



2020–2021 Minerals Yearbook

NORTH KOREA [ADVANCE RELEASE]

THE MINERAL INDUSTRY OF NORTH KOREA

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Note: In this chapter, information for 2020 is followed by information for 2021.

North Korea had various mineral resources, such as metallic minerals (copper, gold, iron, lead, manganese, molybdenum, nickel, rare earths, silver, tungsten, and zinc), industrial minerals (graphite, magnesite, and phosphate rock), and mineral fuels and related materials (coal and uranium). The country's mineral reserves could not be verified by outside sources owing to the confidential nature of the Government information and the country's different system of assessing economic extraction. In 2020, mineral production in North Korea was insignificant compared with the country's reserves owing to its limited infrastructure and technology, and the continued United Nations (U.N.) sanctions. The record typhoon rainfall between August and September caused extensive flood damage across the country, including to mineral facilities in Hamnam, Hwangbuk, Hwangnam, and Kangwon Provinces (Jeon, 2019; Koh and others, 2019, p. 262–265; Ham, 2020; Silberstein, 2020).

Minerals in the National Economy

In 2020, the mineral industry remained important to North Korea's economy. The country's real gross domestic product (GDP) decreased by 4.5% compared with an increase of 0.4% in 2019; the nominal GDP was \$29.4 billion.¹ The decrease in the GDP was attributed mainly to decreases in the output of the mining sector (a 10% decrease); the agriculture, forestry, and fishing sector (an 8% decrease); and the manufacturing sector (a 4% decrease). The agriculture, forestry, and fishing sector accounted for 22% of the country's GDP; the manufacturing sector, 17%; the mining sector, 11%; and the construction sector, 10% (Bank of Korea, 2021, p. 1, 6).

The value of North Korea's exports in 2020 totaled \$89 million, which was down from \$278 million in 2019, \$243 million in 2018, and \$1.77 billion in 2017. Compared with the value of exports in 2017, the considerable decrease in the value of exports in the years 2018–20 was due to the tighter sanctions imposed by the U.N. Security Council under Resolution 2371 in August 2017, Resolution 2375 in September 2017, and Resolution 2397 in December 2017 following the country's nuclear and missile tests (Statistics Korea, 2022a; United Nations Security Council, 2023).

North Korea's exports of "mineral products," as defined under chapters 25 through 27 of the Harmonized System (HS) and which accounted for 21% of total exports, decreased by 46% to \$19 million in 2020, including \$13 million for commodities defined under HS chapter 27 (mineral fuels), and \$6 million for

commodities defined under HS chapter 26 (ores, slag, and ash). The export value of base metals and articles of base metal (as defined under HS chapters 72 through 83), which accounted for 20% of total exports, decreased by 56% to \$18 million, including ferrosilicon, which was valued at \$11 million. Iron and steel were included in the 2017 United Nations sanctions on North Korea's trade; ferrosilicon might have been classified as silicon by the Government of China (Korea International Trade Association, 2020, p. 6; Statistics Korea, 2022a; Zen Innovations AG, 2023).

The value of total imports decreased to \$774 million in 2020 from \$3.0 billion in 2019. Imports of mineral products (mostly mineral fuels) decreased by 33% to \$240 million, accounting for 31% of total imports. Imports of base metals and articles of base metal decreased by 61% to \$1.2 million. China and Russia supplied 95% and 5%, respectively, of North Korea's imports of mineral fuels (Statistics Korea, 2022a, b).

The mineral resources laws (Act No. 14 of 1993 and Amendment Act No. 439 of 2020) provide the basic guidelines for North Korea's mineral exploration, development, and use, and for its estimation of mineral reserves. Coal-mining activities are subject to the country's coal law (Act No. 3044 of 2009 and Amendment Act No. 2388 of 2018). Development and production of coal from small-scale mines (for local use only) are governed by Act No. 256 of 2014. Sea salt mining is governed by Act No. 255 of 2014 (Democratic People's Republic of Korea, 2016, p. 198, 199, 242–248, 254–260; National Intelligence Service, 2022, p. 752, 838).

