



Energy in Canada @150 and Beyond

A National Energy Strategy: The Holy Grail of Canadian Public Policy

By Dr. Robert Skinner

One in a series of papers prepared by Canadian energy sector leaders – at the invitation of the Energy Council of Canada – exploring key aspects of our ongoing national energy story on the occasion of the 150th anniversary of Confederation.

Summary: Robert Skinner's article traces the successive series of energy policy initiatives, starting with the 1842 launch of an assessment of the country's mineral and resource potential, to more recent environmental and energy strategy initiatives. Two immutable realities strongly influence the evolution of energy policy-making – the widely-varied nature of Canada's resources and geography, and the constitutional and legal provisions which define the role of governments and the rights of Canada's First Nations.

The Long Arc of Energy Policy

In the mid-1860s, invasions by the Anti-British Irish-American Fenians, the political difficulties within the Province of Canada, and general indifference in London in the form of a Brexit-like sentiment regarding the colonies, helped hustle the Fathers of Confederation to the table in Charlottetown. Further impetus came in 1866 when the United States cancelled the 1854 Canadian-American Reciprocity Treaty, and with it the tariff-free export to the U.S. of the Canadian colonies' raw materials, including Nova Scotia coal. The Alaskan Purchase the day after the passing of the *British North American Act* on March 29, 1867 presaged an enduring theme –

the United States – in future energy debates in the new Dominion of Canada.

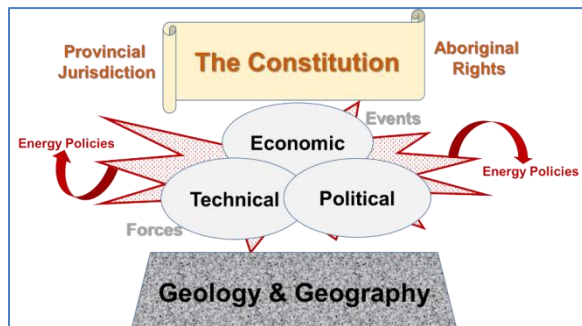
The commodity focus over the previous 350 years of Canadian history was dominated first by fish, then furs, then timber and their transport along waterways. As the fur trade inevitably led to discoveries of minerals, the British government looked for raw materials to feed its home industries, and to be transformed and shipped back to the colonies. In 1842, Sir William Logan was commissioned to conduct a geological survey of British North America, establishing Canada's oldest scientific institute, the Geological Survey of Canada. Post-1867, geological surveys to tabulate the country's mineral and coal resource endowment constituted fuel policy activity by the federal ministry that would be responsible for Canada's energy policies many decades later.

Along the long arc of Canada's energy policy history since Confederation, many themes stand out: "the Americans", subsidies and special treatment, Central Canada's interests over others', denial of geographic realities, Arctic sovereignty, federal/provincial relations, national unity, free markets (or not) and sharing the resource rent. Real or perceived crises related to these themes were shaped within a constant flux of economic, political and



technological developments and triggered policy debates. More often than not, external developments have been the dominant impetus for an energy policy adventure in Canada, and for a policy's eventual demise.

As illustrated below, policy responses in Canada are constrained between two immutable realities. First, geology and geography determine the distribution of energy resources among and distances between the provinces and territories, and – critically – our relative size, population and proximity to the U.S.A.



Second, the Constitution defines the fundamental legal/political responsibilities and governance over natural resources. Aboriginal rights, more specifically the protective duties of the Crown, were declared by the Royal Proclamation of 1763. Only recently have these rights, reaffirmed in the Constitution and defined by successive Supreme Court decisions, become a critical factor affecting energy developments in Canada.

Environmental concerns in energy development gained prominence when, following U.S. President Theodore Roosevelt's Conservation Commission in 1908, a trilateral North American conference was convened. Canada followed up with its own Conservation Commission. Whereas the Americans set aside vast areas protected as

national parks, Canada had protective concerns of a different stripe; not granting U.S. access to our water power in perpetuity and protecting forests from American capitalists.

