

1994. In the first half of 1995, for example, construction activity was down by 70 percent and automotive sales had shrunk by 40 percent compared to the same period in 1994. Imports of resins were maintained until September 1995 because of international demand for the products of the Mexican plastics industry. Sales were projected to drop in the last quarter.

Some mid-sized firms that modernized during 1994 were caught with large dollar debts when the peso was devalued. Many of them have gone out of business or have been acquired by larger firms.

The firms that are weathering the crisis are mainly those which export. The average export level among the larger companies is 30 percent. Most of these companies have access to foreign financial markets, and have been able to maintain their equipment and achieve economies of scale.

### **Resins**

Engineering resins, usually produced in low volume and at higher cost than commodity resins, are particularly sought after in Mexico. These are currently imported because their sales volumes are too low to justify the technologically-advanced production processes involved. Engineering resins used in Mexico include ABS, polyethylene terephthalate (PET), polycarbonate, polyacetal resins, nylon, fluoropolymers, polyamide, polyesters, polyurethanes, epoxy resins, unsaturated polyester, alloys and blends.

Additives for plastics are also an important market opportunity. Mexico relies entirely on imports and foreign suppliers of these products have not marketed their products aggressively.

According to estimates published by the *Secretaría de Comercio y Fomento Industrial (SECOFI)*, Secretariat of Commerce and Industrial Development, about two-thirds of current demand is for four types of resins:

polyvinyl chloride (PVC), low- and high-density polyethylene, polypropylene and polystyrene.

Of these, only PVC is in growing demand according to this source. *SECOFI* also notes that urea-formaldehyde resins, polyvinyl acetate emulsions and bottle-type PET are in strong demand as of early 1995. Another product with good long-run potential are resins used in the production of non-toxic and microwavable plastic food containers. The general advice offered to Canadians by industry experts in Mexico is to focus on niche markets with innovative products that rely on specialized technologies.

### **Services**

The modernization boom of the past five years has been substantially curtailed by the devaluation of the peso. Training is one of the services in demand as a result of this trend. Training designed to help workers use equipment more efficiently is needed, as well as training for repair technicians.

The privatization of 61 plants owned by *Petróleos Mexicanos (PEMEX)*, the national oil company, which is now underway, should create the need for administrative and financial consultants. The plants are in desperate need of modernization.

There is increasing awareness in Mexico of the need for recycling. The industry will require better technology to recycle effectively, creating a demand for specialized consulting services.

### **PET Bottles**

Polyethylene terephthalate (PET), was mentioned by a number of experts interviewed for this summary, as a product with particular potential. PET is expected to gradually displace polyvinyl chloride (PVC) and glass bottles. Its use is projected to rise dramatically in the edible oil, water and soft-drink sectors.

Currently, Eastman holds 44 percent of the market share, followed by HCC with 26 percent. Both companies have ambitious plans to extend their production capabilities. Shell is planning to open two PET plants by 1998. However, since exports to Mexico are still forecast, it is not anticipated that the country will have excess supplies in the foreseeable future.

### **Do-It-Yourself Home Improvement Products**

The do-it-yourself (DIY) culture has yet to take root in Mexico, as it has in Canada and the United States. Skilled labour is relatively cheap and most Mexicans lack the skills to do home projects on their own.

Retailers believe that the market for DIY products has a promising future, although it may take 10 years to develop. The economic crisis has forced more consumers to consider doing their own home repairs and renovations. Mexican consumers are impressed with the large array of DIY products, and tend to be lured by the convenience of having many products under one roof. Visiting the store provides what is often the only opportunity to learn about new products, including many that are made from plastics.

## **THE REGULATORY ENVIRONMENT**

There are currently no official standards that affect the plastics industry. The larger Mexican producers are attempting to develop voluntary quality standards within the guidelines of federal law. There is also the likelihood of future government regulation in the areas of recycling and hazardous wastes.

### **Quality Standards**

There are currently no mandatory standards in effect for plastics, but the *Ley Federal de Normalización*, Federal Law of Standardization, of 1992 puts the onus on designated