

Canada's Energy System Today

An industrialized nation requires energy in various forms — gasoline, heating oil, diesel fuel, pipeline quality gas and electricity to name some of the most obvious ones. It also requires thermal energy over a broad range of temperatures, whether for taking a bath, operating a smelter or generating electricity. Given this spectrum of requirements or demands for "end-use energy", energy systems in the developed world have become quite complicated, especially since World War II. The complex web of energy sources, conversion devices, transmission systems, energy carriers or fuels, and energy-consuming devices or installations may be collectively referred to as the *national energy system*. Canada's energy system reaches into the most remote communities in the land and in the post-war period became such an integral part of our lives that we normally thought little about it.

But the 1970s were not normal times and we have been forced to reassess the manner in which our society uses energy. That reassessment has led to two basic conclusions: the rate of growth in the demand for energy in Canada must be decreased, and our energy system must ultimately be shifted from one dominated by fossil fuels to one which runs on sustainable sources of energy.

While it is easy to state that these changes must take place, it is quite another matter to determine the route by which this will be accomplished. This Report gives our vision of Canada's energy path to the future. To see where that path leads, we begin with where the system stands today.