The Fathers of Confederation recognized that the five patches comprising the remaining British colonies in North America could hardly be stitched into a viable quilt if the sewing was left up to the provinces. So, they agreed that the threads – canals, ships, telegraphic communication, rails and “other works connecting two or more of the Provinces” – and therefore today's pipes – wires and air transport, would be in the federal government's remit.

By 1882 Parliament passed two bills that proved portentous for subsequent energy policy. First, gas lighting companies – then after lengthy debate, electric light companies – were determined to be interprovincial works and undertakings and therefore subject to federal oversight. The essence of these bills was energy transportation – the playing field for national energy debates to this day. The seeds were planted for what would constitute the responsibility of the National Energy Board 75 years later.

While provinces would jealously guard their autonomy over intra-provincial electricity generation and distribution, the unifying imagery of interprovincial wires attracted federal politicians' attention, starting with Prime Minister John Diefenbaker, who in 1959 visualized a national energy grid from Labrador to British Columbia. To this end, Ottawa offered subsidies for regional interconnections. There were few takers. If they made economic sense, the provinces would have done them on their own.



Ottawa was destined to get drawn into spats along the energy value chains that crossed provincial boundaries, whenever some link – producers, transporters, consumers or investors – felt aggrieved, disadvantaged or sought special treatment. The persistent tension in Canadian economic policy –internationalists versus nationalists – dominated energy debate. The internationalist or continentalist view urged the economic efficiency of exporting to proximal markets while the nationalist argument embraced a self-sufficiency sentiment favoring interprovincial movement of energy. The nationalist position confronted the intractable tyranny of distance between resources and markets – especially the very small Canadian market. The nationalists' justification for intervention varied: strengthening the union or nation building, fuel self-sufficiency and supply security. The solution: federal subsidies, price controls, special tariffs and tolls. The consequences: inter-regional tensions, economic losses and distorted markets. But for long-distance pipelines and large-scale hydro developments, projects needed to include American markets to achieve economies of scale. This Joint Service Principle, given the suspicion of many Canadians about letting the neighbors enjoy access to “our resources”, invariably sparked policy debates in Parliament.

King Coal: The Longest Reign

The first real fuel focus of the federal government was coal. It would dominate energy debates for the first eighty years of Confederation and enjoy a resurgence through the energy crises of the seventies only to become the pariah fuel in today's proxy energy policy – global climate change. While coal was the last thing on the Fathers' minds in the 1860s, the U.S.

tariff imposed on Nova Scotia's coal prompted the first fuel policy debate in the new Canadian parliament as the province sought to expand its exports to Lower and (less so) Upper Canada. To displace American coal, its advocates argued, would strengthen the new union. This would not be the last time nation-building would be advanced as a rationale for an energy development or policy. Eventually a duty on U.S. coal in John A. Macdonald's National Policy of 1879 placated Nova Scotia. That province's ability to extract special treatment for its coal interests has endured through 150 years – the latest example, the exemption from the phase out of coal-fired power plants under Ottawa's climate policy.

Coal would dominate energy debates for the first 80 years of Confederation.

After World War I, with the development of coal mines in Western Canada, the rationale for intervention shifted from nation-building to national self-sufficiency. Coal miner strikes in Cape Breton and especially in the U.S. industry during the winter of 1921/22 inflicted major hardship in Ontario. Both sides in the House of Commons called for a National Fuel Policy and independence from strike-prone American suppliers. The debate centered on freight rates; Ontario wanted Alberta coal but not at a price greater than nearby American coal, raising the question of how to move Alberta coal 3,200 km to compete with Pennsylvanian coal 2,400 km closer. While the central government obliged with import tariffs, it refused to intervene on special rail rates or provide direct subsidies.

