advantage from low energy costs can be substantial. Energy intensive mining for iron, coal, nickel, asbestos, salt, gravel and sand is particularly advantaged by the made-in-Canada blended price.

The Canadian oil policy provides an opportunity to innovate and to establish new processes to penetrate new mineral markets. The Canadian mineral industry has been presented with an opportunity which it would not have if it were paying the same world oil prices as its foreign competitors. Clearly, the lower Canadian energy costs will offer Canadian exporters a very real competitive edge. Specifically in the mineral sector, the future looks bright indeed.

The vital signs for the continued growth of the mineral sector in the 1980s are very encouraging. My officials are forecasting an over-all rate of growth of between 2 per cent and 2.5 per cent per annum over the next decade in the non-fuel, mineral industry. This growth will require a total capital expenditure over the ten-year period of more than $42 billion in 1979 dollars, which will be twice that which was required in the previous decade. In current dollar terms, assuming an average rate of price increase of 6.2 per cent per year over the 1980-1990 period, this $42 billion capital requirement mushrooms to $63.5 billion. So we can easily surmise that activity in the mineral sector will provide significant stimulus to the Canadian economy in general. I am happy to report, after a visit with the ministers of mines of the provinces in Halifax last weekend, that their forecasts are just about the same.

In the immediate future there are a number of large projects which have been announced involving new mine development or mine expansion. To give just a few examples, there is a $300 million Texas Gulf expansion near Timmins, which is now nearing completion. There is the $62 million Noranda Gold Stream, copper zinc mine near Revelstoke, British Columbia, which is scheduled to start production in 1982; Billiton Canada Limited's $80 million Mount Pleasant tungsten venture in New Brunswick is also stated to be in production in 1982. After meeting with the New Brunswick minister I have learned that the $130 million Potash Corporation of America plant is now firm, and the $150 million Denison Mines Limited potash developments are on stream. To the west and to the north, Cyprus-Anvil's $240 million eight-year development and expansion program at the Vangorda and Grum deposit in the Yukon is firm. In addition, field work for the Potash Corporation of Saskatchewan's $600 million mine development at Brendenbury has begun. Furthermore, a number of smaller gold mining operations have been announced in Ontario.

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In general, the pace of exploration in 1980 has been high across the country and I think that this bodes well for the rest of the decade.

Of course, as Minister of State for Mines I am especially pleased with the coal initiatives outlined in "The National Energy Program". The Government of Canada will increase its support of studies to determine how best to mine and use this coal, both on the east and west coasts. Sufficient funds will be made available for exploratory tunnelling and assessment of the technical and economic feasibility of the Donkin Mine. Decisions on subsequent steps will be taken once uncertainties have been resolved concerning quality, characteristics, and market opportunities for this coal. The Government of Canada will see to it that development of this mine and other viable local coal sources is not delayed for lack of funding. Moreover, it will play its full part in overcoming the technical challenges confronting these developments.

In support of expanded coal mining in utilization activities, there will be a need for an additional $4 million during the next four years for coal research and development. Priorities include health and mine safety, coal beneficiation, combustion and utilization research, establishment of a coal testing institute and establishment of a continuing program in mining technology.

Cape Breton coal can make an important contribution to the energy supply of Nova Scotia and the maritimes. The challenge is to develop technologies to utilize that coal in more efficient and, I must stress, environmentally benign ways. To further that development the federal government will provide $50 million over the period 1980-1983, with provision for a further $100 million in 1984-1985 to support the development commercialization of new coal utilization technology. It is envisaged that the bulk of this funding will go to demonstrating fluidized bed combustion in a commercial scale generating station in Cape Breton which would directly displace oil-fired capacity. I would invite members of the House to visit our CANMET Research facility to examine the demonstration of fluidized bed combustion which is taking place there. Alternative means to use coal in the production of liquid fuel will also be actively pursued. At present, that is being done at Bells Corners.

The crucial concern of the national energy program is with supplying Canadian requirements and reducing import dependence. Unlike nickel, copper, iron ore, asbestos, potash, zinc, lead, uranium and coal, there are no apparent long term exportable surpluses, and certainly not in the case of crude oil. It is therefore important that decisions to invest and explore, and the rights to economic rents, be vested largely in Canadian hands in the energy industry.

The evolution of the Canadian mining industry has witnessed a substantial Canadianization of reserves and production facilities. The domestic corporate giants in copper, lead, zinc and nickel have substantial Canadian ownership interests; for example, Inco-Cominco; Noranda and Placer. However, there is growing concern that the decline of the junior exploration section in Canada will ultimately cause a reversal of this favourable trend. The grass roots exploration and discovery process has become increasingly dominated by major resource corporations, and the large Canadian junior sector has been discouraged by what I and others consider to be inequitable tax incentives and toughened securities market regulations.