main pipeline, of which 2,790 miles are in Canada. In 1974 the system received 1,277,301 b/d and delivered 1,275,474 b/d, most of it in the form of crude oil. Domestic refiners received 526,993 b/d of this throughput, the remainder was delivered in the US.

Trans Mountain Oil Pipe Line Company owns and operates a pipeline system for transporting crude and natural gas liquids from Edmonton and other points in Alberta and British Columbia to Burnaby, BC, and a subsidiary operates branch lines to refineries in the state of Washington. The 24-inch main line is 723 miles long including a spur line to the US boundary near Sumas, BC. The Company operates 20 pumping stations of which 18 are located in Canada. The present main line's sustainable capacity is over 410,000 b/d. Nine refineries are now connected to Trans Mountain, five in British Columbia and four in the state of Washington. In 1974 Trans Mountain built additional crude oil loading facilities in Vancouver to load tankers delivering oil to eastern Canada via the Panama Canal.

The Montreal refining centre is served by a pipeline from tidewater at Portland, Maine, the nearest port on the Atlantic seaboard from which tanker-borne crude oil from Venezuela, the Middle East and Africa may be trans-shipped by pipeline to Montreal. This joint system of the Montreal Pipe Line Company and its wholly-owned subsidiary in the US, Portland Pipe Line Corporation, shortens tanker voyages as it bypasses the seaboard of the Maritime provinces, the Gulf of St. Lawrence and the St. Lawrence River segments. However, there are excellent deepwater port sites in the Atlantic region and on the St. Lawrence which are now being considered for development as tanker terminals to provide pipeline routes within Canadian territory to Montreal. The Portland–Montreal system consists of 236 miles of right-of-way and 708 miles of main pipeline. In 1974, 467,746 b/d of crude oil went through the system.

The oil embargo of the winter of 1973 coupled with frequent price increases of off-shore oil, led the federal government to decide on a policy of an all-Canadian coast-to-coast pipeline network for security of supply, self-reliance in oil and oil products and to further economic development throughout the country. As phase one of this network the government has decided to extend the existing Interprovincial pipeline system from Sarnia to Montreal to provide consumers in eastern Ontario and western Quebec with access to more secure domestic supplies of western Canadian crude oil. Under the present schedule of construction, crude oil is expected to be flowing through the line to Montreal by the winter of 1976-77. The 30-inch line would have an initial capacity of 250,000 b/d and fully powered capacity of 650,000 bbl.

Natural gas. The authorization of large-volume gas removal from British Columbia and Alberta beginning in the mid-1950s, led to the construction of the first major gas transmission lines in Canada. Today, the complete system serves the major Canadian centres of population from Vancouver to Montreal and transports gas to the international border for US markets ranging from California to New England. The next expansion of the system will be directed to opening up Arctic gas resources. The initial economic, engineering and environmental studies for a Mackenzie Valley gas pipeline were completed in 1973 and an application was filed before Canadian and US regulatory authorities in the spring of 1974 for authorization and approvals to own and operate the pipeline. Research is also being carried out into the feasibility of transporting natural gas from the Arctic islands.

Most Canadian natural gas now produced must be processed before it can be considered marketable. Gathering lines take raw gas from the producing wells to a collection point on a transmission system or to the inlet of a gas processing plant. Main transmission systems receive marketable gas from field gathering lines or plants and transport it through trunk lines to Canadian distribution companies or to interconnected US transmission pipelines at the international border. Distribution systems serve the ultimate customers in the centres of population. With the introduction of PVC (polyvinylchloride) small-diameter pipe, distribution companies — especially in the western provinces — have been rapidly extending their service to rural customers by means of this easily laid durable pipe. At the end of 1973, a total of 70,657 miles of pipeline were in operation, of which 8,064 miles were gathering, 24,505 miles were transmission and 38,088 were distribution.

Unlike an oil pipeline company, which is a common carrier transporting oil for a fixed charge, a gas transmission pipeline company either owns the gas it transports or is a subsidiary