Natural gas requirements are met almost entirely from domestic sources. In 1971 requirements totalled 1,288.0 MMMcf of which imports supplied 14.4 MMMcf. The market for Canadian-produced natural gas was divided between domestic demand (1,292.0 MMMcf) and exports to the United States (910.8 MMMcf). The United States has been increasingly deficient in domestic supply of natural gas and hence there is a growing market for Canadian gas in that country. Sufficient reserves must be set aside to meet future Canadian requirements prior to export approval. On the basis of this policy, an export application in 1971 was rejected because reserves available at the time were insufficient to meet the new requirement.

In the case of petroleum products, Canadian demand for crude oil was met almost equally from domestic and from import sources. This division of the Canadian market between imported and domestic crude oil results from the "National Oil Policy" of 1961 whereby the Canadian market west of the arbitrarily drawn "Ottawa Valley Line" (essentially west of Quebec) is supplied from domestic sources while the market east of the line relies on imports from foreign sources. Canadian crude oil prices have traditionally been higher than those from foreign sources and it has therefore not been economic to supply Montreal and the Maritimes from western Canada. Exports of Canadian crude oil go to the United States. There is a direct link between the Alberta and Saskatchewan fields and the Chicago and other Great Lakes markets via the pipeline system of the Interprovincial Pipe Line Company and from Alberta and British Columbia fields via the Trans Mountain Pipeline system to refineries in the state of Washington. Western Canadian producers exported 273 million bbl of crude oil to these markets in 1971.

13.2.2 Petroleum refining and marketing

Petroleum refining, one of Canada's largest manufacturing industries, is concerned with the distillation and cracking of crude petroleum into a number of economically useful end-products such as motor gasoline, fuel oils, lubricating oils and greases, petrochemical feedstocks and asphalt.

The crude oil refining capacity of Canada's 40 refineries increased to 1,675,500 barrels per day (b/d) in 1971 (Table 13.3), an increase of 24% from 1970. Of this increase, some 12% was in the Atlantic Provinces, 9% in Quebec and 3.5% in the Prairie Provinces, while capacity in Ontario and British Columbia remained unchanged. Much of the increase in the Maritimes and Quebec is attributable to two large refineries, one at Point Tupper, NS and the other at St -Romuald, Que. The latter, with a capacity of 100,000 b/d, is the largest refinery ever built in Canada. Both refineries were designed to supply markets in the United States as well as Canada. The increased refining capacity in the Prairies was the result of one company replacing its smaller refineries with one much larger and more efficient.

During the year Canadian refineries operated at a rate of 1.39 million bbl of crude oil per day, an 8.6% increase over 1970 and representing approximately 83% of estimated capacity at the end of the year (Table 13.4). Refineries west of the Ottawa Valley Line, which, according to the National Oil Policy may use only Canadian crude oil, increased their consumption by 3.2%. Those east of the line, in Quebec and the Maritimes, relying on foreign crudes, increased their deliveries by 17% to 669,000 b/d. Much of this latter increase was again the result of the two new refineries. As a result of the increased refinery capacity, particularly in eastern Canada, refined product imports declined by some 46,000 b/d to 148,000 b/d.

The main source of crude oil imported into Quebec and the Maritimes was Venezuela which increased its exports to Canada by 11% to 406,000 b/d. Imports from the Middle East exceeded 156,000 b/d and Nigeria accounted for 66,000 b/d. The remaining major foreign source was Colombia which contributed 21,000 b/d.

Canadian exports of refined petroleum products increased by 41% to 100,000 b/d in 1971. A great part of this increase was due to a substantial growth in heavy fuel oil exports to the northeastern region of the United States. As already noted, the ability of refineries in Quebec and the Maritimes to serve a part of this important market has been substantially increased with the establishment of the two new large refineries at St -Romuald and Point Tupper. This capacity will be further increased by the 100,000-b/d refinery under construction at Come-By-Chance, Nfld, which is expected to begin operations in 1973.

The production of Canadian oil refineries was predominantly fuel oils and motor gasoline (the former accounted for 52% of refinery output and the latter for approximately 33%). The remaining output was divided among such other products as aviation gasoline and turbo fuel (3.4%), liquefied petroleum gases (4.3%), petrochemical feedstocks (2.1%) and asphalt (3%).