AUSTRIA

By Harold R. Newman

Although the mining industry has maintained a long tradition in Austria, the metal mining sector was declining, principally owing to high operating costs, low ore grades, environmental problems, and increased foreign competition. This was not the case with the industrial minerals sector, which had been producing a number of important minerals. Austria was considered to be a significant producer of graphite (10th in the world) and talc (9th in the world) with about 2.5% of the total world output of graphite and about 1.6% of the total world output of talc. Recycling activities also increased (table 1).

Because of Austria's dependence on foreign trade, its economy was closely linked to the economies of other European Union (EU) member states, particularly Germany. Foreign trade and investment ties with Central and Eastern European countries played an increasingly important role. From 2000 to 2004, the Austrian economy was expected to grow at an average real rate of about 2.4% per year, slightly lower that the EU-wide average of 2.5% (U.S. Embassy, Vienna, Austria, 2000, p. 6). Table 2 lists selected indices of industrial production.

The Government was removing many of Austria's restrictions on business and was intent on privatizing state-owned companies. It was estimated that until 1997 about 40% of Austria's gross national product was controlled by the state, tying Russia for the highest percentage in Europe. After completing a 10-year privatization program in 1997, the Government introduced another privatization plan in early 2000 that included state-owned industries' groups of aluminum, petroleum, and steel. The Government will review full privatization of its shareholdings in the partly privatized companies Österreichische Mineralolverwaltung AG (OMV) in petroleum, Voest-Alpine Stahl GmbH in steel, and Voest-Alpine AG in technology (U.S. Embassy, Vienna, Austria, 2000, p. 8, 46).

During the last several years, the Austrian mineral industry had turned away from coal and base metal mining. Except for the iron ore operation at Erzberg and the tungsten operation at Mittersill, all the metal mines were closed. Most of the growth in the mineral resources area was in the production of industrial minerals for which operations were developed by the private sector. Although partial privatization of state-owned industries was underway, a portion of the mineral industry was still under government control (table 3).

The Erzberg Mine of Voest-Alpine Erzberg GmbH produced a beneficiated iron ore that was shipped by rail to the nearby steel mills of Voest-Alpine Stahl AG for further beneficiation and production of self-fluxing sinter that averaged 50% iron and 3% manganese. Wolfram Bergbau und Hütten GmbH operated the Western World's largest underground tungsten mine at Mittersill and a tungsten conversion plant at Bergla.

Ample supplies of calcite, dolomite, and limestone were available to support a viable cement industry in Austria. The market was relatively fragmented; only two of the five major producing companies had more than one plant.

Austria was one of the world's largest sources of high-grade graphite. Grafitbergbau Kaiserberg AG operated open pit mines at Kaisersberg and at Trieben. Grafitbergbau's 30,000-t/yr capacity processing plant at Kaisersberg consisted of drying, classification, milling, flotation, and fine-grinding sections.

Austrian salt mines were owned by the Government and regulated by the Ministry of Finance. All salt output was from three underground mines and one brine well in central Austria. The Government was proceeding with plans to privatize the operations. Luzenac Naintsch AG, which was the only producer of talc in Austria, operated three mines in the Styria region and produced a range of talc, chloritic talc, dolomite talc, and chlorite-mica-quartz ores.

In the coal mining sector, the open pit Oberdorf Mine of Graz-Koflacher Eisenbahn und Bergbau Gesellschaft mbH was the only lignite mine with any significant production.

OMV bought a 15% stake in exploration acreage west of the Shetland Islands north of Scotland from Shell UK. OMV said the acquisition was part of its strategy to develop oil and gas production in the North Sea, which was one of its core areas. The company was aiming to increase group output to 100,000 barrels per day by 2002 (Alexandria's Gas & Oil Connections, July 7, 2000, Austria's OMV buys stake in west of Shetland Islands, accessed July 13, 2000, at URL http://gasandoil.com/goc/company/cne02782.htm).

Because of Austria's long history of minerals exploration and a strong mining tradition, geologic conditions are fairly well known. Future mining activities will most likely be concentrated in industrial minerals, mainly for domestic consumption. The chances of finding new and workable base metal deposits are probably remote.

Reference Cited

U.S. Embassy, Vienna, Austria, 2000, FY 2001 country commercial guide—Austria: U.S. Department of State, July, 76 p.

