## **Textile and Clothing Industry**

Poland's textile industry is scattered throughout the country. Despite the presence of several large factories in the sector, many establishments employ only a handful of people. Even so, there are regions, like central and southwestern Poland, where the textile and clothing industry is somewhat more concentrated. A good deal of the industry can be found in the Silesian industrial heartland around Katowice where there are retail outlets serving a large market of two million people.

The Polish city most closely associated with textiles and clothing is Lodz. In the 19th century, Lodz built its reputation and its prosperity on the production of textiles and clothing. It came to be known as the Polish Manchester, supplying not only Polish markets, but those of the other Central and East European countries as well. Unfortunately, the industry has not kept pace with the times. Its current industrial base is outdated and in urgent need of modernization.

## **Chemical and Paper Industry**

Poland's chemical industry represents about 12% of industrial production, but suffers from under-investment. Its main products include carbide, fertilizers, plastics, dyes, and synthetic fibers. Priority sectors for investment include the manufacture of concentrated fertilizers, crop protection products, polyester, styrene, epoxy, polyurethane and paper. The country's natural resources and geographic location make this sector an attractive investment possibility. Poland is a major producer of minerals and chemical products. It produces 6% of the world's coal, 6.2% of its silver, 9.1% of its sulphur, 4.1% of its copper and 2.8% of its zinc. The country also boasts rich deposits of rock salt, limestone, gypsum, ceramic clay and barite. Poland does perform some high value-added processing in the case of dyes and medical products, but they play a limited role, and production is often restricted by shortages of imported raw materials.

Investment in the industry fell dramatically during the 1980s. As a result, machinery and production facilities are now working at only 60% of capacity, and only 30% of factories and other buildings are being fully exploited. The number of production lines has remained unchanged since 1980. Only 15% are automated, although in cellulose-paper the degree of automation has increased to 55%. The industry consumes about one fifth of all the energy used by Polish industry.

Approximately 400 large chemical plants employ 100-500 workers each, while a dozen very large facilities each employ more than 2000 workers. Some factories use outdated technology and are environmentally destructive. A relative few, like the oil refinery in Gdansk, the nitrogenous fertilizer plant in Pulawy, and the oxy-alcohol plant in Kedzierzyn are technologically advanced.

The future will no doubt witness increased production of inorganic minerals (sulphur, sodium chloride), extensive processing of products like fluorspar, anhydride and barite; and an expansion of oil refineries and other petrochemical plants. These developments will cause attendant increases in the production of plastics, polyolefines, polystyrene and copolymers. Poland will also need to expand its production of fertilizers, pesticides, synthetic fibers, and pharmaceuticals. Coke chemistry and coal gas production is another promising area, given Poland's huge coal deposits.

Of special importance is the production of small quantities of highly processed and refined chemicals for the electronics industry. Also growing in significance are special pharmaceutical products; medical diagnostics; water and sewage purification equipment; food and animal fodder; catalysts; inhibitors; special glues; photochemicals; textiles; rubber; refined lubricating oils; anti-knock compounds for unleaded gasoline; and biopolymers. A characteristic of these specialized chemical products is the relatively low cost of investment and the relative ease of access to universal, multipurpose reactors and facilities. Poland is suited to such production because it has a large and absorptive market, highly qualified engineers, and a skilled work force. Water for industrial purposes is plentiful, as is transportation.

Pharmaceuticals: Poland's population of 40 million constitutes a significant market for pharmaceuticals and medical devices. Indeed, pharmaceuticals constitute one of the country's leading import items. Poland has already developed an embryonic pharmaceutical industry which can make effective and profitable use of foreign investment. Development of this sector will be stimulated by a World Bank project to improve Polish health care.