Meanwhile oil was in the ascendency as diesel replaced coal in locomotives and maritime shipping, heating oil replaced wood and hard



coal in homes, and gasoline demand surged to serve the burgeoning automobile fleet. The war over, the government launched a **Royal Commission on Coal** (the Carroll Commission, 1946) to assess the health of the industry. Coal producing provinces wanted a national fuel policy. They argued that transport subsidies for their coal would be a fair counterbalance to the economic advantages under tariff protection enjoyed by Central Canada's manufacturers. The Commission recognized there might be an "emergency supply" rationale for keeping mines operating, but in the end a coal policy would simply amount to being an instrument of Canadian welfare policy.

Oil had become a global commodity with acute geopolitical significance. A new era of energy policy had dawned. Like it or not – and in the seventies Canadians did not – our energy destiny would be determined mostly by others.

Oil – Swimming Against Global Currents

When it comes to fuel supply, two principal threats or crises tend to trigger politicians: dramatic increases in price and production booms. If simultaneous, policy makers go into a frenzy, responding with price intervention and resource nationalism (i.e. revenue envy). Coal never offered much economic rent. So, coal policy debate was mostly about sustaining coal mining jobs and parts of the industry were subsidized for decades. But oil has considerable rent, especially during price surges, triggering major policy tensions between the producing and the vastly more populated consuming provinces.

The discovery of oil in Turner Valley, the subsequent transfer of jurisdiction for resources

to the Province of Alberta, and the establishment of resource conservation regulations were significant events in Alberta's history. The Leduc oil discovery in 1947, while important for the operating company and the province, would create the context for a set of important national energy policy debates. First of all, the subsequent prolific oil developments in the fifties brought into stark relief the degree of foreign ownership of the industry. Economic nationalism was rampant; its chief advocate, Walter Gordon, convinced Prime Minister Louis St Laurent to approve a **Royal Commission on Canada's Economic Prospects** (1957). It raised numerous energy issues, mostly to do with pipelines and market access, which were subsequently examined by a **Royal Commission on Energy** (Borden Commission) that led to establishment of the National Energy Board in 1959. The Borden Commission examined but rejected the idea of extending the Interprovincial Oil Pipeline to Montreal to expand the market for surging production of western Canada oil.

Oil had become a global commodity with acute geopolitical significance.

With 50 per cent of Canada's oil production shut in and President Eisenhower's quota on oil imports announced in 1959, Canada sought special access to the U.S. market. Imports by pipeline were exempt under the national security provision establishing the quotas. Taking advantage of this exemption, the U.S. major oil companies, whose further investments in the Middle East and Venezuela were frustrated by the U.S. policy, developed their Alberta leases. To reinforce access to the U.S. market Ottawa announced the **National Oil Policy** in 1961. Consumers east of the Ottawa Valley line would enjoy lower world market



prices while Ontario and the west would pay prices based on the much higher U.S.-determined price. Ottawa had thereby touched the third rail in oil policy – price intervention, a moral hazard that would dominate Canadian energy policy for nearly a quarter century.

The U.S., now worried about oil supply security, pressured Canada for a continental energy policy.

By 1970, for the first time, Canada's oil demand equaled its production. The price had hardly increased, notwithstanding annual oil demand growing at nearly seven per cent. Ottawa's policy makers, still concerned that Ontario imported coal while western coal was exported, confronted other looming issues, not the least of which were the pricing, export and financing issues associated with a possible northern gas pipeline. So they sought cabinet approval for an energy policy pilot study; it was intended to examine the rapid growth in demand, protection of the northern environment, allocation of oil and gas for export, state participation in the industry, security of supply, and of course foreign ownership.

But international events were rapidly evolving; ten years old, OPEC was asserting its sovereign control of oil production and taking pricing away from the major oil companies. The U.S., now worried about oil supply security, pressured Canada for a continental energy policy. But studies by the National Energy Board found that Canada would soon have insufficient oil and gas to export. New exports of gas were turned down for the first time. A looming crisis of energy security dominated the policy discourse.

