



# 2019 Minerals Yearbook

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**AUSTRIA [ADVANCE RELEASE]**

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# THE MINERAL INDUSTRY OF AUSTRIA

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The mineral industry of Austria involved mainly the extraction of industrial minerals and the processing of metals. Austria also was an important source of vanadium and tungsten imports for the United States. In 2019, Austria was the third-ranked producer of fused aluminum oxide (a manufactured abrasive) (tied with the United States) and magnesite (excluding the United States) and the eighth-ranked producer of tungsten, accounting for 4.6%, 2.9%, and 1.1% of world production, respectively (Apodaca, 2021; Merrill, 2021; Shedd, 2021).

## Minerals in the National Economy

Austria's real gross domestic product (GDP) increased by 1.6% in 2019; the nominal GDP was \$446 billion (EUR 399 billion)<sup>1</sup> in 2019. In 2019, mining and quarrying output increased by 1.1% and base metals output decreased by 0.5%. In 2019, the value of output of the hydrocarbon sector was \$10.8 billion; the mining and ferrous metals sector, \$9.15 billion; the nonferrous metals sector, \$5.15 billion; and the building materials, ceramics, and stone sector, \$3.73 billion. When combined, these sectors composed 6.5% of the total GDP (Österreichisches Institut für Wirtschaftsforschung, 2021; Wirtschaftskammer Österreich, 2021, p. 8, 12, 50).

In 2019, Austria's total exports were valued at \$172 billion. Exports of mineral products were valued at \$4.27 billion; of this amount, mineral fuels and products accounted for \$3.83 billion; and ores and concentrates, \$44.5 million. Austria's top five export partners for mineral products were Hungary (which received 25% of Austria's exports of mineral products), Germany (20%), Slovenia (14%), Switzerland (9.4%), and Slovakia (6.3%). Total imports were valued at \$177 billion. Imports of mineral products were valued at \$15.5 billion; of this amount, mineral fuels and products accounted for \$13.8 billion; and ores and concentrates, \$1.12 billion. Austria's top five import partners for mineral products were Germany (which provided 21% of Austria's imports of mineral products), Kazakhstan (19%), Libya (6.0%), Italy (4.5%), and Czechia (4.1%) (United Nations Statistics Division, 2020).

In 2019, Austria's exports of metals and articles thereof were valued at \$24.6 billion; of this amount, iron, steel, and articles thereof accounted for \$12.8 billion. Austria's top five export partners for metals and articles thereof were Germany (which received 36% of Austria's exports of metals and articles thereof), Italy (8.9%), the United States (4.7%), France (4.5%), and Switzerland (4.5%). Austria's imports of metals and articles thereof were valued at \$20.5 billion; of this amount, iron, steel, and articles thereof accounted for \$9.31 billion. Austria's top five import partners for metals and articles thereof were Germany (which provided 40% of Austria's imports of

metals and articles thereof), Italy (8.8%), Switzerland (6.0%), Slovakia (4.2%), and China (4.1%) (United Nations Statistics Division, 2020).

## Production

In 2019, significant increases in production included that of other crushed stone, which increased by 39%; ammonia (N content), 37%; urea (N content), 27%; refined copper (secondary), 20%; kerosene, 18%; iron ore (gross weight) and crushed basalt, 16% each; and amphibolite, 10%. Significant decreases in production included that of magnesite, which decreased by 14%; gneiss, 11%; and natural gas liquids, 10% (table 1).

## Structure of the Mineral Industry

In 2019, a total of 2,303 companies operated in the industrial sector in Austria. Of these companies, the metalworking sector accounted for 672; the stone and ceramic sector, 212; the construction sector, 70; the mining and steel sector, 33; the nonferrous metal sector, 20; and the petroleum sector, 10. The industrial sector employed 430,818 people in Austria, which was 9.3% of the total labor force. Of this total, the metalworking sector employed 136,367 people; the construction industry, 28,851; the mining and steel sector, 17,368; the stone and ceramic sector, 12,362; the nonferrous metal sector, 6,676; and the petroleum sector, 2,403. Two mines produced iron ore and micaceous iron oxide, and one mine produced tungsten. The mineral industry in Austria was primarily privately owned, although the Government owned a 31.5% stake in OMV Aktiengesellschaft, which operated the Schwechat refinery as well as petroleum and natural gas fields in the country (table 2; Bundesministerium Landwirtschaft, Regionen und Tourismus, 2020, p. 24; Wirtschaftskammer Österreich, 2020, p. 18–19; World Bank, The, 2022).

