

Copper oxide mining typically involves an open-pit mine and the use of solvents to extract copper that is then transformed into sheets, a process known as solvent-extraction/electro winning or S-Ex. S-Ex mining can be developed to utilize recycling procedures and lined containment and waste areas. In the past, copper mining has been responsible for serious environmental damage in Mexico.

The state of Sonora produced 86 percent of the national copper output in 1994. Zacatecas and Chihuahua followed with 5.2 percent and 3.9 percent respectively.

ZINC

Mexico is the world's sixth largest zinc producer. Production in 1994 totalled 358,953 tonnes, which was almost 6 percent of the world's production of newly-mined zinc. Approximately half of Mexico's zinc production is exported to the United States, Japan and Belgium in the form of either zinc metal or zinc concentrates.

The largest zinc-producing state is Chihuahua, with 38 percent of production, followed by Zacatecas and San Luis Potosí. The three states produce 81 percent of the national total.

There are only two plants in Mexico that treat zinc concentrates to produce zinc metal. Their combined capacity totals almost 220,000 tonnes per year. Both refineries recover sulphur dioxide for the production of sulphuric acid, cadmium and other byproducts.

LEAD

Mexico is a major supplier of lead to the world market and ranks seventh amongst world producers. Production volume was 163,836 tonnes in 1994, a drop of about 10 percent from the year before. The industry exports more than 60 percent of lead production, of which approximately one-third goes to the U.S., and the remainder to Belgium, Italy, Japan, Spain and the countries of the former Soviet Union.

Mexico's smelter and refinery capacity is the largest in Latin America. About 60 percent of domestic consumption of lead is for the manufacture of batteries and 14 percent is for pigments.

Chihuahua produced 46 percent of Mexico's lead in 1994, followed by Zacatecas with 32 percent.