The natural gas supply and demand situation is illustrated in Table 13.5. In the 10year period to 1975, production of marketable pipeline gas and domestic demand increased by more than 130%. In 1976 exports remained virtually static while domestic demand continued to grow, but at a slower rate than in previous years. With no new export approvals since 1970, and none planned except in emergencies, domestic demand growth will relate directly to the ability of the industry to develop new markets to be supplied from present producing areas, pending the opening of new sources in frontier areas.

More than 1,500 companies are involved in the Canadian petroleum industry, excluding a further 5,000 independent gas station operations; however, the top 30 oil producers accounted for 85.8% of Canadian oil production and the top 30 gas producers for 57.3% of gas production in 1976. This degree of concentration has diminished during the last decade as smaller companies move from exploration to production.

The federal government has taken a number of steps to boost supplies of oil and natural gas. It has made large direct investments in oil and gas projects including an investment of \$300 million in Syncrude of Canada Ltd., which was to begin producing oil from the Athabasca tar sands in 1978. The project was granted the world price for oil. Development of new technology to tap Western Canada's heavy oil and oil sands resources is a high priority of research and includes a \$96.0 million joint research fund with Alberta, and a \$16.1 million heavy oils program undertaken with Saskatchewan.

Federal guarantees were provided for construction of a pipeline to move Alberta oil from Sarnia to Montreal, lessening Quebec's dependence on foreign oil. About 73% of the energy demand of that province is met by oil.

By 1977 it appeared the main future source of Alberta oil would be the costly oil sands and heavy oils. The price of this oil will be very much higher than the field price of \$73.90 per cubic metre as of January 1, 1978. By world standards Canadian prices remain low.

By agreement with provincial governments, a schedule of increases has been established to bring the field price of oil to \$86.48/m³ by January 1979. The schedule is subject to review. In May 1975 the minister of energy, mines and resources announced increased export prices of natural gas to \$49.44 a thousand cubic metres in August, to \$56.50/thousand m³ in September 1976 and to \$68.51/thousand m³ in January 1977.

For the domestic market, the federal government raised the price of natural gas, after consultation with the provinces, from approximately \$28.96/thousand m³ to \$44.14/thousand m³ at Toronto November 1, 1975. This was increased to \$49.62/ thousand m³ in July 1976 and to \$53.15/thousand m³ in January 1977.

Announcement of the scheduled price increases brought a sharp improvement in natural gas prospects. Federal funding and encouragement have been given to exploration in the Arctic and preliminary investigations are under way on eventual transportation of Arctic gas to southern markets. These include the possibility of an eventual Canadian link with the Alaska Highway natural gas pipeline, an application for a pipeline from the Arctic islands, participation by Petro-Canada, the national oil company, in efforts to ship liquefied Arctic gas to the Atlantic Coast by tanker, and the expansion of Quebec and Maritime access to western natural gas.

Oil and natural gas

Production

Production of Canadian crude oil and equivalent in 1976 declined 8.4% or an average of 21 megalitres a day from the 1975 production of 251 ML a day. Exports of crude oil and equivalent to the United States dropped 39.4 ML a day while domestic demand increased 9.4 ML a day.

In Alberta, production of conventional crude oil was down 17 ML a day, synthetic crude oil increased 1 ML a day and pentanes plus decreased 3 ML a day for a total decline of 19 ML a day or 8.8%. Saskatchewan crude oil production decreased 7.7% or 2 ML a day.

13.4

13.4.1