## Commodity Review

### Metals

**Aluminum.**—AMAG Austria Metall AG operated the Ranshofen integrated plant, which produced recycled foundry alloys and high-quality aluminum rolled products in the form of plates, sheets, and strips. In 2019, AMAG's global metal shipments, primarily from Austria, increased by 2.8% to 118,100 metric tons (t), and its shipments of rolled aluminum products increased by 2.5% to 228,400 t. Sales of recycled aluminum foundry alloys by the casting division increased by 7.9% to 93,800 t (AMAG Austria Metall AG, 2020, p. 5, 61, 63, 65).

**Copper.**—Montanwerke Brixlegg AG, which was a wholly owned subsidiary of UMCOR AG of Switzerland, operated a copper refinery with a capacity of 122,000 metric tons per

<sup>1</sup>Where necessary, values have been converted from euro area euros (EUR) to U.S. dollars (US\$) at the annual average exchange rate of EUR0.893=US\$1.00 for 2019.

year (t/yr) at Brixlegg in the State of Tyrol; this was the only copper refinery in Austria. The refinery was a 100% recycling operation. Secondary raw materials used in the production process were sourced from Europe and other parts of the world. The refinery produced copper cathodes; round bars and cakes made of pure copper; precious metals, such as gold, silver, platinum, and palladium; and iron silicate slag. Montanwerke Brixlegg exported more than 80% of its products to Europe and other parts of the world (Montanwerke Brixlegg AG, 2020a–c).

**Iron and Steel.**—In April, voestalpine Stahl GmbH launched the construction of a fully digitalized specialty steel plant in Kapfenberg; the company had a capital spending budget of \$392 million. The plant would use an electric arc furnace powered by electricity generated according to high ecological standards in terms of energy efficiency, heat recovery, and wastewater recycling. The plant was projected to produce about 205,000 t/yr of specialty steel beginning in 2021 (voestalpine Stahl GmbH, 2019; 2020, p. 69).

In November, voestalpine started up the hydrogen electrolyzer pilot plant in Linz, which was to produce hydrogen using a carbon dioxide (CO<sub>2</sub>)-emission-free process. The hydrogen was to be used as input material to replace fossil fuels in steelmaking. The pilot plant was the world's largest zero-emissions hydrogen plant. The primary objective of the pilot project was to investigate the scalability of the process to an industrial scale. If the process was shown to be economically feasible, it was anticipated to be able to reduce voestalpine's CO<sub>2</sub> emissions by about one-third between 2030 and 2035. The voestalpine group also completed construction of its continuous casting plant (CC4 unit) at the Donawitz site; the plant had an annual production capacity of 950,000 t and a capital investment of \$112 million. This highly digitized facility would replace the CC2 unit, which was considered obsolete. The new plant was anticipated to be commissioned in early 2020 (Collins, 2019; voestalpine Stahl GmbH, 2019; 2020, p. 56, 57, 67, 69).

**Tungsten.**—Wolfram Bergbau und Hütten AG (WBH), which was a subsidiary of Sandvik AB of Sweden, was a world-leading vertically integrated manufacturer of tungsten carbide and tungsten metal powders and the only integrated tungsten producer outside of Asia. The company operated an underground scheelite mine in Mittersill and a refining and powder manufacturing facility in St. Martin. The refining and powder manufacturing facility sourced its raw material of tungsten ore concentrates from the Mittersill Mine and from imports; other raw materials used at the facility included secondary raw materials (scrap) and crude and refined intermediate products. In 2019, WBH conducted more than 5,000 meters (m) of core drilling as part of exploration activity, and construction of a second underground screening and crushing plant was ongoing; this plant was expected to start up in 2023. WBH employed 67 people. In 2019, WBH extracted 551,046 t of tungsten ore from the Mittersill Mine, which was an increase of 1.2% from the 544,390 t extracted in 2018, although the production of concentrate decreased by 6.9% to 3,978 t from 4,275 t in 2018. In 2019, Austria imported 1,159 t of tungsten ores and concentrates, primarily from Russia (accounting for 58% of Austria's imports of tungsten ores and concentrates, by quantity), Spain (19%), and Mongolia (14%).

Austria imported 2,499 t of tungsten articles (including waste and scrap), primarily from Germany (40%), Sweden (34%), and the United Kingdom (12%). Austria exported 1 t of tungsten ore and concentrates in 2019 (table 1; Bundesministerium Landwirtschaft, Regionen und Tourismus, 2020, p. 45, 46, 90; United Nations Statistics Division, 2020; Wolfram Bergbau und Hütten AG, 2020, p. 1, 2, 5).

