



Energy

Doing Business in Canada

AIRD BERLIS



airdberlis.com

The exploration, development, transmission and sale of energy has been the backbone of the Canadian economy, and Canada is blessed with a diversity of energy resources. Reserves of crude oil found in western Canada are among the largest in the world and Canada is one of the leading producers of both oil and natural gas. The world's longest crude oil and liquids pipeline system is operated by a Canadian company. A Canadian company owns one of the most extensive natural gas transmission networks in the world. A significant portion of Canada's energy, primarily oil, natural gas and electricity, is exported to the United States. Shale discoveries in the United States and eastern Canada will continue to have an impact on natural gas in Canada. Pipeline capacity will continue to be an issue to get product to international markets.

The provinces of British Columbia, Quebec, Manitoba, Newfoundland and Ontario have abundant sources of hydroelectric power, and Canada is a world-leading producer of hydropower. The largest nuclear power generating facility in North America is located in Ontario. The province of Saskatchewan is home to some of the largest known high-grade uranium deposits, making it the world's second largest uranium producer. Coal is also mined and used primarily in the western provinces and for export.

Canadians have been recognized as among the largest per capita users of energy in the world. Several Canadian provinces have taken steps to reduce the level of energy consumption, both on the part of large industrial users and individual consumers, especially where this will help achieve certain carbon reduction goals. Laws and government programs that support investment in infrastructure, additional generation, conservation and improved energy efficiency and carbon sequestration have the ability to transform the way new and existing Canadian companies meet their own and the Canadian market's energy needs over the coming decades and represent significant investment opportunities. Energy investments and opportunities will be impacted by Canada's climate change commitments and, given the diversity of the various regions in the country, these opportunities will vary widely across the country. Canada's federal government has minimum standards for reducing greenhouse gases, as do most provinces.

NATIONAL MANAGEMENT & REGULATION

The Canadian energy sector is governed by both federal and provincial laws. At the federal level, the Canadian Energy Regulator regulates matters that transcend provincial boundaries and provides

advice to the Government of Canada on national energy issues. It has been given a mandate to study and keep under review a broad range of energy-related matters under federal jurisdiction, including the production, transmission, distribution and sale of energy, and sources of energy, both in and outside Canada.

Thus, the Canadian Energy Regulator regulates the construction and operation of interprovincial and international pipelines, international electricity transmission lines and designated interprovincial electricity transmission lines; it deals with traffic, tolls and tariffs for the pipelines within its jurisdiction; and it grants approval for the export and import of oil and natural gas and the export of electricity. Deference to social licence, including Aboriginal and environmental constituencies, and a shifting focus towards decarbonization have resulted in significant challenges to Canada's oil and gas sector and related infrastructure development.

PROVINCIAL REGULATION

In addition, most provinces have established a regulatory body to deal with economic regulation of natural monopolies in the energy sector, such as the transmission and distribution of electricity and natural gas, as well as licensing of competitive activities, including generation of electricity and retailing of electricity and natural gas. In Ontario, for example, this body is the Ontario Energy Board. In the natural gas field, the Ontario Energy Board does not regulate the price of the commodity purchased by consumers, but it licenses marketers who sell gas to small volume consumers. It also approves rates charged by utilities for the distribution of gas and exercises powers in relation to the construction of gas distribution facilities, the creation and operation of gas storage areas, the sale or amalgamation of gas distribution utilities and the approval of franchise agreements between distribution utilities and municipalities.

On the electricity side, the Ontario Energy Board sets transmission and distribution rates and approves the budget and fees for the Independent Electricity System Operator. The Ontario Energy Board also licenses electricity market participants; sets the rate for standard supply service by electricity distributors that supply the commodity directly to customers; approves the construction of certain transmission facilities; and approves certain business arrangements within the regulated part of the electricity industry. Regulators typically focus on the economic and customer rate impact of the decisions being made on rates, tariffs and new infrastructure.

Many provinces, including British Columbia, Manitoba, Saskatchewan, Quebec and the Maritimes have, generally speaking, retained vertically integrated government-owned electricity monopolies in the electricity generation, transmission and distribution sector. Alberta has adopted a market-oriented approach, with competitive generation resources and a mix of investor- and municipally owned utilities in the transmission and distribution sectors. Ontario has pursued a “hybrid” approach, with a mix of regulated/government-owned (hydro-electric and nuclear) and competitive generation. Unregulated generation resources are generally subject to long-term power purchase agreements between the generator and the province’s “single buyer,” the Independent Electricity System Operator. The Ontario government has retained a significant stake in Hydro One, the publicly listed transmission and distribution company, while much of the remaining distribution sector is municipally owned.

