

technical, financial, etc. - smelters are forced to reduce capacity too much and must shut down completely. It should be noted that smelters in all of the industrialized countries are under similar constraints, in varying degrees. Increasing competition is coming from LDC's, whose governments do not place as much emphasis on environmental considerations, although LDC's are not as large a factor in lead and zinc as they are in nickel, copper and aluminum.

Concerning other non-technological factors on ability to compete:

Transportation is a major cost at all stages and can affect the competitiveness of Canada's producers. BMS is on tidewater; CKZ is well located on the St. Lawrence Seaway, on rail lines and major highways, close to major markets; Cominco, HMNS and Kidd Creek are "inland", which increases their transportation costs. Costs of transporting concentrates to smelters is somewhat higher, on average, than those costs in other regions of the world, but the cost of transporting concentrates to port for exporting, or metal to market is significantly higher than for Canada's major competitors. U.S. smelters in the so-called Missouri belt have low transportation costs, partly because the mines are close to the smelters, which in turn are close to major metal markets.

(b) Geographical Factors

The fact that many lead and zinc mines are situated in Canada's northern regions means higher transportation, energy, materials and labour costs. These in turn lead to higher capital and operating costs than is the case for many of Canada's competitors.

Labour supply is a problem in Canada's northern mining regions which produce some of the concentrate supply for the smelters but which export much of their productions.

Labour/management relations have improved recently. Previously there had been considerable labour unrest and work stoppages at the mines and smelters, and at rail and port transportation centres.

Foreign ownership is not a negative factor in Canada's competitive position.

Resource base in Canada, with exceptions, is generally sufficient for several decades. Cominco has large deposits in the N.W.T., Greenland and Alaska, in addition to the Sullivan mine in B.C. It also custom smelts concentrates from the U.S. and other countries. HMNS is not self-sufficient in ores and will be better able to compete if a long term exploration program results in finding sufficient ore to take up the approximately 50% deficiency. BMS and Kidd Creek treat concentrates from their own large, nearby mines.

(c) International Trade Related Factors

Trade issues are of fundamental importance to the domestic lead and zinc sector, particularly from the point of view of exports. The sector is faced with tariff and non-tariff barriers in its major export markets, E.G., U.S. and Japan.

Tariffs: Canada imposes no tariffs on imported lead and zinc. Generally, tariffs in other countries are zero, low, or postponed for Canada's ores and concentrates because these countries, particularly the EEC, where unemployment is high, and Japan, require feed for their smelters. However, there are substantial tariffs on metals which tend to restrict Canada's exports. Tariffs are as high as 7 to 12% on lead and 2.5% on zinc entering Japan. The EEC protects its smelting industry - operating at a low rate of capacity - by imposing a 3.5% tariff on lead and zinc. Tariffs into the U.S. are slightly lower. All of these tariffs will decline slowly in accordance with MTN schedules.

Non-Tariff Barriers: None