### *Industrial Minerals*

**Lithium.**—European Lithium Ltd. was the 100% owner of the Wolfsberg lithium project in Weinebene in the State of Carinthia. The project comprised 22 original and 32 overlapping exploration licenses and a mining license for 11 mining areas, which could be held in perpetuity provided its conditions were maintained. In October, the company submitted a request for deep drilling [greater than 300 m] to convert inferred resources into indicated resources as well as incorporate additional inferred and indicated resources. The proposed drilling would comprise 20 drill holes totaling 7,740 m. Metallurgical test work was conducted by Dorfner Anzaplan, an independent consultant in lithium and industrial minerals. European Lithium reported that the measured, indicated, and inferred resources were 10.98 million metric tons (Mt) at a grade of 1% lithium oxide. The company planned to produce 10,129 t/yr of lithium hydroxide during a mine life of more than 10 years, assuming a mining rate of 720,000 t/yr, starting at the end of 2023. Maximum annual extraction was expected to be 800,000 t/yr (producing 67,000 t/yr of spodumene concentrate), which in turn was expected to produce approximately 10,000 t/yr of lithium hydroxide; 136,000 t/y of feldspar, and 85,000 t/yr of quartz (European Lithium Ltd., 2020a, p. 7, 8, 12; 2020b).

**Magnesium Compounds.**—In 2019, Austria produced about 692,000 t of magnesite compared with 808,000 t in 2018, which was a decrease of 14%. Magnesite was produced at 10 locations by four companies, of which the two leading producers were Veitsch-Radex GmbH & Co. OG and Styromagnesit Steirische Magnesitindustrie GmbH. Veitsch-Radex GmbH & Co., which was a subsidiary of RHI Magnesita GmbH, extracted raw magnesite at the Breitenau, Hochfilzen, and Radenthein Mines. In 2019, RHI Magnesita AG partially shut down its plant in Trieben; the total cost of the partial closure was \$15.3 million (tables 1, 2; Bundesministerium Landwirtschaft, Regionen und Tourismus, 2020, p. 49; RHI Magnesita GmbH, 2020, p. 66, 67).

### *Mineral Fuels*

**Natural Gas and Petroleum.**—OMV AG (OMV) and Rohöl-Aufsuchungs AG (RAG) explored for and produced crude petroleum and natural gas in the Vienna basin (Lower Austria) and the Molasse zone (Upper Austria and Salzburg). In 2019, Austria's production of natural gas decreased by 8% to 891 million cubic meters; that of crude petroleum, by 6% to about 4.60 million barrels (Mbbbl); and natural gas liquids (NGL), by 10% to 167,000 barrels. Of the total crude petroleum and natural gas liquids output, 89% was extracted from the Vienna basin and 11% came from the Molasse zone. OMV provided about 88% of the country's total output of petroleum and NGL, whereas RAG produced the remaining 12%.

OMV produced virtually all the NGL produced in the country. In 2019, OMV conducted 26,161 m of drilling and established two exploration wells and nine production wells. RAG conducted 12,724 m of drilling and established two exploration wells and one storage well (table 1; Fachverband der Mineralölindustrie Österreichs, 2020, p. 14–17, 20, 21).

OMV's Schwechat refinery, which had the capacity to produce 9.6 Mt of crude petroleum per year (about 77.2 Mbbl of refined product) was the only refinery in Austria and one of the largest inland refineries, in terms of production, in Europe. In 2019, Schwechat processed 9.3 Mt of crude petroleum (about 74.8 Mbbl of refined product) compared with 9.1 Mt in 2018. The refinery produced, in order of percentage of the refinery's total output, diesel (39%), gasoline (23%), petrochemicals (11%), jet fuel (10%), and other products (4%). In 2019, the refinery employed 820 people (Fachverband der Mineralölindustrie Österreichs, 2020, p. 14, 28).

## Outlook

In 2020, Austria's GDP is expected to decrease by 8.6% owing to global disruptions caused by the coronavirus disease 2019 (COVID-19) pandemic, followed by a sharp uptick (by 8.3%) in 2021. Austria is likely to remain a globally significant producer of magnesite and tungsten. Aluminum and steel production in the country are likely to increase with the gradual completion of multiple capacity expansion projects. Austria may become a regionally significant lithium producer in 2023 if the Wolfsberg project comes online as planned (European Lithium Ltd., 2020c, p. 8, 12; International Monetary Fund, 2020).

