scheduled for April 1980. The output of slabs will be trucked to Hamilton for rolling into finished steel products. DOFASCO's new basic oxygen plant continued under construction at its Hamilton site with completion set for 1978. Capacity will be approximately 910 000 tonnes. Algoma was in the final stages of a major investment program that has raised effective steelmaking capacity from under 2.7 million tonnes to 3.9 million tonnes annually.

Among the smaller producers Sidbec-Dosco Ltd. continued a major plant expansion at Contrecoeur, Que., designed to more than double steel capacity to about 1.5 million tonnes by the end of 1977. Interprovincial Steel and Pipe Corp. Ltd. (IPSCO) of Regina, the largest steel and pipe producer in Canada with capacity of about 500 000 tonnes a year, carried out investigations on expansion of capacity in 1976. The motivating factor was the potential market for large diameter pipe to be used in any northern pipeline to transport natural gas. The Atlas Steels Division of Rio Algom Mines Ltd., Canada's largest producer of stainless and specialty steels, continued a major program of conversion and expansion of steel producing operations. At Welland, Ont., a new melt shop was due for completion in 1977. Sydney Steel Corp., in Sydney, NS, continued to encounter difficulties with production and markets in 1976. The provincial Crown corporation investigated a rehabilitation program to improve production capability.

Exports of steel by Canadian producers increased 39% to 1.8 million tonnes in 1976. Value of exports increased approximately 12% to \$655 million. Approximately two-thirds of total export trade went to the United States. Shipments were up sharply to EEC countries as exports jumped from 33 000 tonnes in 1975 to 237 700 tonnes in 1976.

Imports fell 18% to 1.3 million tonnes although value declined only fractionally to \$598 million. Although imports were down, Japan increased shipments to Canada by over 30% to some 434 000 tonnes. Toward the end of 1976 imports were increasing and orders for forward delivery in early 1977 were said to be mounting. Concern was being shown by Canadian producers as many of these offshore quotations appeared to be at low price levels, possibly indicating dumping.

## 12.7 Government aid to the mineral industry

## 12.7.1 Federal government aid

The federal government helps mining by providing detailed geological, geophysical, topographical, geodetic, geographical and marine data; technical information concerning the processing of ores, industrial minerals and fuels on a commercial scale; and certain tax incentives.

The Department of Energy, Mines and Resources. This federal department was created on October 1, 1966 (RSC 1970, c.E-6). In addition to its administrative establishment, the department has three main sectors - science and technology, mineral development and energy policy.

The science sector has divisions for mineral and energy technology, geological surveys, surveys and mapping, earth physics, a polar continental shelf project, a centre

for remote sensing, and an explosives branch.

The centre for mineral and energy technology, a large laboratory and pilot-plant complex, conducts research into methods of extracting and processing minerals and fuels. Emphasis is placed on recovery techniques for ores and minerals with low-grade impurities or complex mineral composition. Fuels research includes evaluation of fossil fuels and development of refining methods for the low-grade, high-sulphur petroleum of the Athabasca oil sands. One project is aimed at lowering waste rock production and costs by improving wall design of open-pit mines. Research is also being conducted to improve burning qualities of coal. In the related area of the extraction of metal by heat, research is concentrated on development of a shaft electric furnace for smelting iron ore. In mineral sciences, the centre carries out physical, chemical, crystallographic and magnetic studies to determine characteristics important to extraction and processing methods. The centre also produces standard reference ores and metals needed by mining and metallurgical companies. In metals research, in addition to improving