

THE MINERAL INDUSTRY OF SWITZERLAND

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The reserves of the small deposits of metalliferous ores that once existed in Switzerland are mostly depleted, and any new metal mining activities have been discouraged for environmental reasons. Consequently, metals were not mined in 2003.

All metal production in Switzerland was from either imported raw materials or scrap. Metal processing was confined mainly to the production of primary and secondary aluminum, copper, secondary lead, pig iron, and steel. Switzerland relied on imports for many mineral commodities because of self-imposed environmental restrictions and lack of natural resources. Concerns about environmental pollution reportedly caused the adoption of a policy to curtail gradually or perhaps even cease smelting activities. Mining and mineral production were mainly industrial mineral commodities required for construction. These commodities included cement, clays, gravel, gypsum, lime, and sand (table 1).

Switzerland, which was a large diamond trading center, was actively involved in the cutting and polishing of diamond.

The Swiss mineral industry was largely controlled by the Government and was owned privately or by regional governments (table 2). The 26 regional cantons, or communal governments, grant mining and processing licenses and directly operate electrical generating facilities, gas utilities, local transportation facilities, and water resources. The final executive authority for the mineral industry was vested in the Federal Council, which comprised regional delegates and representatives of the four major political parties.

Switzerland has an area of 41,285 square kilometers and had a population of 7.3 million, and a work force of about 4 million. Gross domestic product in purchasing power parity was \$211 million, and per capita income was \$42,004. The annual growth rate was 0.1% in real terms and unemployment was 3.5% (International Monetary Fund, 2004^{§1}).

Trade has been the key to prosperity in Switzerland. The country depended on exports to generate income and on imports for most mineral commodities. The country had liberal trade and investment policies. Swiss exports to the United States were about \$8,660 million in 2003 and \$7,783 million in 2002. Swiss imports from the United States were about \$10,668 million in 2003 and \$9,382 million in 2002 (U.S. Census Bureau, 2004[§]).

Switzerland's mineral assets are limited to aluminum and basic construction materials, although the country does serve as a major diamond exchange. Switzerland has avoided heavy reliance on imported primary energy by balancing ample indigenous hydropower resources with nuclear facilities and through conservation efforts. The Swiss watch and clock making industry has experienced excellent performance over recent years. These situations are expected to continue.

Additional coverage of the mineral industry of Switzerland can be found in the 2002 Minerals Yearbook, volume III, Mineral Industries of Europe and Central Eurasia.

Internet References Cited

International Monetary Fund, 2004 (April), World economic outlook database, accessed May 20, 2004, at URL <http://www.imf.org/external/pubs/ft/weo/2004/01/pdf/appendix.pdf>.

U.S. Census Bureau, 2004 (May), Foreign trade, accessed May 10, 2004, at URL <http://www.census.gov/foreign-trade/balance/c4419.html>.

Major Source of Information

Office Fédéral de la Statistics
INFO
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¹References that include a section mark (§) are found in the Internet References Cited section.

TABLE 1
SWITZERLAND: ESTIMATED PRODUCTION OF MINERAL COMMODITIES^{1,2}

(Thousand metric tons unless otherwise specified)

Commodity ³	1999	2000	2001	2002	2003
METALS					
Aluminum:					
Primary metric tons	34,439 ⁴	35,539 ³	36,228 ^{r,4}	40,007 ^{r,4}	40,000
Secondary do.	15,000	15,000	6,000	6,000	6,000
Iron and steel, metal:					
Pig iron	100	100	100	100	100
Crude steel	1,037 ⁴	1,140	1,200	1,200	1,100
Semimanufactures	700	700	700	700	700
Lead, refined, secondary metric tons	9,200 ⁴	10,100 ⁴	8,000 ^{r,4}	8,000 ^r	8,000
INDUSTRIAL MINERALS					
Cement, hydraulic	3,600	3,600	3,600	3,600	3,600
Gypsum	300	300	300	300	300
Lime	30	30	30	30	30
Nitrogen, N content of ammonia	32	33 ⁴	31	33 ⁴	32
Salt	300	300	300	300	300
Sulfur, from petroleum refining metric tons	3,000	3,000	3,000	3,000	3,000
MINERAL FUELS AND RELATED MATERIALS					
Petroleum refinery products:					
Liquefied petroleum gas thousand 42-gallon barrels	2,000	2,000	2,000	2,000	2,000
Gasoline do.	9,000	9,000	8,690	9,000	9,000
Distillate fuel oil do.	9,500	9,500	3,036 ⁴	3,000	3,000
Residual fuel oil do.	5,500	5,500	3,397 ⁴	3,500	3,500
Bitumen do.	800	800	800	800	800
Refinery fuel and losses do.	2,000	2,000	2,000	2,000	2,000
Total ⁵ do.	28,800	28,800	19,900	20,300	20,300

^rRevised.

¹Table includes data available through March 2004.

²Estimated data are rounded to no more than three significant digits; may not add to totals shown.

³In addition to the commodities listed, a variety of crude construction materials (common clay, sand and gravel, and stone) were produced, but output was not reported, and available general information was inadequate to make reliable estimates of output levels.

⁴Reported figure.

⁵Total of listed products only.

TABLE 2
SWITZERLAND: STRUCTURE OF THE MINERAL INDUSTRY IN 2003

(Thousand metric tons unless otherwise specified)

Commodity	Major operating companies and major equity owners	Location of main facilities	Annual capacity
Aluminum	Alusuisse Sierre AG (Alcan Group, 100%)	Smelter at Stag, rolling mill and plant at Sierre	168
Cement	Holcim (Schweitz) AG (Holcim Group, 100%)	Plants (7) at various locations	4,300
Do.	Cementfabrik Holcim AG (Holcim Group, 100%)	Plant at Rekingen	700
Copper metric tons	Schmelzmetall AG (Adkins Corp., 100%)	Refinery at Gurtellen	2,400
Gold do.	Produits Artistiques de Métaux Précieux (PAMP) S.A.	Refinery at Castel San Pietro	400
Lead, secondary	Metallum AG	Smelter at Pratteln	13
Petroleum, refinery barrels per day	Tamoil (Suisse) S.A.	Refinery at Collombey	47,000
Do. do.	Petroplus International NV (Petroplus Corp., 100%)	Refinery at Cressier	68,000
Salt	La Societe des Mines (Canton of Vaud, 100%)	Saline plant at Bex	50
Steel	Stahl Gerlafingen AG (Swiss Steel AG, 100%)	Plant at Gerlafingen	650
Do.	von Moss Stahl AG (Swiss Steel AG, 100%)	Plant at Emmenbrucke	300