# **Energy**

## Chapter 13

### Canada's energy concerns

13.1

#### International scene

13.1.1

Increasing world concern surrounds the adequacy of future energy supply prompted by growth in energy demand and major dependence on Middle East oil. Rapidly rising oil prices since 1973-74 have created major problems for developing countries and industrialized nations alike.

The need for concerted action by major industrial nations was demonstrated on several occasions in 1979. In March 1979, in direct response to the Iranian oil crisis and subsequent global repercussions, the International Energy Agency (IEA) called on its 20-nation membership to restore a better balance in international oil supply and demand by lowering demands on world energy supplies by 5%, or the equivalent of 317 974 m³ (2 million barrels) of oil a day in 1979, and reducing the upward pressure on international oil prices. Canadian initiatives include a 4% increase in domestic oil production; voluntary conservation programs to decrease domestic demand by 3% in a year; and an expanded home insulation program. In May 1979 IEA countries agreed to extend the 5% reduction program into 1980 and to adopt new longer-term measures to deal with the uncertainties of oil supplies and prices in the decade of the 1980s.

Canada participated in the first full-scale test of the IEA emergency oil-sharing program in 1978. In international energy affairs, Canada is also an active member of such international bodies as the United Nations (UN), the Organization for Economic Co-operation and Development (OECD), and the North Atlantic Treaty Organization (NATO). In 1979 it initiated bilateral negotiations with such oil-producing countries as Venezuela and Mexico for secure supplies of oil in exchange for other energy-related commodities, technologies and services.

October 1979 was designated as the first international energy conservation month by the IEA. Canada's conservation month activities focused on the long-term benefits of energy conservation and the development of international co-operation. As its major contribution to conservation month, Canada hosted the international industrial energy conservation conference in Toronto in early October 1979.

In another display of international solidarity, Canada and six other industrialized nations at the Tokyo economic summit meeting in June 1979 pledged to adhere to a strict energy conservation program in light of new increases in the international price of oil. It was also in Tokyo that Canada made a commitment to move the domestic price of oil toward the world level and limit oil imports to 95 392 m³ (600,000 barrels) a day.

A list of countries from which Canada imports oil, by volume and by value, appears in Table 13.1.

## Energy research and development

13.1.2

The office of energy research and development (R&D) in the energy, mines and resources department (EMR) served as a secretariat for a task force on energy R&D, which recommended major increases in federally supported energy R&D, to be implemented in co-operation with provincial governments and industry. New priorities resulted in increases in funding of \$10 million in 1976-77 and again in 1977-78, \$15 million in 1978-79, and over \$5 million in 1979-80, raising the total for energy R&D in 1979-80 to \$152.4 million.

A breakdown of federal expenditures on energy R&D is given in Table 13.2. Initial estimates of provincial expenditures on energy R&D were: \$42 million in 1976-77, \$70 million in 1977-78 and \$85 million in 1978-79.

### Renewable energy sources

13.1.3

Government activity in renewable energy resources continued to increase. Federal spending on research rose from \$5.4 million in 1977-78 to \$14.4 million in 1978-79 and