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TABLE 1  
AUSTRIA: PRODUCTION OF MINERAL COMMODITIES<sup>1</sup>

(Thousand metric tons, gross weight, unless otherwise specified)

Commodity	2015	2016	2017	2018	2019
<b>METALS</b>					
Aluminum, metal, secondary <span style="float:right">metric tons</span>	468,719	469,135	465,041	472,000	472,000 <sup>e</sup>
Copper, secondary:					
Smelter	62 <sup>r</sup>	59 <sup>r</sup>	66 <sup>r</sup>	67 <sup>r</sup>	68
Refinery	103	103	110 <sup>r</sup>	107 <sup>r</sup>	128
Ferrous alloys:					
Ferro-nickel:					
Gross weight <span style="float:right">metric tons</span>	2,500	2,500	2,500 <sup>e</sup>	2,500 <sup>e</sup>	2,500 <sup>e</sup>
Ni content <span style="float:right">do.</span>	1,000	1,000	1,000	1,000 <sup>e</sup>	1,000 <sup>e</sup>
Other, unspecified <sup>e</sup>	12	12	12	11 <sup>r</sup>	11
Iron ore, mine, including micaceous iron oxide:					
Gross weight	2,783	2,777	2,982	2,804	3,243
Fe content	891	889	954	897	897
Iron and steel:					
Pig iron	5,805	5,642	6,335	5,269	5,750
Steel:					
Raw steel	7,687	7,438	8,134	6,885	7,423
Products, semimanufactured, hot rolled	7,601	7,594	7,999	7,495 <sup>r</sup>	7,244
Lead, refinery, secondary <span style="float:right">metric tons</span>	24,399	24,000 <sup>e</sup>	24,000 <sup>e</sup>	24,000 <sup>e</sup>	24,000 <sup>e</sup>
Tungsten, mine:					
Ore <span style="float:right">do.</span>	535,762	515,172	508,425	544,390	551,046
Concentrate:					
Gross weight <span style="float:right">do.</span>	3,879	4,184	4,150	4,275 <sup>r</sup>	3,978
W content <span style="float:right">do.</span>	861	954	975	936	892
Zinc, metal <span style="float:right">do.</span>	25,453	27,339	34,152	34,000 <sup>e</sup>	34,000 <sup>e</sup>
<b>INDUSTRIAL MINERALS</b>					
Cement:					
Clinker <sup>e</sup>	3,200	3,200	3,200	3,200	3,200
Hydraulic	4,700 <sup>r</sup>	4,800	4,900	5,200	5,300 <sup>e</sup>
Clay:					
Kaolin <span style="float:right">metric tons</span>	32,126	36,520	32,000 <sup>e</sup>	32,000 <sup>e</sup>	32,000 <sup>e</sup>
Unspecified, including bentonite, brick clay, and illite	1,923	1,736	1,901	1,883 <sup>r</sup>	1,964
Feldspar, byproduct of silica processing <sup>e</sup> <span style="float:right">metric tons</span>	35,000	35,000	35,000	35,000	35,000
Graphite, amorphous, crude <sup>e</sup> <span style="float:right">do.</span>	700	800	1,000	1,000	1,000
Gypsum, mine, including anhydrite	715	674	712	837	900
Lime, including quicklime <sup>e</sup>	820	830	830	800	820
Magnesite	703	646	730	808	692
Mica <sup>e</sup> <span style="float:right">metric tons</span>	4,000	3,800	4,400	4,500	4,500
Nitrogen, N content:					
Ammonia	427 <sup>r</sup>	453 <sup>r</sup>	417 <sup>r</sup>	333 <sup>r</sup>	455 <sup>e</sup>
Urea	200	205	193	162	206 <sup>e</sup>
Salt:					
Brine salt	969	1,028	1,150	1,170	1,206
Evaporated salt, mechanical heating process <sup>e</sup>	1,100	1,100	1,100	1,100	1,000
Rock salt <span style="float:right">metric tons</span>	248	245	388	376	400 <sup>e</sup>
Sand and gravel, industrial:					
Quartz and quartzite, including pegmatite	319	388	421	475	471
Quartz sand	1,008	841	902 <sup>r</sup>	1,126	1,123
Sodium, compounds, manufactured <sup>e</sup>	300	300	300	300	300
Stone, sand, and gravel, construction:					
Sand and gravel:					
Dolomite, loose rocks and gravel	2,902	3,176	3,311	3,300 <sup>e</sup>	3,300 <sup>e</sup>
Unspecified	26,389	26,297	30,927	31,617 <sup>r</sup>	30,619

See footnotes at end of table.

