Natural Allies

Environment, Energy, and the History of US-Canada Relations

DANIEL MACFARLANE

McGill-Queen's University Press Montreal & Kingston • London • Chicago

Fossil Fuels after 1945

During the early Cold War period, Canada joined the United States as a principal producer of fossil fuels, which are formed by hydrocarbons. The discovery and exploitation of vast oil and gas deposits in Canada proved very consequential for modern Canadian-American relations. To be sure, the mobilization of these energy sources is one of the most important framers of modern Canadian politics. The 1950s and 1960s, the decades covered in this chapter, are sometimes labelled as a period of informal continentalism for hydrocarbon resources since Canada and the United States loosely coordinated the fossil fuel trade, doing so through a series of ad hoc decisions and preferences rather than permanent agreements. More entrenched and permanent exchange patterns would not become the norm until later in the twentieth century.

It bears pointing out that the policy regime for Canadian hydrocarbon exports that developed after the Second World War was conditioned by the crossborder hydroelectricity trade. Concerns about long-term contracts involving electricity that could not be repatriated on demand had shaped the Fluid and Electricity Exportation Act, in turn influencing approaches to exporting fossil fuels. The material properties of hydroelectricity, water and electricity in particular, informed how energy was applied and governed; the same is true of the various fossil fuels. While oil, natural gas, and coal are all fossil fuels, they have different characteristics. Coal is a combustible rock, though types of oil and gas can be derived from it. By the mid-twentieth century, coal's primary uses in North America included heating, industrial applications such as steelmaking, and electricity generation. Oil is a viscous liquid, and natural gas is a lightweight, colorless, odorless gas

(mostly methane), though it can be cooled and liquified for transport (known as Liquid Natural Gas, or LNG). Oil and natural gas are variously used for heating, transportation, and electricity generation. Oil powers vehicular transportation; natural gas also powers vehicles, though it is not frequently used this way. Both are feedstocks to produce plastics, petrochemicals, and myriad other synthetic products. The chief application of natural gas in North America is for heating buildings and power generation. As with other energy forms, the various properties of fossil fuels both enabled and constrained technical options for their procurement, production, and use, which in turn altered the viable economic and political choices.

PIPELINES

Before the Second World War, Canada was a minor player in oil and natural gas. Oil wells had been drilled in southwestern Ontario around the time of Confederation, and refineries sprung up to process the different products derived from petroleum, such as kerosene. Some of the products were exported to Britain and the United States. Imperial Oil was one of the domestic Canadian producers. In 1897 it was bought by Standard Oil of New Jersey which soon consolidated the Ontario industry and expanded to other parts of the country. Refining was concentrated at Sarnia, where it could easily receive crude imports from the United States. Natural gas deposits had also been discovered in southern Ontario. During the 1890s, pipelines carried some of this gas to Detroit and Buffalo. However, these deposits were soon exhausted, and these first Canadian exports ceased for the next half-century, aside of small amounts of natural gas exported to Buffalo.²

Most fossil fuel exports in the first half of the twentieth century went in a northward direction. In 1941, the Portland-Montreal oil pipeline was completed; it transported primarily non-North American oil from Maine to Quebec. Pipelines were subject to international and domestic debates, as well as regulatory hearings about issues such as routes and the volumes that they could carry. The 1938 Natural Gas Act in the United States had given the Federal Power Commission responsibility for approving gas exports. In Canada, the Fluid and Electricity Export Act of 1907 underwent minor modifications in 1925 and 1955. In 1949 Ottawa passed the Pipelines Act which affirmed federal control over interprovincial and international oil

and gas pipelines and exports. The Fluid and Electricity Export Act was superseded by the National Energy Board (NEB) in 1959. The establishment of the National Energy Board signalled the federal government's recognition that fossil fuels would likely overtake electricity as Canada's main form of energy export. Thus, this board was given broad powers concerning oil, natural gas, and electricity. The National Energy Board was responsible for the licensing of any energy forms sent across the border, as well as related infrastructure such as transmission lines and pipelines.³ Any pipelines built in Canada also needed to be chartered by Parliament.

The creation of the National Energy Board reflected the fact that, by the 1950s, Canada was producing enough fossil fuels to export significant volumes. Many new oil and natural gas pipelines came to link Canadian and US markets.⁴ A dual pipeline was built under the Detroit River to send US natural gas to Ontario. The Niagara River region was another natural gas gateway. Small amounts were exported between Montana and Alberta. In 1953, Canada gave its permission to an American pipeline that goes from Haines to Fairbanks, both in Alaska, but passes through a few hundred miles of Canadian territory along the way.