1973 was a bumper year for energy policies worldwide. Ottawa introduced oil export controls and in June released its long-awaited *An Energy Policy for Canada* – a report for consultation with the provinces and the public. But all was pre-empted by oil prices having increased by 45 per cent. In September Prime Minister Pierre Trudeau announced a program of voluntary oil price restraint. A month later during Ramadan, Syria and Egypt attacked Israel on Judaism's holiest day, Yom Kippur, sparking a proxy war between Russia and the U.S., in the world's most geopolitically strategic region. Prices skyrocketed. At Henry Kissinger's urging, the industrialized countries created the International Energy Agency (IEA) to collaborate on policy and emergency oil-supply response. Ottawa imposed an oil export tax and cancelled the National Oil Policy. A new policy was announced, extending the price controls on domestic crude while pursuing self-sufficiency, creation of a national petroleum company, expediting an oil pipeline from Sarnia to Montreal and increasing energy research and development, especially on oil sands.

By the mid-seventies, the world price of oil had levelled off as Middle East tensions eased. Ottawa issued *An Energy Strategy for Canada: Policies for Self-Reliance*. Proposed policies included "appropriate" pricing, conservation, increased exploration, substituting domestic for imported supplies (coal received a new lease on life), massive investment in renewables, emergency preparedness, and of course Canadianization. These policies were aimed at making Canada self-reliant in energy within 10 years. Meanwhile, student demonstrations in Iran were a harbinger that this latest energy policy would, like its precursors, be overcome by international events. Ottawa's energy planners explored future energy pathways in a **Long-Term**



Energy Assessment Program (LEAP), released by the government as *Energy Futures for Canadians* (1978). It was presented as “a prologue to action” for a National Energy Program.

The National Energy Program became iconic for how not to do energy policy in Canada.

A year later, with the loss of Iranian production owing to its revolution, major consuming countries' national oil companies bid up the oil price under state-to-state deals in the futile pursuit of security of supply. The world price was twenty times its 1970 level; however, Ottawa had only allowed Canada's controlled price to rise five times 1970 levels. Thus, the government's bill to compensate oil importers for the difference between world and domestic prices vastly exceeded its 10 per cent share of oil and gas revenues. Its suite of off-oil, energy conservation and research and development programs was costing hundreds of millions of dollars. The oil crisis thus became a major fiscal crisis for the federal government. The newly elected minority government of Joe Clark sought a way to address this unsustainable fiscal imbalance. A central element of his energy budget was an increase in prices. But most Canadians had bought into the idea that we shouldn't have to pay the OPEC cartel-determined price. Besides, they had become accustomed to oil price subsidies and handouts to install home insulation. Predictably the budget failed, and with it, the government, ostensibly on its proposed gasoline tax increase. As 1979 came to a close, energy policy planning in Canada was approaching its zenith. It had

become central to Ottawa's management of the national economy.

Interventionist Responses to Crisis

Canada, under a new Trudeau majority government, was not alone in its activist approach. Virtually every OECD capital enacted policies to address the oil crisis, cooperating through the IEA around agreed, highly dirigiste energy policy principles to reduce demand, increase domestic oil supply, and accelerate oil substitution. The 1980 G7 Summit in Venice focused almost entirely on the energy crisis; leaders' intention to double the use of coal within 10 years was well received in Canada's coal provinces. The summit's exhortation of “Maximum reliance...on the price mechanism”, however, received a long blink in Ottawa, given the just-announced intention to set a made-in-Canada price. Back home, officials beefed up the LEAP proposals for the new government. Two critical factors underpinned the political context for what was to come in energy policy: a federal government with no seats west of Manitoba and the first Quebec referendum on sovereignty.