TABLE 1—Continued  
AUSTRIA: PRODUCTION OF MINERAL COMMODITIES<sup>1</sup>

(Thousand metric tons, gross weight, unless otherwise specified)

Commodity	2015	2016	2017	2018	2019	
INDUSTRIAL MINERALS—Continued						
Stone, sand, and gravel, construction:—Continued						
Stone, crushed:						
Amphibolite	1,117	1,218	1,474	1,825	2,011	
Basalt, not included in diabase	1,614	1,537	1,601	1,912	2,211	
Diabase, of basaltic rocks	1,929	1,910	1,626	1,602	1,616	
Dolomite	3,964	3,971	3,918	4,267 <sup>r</sup>	4,237	
Gneiss	1,513	1,407	1,462	1,597	1,425	
Granite, including granulite	2,797	2,890	2,913	2,857	2,770	
Limestone, including marble	21,060	20,863	20,889	21,075 <sup>r</sup>	20,958	
Marl	895	954	1,083	1,215	1,156	
Serpentine	1,464	1,372	1,152	1,186	1,239	
Other, including conglomerate and sandstone	16	22	22	18	25	
Sulfur, byproduct, natural gas and petroleum, S content	metric tons	8,502	5,474	7,691	7,700 <sup>e</sup>	7,700 <sup>e</sup>
Talc and related minerals, talc, including leucophyllite, white mica	do.	122,326	123,040	123,558	127,866	124,184
MINERAL FUELS AND RELATED MATERIALS						
Coke, metallurgical	1,329	1,352	1,350 <sup>e</sup>	1,350 <sup>e</sup>	1,350 <sup>e</sup>	
Natural gas liquids	thousand 42-gallon barrels	611	590	387	185	167
Natural gas, marketable, net	million cubic meters	1,183	1,253	1,742	969	891
Petroleum: <sup>2</sup>						
Crude	thousand 42-gallon barrels	6,210	5,515	5,165	4,867	4,595
Refinery:						
Bitumen, bituminous mixtures and other residues	do.	1,757	2,018	1,854	2,236	2,254
Diesel	do.	25,692	23,499	24,633	25,759	27,057
Distillate fuel oil	do.	7,012	6,692	6,266	6,344	6,244
Gasoline	do.	15,456	14,979	15,158	17,299	15,957
Kerosene, including jet fuel	do.	5,337	5,333	4,954	6,228	7,375
Liquefied petroleum gas	do.	1,450	1,427	1,206	1,288	1,290 <sup>e</sup>
Lubricants, including miscellaneous oils	do.	287	517	500 <sup>e</sup>	500 <sup>e</sup>	500 <sup>e</sup>
Naphtha	do.	7,751	7,891	6,592	8,434	8,430 <sup>e</sup>
Residual fuel oil	do.	4,282	4,222	4,402	3,922	3,920 <sup>e</sup>
Other, unspecified	do.	269	670	615	650	650 <sup>e</sup>
Refinery fuel, and losses	do.	3,176	1,938	2,139	2,146	2,150 <sup>e</sup>
Total	do.	72,500	69,200	68,300	74,800	75,800
Shale oil <sup>e,2</sup>	do.	498	400	400	400	400

<sup>e</sup>Estimated. <sup>r</sup>Revised. do. Ditto.

<sup>1</sup>Table includes data available through December 28, 2020. All data are reported unless otherwise noted. Totals and estimated data are rounded to no more than three significant digits; may not add to totals shown.

<sup>2</sup>Converted from metric tons to barrels.

TABLE 2  
AUSTRIA: STRUCTURE OF THE MINERAL INDUSTRY IN 2019

(Thousand metric tons unless otherwise specified)