There were also talks of a pipeline to move gas from Alberta to Ontario, taking a shortcut through US territory. Different companies made different proposals, and a forced merger was brokered by C.D. Howe to build what came to be called the TransCanada Pipeline. This pipeline could run partly through the US since this would be shorter and cheaper. For nation-building reasons, and perhaps to help his own northwestern Ontario riding, Howe (and many Canadians) wanted the pipeline to be purely in Canada. This was part of a nationalist desire to link Canada in an east-west fashion, blunting the north-south continental pull, through megaprojects such as the TransCanada highway and the St Lawrence Seaway.

The American-born Howe was likely the most powerful figure in the St Laurent government. Dubbed the "minister of everything," he was a leading figure in Canadian-American relations and had extensive government and business ties in the United States. There are different schools of thought on Howe (and the Liberals in general): on the one hand, he is seen as a sell-out to the United States who nurtured Canadian-American integration. On the other hand, by the 1950s Howe seemed like a nationalist resisting further integration with the US (he was a chief proponent of an all-Canadian St

Lawrence Seaway). The answer may be that Howe was a political and economic pragmatist who believed that was good for industry and business was good for the country.

The TransCanada Pipelines company was having problems financing the all-Canadian section of the pipeline, which would go north of Lake Superior through the rocky Canadian shield. The Liberal government decided to advance a loan to cover up to 90 percent of the \$80 million price for the western portion of the line from Winnipeg to Sudbury. But the company building the pipeline was half-owned by American interests. That engendered the Great Pipeline Debate of 1956 in the House of Commons. With a seasonal construction deadline looming – work needed to start before winter or wait until the following year – the Liberal government used a closure motion to end a parliamentary filibuster, causing an uproar. Nevertheless, the bill to help finance the company passed, and the pipeline was completed from Saskatchewan to Montreal by 1958. Soon after, TransCanada Pipelines became principally Canadian-owned.

Other natural gas lines followed, which were much less politically controversial. In 1957, the Westcoast Energy Inc system began delivering natural gas from northeastern British Columbia to the lower mainland and United States markets.⁵ The Midwestern Gas Transmission Company proposed a pipeline connecting with the new Trans-Canada line in Manitoba, bringing gas to the US Midwest.⁶ Its first attempt was denied, but then in 1960 it secured permission for a line to central Wisconsin. The Great Lakes Pipeline was built from the same Manitoba/Minnesota border junction, but by different private interests. Another pipeline opened in 1961 to bring gas from Alberta, crossing the international border in eastern British Columbia at Kingsgate. The NEB and FPC approved a pipeline to take natural gas from TransCanada's pipeline and send it to the Massena-Ogdensburg area by way of Cornwall. This short pipeline opened in the early 1960s, and by 1966 its license allowed imports of 23,000 mcf per day. TransCanada also became a supplier for Vermont via a ten-inch pipeline that ran to Burlington.

Turning to oil, before 1945 almost all of this hydrocarbon consumed in Canada was imported from the United States. In the second half of the twentieth century, that trend would change. Both countries left the development of the oil sector mostly in private hands with some governmental oversight and involvement. As the western Canadian oil industry developed after 1945, the Canadian and Albertan govern-

Fossil Fuels after 1945

Table 7.1 Canadian production and trade in crude petroleum, 1946–76 (quantities in thousands of barrels)

Year	Production	Imports	Exports	Consumption
1946	7,586	63,407	0	70,993
1948	12,287	75,559	I	87,845
1950	29,044	78,660	0	107,704
1952	61,237	81,200	1,424	141,013
1954	96,080	78,772	2,345	172,508
1956	171,981	106,470	42,907	235,543
1958	165,496	104,039	31,679	237,856
1960	189,534	125,560	42,235	272,859
1962	243,238	135,365	86,128	292,475
1964	274,479	143,835	101,718	316,596
1966	319,568	158,544	126,799	351,313
1968	378,403	178,415	169,230	387,588
1970	459,977	208,363	244,466	423,874
1972	560,468	288,781	348,431	500,818
1974	513,412	299,239	330,583	482,068
1976	479,397	265,743	174,291	570,859

Source: Statistics Canada.

