In the following sections, Canadian government strategy and programs, and industrial capability and expertise are discussed for each of the new and renewable sources of energy, and conservation. Although conservation is not officially included in the coverage of the Conference, it is included here because of its relative importance for Canada, and indeed for the rest of the developed world, in reducing dependence on insecure energy resources. Those aspects of Canadian capabilities that relate to developing countries, including possible transfer of information, expertise and hardware, are then set out.

2. NEW AND RENEWABLE ENERGY IN CANADA

Introduction

Canadian government interest in renewable energy was demonstrated in 1974 with the establishment of a program of renewable energy research and development. A further major initiative in 1978 launched several new programs oriented toward industrial development in the area. More recently the 1980 National Energy Program emphasized the future role of renewable energy sources in providing for a stable and independent future. The following passage from the NEP illustrates this perspective:

"Canada is well endowed with non-renewable resources that can provide a bridge into a future where Canadians use less energy in their daily lives, and renewable energy plays a much larger role. Renewable energy in the form of hydro-electricity already contributes 24 per cent of Canada's energy. Other renewables contribute a share approximately equal to that of nuclear power. (...) The realities of the energy future indicate the wisdom of accelerated efforts to develop new and renewable energy forms, to stand beside hydro-electricity as the basis for a sustained, clean, and economically viable energy structure.

The National Energy Program envisages a much greater role for renewable energy. The Government of Canada believes that economic realities now favour a range of renewable energy options. The National Energy Program will provide further incentives to the commercial use of these resources, both within the comprehensive off-oil effort already described, and in the form of special new or enriched programs. It will also provide increased funds for research, development and demonstration of renewable energy."