Commodity	Major operating companies and major equity owners	Location of main facilities	Annual capacity
Alumina, fused	Treibacher Schleifmittel GmbH (Imerys S.A., 100%)	Plant at Villach, State of Carinthia	100
Aluminum, secondary	AMAG Austria Metall AG (B&C Industrieholding GmbH, 52.7%; RLB OÖ Alu Invest GmbH, 16.5%; AMAG Employees Private Foundation, 11.5%; Treibacher Industrieholding GmbH, 8.2%; Esola Beteiligungsverwaltungs GmbH, 4.1%; free floating shares, 7.0%)	Ingot plant at Ranshofen, State of Upper Austria	345 °
Do.	Hammerer Aluminium Industries GmbH	Extrusion plant at Ranshofen, State of Upper Austria	75
Do.	Hydro Aluminium Nenzing GmbH (Norsk Hydro ASA, 100%)	Plant at Nenzing, State of Vorarlberg	59
Do.	Speedline Aluminium Giesserei GmbH (Swiss Alu Trading AG, 100%)	Plant at Schlins, State of Vorarlberg	49
Do.	Aluminum Lend GmbH (Salzburger Aluminium AG, 100%)	Ingot plant at Lend, State of Salzburg	40
Do.	NEUMAN Aluminium Austria GmbH (CAG Holding GmbH, 100%)	Plant at Marktl, State of Styria	16
Do.	Almaxal Brüder Tschirk GmbH	Plant at Neudörfel, State of Burgenland	NA
Do.	Almeta Metallumschmelzwerk GmbH	Plant at Vienna; Plant at Sollenau, State of Lower Austria	NA
Do.	Bavaria Industriekapital AG	Plant at Gleisdorf, State of Styria	NA
Do.	Georg Fischer Automotive AG	Plant at Altenmarkt, State of Salzburg; Plant at Herzogenburg, State of Lower Austria	NA
Do.	Nemak Linz GmbH (Tenedora Nemak S.A. de C.V., 100%)	Plant at Linz, State of Upper Austria	NA
Calcium carbonate, ground	Omya GmbH (Omya AG, 100%)	Plant at Gummern, State of Carinthia	2,500
Do.	do.	Plants at Golling, State of Salzburg; Neu Pirka, State of Styria; and Ulmerfeld-Hausmening, State of Lower Austria	NA
Cement	Lafarge Perlmooser AG (LafargeHolcim Ltd., 70%, and Strabag SE, 30%)	Plant at Mannersdorf, State of Lower Austria; plant at Retznei, State of Styria	1,600
Do.	Wietersdorfer & Peggauer Zementwerke GmbH (Knoch, Kern & Co. KG, 100%)	Plant at Peggau, State of Styria; Plant at Wietersdorf, State of Carinthia	1,100
Do.	Schretter & Cie GmbH & Co KG	Plant at Vils, State of Tyrol; grinding plant in Kirchbichl, State of Tyrol	830
Do.	Zementwerk LEUBE GmbH (LEUBE Baustoffe, 100%)	Plant at Gartenau, State of Salzburg	700
Do.	SPZ Zementwerk Eiberg KG (Rohrdorfer Gruppe, 100%)	Plant at Kufstein, State of Tyrol	600
Do.	Gmundner Zement Produktions- und Handels GmbH	Plant at Hatschek, State of Upper Austria	580
Do.	Kirchdorfer Zementwerk Hofmann GmbH	Plant at Kirchdorf, State of Upper Austria	550
Do.	Wopfinger Baustoffindustrie GmbH	Plant at Wopfing, State of Lower Austria	270
Chalk	Mühlendorfer Kreidefabrik Margit-Hoffman Ostenhof KG (Omya AG, 100%)	Plant at Müllendorf, State of Burgenland	NA
Clays, including brick clay	Wienerberger AG	Clay mines at Göllersdorf, State of Lower Austria; at Rotenturm and Stoob, State of Burgenland; and at Apfelberg and Weißkirchen, State of Styria	NA
Clays, kaolin, and silica sand	Österreichische Kaolin- und Montanindustrie AG	Mines at Weinzierl and Kriechbaum; processing plant at Aisthofen, State of Upper Austria	170
Copper, refined, secondary	Montanwerke Brixlegg AG (UMCOR AG, 100%)	Plant at Brixlegg, State of Tyrol	122
Feldspar	Quarzwerke Österreich GmbH (Quarzwerke GmbH, 100%)	Mine and plant at St. Georgen an der Gusen, State of Upper Austria	NA
Ferroalloys, FeV, FeMo, FeNi	Evonik Treibacher GmbH (Treibacher Industrie AG, 50%, and Evonik Industries, 50%)	Plant at Althofen, State of Carinthia	65 °

See footnotes at end of table.

TABLE 2—Continued  
AUSTRIA: STRUCTURE OF THE MINERAL INDUSTRY IN 2019

(Thousand metric tons unless otherwise specified)