ments actively encouraged American investment since US firms had the experience and capability Canadian companies lacked. American finance could also help, somewhat paradoxically, to make Canada less dependent on American fuels. But this also meant that foreign multinationals, which vertically integrated most of the oil industry, were able to influence Canadian energy policy.⁷ The American-owned Imperial Oil remained the major oil company in Canada.⁸

American markets and companies shaped Canadian oil policy more than American officials or policymakers. Though American firms quickly swept into the prairie oil fields, the American government was not immediately overjoyed about the fossil fuel discoveries in the Canadian west; in the late 1940s, Washington believed it still had access to ample domestic oil reserves. US officials were concerned that Canadian oil imports might affect American producers or harm American-Venezuelan oil relations. On the other hand, the 1952 Paley Report indicated that the US needed to secure greater supplies of oil and gas from reliable sources. American companies, therefore, continued investing heavily in the exploration and development of Canada's oil and gas resources.

Table 7.2 Canadian production and trade in crude natural gas, 1946–76 (quantities in millions of cubic feet)

Year	Production	Imports	Exports	Consumption
1946	47,900	836	0	48,268
1948	58,603	404	0	59,007
1950	67,822	6,433	0	71,076
1952	88,686	9,518	8,145	86,253
1954	120,775	12,482	7,148	119,823
1956	169,153	16,850	9,642	175,205
1958	337,804	34,716	86,972	288,548
1960	522,972	5,571	91,043	437,497
1962	775,887	5,575	319,566	461,896
1964	944,280	8,046	404,144	548,182
1966	1,106,643	43,551	426,224	723,969
1968	1,383,872	88,228	598,144	873,956
1970	1,851,095	11,878	768,113	1,094,860
1972	2,298,981	15,759	1,007,054	1,307,686
1974	2,420,138	9,228	960,713	1,468,653
1976	2,458,668	9,855	954,051	1,513,572

Source: Statistics Canada.

Two major liquid hydrocarbon pipelines to take Canadian oil south were built. The TransMountain Pipeline Company completed its pipeline from Edmonton to Vancouver in 1953 and then extended it into Washington State. The Interprovincial pipeline, constructed by the Interprovincial Pipe Line Company (IPL), carried oil from Edmonton to the head of the Great Lakes at Superior, Wisconsin. This line was completed in 1950, and in 1968 was replaced by Line 3. IPL itself was a subsidiary of Imperial Oil of Canada, which meant that it was controlled by the US-owned Standard Oil; it would remain that way until 1998 when IPL became Enbridge and Canadian-o delta. Initially, tankers carried crude from Superior to Sarnia during the icefree shipping season, but another pipeline reached Sarnia in 1953 via Michigan, crossing that state's Straits of Mackinac. Before the decade's end the line reached to Toronto. In the 1960s, IPL built lines across the Niagara River to Buffalo, added to the loop network that passed through the greater Chicago area, and with financing from the federal government connected Line 9 to Montreal in the 1970s.



Figure 7.1 Crossborder oil pipeline network built prior to 1970.

OIL DIPLOMACY

The US kept high tariffs on foreign oil imports to protect its own producers. Ottawa asked for preferential treatment for Canadian oil - and eventually got it. The Voluntary Oil Import Program (VOIP) had initially not exempted Canada. But a month and a half later, Eisenhower amended VOIP to exclude oil arriving "overland" – that is, by pipeline, truck, or rail. Almost all oil sent from Canada to US arrived this way. Eisenhower decided to give Canada alone an exemption, which meant that Canadian oil was not subject to duties or taxes in the US. 10 This decision was based on his personal relationship with John G. Diefenbaker, who followed St Laurent as prime minister. In 1959, the US inaugurated the Mandatory Oil Import Program (MOIP) to restrict imported refined and crude oil products. Canada would again get an exemption.11 US oil imports from Canadian sources increased steadily, from 4.9 percent of total US oil imports in 1958 to 11.7 percent in 1962, and 18.7 percent by 1967 (a figure which exceeded imports from the Middle East).

By the late 1950s, there were signs that the Cold War consensus in Canada was starting to break down. Anti-Americanism was becoming more palpable. Progressive Conservative leader Diefenbaker had picked up and played on sentimental feelings toward the British Empire on his path to the prime ministership. But he was not anti-American at heart, even if some of his rhetoric sounded that way. In fact, he established a good rapport with Eisenhower and bilateral relations continued much as they had under the Liberals, producing NORAD and Defence Production Sharing Agreements.