ENERGY GENERATION

While the generation, transmission and distribution of electricity generally fall under the jurisdiction of the provinces of Canada, nuclear energy is accorded special treatment. Nuclear energy is seen to be a matter of national interest, as is Canada’s effective participation in the international control of nuclear energy. The Government of Canada has established the Canadian Nuclear Safety Commission which regulates the development, production and use of nuclear energy, as well as the use of nuclear substances and certain prescribed equipment and information. In Ontario, the current government has recommitted to nuclear resources remaining a significant portion of the province’s generation capacity. Progress continues for the proposed disposal of nuclear waste using a deep geological repository. Canada’s nuclear industry is evolving with the development of small modular reactors to assist with the transition away from fossil fuels and the electrification of the economy. The generation of renewable energy, particularly the wind, solar, hydro and biomass/biogas industries, has very quickly become a multi-billion-dollar business in Canada. Most provinces have embarked on programs to develop and procure renewable energy from independent power producers. Energy storage offers additional opportunities for renewable development. While natural gas will continue to play a role in power generation, as the dispatch capability makes it especially adept at providing the necessary response to peaks in demand, this resource faces new challenges as governments at all levels face pressure to decarbonize electricity

generation. While coal continues to be used for approximately 9% of the electricity generated in Canada, the federal government announced in 2018 regulations to phase out coal generation by 2030. Coal will continue to be used for metallurgical purposes.

TRANSMISSION AND DISTRIBUTION

Canada has an extensive pipeline system to deliver natural gas from British Columbia, Alberta and Saskatchewan to eastern Canada and the United States. The distribution and transmission of natural gas is regulated but open to private sector ownership. Investment will continue to be required to expand the system’s capacity and flexibility. The development and evolution of the natural gas market and infrastructure system will continue to be impacted by the development of shale gas in the northeast United States, the changing needs of the oil sands, access to export markets and LNG. Recent drops in the price of oil have slowed development of the oil sands.

Proposed new pipelines that would connect Alberta to the Pacific Coast thereby opening up new markets in places such as China have faced legal and regulatory challenges. The federal government stepped in to purchase one such project to continue to move it forward. In addition to reviewing large project applications, the Canadian Energy Regulator provides oversight of oil and gas exploration on frontier lands such as the Arctic and offshore. The use of rail for shipping oil and fuel is regulated by Transport Canada, which increased its safety requirements following the tragic and devastating explosion at Lac-Mégantic. However, the inability to increase pipeline capacity has led to greater use of rail for oil transport.

A significant portion of the electricity generated in Canada is transmitted from the province of origin to neighbouring provinces and to the United States. Most provinces have an Open Access Transmission Tariff (“OATT”) for the transmission of electricity to ensure access to US markets. The ownership of the electricity grid is a combination of public and private sector ownership with provincial regulators regulating the rate of return. To meet the needs of the changing economy, several jurisdictions have embarked on multi-billion-dollar initiatives to expand their supply portfolio and improve the transmission system. This includes both expansion and development of new infrastructure, but also the use of smart technology to improve the efficiency of the existing system.

CONSERVATION INITIATIVES

Energy conservation has also been given prominence as a key objective of both the federal and provincial governments. At the federal level, Natural Resources Canada continues to operate the Office of Energy Efficiency (“**OEE**”), which is the starting point for businesses and individuals to collect information on government grants, rebates and incentive programs for research and development into new technologies and energy efficiency upgrades. For businesses, the OEE offers incentives as varied as grants for the retrofitting of factories to rebates on the purchase of fuel-efficient fleets. Provincial programs may also exist to encourage energy efficiency upgrades.

In many provinces, a wide range of opportunities have been realized through the promotion of conservation, demand management and the addition of smart technology. Canada has invested significant amounts for the development of a “smart grid.” Using technology to track and manage electricity from the point of generation all the way to the end-use appliance allows valuable efficiencies to be gained.

Electrification of Transportation and Industry

Climate change has forced a transition to renewable energy for climatic reasons, which has resulted in electricity use being encouraged in situations where fossil fuels have traditionally been the fuel of choice. Combined with energy storage, renewables are becoming much more prevalent across the country and this will continue as the fossil fuel fleet ages and emissions regulations tighten. Canada and many provinces encourage the increased use of electric vehicles and are supporting many communities in the development of a widespread electric vehicle charging network with varying financial incentives. Significant investment will continue as electric vehicle technology improves and prices reduce. Mass transportation and industry will also need investment as this transition continues.

Distributed Energy Resources

A significant trend in the electricity sector globally has been the emergence of new technologies that can support locally owned facilities for electricity generation, control and storage. These facilities and technologies are referred to as Distributed Energy Resources (“**DERs**”). While large power plants continue to play an essential role, smaller-scale technologies, such as solar panels and onsite battery storage, enable customers and communities to produce and even distribute their own electricity, reducing their reliance on centralized resources.

Initiatives such as net metering, government funding mechanisms and community energy plans are likely to play an increasing role in supporting DERs as part of grid resiliency and decarbonization efforts. In addition, new roles for distribution utilities to become distribution system operators are also being explored.

June 2025

AIRD BERLIS

We are committed to being the
Canadian gateway for our clients.



Brookfield Place, 181 Bay Street, Suite 1800, Toronto, ON M5J 2T9

T 1.416.863.1500 F 1.416.863.1515

701 West Georgia Street, Suite 1420, Vancouver, BC V7Y 1E4

T 778.371.2241 F 778.371.2270

Other articles and papers written by our professionals can be viewed at:

airdberlis.com

Doing Business in Canada offers general comments on legal developments of concern to businesses, organizations and individuals, and is not intended to provide legal opinions. Readers should seek professional legal advice on the particular issues that concern them.

© 2025 Aird & Berlis LLP

Parts of this booklet may be reproduced with acknowledgment.