The **National Energy Program (NEP)**, set out in the new government's first budget on October 28, 1980, became iconic for how not to do energy policy in Canada. Its goals were three-fold: security of supply, Canadianization of the oil and gas sector, and fairness in pricing and in revenue sharing. It amounted to a massive appropriation of rent from the petroleum sector aimed at increasing Ottawa's share to 45 per cent. The NEP was the most detailed energy policy ever enacted in Canada, touching on everything from wood stoves to nuclear power. But six months after its launch, the world oil price faltered and the critical assumption of rising prices failed to materialize. Revenue did not align with the projected billions of dollars of



planned expenditures. Retreat was in order but the damage to Canadian unity was acute.

By 1984, economics and technology had worked their magic. World oil demand had shrunk by eight per cent since 1979. Technology surprised the planners. Applying the newly confirmed theory of plate tectonics, the international oil industry succeeded in replacing much of the oil production lost through nationalization in OPEC regions. OPEC led by Saudi Arabia cut production and OPEC's share dropped by more than a third. Aggressive G7 monetary policy led by the U.S., together with subsequent neo-liberal policies advocated by Margaret Thatcher and newly elected Ronald Reagan, changed the global economic policy context. Saudi Arabia, having made the lion's share of production cuts, reversed policy and went for market share, flooding the market. The price crashed in late 1985. The era of price intervention in the oil market ended.

The return to energy price intervention in the form of carbon taxes is now national policy.

Brian Mulroney was elected on September 4, 1984 – ironically eleven years to the day from when Pierre Trudeau froze the domestic oil price. The NEP was soon dismantled. Energy policy became unmentionable in Ottawa. The NEP's failure signaled that any future energy policy development would have to take a different approach. So, in 1987 the Minister of Energy launched the **Energy Options Process – A Canadian Dialogue**, a broad public consultative exercise. It delivered yet another report, *Energy and Canadians into the 21st Century*. The report

was a predictable list of energy projects and ideas that appealed to all the regions. The process exposed an emerging social dimension essential to addressing complex policy issues, something that in 2017 utterly confounds not just policy making but basic project approval processes. Vacating the energy policy field, the federal government espoused a least-controversial position: dependence on markets and free trade, respect for provincial jurisdiction and the various provincial accords, and intervention limited only to meet health, safety and environmental requirements. It proved to be Canada's shortest but longest-lasting national energy policy ever.

Emergence of Climate Change

As the energy options exercise concluded in 1988, federal environment officials in the weather service had successfully advanced climate change on the global stage as a major issue. Fresh off the success of **the Montreal Protocol on Substances that Deplete Ozone** and the release of the report of the Brundtland Commission (*Our Common Future*), which had considerable Canadian involvement, climate change became the new crisis. During an unprecedented heat wave, Canada hosted a policy conference in Toronto titled *Our Changing Atmosphere: Implications for Global Security*. A CO₂ emissions target was proposed – 20% of 1988 levels by 2005 – as a first step to confront “Humanity(‘s)...unintended, uncontrolled, globally pervasive experiment whose ultimate consequences could be second only to a global nuclear war.” Climate change thus became the proxy for global energy policy development.

Many federal officials migrated from the Energy department to the Environment department and quickly got to work on a national climate plan, the **Green Plan**. Critical for the policy process in



the capital, non-government environmental organizations (ENGOs), enjoying a close relationship with the Minister's office and officials, were deeply involved in policy design. The socialization of policy was firmly established. Officials would never again have autarchy over energy policy analysis and development. Technocratic analysis was trumped by political calculus. The Green Plan and successor commitments, such as under the **Kyoto Protocol** and the **Turning the Corner Action Plan**, were doomed to failure. Common to all was the political denial of the overwhelming and intractable role that carbon plays in the gearing of Canada's economy. This disconnect between Canada's climate commitments, energy sector and economic realities prompted the energy industry associations in 2003 to launch a call for an energy dialogue in Canada. Critically, North America faced a natural gas supply crisis. This low carbon "bridge fuel" to address climate change would increasingly have to be foreign LNG. Many believed that Canada needed a National Energy Strategy.

