



# 2007 Minerals Yearbook

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**SWITZERLAND [ADVANCE RELEASE]**

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# THE MINERAL INDUSTRY OF SWITZERLAND

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Mining, exclusive of industrial minerals for construction, played a minor role in Switzerland's economy. No metal mining took place in 2007 owing to the depletion of metalliferous ores. Metal processing—which was restricted to primary and secondary aluminum, secondary lead, pig iron, and steel—depended on imported raw materials or scrap. Industrial minerals produced by mining and processing included cement, gypsum, and lime, which were used domestically in construction.

Trade has been the key to prosperity in Switzerland. Swiss exports to the United States in 2007 were valued at about \$17 billion, which included gem-quality diamond, \$732 million; petroleum products, \$161 million; copper, \$11 million; and aluminum, \$6 million. Swiss imports from the United States were valued at about \$15 billion, and included bauxite and aluminum, \$31 million; iron and steel products (semifinished), \$24 million; nonmonetary gold, \$21 million; and sulfur and nonmetallic minerals, \$6 million. Switzerland's main trading partners were the members of the European Union (U.S. Census Bureau, 2007).

## Production

Data on mineral production are provided in table 1.

## Structure of the Mineral Industry

Switzerland's mineral industry was owned privately or by regional governments (Cantons). Regulatory control was administered by the Government. The 26 regional Cantons granted mining and processing licenses and directly operated electricity-generating facilities, gas utilities, and water resource facilities. The final authority for the mineral industry was vested in the Federal Council. Table 2 is a list of major mineral industry facilities.

## Commodity Review

### Metals

**Aluminum.**—Novelis Inc. of the United States announced that it would invest \$32 million in the construction of a new casthouse at its Sierre rolling mill. The facility would house a multialloy ingot casting center based on the company's Novelis Fusion technology for simultaneously casting multiple alloy layers into aluminum ingots. The multialloy ingots will be rolled into sheet products and targeted for the automobile industry. The new casthouse was to have an initial production capacity of 70,000 metric tons and was expected to be operational in 2008 (Novelis Inc., 2006).

### Industrial Minerals

**Cement.**—Holcim (Schweiz) AG was the leading cement, concrete, and gravel producer in Switzerland. Holcim operated seven cement plants and grinding stations and had a production capacity of 3.9 million metric tons per year (Holcim Ltd., 2007).

**Diamond.**—Switzerland was involved in the cutting and polishing of diamond and played a large role in international diamond trade activities. Lucerne was the world's third most important diamond trading center after London and Antwerp, Belgium. Exports of polished diamond in 2006, which was the latest year for which data were available, totaled 847,830 carats and were valued at \$661,473,171. Exports of rough diamond in 2006 totaled 135,851,221 carats and were valued at \$9,841,846,631. According to the latest data available, Swiss imports of polished diamond in 2006 totaled 481,724 carats and were valued at \$592,006,741. Switzerland is a member of the Kimberley Process Certification Scheme (HRD Antwerp NV, 2007, p. 8).

### Mineral Fuels

**Natural Gas.**—In 2007, the Trans Adriatic Pipeline project was launched by the Swiss energy company Elektrizitaets-Gesellschaft Laufenburg AG. The project would transfer natural gas from Iran and Azerbaijan to Europe and open up a new supply corridor for the transportation of natural gas from significant reserves in Iran, the Caspian Sea region, and Russia to Western Europe, especially Italy and Switzerland (Alexander's Gas & Oil Connections, 2007).