Major Source of Information

Bundesministerium für Wirtschaft und Arbeit Denisgasse 31 1200 Vienna, Austria

TABLE 1 AUSTRIA: PRODUCTION OF MINERAL COMMODITIES 1/2/

(Metric tons unless otherwise specified)

Commodity METALS	1996	1997	1998	1999	2000 e/
Aluminum metal, secondary	97,500	118,800	116,500	143,000 r/	140,000
Copper, refined:	97,300	118,800	110,300	143,000 1/	140,000
Primary	1,000 e/	2,000 e/	1,000	5,000 r/	2,000
Secondary	57,000 e/	2,000 e/	71,000	77,573 r/	77.000
Total	58,000 e/	76,000 e/	72,000	82,573 r/	79,000 3/
Gold, metal e/ kilograms	100	100	100	100	100
Iron and steel:	100	100	100	100	100
Iron ore and concentrate: e/					
Gross weight thousand tons	1,853 3/	1,800	1,797	1,752	1,800
Fe content do.	504 3/	500	500	553 3/	500
Metal:	504 5/	500	500	555 51	500
Pig iron do.	3,416	3,965	4,022	3,913	4.318 3/
Ferroalloys, electric-furnace e/ do.	11	11	12	12	12
Crude steel do.	4,442	5,196	5,298	5,213	5,725 3/
Semimanufactures do.	3,837	4,516	4,640	4,657 r/	5,035 3/
Lead, refined, secondary	22,900	22,700	23,100	24,500 e/	24,000
Manganese, Mn content of domestic iron ore e/	26,000	25,000	24,000	20,000	20,000
Tungsten, mine output, W content of concentrate	1,413	1,400	1,423	1,610	1,600
INDUSTRIAL MINERALS	1,415	1,400	1,425	1,010	1,000
Cement, hydraulic thousand tons	3,873	3,852	3,850	3,800 e/	3,800
Clays:	5,875	5,852	5,850	3,800 6/	5,800
llite do.	151	150 e/	186	190 e/	305 3/
Kaolin:	151	150 e/	180	190 e/	305 3/
Crude do.	180	180 e/	298	152	119 3/
	60	60 e/	298 100	50 e/	50
	3,000 3/	2,800	2,800	2,600	2,600
Other e/ do. Graphite, crude	,	<i>'</i>	,	· ·	,
1 /	12,000 996	12,000 e/	10,738 961	12,635 999	12,000 946 3/
Gypsum and anhydrite, crude thousand tons		1,000 e/			
Lime e/ do.	1,990 3/	2,000	2,000	2,000	2,000
Magnesite: Crude do.	624	650 e/	723	749 3/	726 3/
	289				
Sintered or dead-burned do.		300 e/	325 60	325	325 60
Caustic calcined e/ do.	52 3/	60 400	400	60 450	
Nitrogen, N content of ammonia e/	400	400		450	450
Pigments, mineral, micaceous iron oxide e/	7,500	7,500	7,000	6,000	6,000
Pumice (trass)	6,000 e/	6,000 e/	6,137	4,272	3,961 3/
Salt: e/		1	1	1	1
Rock thousand tons	1	1	1	1	1
In brine do.	367 3/	400	400	400	400
Sand and gravel:	(012	(000 l	(220	6.957	6 005 21
Quartz sand do.	6,012	6,000 e/	6,329	6,857	6,985 3/
Other sand and gravel e/ do.	16,000	18,000	18,000	18,000	18,000
Total do.	22,012	24,000 e/	24,329	24,900 e/	24,985
Sodium compounds, n.e.s.: e/	200	200	1.50	1.50	1.50
Soda ash, manufactured do.	200	200	150	150	150
Sulfate, manufactured do.	100	100	100	100	100
Stone: 4/	0.155	0.000	0.070	7.0/0	7 1 50 6 1
Dolomite thousand tons	9,155	9,000 e/	8,978	7,968	7,152 3/
Quartz and quartzite do.	317	282	398	409	372 3/
Other:	20.000	20.000	20.000	26 100	00.004.01
Limestone and marble e/ do.	20,000	20,000	20,000	26,409	23,824 3/
Basalt do.	698	647	5,075	5,201	4,933 3/
Marl do.	2,000	2,000	1,364	1,423	1,559 3/
Crushed stone e/ do.	12,000	12,000	12,000	12,000	12,000
Total do.	34,698	34,647	38,429	38,624	38,500
Sulfur, byproduct of petroleum and natural gas e/	10,000	9,000	9,000	9,468	9,646 3/
Talc and soapstone, crude	130,000	155,730	137,114	129,516	133,060 3/

