Canada's primary energy demand increased at an average annual rate of 5.3% over the 15-year period 1960-75, while energy use per capita grew annually by 3.6%. Higher energy prices and increasing attention to energy conservation measures are expected to lower per capita growth to an annual average of less than 3.5% during the remainder of this decade. Trends in energy supply and demand for each of the principal energy sources are expected to continue.

Growth in oil usage and the related supply trends since 1964 are illustrated in Table 13.2. Production of crude oil and gas liquids more than doubled in the 10-year period to 1974; declines in production and exports, evident in 1974, continued in 1975. The growth rate in domestic demand began to moderate toward the end of the year. The most notable trend in 1974-75 was the decline in the export-import surplus from 297,800 to 40,100 barrels a day (b/d) or 47 300 to 6 400 cubic metres a day (m^3/d). This surplus was expected to disappear in 1976.

The natural gas supply and demand situation is illustrated in Table 13.3. In the 10-year period to 1974, production of marketable pipeline gas and domestic demand almost tripled. In 1975 exports declined while domestic demand continued the growth rate of previous years. With no new export approvals since 1970, and none planned, domestic demand growth will relate directly to the ability of the industry to increase supply from present producing areas pending the opening of new sources in frontier areas.

The coal supply and demand picture has changed considerably (Table 13.4). In the 10-year period to 1974, production more than doubled, but most of the increase occurred in the years 1970-74. Domestic demand grew, reaching a peak in 1970. Despite a slight decline since, there are indications of renewed growth in the near future. Imports increased steadily until 1970 and remained within a narrow range of the 1973 level followed by a decline in 1974 due to a tightening in US supply. In 1975 imports increased again. The most pronounced change in the coal supply and demand balance was the export increase in the years 1970-74 which accompanied the production increase. Present trends point to a stabilization of imports, and demand increases in the domestic market. Exports are expected to grow but only to the extent that expanded production exceeds domestic needs.

Electric energy supply and demand (Table 13.5) shows a doubling in domestic demand over the period 1964-74 and indicates a continuation of this growth. Until 1968 exports remained close to the 1963 level and have since quadrupled while imports have not changed significantly since 1963. However, exports have remained less than 6% of total electrical generation. In 1964 thermal power based on coal, and to a lesser extent on oil and natural gas, accounted for 16% of total production with hydro-electric sources providing the remainder. By 1974 thermal power had risen to 25%. With increasing use of nuclear energy in thermal power plants, this upward trend will continue.

Total sales of secondary energy, i.e. for uses other than producing energy for sale, were apportioned as follows: residences and farms 22%, commercial and institutional use 16%, industry 33% and transportation 29%. Each energy source component has its specialized markets. In the residential market oil and gas supply 80% of requirements, and electricity the rest. The commercial sector is supplied by oil and gas (75%) and the remainder by electricity. The energy used in transportation is essentially oil. In industry, oil and gas meet 63% of the energy demand, electricity 24% and coal 13%. The composition of the energy mix changes over time, with changing price and supply conditions, but no dramatic changes from this pattern are foreseen for the remainder of the decade.

Quadrupling oil prices, declining reserves and the increasing costs of exploration and development had made 1974 an eventful period in the management of the energy economy. The changed circumstances involved export controls, export charges, import compensation, voluntary product price restraint, a single price for domestic production, the intervention of provincial marketing agencies, and the existence of an international energy agreement.