Canadian firms are technologically competitive with the rest of the world. The Canadian industry is perceived abroad as being a leader in environmental matters; however, the Canadian involvement in export markets has been minimal to date. In fact, one study estimated that 20 manufacturers and 20 service firms are already active in environmental products export.

Export markets appear to have a number of attractive features that might make them promising options for Canadian suppliers. The growth rate of this industry throughout the world is one of the primary attractions. Estimation of growth in the past five years (1986-1990) for the worldwide industry has been calculated to be around 40 per cent. Experts expect another impressive growth in the next five years (8 to 12 annually). Thus, other foreign markets such as the European Community may be attractive to Canadian exporters.

The market value of the countries inside the EC for the environmental protection market totalled 52 billion Canadian dollars in 1987. Of this total, 48 per cent was for water treatment projects, 27 per cent for solid waste and 21 per cent for pollution control. The biggest market inside the Community is Germany, followed by Italy and the U.K.

The European market is very fragmented, with over 9000 small and medium-sized private companies. This large number should make it easier for Canadian firms to penetrate this market or to find a partner.

It is expected that with the opening of the European markets, there will be a large number of mergers and acquisitions, as well as joint ventures.

Virtually all segments of this industry represent a good potential. The most important variable is the technology of the product, since the quality of the work is quite significant. Many Canadian firms could compete adequately

in this market in Europe, but most of them are not exporting because they cannot fill the demand in Canada. The Canadian industry imports 56 per cent of the products and services required in this area (90 per cent of this coming from the U.S.) even though the technology in Canada is comparable to that of the U.S.

For companies that have the human resources to expand, it is important to mention that doing business in foreign countries requires sales people who are capable of providing extensive pre-sales and post-sales counselling. Companies wishing to establish their industry in the EC are advised to either establish a consulting or engineering company, enter into a licensing agreement with an engineering firm or co-operate with a consulting engineering or manufacturing company. It would be difficult for a company to make it on its own because of technical standards that are different from Canadian ones and government (either national or municipal) procurement that represents a large part of the market.

The major problem in finding a partner for a joint venture is that local partners are entirely aware that they may be educating a potential competitor through joint venturing. That is why firms with specialized expertise or new technology and/or companies willing to be minority partners may be more attractive to European firms.

Canadian firms appear to have a strong knowledge and experience in market segments such as cleaning water systems, advanced wastewater treatment and air pollution control systems for industrial companies. There are probably a number of small segments in which Canadian firms have a technological advantage over their European competitor. Canadian companies should keep track of the situation in Europe and the new international trends.

## Machine Tools

There are several different trends emerging in machine tool technology. Machine