Commodity	Major operating companies and major equity owners	Location of main facilities	Annual capacity
Graphite, natural	Graphitbergbau Mühlendorf Mörth GmbH	Trandorf Mine at Weinberg and extended to Weinbergwald, State of Lower Austria; mine at Eichenwald, State of Styria	NA
Do.	Grafitbergbau Kaisersberg GmbH	Kaisersberg Mine, State of Styria	3
Gypsum and anhydrite, natural	Moldan Baustoffe GmbH & Co. KG (Salzburger Sand- & Kieswerke GmbH, 100%)	Abtenau and Moosegg Mines, near Kuchl bei Hallein, State of Salzburg	300
Do.	Saint-Gobain Rigips Austria GmbH (Compagnie de Saint-Gobain, 100%)	Mine at Grundlsee and main plant at Bad Aussee, State of Styria; Mine and plant at Puchberg, State of Lower Austria	250
Do.	Knauf GmbH	Hinterstein Mine, Spital am Pyhrn, State of Upper Austria; Mines at Dörfelstein and Tragöß-Oberort, and plant at Weißenbach bei Liezen, State of Styria	160
Do.	Gipswerk Schretter & Cie GmbH (Schretter & Cie GmbH & Co KG, 100%)	Mine at Weißenbach am Lech and plant at Vils, State of Tyrol	NA
Iron ore	VA Erzberg GmbH (voestalpine AG, 100%)	Erzberg Mine at Eisenerz, State of Styria	3,000
Iron oxide, micaceous	Kärntner Montanindustrie GmbH	Mine near Waldenstein, State of Carinthia	NA
Limestone	voestalpine Stahl GmbH (voestalpine AG, 100%)	Mine near Kremsmauer mountain, and plant at Steyrling, State of Upper Austria	1,200
Do.	Wopfinger Baustoffindustrie GmbH	Mine near Dürnbach in Walldeg, State of Lower Austria	1,400
Do.	Kanzel Steinbruch Dennig GmbH (STRABEG SE, 100%)	Steinbruch plant, municipality of Gratkorn	400 <sup>c</sup>
Do.	LEUBE Baustoffe GmbH	Mine near Ofenauer Mountain in Golling and plant at Golling, State of Salzburg	300 <sup>c</sup>
Magnesite, crude	Veitsch-Radex GmbH & Co. OG (RHI Magnesita AG, 100%)	Mine and plant at Breitenau, State of Styria; Mine at Eichberg, State of Lower Austria; Hochfilzen Mine, area near Weissenstein, State of Tyrol; mine and processing plant at Radenthein, State of Carinthia; plant at Trieben, State of Styria	800
Do.	Styromagnesit Steirische Magnesitindustrie GmbH	Angerer, Kaintaleck and Wieser Mines, and plant near Oberdorf an der Laming, State of Styria; Hoehentauern Mine in Murtal, State of Styria; Wald Mine in the Schoberpass, State of Styria	150
Do.	PRONAT Steinbruch Preg GmbH (Schotter- und Betonwerk Karl Schwarzl Betriebsgesellschaft m.b.H., 100%)	Magnesite and dunitite (olivine rock) mine at Gulsen, and plant at Preg, State of Styria	NA
Do.	Rohrdorfer Gruppe	Mine and plant at Veitsch, State of Styria	NA
Natural gas	million cubic meters	OMV AG [Free floating shares, 43.0%; Österreichische Bundes und Industriebeteiligungen GmbH (Government), 31.5%; International Petroleum Investment Co., 24.9%; employee share programs, 0.4%; treasury shares, 0.2%]	1,010 <sup>c</sup>
Do.	do.	Rohöl-Aufsuchungs AG (EVN AG, 50.025%; Uniper Exploration & Production GmbH, 29.975%; Energie Steiermark Kunden GmbH, 10%; Salzburg AG, 10%)	276 <sup>c</sup>
Nitrogen, N content of ammonia	Borealis Agrolinz Melamine GmbH (Borealis AG, 100%)	Plant at Linz, State of Upper Austria	498

See footnotes at end of table.



TABLE 2—Continued  
AUSTRIA: STRUCTURE OF THE MINERAL INDUSTRY IN 2019

(Thousand metric tons unless otherwise specified)

