

had developed an expertise in selected markets have been bought out by international firms.

The key factors influencing competitiveness in this industry are quality, technology and price. Canadian pulp and paper machinery manufacturers have developed the technical expertise to compete in both the domestic and overseas markets. The smaller Canadian-owned companies are very active in the export market. They are keeping pace with the international technology developments by investing in their own R&D programs. Even though the Canadian-owned companies are export-oriented, very few Canadian goods are sent to the EC (less than 1.5 per cent of total shipment or 4 per cent of total export). They are exporting mostly to the U.S.

Although Canada imports more equipment than it exports, the Canadian pulp and paper equipment industry has world-recognized capacities in manufacturing competitive equipment for the chemical pulp and paper part of the industry. It also has excellent capabilities in equipment in the mechanical pulping area. The Canadian industry is renowned for the quality and the technology of its products. To keep this image, Canadian firms keep modernizing their facilities and upgrading their product through R&D.

The principal source of export outside North America in this subsector is the Canadian consulting engineering industry that specializes in pulp and paper technology. This industry usually spearheads Canada's participation in overseas projects where Export Development Corporation (EDC) is involved. These are the kinds of companies Canadian manufacturers will want to reach an agreement with in order to bid for international contracts.

The European sector, on the other hand, is the biggest in the world in terms of production and exports. Germany is

leading the Community with shipments of ECU 1134 million in 1987.

It is difficult to penetrate this market since it is a very small one in terms of purchases. Since the number of forest acres inside the EC is very small, Member States do not buy much equipment compared with important producer countries. Major customers in this subsector are companies in the Scandinavian countries such as Sweden and Finland, as well as African countries.

Europe 1992 will not have an important impact on this industry since the important moves have already been made and since this market is oligopolistic in nature. Recent amalgamations have resulted in the domination of three major refiner manufacturers. This means that, in order to perform well in this market, companies must be large enough to take advantage of the same economies of scale that the leaders enjoy.

In this particular area, mergers and acquisitions might not be a very good idea for Canadian firms. A venture with complementary European firms in order to get contracts from government throughout the world in association with a major consulting engineering firm seems to be the best way to take "advantage" of the European development.

e) Other Industrial Equipment

This subsector incorporates such a wide variety of industrial equipment and services, that it is impossible to analyse them all in this report. Nevertheless, some of the most important segments will be examined.

Environmental Equipment

More and more attention is being given to the environment. This is reflected in an industry that is growing at a fast pace. Here again, the key factors for competing internationally are technology and price.