNG facilities, and halted the natural gas pipelines that would deliver the needed natural gas from the Montney and Horn River basins. The emerging potential energy relationship with Asian countries was quickly stillborn. By 2016, Japan’s then-ambassador to Canada, Kenjiro Monji, stated that “[i]f the approval of the environmental assessment [of the Pacific Northwest LNG project proposed by Petronas] is delayed further, Canada may run the risk of missing the chance to export LNG to the growing Asian market for a long time” (Bennett 2016). Former senior Alberta official and diplomat Jeff Kucharski (2015) at the time expressed frustration that “Canada’s credibility is at risk in Asia in light of the inability to complete necessary export infrastructure that would make good on the political rhetoric about Asia being a priority for Canada. Competitors such as Russia, Central Asia, East Africa and Australia are moving far more quickly and tangibly to meet Asia’s growing energy demand.”

The demand for energy from Asian economies continues to grow; however, absent a coherent plan that allows energy exports in significant quantities from the West Coast, Canada will not become a key supplier to those regions. And most unfortunately, this comes at a time when Southeast Asian countries are turning to lower-cost coal to satisfy their increasing demand for electricity, forecast to increase by 70 per cent between now and 2030. As reported in Nikkei Asian Review, “Indonesia is on track for the third-largest coal-fired power capacity […] behind China and India. Vietnam follows in fourth place, while the Philippines and Thailand will be home to multiple new coal power stations” (Hanada et. al. 2019). As it turns out, Indonesia, Vietnam, the Philippines and Thailand are all in the Association of Southeast Asian Nations (ASEAN), a regional organization of 10 countries with which Canada is exploring the possibility of negotiating a trade agreement (Global Affairs Canada 2019). Shipping Canadian LNG to offset the growing use of coal in these emerging economies would be beneficial for Canadian exports.

Another opportunity exists with Canada’s European trading partners. Many European countries receive significant imports of natural gas from Russia, but as mentioned previously, Russia has a habit of using its energy assets as a geopolitical tool to either entice new friends or punish
behaviour it does not agree with. In January 2009, Russia cut gas exports to Ukraine in one of several such occurrences. Since Russia supplies 40 per cent of Europe’s natural gas, this action left much of Western Europe shivering for almost two weeks in the dead of winter as collateral damage from Russia’s deteriorating relationship with Ukraine (Kramer 2009).

To mitigate against these supply threats from Russia, many “European countries are looking to diversify their natural gas supply sources and are prioritizing geopolitically stable and environmentally responsible supplies...Canada is a world benchmark for that kind of stability, thus making it a dependable, reliable supplier unshaken by whichever way the geopolitical winds are blowing” (Winter et al. 2018, 1-2). The authors also note that “Russia is likely to respond aggressively to attempts from competitors to obtain noticeable shares of the European natural gas market” (Winter et al. 2018, 39). This further highlights the tensions that can develop between energy-deficient states and energy-producing states when geopolitical interests collide. Canada likely will not develop the capacity to become an energy exporter to its European allies for at least three reasons. First, Canadian major energy project proponents have been stymied by domestic opposition to furthering hydrocarbon production and exports. Second, and closely related, two provinces nearest to the Atlantic Coast who could develop their known shale gas deposits have banned hydraulic fracturing, the method of accessing the resource. Finally, since any project currently in development would have to import Western Canadian gas, the added transport costs would make Canadian LNG over-priced.

Conclusion: Can Canada co-ordinate its international trade and energy policy objectives?

This article argues that LNG exports represent a significant opportunity for Canada in advancing its global interests in an era of geopolitical disruptions. Unfortunately, as the previous sections have shown, Canada has not demonstrated a political desire to use its vast energy endowments for geopolitical purposes even when many energy-deficient countries in Asia are increasing their energy imports – including coal – and seek energy security. As Prentice and Rioux (2017, 35) wrote, “[s]uccessive national governments have failed to view Canada’s vast energy endowment as a strategic asset, or to consider the global geopolitical opportunities it confers on our country.”

Moreover, Canada has faced significant obstacles in building the major energy infrastructure projects that would achieve those objectives. Chief among these obstacles are, first, Canada’s constitutional arrangement via section 92a of the 1982 Amendments to the Constitutional Act of 1867, whereby natural resources are owned and managed by the provinces and Territories. Given the country’s vast geography and regional differences in history, language, culture and resource endowments, the federal government cannot impose a unified and centralized policy for national energy export projects that would support its national foreign policy objectives.

A second obstacle has been a recent lack of a national societal consensus on whether to develop major energy infrastructure projects, particularly oil and gas pipelines. Growing opposition to hydrocarbon projects of any kind have quashed two major pipeline projects designed to export
Canadian oil to foreign markets: Enbridge’s Northern Gateway project to the West Coast and TransCanada’s Energy East to New Brunswick. The last pipeline project left standing, the Trans Mountain expansion to Burnaby, B.C., has faced such significant opposition that the private company eventually sold it to the government of Canada before it cancelled it altogether. It has become clear that better arrangements with First Nations in the form of enhanced consultations and equity participation are the first step in unlocking this opposition. One group of Indigenous leaders – the Indian Resource Council, representing the oil- and gas-producing First Nations – is currently proposing a bid to buy a 51-per-cent stake in the Trans Mountain oil pipeline (Neis 2019). A successful outcome could lead to more Indigenous participation in major projects, and help to ease endless challenges to major projects before it is too late to build the necessary infrastructure. The fate of the Mackenzie gas pipeline project offers a cautionary tale of missed opportunities.