The US generally assuaged Canadian concerns about various import tariffs and quotas, such as on dairy, meat, produce, lead, and zinc, though uranium and wheat proved trickier, as did GATT negotiations (which often pertained to natural materials).¹² Bilateral negotiations about wheat frequently occurred in the early Cold War: not necessarily over wheat that either country was selling to the other, but how American wheat subsidies and dumping affected Canadian sales to other countries. Another wheat-related problem was Canadian grain sold to Communist countries, which was also linked to the extraterritoriality concerns about American firms operating in Canada but applying US laws.

Diefenbaker clashed personally with John F. Kennedy. Though the professional diplomats were largely able to act as shock absorbers, this personal animosity still led to some complications in Canadian-American relations, especially over the Cuban missile crisis and Canada's potential acquisition of nuclear warheads. By the end of his time in office, Diefenbaker was campaigning on starkly anti-American themes. Lester Pearson, Diefenbaker's replacement, got on well with Kennedy for the brief time both were leaders of their respective nations, but less so with Lyndon Johnson.¹³

The minority Diefenbaker government had appointed a Royal Commission in October 1957 to look into the state of the oil and gas industry. The Royal Commission on Energy, also known as the Borden Commission, produced two reports. The first made several recommendations concerning a National Energy Board to monitor the fossil fuel industry, including natural gas and oil exports and the related conduits. The second report stated that Canada had ample oil reserves to meet its national requirements and therefore deemed increased oil exports acceptable. The report recommended that Canadian oil serve all points west of the Ottawa River, supplied by a pipeline from Alberta; the part of the country east of the Ontario-

Quebec border was to continue to import foreign oil, subject to market conditions, chiefly from Venezuela. This split the country into two oil regions, with the Ottawa Valley the dividing line.

These recommendations were incorporated into the National Oil Policy (NOP) announced by the Diefenbaker government in 1961, which was largely designed around maintaining Canada's exemptions in the United States. ¹⁴ Instead of embarking upon a policy of national self-sufficiency in oil, this approach was a commitment to furthering a continental oil relationship. That reflected the wishes of American capital which controlled fossil fuel companies in Canada. These oil companies opposed a pipeline to Montreal, although smaller independent Canadian companies were in favour. The Diefenbaker government was happy, as had been its Liberal predecessors, to mostly leave the burden and risk of developing fossil fuel resources to the private sector.

The price for oil from outside of North America tended to be lower than the price at which Canada was selling its oil in the US. Essentially, Canada was using the oil it developed to supply the country west of the Ottawa River while selling most of the rest to the US at a higher price than the oil it was importing to supply eastern Canada. Consequently, the eastern part of the country became dependent on foreign oil. However, this east-west oil supply system had as much to do with the interests of the oil multinationals (e.g., ensuring a market for Venezuelan oil) as those of the Canadian state. Of course, in return, Canadian oil received an exemption in the US (though this again served the interests of the oil multinationals, Standard Oil specifically).

At the very least, it is safe to say that the options for Canada's national oil policy, and Canada-US oil relations, were limited by the oil majors. In some ways, this mirrors the general Canada-US diplomatic relationship: the asymmetry in favour of the United States sets the broad parameters in which Canada can operate, even if those parameters are not always explicitly stated. US parent firms of the oil multinationals had some means of controlling whether its Canadian subsidiaries or Canadian-owned firms could sell oil or expand abroad. That often limited international opportunities for the Canadian oil industry. Sometimes this worked to Canada's advantage, however, such as in countries where a Canadian company was more politically acceptable than an American one.

MOIP was in many ways a voluntary program, as it did not strictly regulate oil imports, leaving companies to operate as they chose with-

out quotas. But there was no guarantee that the US would continue exempting Canada. Indeed, Kennedy was preparing to revoke Canada's exemption, partly to spite Diefenbaker. Kennedy did, in fact, stall approval for two pipelines (oil and natural gas) in 1962. But after the Liberals were elected, Prime Minister Lester Pearson convinced JFK otherwise at their Hyannisport meeting in May 1963.