The following dozen years saw virtually every NGO as well as business groups, the Senate, a chorus of academics and think tanks, and the Council of the Federation put forward their recipe for a National Energy Strategy. But technological innovation surprised again. The merging of hydraulic fracturing and long-reach horizontal wells dramatically reversed the North American trend lines, not only for natural gas production, but critically for crude oil. While the ongoing social dialogue among industry and NGOs involved debate on everything from

climate change to energy literacy, the government of Stephen Harper zeroed in on regulatory reform (advocated for by the Council of the Federation in 2007). The 2012 *Jobs, Growth and Long Term Prosperity Act* (an omnibus budget bill) made major changes to some of Canada's environmental laws. It seriously upset environmental organizations, planting the seeds for more uncertainty when the government was voted out of office in 2015.

The Roots of our Policy Tension

Back in 1888, drawing on the surveys by Robert Bell of the Geological Survey of Canada, a Senate Select Committee reported, "The evidence...points to the existence in the Athabasca...of the most extensive petroleum field in America, if not in the world. The uses of petroleum and consequently the demand for it by all nations are increasing at such a rapid ratio, that it is probable this great petroleum field will assume an enormous value in the near future and will rank among the chief assets...of the Dominion."¹ Thirty years earlier, it had been discovered that certain gases including CO₂ block infrared radiation. These two discoveries are at the roots of the major tension in Canadian energy policy today – the oil sands and climate change.

2015 proved a critical year for climate/energy policy in Canada. New governments in Alberta and Ottawa both committed to climate policy action. Following several years of discussions, the Council of the Federation – Canada's Premiers – declared their consensus for a **Canadian Energy Strategy**. As if to underscore the political difficulty of agreeing on anything

¹ Journals of the Senate of Canada: Being the second Session of the Sixth Parliament, 1888, Queen's Printer, p163.



that is truly of national importance where energy is concerned, the premiers' document assiduously – and remarkably – avoided any reference to the oil sands. Oddly, the premiers endorsed a principle to respect U.S. open access rules for electricity trade but ominously made no reference to the National Energy Board. In May 2016, the economic importance of the oil sands, indeed almost certainly the largest hydrocarbon deposit in the world, was demonstrated when wildfires caused a 50 per cent disruption of oil sands production for just 10 days, trimming the *nation's* quarterly growth by 1.1 percentage points.

The return to energy price intervention in the form of carbon taxes is now national policy. In April, the federal energy minister launched **Generation Energy**, “a national conversation on energy” to be concluded by October of Canada's sesquicentennial. In May, a specially-appointed panel recommended major changes to the role and location of the National Energy Board. After nearly 150 years, transporting fuels and energy continues to be a public policy challenge for Canada, a country blessed with energy resources. However, the search for the holy grail of a national strategy of how to manage that endowment continues to be cursed – perhaps because we have so much energy.

Dr. Robert Skinner's career in energy spans more than four decades in government, industry and academia. With Canada's Energy department in the seventies he was involved in geological research, energy and environment policy and oil and gas market regulation and their eventual liberalization in the mid-eighties. He served as Assistant Deputy Minister of Energy Commodities from 1985 to 1988 and then as Director of the Policy Office of the International Energy Agency at the OECD in Paris, France. He left public service in 1995 and joined TOTAL's downstream gas and power group where he advised on strategy and business development and the business implications of the European Union's energy directives opening the European grid industries. In 1998, he opened TOTAL's Canadian office in Calgary to gain entry to the oil sands. From 2003 to 2006 he directed the Oxford Institute of Energy Studies in Oxford, England. On returning to Canada, he advised Statoil on its entry to the oil sands and worked as Senior Vice President, Statoil Canada until mid-2011. Since then, he advises governments, industry and universities on strategy. He is associated with several energy and economic think tanks in North America and Europe. Dr. Skinner is currently the President of KIMACAL Energy Strategies Ltd, a private advisory service, and an Executive Fellow of the School of Public Policy and Energy Research Advisor to the Vice President, Research at the University of Calgary.