Commodity		Major operating companies and major equity owners	Location of main facilities	Annual capacity
Petroleum:				
Crude	thousand 42-gallon barrels	OMV AG [Free floating shares, 43.0%; Österreichische Bundes und Industriebeteiligungen GmbH (Government), 31.5%; International Petroleum Investment Co., 24.9%; employee share programs, 0.4%; treasury shares, 0.2%]	Main fields in the Vienna Basin, State of Lower Austria, and some fields in the State of Upper Austria	5,660 <sup>c</sup>
Do.	do.	Rohöl-Aufsuchungs AG (EVN AG, 50.025%; Uniper Exploration & Production GmbH, 29.975%; Energie Steiermark Kunden GmbH, 10%; Salzburg AG, 10%)	Main fields in the State of Upper Austria, and some fields in the State of Lower Austria and the State of Salzburg	850 <sup>c</sup>
Refined products	do.	OMV AG [Free floating shares, 43.0%; Österreichische Bundes und Industriebeteiligungen GmbH (Government), 31.5%; International Petroleum Investment Co., 24.9%; employee share programs, 0.4%; treasury shares, 0.2%]	Schwechat refinery, City of Schwechat, State of Lower Austria	77,200
Rare-earth chemicals and oxides		Treibacher Industrie AG	Plant at Althofen, State of Carinthia	NA
Salt, NaCl content		Salinen Austria AG	Mines at Bad Ischl and Hallstatt, and evaporite saltworks at the Ebensee, State of Upper Austria; mine at Hallein-Dürnborg, State of Salzburg; mine at Hall in Tyrol, State of Tyrol; mine at Altaussee, State of Styria	1,200
Silica sand		Krempelbauer-Quarzsandwerk St. Georgen Hentschläger & Co. KG.	Burger and Knoll-Wizany Mines at Luftenberg, Krempelbauer and Poscher Mines at St. Georgen, and Treffling Mine at Aigen-Engerwitzdorf, State of Upper Austria	NA
Do.		Quarzwerte Österreich GmbH (Quarzwerte GmbH, 100%)	Mine and plant at Melk, State of Lower Austria; mine and plant at St. Georgen an der Gusen, State of Upper Austria	NA
Do.		Quarzsande GmbH (Zementwerk LEUBE GmbH, 100%)	Mine and plant at Eferding, mine at Bruck-Waasen, and mine at Wolfsegg, State of Upper Austria	NA
Steel, raw		voestalpine Stahl GmbH (voestalpine AG, 100%)	Plant at Linz, State of Upper Austria	6,000
Do.		voestalpine Stahl Donawitz GmbH Co & KG (voestalpine AG, 100%)	Plant at Donawitz (near Leoben), State of Styria	1,500
Do.		Breitenfeld Edelstahl AG	Plant at Mitterdorf im Mürtal, State of Styria	300
Stone, diabase, basalt		Diabaswerk Saalfelden GmbH (STRABAG SE, 100%)	Mine and plant at Saalfelden, State of Salzburg	NA
Do.		Klöcher Basaltwerke GmbH & Co KG (ASAMER Holding AG, 100%)	Mines and plants at Klöch and Oberhaag, State of Styria	NA
Talc and leucophyllite (white mica)		Naintsch Mineralwerke GmbH (Imerys S.A., 100%)	Talc mines at Lassing and Rabenwald, and plant at Oberfeistritz, State of Styria; talc and mica mine at Kleinfestritz, and a plant at Weisskirchen, State of Styria	200 <sup>c</sup>
Do.		Aspanger Bergbau und Mineralwerke GmbH & Co. KG (Wietersdorfer & Peggauer Zementwerke GmbH, 100%)	Leucophyllite mine and mica processing plant at Aspangberg-Zöbern, State of Lower Austria	NA
Tungsten:				
Ore (scheelite), gross weight		Wolfram Bergbau und Hütten AG (WBH) (Sandvik AB, 100%)	Mine at Mittersill and processing plant at Bergla, in the Felbertauerntal, State of Salzburg	600 <sup>c</sup>
Concentrate, W content	metric tons	do.	do.	1,000 <sup>c</sup>
Carbide, powders	do.	do.	Primary and secondary chemical treatment and sintering plant at St. Martin, in the Sulmtal, State of Styria	3,000 <sup>c</sup>
Do.	do.	Treibacher Industrie AG	Plant at Althofen, State of Carinthia	NA

See footnotes at end of table.

TABLE 2—Continued  
 AUSTRIA: STRUCTURE OF THE MINERAL INDUSTRY IN 2019

(Thousand metric tons unless otherwise specified)

Commodity		Major operating companies and major equity owners	Location of main facilities	Annual capacity
Tungsten:—Continued				
Metal, powders	metric tons	Wolfram Bergbau und Hütten AG (Sandvik AB, 100%)	Primary and secondary chemical treatment and sintering plant at Sankt Martin im Sulmtal, State of Styria	3,600 <sup>c</sup>
Do.	do.	Plansee SE (Plansee Holding AG, 100%)	Plants at Liezen, State of Styria, and at Reutte, State of Tirole	NA
Do.	do.	Treibacher Industrie AG	Plant at Althofen, State of Carinthia	NA
Oxides	do.	do.	do.	NA

<sup>c</sup>Estimated; estimated data are rounded to no more than three significant digits. Do., do. Ditto. NA Not available.