

## 1. OVERVIEW OF CANADIAN ENERGY SCENE

Canada compared to most countries, is extremely well endowed with energy resources. It is, in fact a net exporter of energy. However it is in no sense insulated from the energy concerns which affect the rest of the world, since, like most countries, Canada imports oil. About 43% of Canada's primary energy consumption is oil of which currently one-quarter (gross) is imported. Net imports of oil are currently about 140,000 barrels a day.

Prior to the international oil price increases and availability problems of 1979-1980, this import dependence was expected to grow as domestic producibility from conventional oil reserves fell, with net imports reaching some 600,000 barrels a day by the mid 1980's. This would be counterbalanced by increasing exports of natural gas, electricity and coal.

Canadian energy policy now centres on the reduction of this import dependence through the development of indigenous resources (natural gas, coal, nuclear fuels, unconventional oil and renewable energy), substitution of other energy forms, including renewables and wastes, for oil consumption wherever possible, and reduction of demand through improved efficiency and conservation. The overall aim is to eliminate oil imports by 1990, reducing oil consumption to only 10% of energy demand in each of the economic sectors, with the exception of transportation. Oil will then represent 27% of total consumption, rather than the present 43%. Many new programs of incentives and regulation are being put in place to achieve these objectives by both Federal and Provincial Governments, including a number concerning new and renewable energy. Conventional hydro-electric generation currently supplies more than 60% of Canada's electricity (about 24% of its total primary energy). With this exception, renewable energy is not expected to make a major contribution in the next decade. However, it is seen as the key to a stable long-term energy future. Government programs are encouraging this long-term development of renewable and alternative energy with R&D assistance, demonstrations, industrial support and market stimulation, and as the prices of other forms are allowed to rise the economic competitiveness of various renewable applications will continue to improve.

In terms of its energy consumption, Canada is also in many ways a unique country. It is one of the highest users of energy per capita in the world due in part to its climate, long transportation distances and dispersed population, and its energy intensive industrial structure based on its indigenous natural resources. Now Canadian patterns of