Within a few years, the MOIP exemption existed on paper but not in practice, and Canadian oil imports were not accorded unlimited entry into the United States. Rather, imports were determined or limited by an informal understanding between National Energy Board officials and representatives of the US Department of Interior that Canadian oil would not unduly displace American domestic oil. Canada regularly exceeded these limits, however. The Pearson-Johnson tiff over the prime minister's 1965 Vietnam speech translated "into a cooler approach to the idea of a continental energy or oil policy between the U.S. and Canada, and a persistent push to limit Canadian oil exports to the U.S." In 1967, Canada and the US signed a secret agreement in which Canada agreed formally to limit exports, yet these too were exceeded.

Pearson's policy was to maintain both the NOP and Canadian exemption while continuing – hopefully increasing – Canadian oil exports to the US, balanced by importing cheaper foreign oil to eastern Canada. The policy for natural gas also continued as before: amounts that were surplus to Canadian use could be exported. Matters would continue much this way until Pierre Trudeau upended Canada-US energy relations.¹⁶

COAL AND CARS

During all of this, another important fossil fuel, coal, continued moving north. Coal is the dirtiest fossil fuel from a carbon emissions perspective. The mining process is ecologically destructive, and burning coal puts many different types of pollutants into the atmosphere, contributing to acid rain, air pollution, and climate change. In North America by this time, coal had two primary uses: electricity generation and metallurgical production. The US was Canada's main source of coal for steam-powered electricity generation, chiefly imported by central Canada (with Ontario Hydro a major consumer). Indeed, the United States was historically the world's foremost coal exporter.

In 1950, the US exported 25,468,000 tons of the sooty stuff, and 90 percent of it went to Canada – which accounted for about half of the coal burned in Canada at the time. Though total US exports went up over the next quarter century, the amount sent to Canada declined: 15,661,000 tons in 1965, but only two million tons less than a decade later. ¹⁷ Incidentally, the amount that Canada exported began rapidly increasing around 1970. After declining through much of the Cold War, Canada's total coal consumption rose again, peaking at seventy million tons at the end of the twentieth century, primarily thermal coal for electricity generation. ¹⁸

Fossil fuel exports are linked to debates about foreign investment and the Auto Pact. Pearson had appointed Walter Gordon as finance minister, and he set out to reduce American financial investment in Canadian business.¹⁹ As the 1972 Gray Report would later show, US investors controlled about half of Canadian manufacturing and mining/smelting, more than three-quarters of the chemical industry, and virtually all the Canadian oil and gas industry. Gordon's demarche met with a host of obstacles. When the Kennedy government moved to impose a tax on American investment abroad, which would achieve many of Gordon's goals, Ottawa sought out and received a partial exemption. But there were still bilateral balance of payments problems, with a Canadian deficit in the auto industry. The solution was a 1965 trade agreement: the Auto Pact, as historian Dimitry Anastakis details, created a free trade regime for vehicles and auto parts.²⁰ Essentially, automobile manufacturers were allowed to sell as many vehicles in Canada as they produced in that country. The Canadian auto industry subsequently thrived, its success irritating the United States.

The Auto Pact concerns us here not only because of its impact on the general tenor of the Canada-US relationship and trade, but because of the environmental and energy impacts of automobiles. Cars, trucks, and vans collectively have consumed massive amounts of fossil fuels, requiring more and more fuel to be discovered, refined, and consumed. As much as burning petroleum has a large impact on climate change, the production stage of a vehicle also has a colossal ecological footprint. Manufacturing all the constituent parts of a vehicle – metal, glass, plastics – requires copious amounts of resources and energy. So even though the Auto Pact did not involve negotiations about a specific oil field, waterway, or type of transborder resource, it inherently had linked environmental consequences. Of course, had such a pact not been brokered, many vehicles would still have been

produced; presumably, however, there would have been much less auto production in, and less economic benefits for, Canada.

We might say similar things about cultural diplomacy during this period: magazines, for example. Concerns about the domination of American media in Canada led the Pearson government to enact regulations on American periodicals (as well as films and television). Changes to the volume of magazines printed in either country of course had repercussions for the number of trees cut down for paper in Canada.

The early Cold War trade in fossil fuels demonstrates the extent to which energy and environmental diplomacy had affected the nature of the two countries and their bilateral relations. In studies of Canadian-American relations during this period, the hydrocarbon trade is usually mentioned, albeit subordinated to the international security politics connected to the ongoing capitalist-communist conflict. Yet fossil fuels arguably had longer-lasting significance for Canadian-American relations, given their contribution to continental integration, economic development, and global carbon emissions. As I will show in subsequent chapters, in the last decades of the Cold War and then the decades afterward, hydrocarbons would become even more important to Canada-US relations.