See footnotes at end of table

TABLE 1--Continued AUSTRIA: PRODUCTION OF MINERAL COMMODITIES 1/2/

Commodity		1996	1997	1998	1999	2000 e/
MINERAL FUELS AND REL	ATED MATERIALS					
Coal, brown and lignite	thousand tons	1,110	1,122	1,191	1,137	1,255
Coke	do.	1,559	1,567	1,500	1,400 e/	1,400
Gas, natural:						
Gross	million cubic meters	1,400 e/	1,400 e/	1,568	1,791	1,805 3/
Marketed e/	do.	1,000	1,000	1,000	1,000	1,200
Oil shale		498	500 e/	500	496 3/	440 3/
Petroleum:						
Crude the	ousand 42-gallon barrels	7,121	7,200 e/	7,624	6,879	7,024 3/
Refinery products:						
Liquefied petroleum gas	do.	7,416	7,000 e/	325	241	186 3/
Gasoline	do.	19,541	20,120	19,540	18,196	15,413 3/
Kerosene and jet fuel	do.	3,823	3,832	3,960	4,256	4,360 3/
Distillate fuel oil	do.	9,000	9,000 e/	29,019	27,387	25,897 3/
Residual fuel oil	do.	9,510	9,623	9,710	8,521	6,325 3/
Unspecified	do.	8,000	8,000	8,393	8,673	14,748 3/
Refinery fuel and losses	do.	2,200	2,000 e/	4,781	5,497	5,149 3/
Total	do.	59,490	59,600 e/	75,728	72,771	72,078 3/

(Metric tons unless otherwise specified)

e/ Estimated. r/ Revised.

1/ Table includes data available throughJune 2001.

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

3/ Reported figure.

4/ Excludes stone used by the cement and iron and steel industries.

3/ Reported figure.

4/ Excludes stone used by the cement and iron and steel industries.

TABLE 2 AUSTRIA: SELECTED INDICES OF PRODUCTION

(1990 = 100)

Sector	1997	1998	1999	2000 e/
General	121	131	138	145
Mining	87	93	96	95
Manufacturing	122	133	141	150
Electricity and gas	120	122	129	130
Construction	92	105	107	100

e/ Estimated.

Source: United Nations, 2000, Monthly Bulletin of Statistics, v. LIV, no. 12, December, p. 24.

TABLE 3 AUSTRIA: STRUCTURE OF THE MINERAL INDUSTRY IN 2000

(Thousand metric tons unless otherwise specified)

	Major operating companies	Location of	Annual
Commodity	and major equity owners	main facilities	capacity
Aluminum	Aluminum Lend GmbH (Salzburger Aluminium AG, 100%)	Secondary ingot plant at Lend	25
Do.	Austria Sekundär Aluminium GmbH (Amag Austria Metall, 100%)	Secondary ingot plant at Ranshofen	50
Cement	Lafarge Perlmooser AG (Lafarge France, 100%)	Plants at Mannesdorf and Retsnei	2,200
Do.	Wietersdorfer Zemenwerke	Plants at Peggau and Wietersdorf	
Do.	Zementwerk Leube	Plant at Gartenau	700
Do.	SPZ Zemenwerke Eiberg	Plant at Eiberg	600
Do.	Gmundner Zement	Plant at Gmundner	
Coal	Graz-Koflacher Eisenbahn und Bergbau Gesellschaft mbH	Oberdorf Mine	1,200
	(Government, 100%)		
Copper	Austria Metall AG (Metal Mining Corp. of Canada, 41%; Mount	Plant at Brixlegg	75
	Isa Mines of Australia, 41%; and Government, 18%)		
Graphite	Industrie und Bergbaugesellschaft Pryssok & Co. KG	Trandorf Mine at Mühldorf	15
Do.	Grafitbergbau Kaiserberg AG	Kaisersberg Mine	3
Do.	do.	Trieben Mine	3
Gypsum	Erste Salzburger Gipswerk-Gesellschaft Christian Moldan KG	Abtenau and Moosegg Mines	300
Do.	Rigips Austria GmbH	Grundlsee, Puchberg, Unterkainisch, and	250
		Weisenbach Mines	
Do.	Knauf Gesellschaft GmbH	Hinterstein Mine	160
Iron ore	Voest-Alpine Erzberg GmbH (Government, 100%)	Erzberg Mine at Eisenerz	1,000
Lead	Bleiberg Bergwerks-Union AG (Metall Gesellschaft, 74%)	Smelter at Brixlegg	55
Magnesite	Veitsch Radex AG	Mines at Breitenau, Hochfilzen and Radenthein	600
Do.	Radex Austria AG (Osterreichische Magnesit AG, 100%)	Millstatteralpe Mine	250
Natural gas million cubic meters	Oesterreichische Mineralolverwaltung AG (Government, 100%)	Fields in Vienna Basin	1,500
Steel	Voest-Alpine Stahl GmbH (Government, 100%)	Plants at Donawitz and Linz	4,500
Talc	Luzenac Naintsch AG	Mines at Lassing, Rabenwald, and Weisskirchen;	160
		plants at Oberfeistitz and Weisskirchen	
Tungsten	Wolfram Bergbau und Hütten GmbH (Inmet Mining Corp., 100%)	Mittersill Mine, Salzburg; conversion plant,	350
		Bergla	