The Mackenzie Gas Project (MGP) involved the construction of a $16-billion, 1,196-kilometre pipeline system from the Beaufort Delta along the Mackenzie Valley to link the northern natural gas fields to southern markets. Natural gas was discovered as early as the 1950s in the Beaufort, but the promise of the massive Taglu gas field in 1971 launched a proposal to build a pipeline to the south. However, a federal inquiry headed by Justice Thomas Berger from 1974 to 1979 concluded that the potential impacts to northerners and to the environment were significant enough that a 10-year moratorium was put in place until issues such as Aboriginal land claims and conservation areas could be settled.

In the years that followed, many comprehensive claims were settled in both the Northwest Territories and in Yukon. The project was re-launched in the early 2000s by a consortium comprised of TransCanada Pipelines, Imperial Oil, ExxonMobil, Shell, ConocoPhillips and the Aboriginal Pipeline Group – a first equity partnership of its kind with First Nations. From 2004 to 2010, the project undertook a joint review panel for a regulatory hearing. Finally recognizing the tremendous benefits to northerners in terms of jobs and economic opportunities, as well as the benefits of cleaner burning natural gas for the environment, the panel granted regulatory approval on Dec. 30, 2010 with a condition that work on the pipeline had to begin by Dec. 30, 2015 or the permit could expire.

A remarkable set of events occurred during that very long review process that undercut the project’s commercial viability – the shale gas revolution in the U.S. brought about by advances in hydraulic fracturing and the resulting glut of natural gas throughout North America. As horizontal drilling and multi-stage fracking enabled natural gas to be produced in Pennsylvania and Ohio – close to the huge northeastern U.S. markets – and in British Columbia, as opposed to faraway Inuvik, prices for natural gas dropped from around $14 per cubic metre in 2006 to around $2 today.

In summary, cleaner burning LNG could be used to offset new coal-fired electricity generating plants in Asia. Canadian political leaders at both the federal and provincial levels must work harder to co-ordinate Canada’s federal international trade policy with the provinces’ energy development objectives. They must “sell” it to the public by tying it to an improved energy and
trade co-ordination with our Paris Climate Accord commitments, by working with trade partners to reduce global GHG emissions. The mechanism could be Article 6.2 of the aforementioned Paris Agreement (2015) which encourages international co-operation and allows countries with higher emissions to acquire emission reductions via internationally transferable mitigation outcomes (ITMOs). As previously mentioned, some of our new trading partners are building new coal-fired electricity generating facilities. Canada can be a leader in the diplomatic effort to operationalize Article 6 in demonstrating a net reduction in global GHG emissions by moving our partners away from coal to cleaner burning natural gas. Canada is a top-five energy producing and exporting country, and should lead the way in developing LNG export markets using all available tools.

The window for co-ordinating Canada's energy-exporting ambitions to move away from our dependency on the U.S. and shifting towards our newest trading partners is fast closing. We should not let it happen.
References


About the Author

**Dr. Jean-Sébastien (J-S) Rioux** hails from Québec City and lived and studied in the U.S. from 1985 to 1996, where he earned a PhD in International Relations. He taught at McGill and Concordia Universities before being awarded a Canada Research Chair Université Laval in 2001.

From February 2006 to August 2008, he was the late Jim Prentice’s Chief of Staff in Ottawa. He and Mr. Prentice were good friends and continued working together in the ensuing years, including helping Mr. Prentice’s successful run to become the 16th Premier of Alberta in 2014. Later, he and Mr. Prentice collaborated on the national bestselling book, *Triple Crown: Winning Canada’s Energy Future* (Toronto: HarperCollins, 2017).

J-S Rioux moved to Calgary in 2008 and after almost 4 years working at one of Canada’s largest energy companies as the lead Government Relations & Issues Management practitioner, joined The School of Public Policy in September 2012. Among the courses he teaches, J-S is co-founder and lead instructor of the Calgary-Québec Summer School on the Geopolitics of Energy and Natural Resources, an annual national graduate-level course focussing on the important energy and natural resource policy issues of the day.
The Canadian Global Affairs Institute focuses on the entire range of Canada’s international relations in all its forms including (in partnership with the University of Calgary’s School of Public Policy), trade investment and international capacity building. Successor to the Canadian Defence and Foreign Affairs Institute (CDFAI, which was established in 2001), the Institute works to inform Canadians about the importance of having a respected and influential voice in those parts of the globe where Canada has significant interests due to trade and investment, origins of Canada’s population, geographic security (and especially security of North America in conjunction with the United States), social development, or the peace and freedom of allied nations. The Institute aims to demonstrate to Canadians the importance of comprehensive foreign, defence and trade policies which both express our values and represent our interests.

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