## References Cited

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TABLE 1  
SWITZERLAND: ESTIMATED PRODUCTION OF MINERAL COMMODITIES<sup>1,2</sup>

(Thousand metric tons unless otherwise specified)

Commodity <sup>3</sup>		2003	2004	2005	2006	2007
<b>METALS</b>						
<b>Aluminum:</b>						
Primary	metric tons	43,538 <sup>4</sup>	44,538 <sup>4</sup>	44,458 <sup>r</sup>	40,000 <sup>r</sup>	40,000
Secondary	do.	186,930 <sup>4</sup>	192,000	193,200 <sup>4</sup>	190,000	190,000
<b>Iron and steel, metal:</b>						
Pig iron		100	-- <sup>r</sup>	-- <sup>r</sup>	-- <sup>r</sup>	--
Crude steel		1,100	1,100 <sup>r</sup>	1,158 <sup>4</sup>	1,252 <sup>r,4</sup>	1,264 <sup>4</sup>
Semimanufactures		700	700	700	700	700
Lead, refined, secondary	metric tons	8,000	9,000	8,000	9,000	9,000
<b>INDUSTRIAL MINERALS</b>						
Cement, hydraulic		3,613 <sup>4</sup>	3,851 <sup>4</sup>	4,022 <sup>4</sup>	4,000	4,000
Gypsum		300	300	300	300	300
Lime		75	75	75	75	75
Nitrogen, N content of ammonia		29 <sup>4</sup>	32 <sup>4</sup>	30	30	30
Salt		562 <sup>4</sup>	569 <sup>4</sup>	566 <sup>4</sup>	560	560
Sulfur, from petroleum refining	metric tons	3,000	3,000	3,000	3,000	3,000
<b>MINERAL FUELS AND RELATED MATERIALS</b>						
<b>Petroleum refinery products:</b>						
Liquefied petroleum gas	thousand 42-gallon barrels	3,640 <sup>4</sup>	2,604 <sup>4,r</sup>	3,000 <sup>r</sup>	3,000 <sup>r</sup>	3,000
Gasoline	do.	9,089 <sup>4</sup>	9,793 <sup>4,r</sup>	10,000	10,000	10,000
Distillate fuel oil	do.	14,126 <sup>4</sup>	20,531 <sup>4,r</sup>	20,000 <sup>r</sup>	20,000 <sup>r</sup>	20,000
Residual fuel oil	do.	4,891 <sup>4</sup>	29,997 <sup>4,r</sup>	30,000 <sup>r</sup>	30,000 <sup>r</sup>	30,000
Bitumen	do.	800	800	800	800	800
Refinery fuel and losses	do.	1,716 <sup>4</sup>	15,178 <sup>4,r</sup>	16,000 <sup>r</sup>	16,000 <sup>r</sup>	16,000
Total <sup>5</sup>	do.	34,262 <sup>4</sup>	78,903 <sup>r</sup>	79,800 <sup>r</sup>	79,800 <sup>r</sup>	79,800

<sup>r</sup>Revised. do. Ditto. --Zero.

<sup>1</sup>Estimated data are rounded to no more than three significant digits; may not add to totals shown.

<sup>2</sup>Table includes data available through July 2008.

<sup>3</sup>In 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.

<sup>4</sup>Reported figure.

<sup>5</sup>Total of listed products only.

TABLE 2  
SWITZERLAND: STRUCTURE OF THE MINERAL INDUSTRY IN 2007

(Thousand metric tons unless otherwise specified)

Commodity		Major operating companies and major equity owners	Location of main facilities	Annual capacity
Aluminum		Novelis Inc. (Hindalco Industries Ltd., 100%)	Plant at Sierre	168
Cement		Holcim (Schweiz) 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	Refinery at Gurtellen	2,400
Gold	kilograms	Produits Artistiques de Métaux Précieux S.A. (MKS Finance SA, 100%)	Refinery at Castel San Pietro	425,000
Lead, secondary		Metallum AG	Smelter at Pratteln	13
Petroleum, refinery	barrels per day	Tamoil (Suisse) S.A. (Colony Capital LLC, 65%, and Government of Libya, 35%)	Refinery at Collombey	72,000
Do.	do.	Petroplus Refining Cressier S.A. (The Carlyle Group)	Refinery at Cressier	68,000
Salt		Saline de Bex S.A. (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