Production

Data on mineral production are in table 1. In 2020, North Korea's production of raw steel and cement increased by 7% and 2%, respectively, as a result of the "80-day battle" productivity campaign to recover the national economy from the coronavirus disease 2019 (COVID-19) pandemic and the late summer flooding. Ammonia was not produced during the year. Other significant decreases in production included that of mined tungsten, which decreased by 64% (estimated); sea salt, 30% (estimated); and metallurgical coke, 18%. The decrease in mineral production was attributed to the COVID-19 pandemic (An, 2020b).

Structure of the Mineral Industry

Table 2 is a list of major mineral industry facilities. North Korea's mineral industry was dominated by coal and iron ore mining. Mining and mineral-processing enterprises were primarily owned and operated by the Government. The Ministry of State Natural Resources Development was

¹North Korea's nominal gross domestic product was estimated from the prices and value-added ratios of the Republic of Korea (Bank of Korea, 2021, p. 7). Values have been converted from Republic of Korea won (KRW) to U.S. dollars (US\$) at the annual average exchange rates of KRW1,180=US\$1.00 for 2020 and KRW1,144=US\$1.00 for 2021.

engaged in the exploration for mineral resources (Park and others, 2018, p. 103–104).

Since 2004, companies from China, France, Japan, and Switzerland had signed a total of 40 contracts to develop and operate mineral facilities in North Korea, including gold deposits (10 mining sites), iron ore deposits (9), coal deposits (9), copper deposits (5), and other mineral deposits (7). As of 2017 (the latest year for which data were available), of these 40 contracts, only 6 to 10 mines that had been signed with Chinese companies were considered active; these mines included the Hyesan Youth Mine (copper), the Jangjin Mine (molybdenum), and the Musan Mine (iron ore) (Lee, 2018; Chung, 2019).

Tanchon in Hamnam Province was the country's largest mineral industry area. The area had 56 active mines (for graphite, lead, magnesite, iron, phosphate rock, and zinc), related mineral processing facilities, and supporting infrastructure (Jeon, 2019).

Commodity Review

Metals

Iron Ore.—North Korea's iron ore production decreased by 9% to about 2.6 million metric tons (Mt) in 2020 owing to the suspension of exports to China. Since the end of January 2020, North Korea had closed the border with China after the breakout of the COVID-19 pandemic. North Korea had been officially banned from exporting iron metal and iron ore by the U.N. sanctions under Resolution 2371 in August 2017. For this reason, the country's production of iron ore had declined and remained below about 3.3 Mt from 2018 through 2020 compared with 5.7 Mt in 2017 (table 1; Jang, 2020b; United Nations Security Council, 2023).

Tungsten.—In 2020, North Korea's tungsten concentrate exports were valued at \$4.5 million, accounting for 81% of the country's metallic ore exports; tungsten along with molybdenum was not listed in the U.N. sanctions. Production of tungsten decreased by 64% (estimated) to 410 metric tons (W content), all of which was exported to China. The decrease was attributed to the closure of the border with China and the suspension of trade to prevent the spread of COVID-19. The tungsten exports to China were suspended in late January, resumed between June and August, and were then suspended again (table 1; Shin, 2021; Zen Innovations AG, 2022).

Industrial Minerals

Cement.—Cement production increased by 2% to about 5.7 Mt in 2020 owing to increased demand for construction materials in flood-damaged areas. During the "80-day battle" productivity campaign starting in October, the Suncheon Cement Complex in Pyongnam Province and the Cheonnaeri Cement Factory in Kangwon Province ramped up cement output by 110% and 120%, respectively (An, 2020a).

In March, the North Korean Government asked cement factories to replace anthracite coal in cement production with lignite to reduce the use of imported petroleum. As a heating source used in cement factories, lignite requires less heavy fuel oil than does anthracite because it has a lower ignition temperature.

The 2017 U.N. sanctions on North Korea's fuel imports took effect in January 2018 and resulted in a reduced amount of heavy fuel oil imports by North Korea, which negatively affecting the cement industry. In addition, the shutdown of the border with China in late January 2020 also affected trade, including heavy fuel imports (table 1; Jang, 2020a).

Fertilizer.—The construction of the Suncheon Phosphate Fertilizer Factory was completed in May 2020. The construction site was the old Suncheon Nitrolime Fertilizer Factory in Suncheon. The new factory was estimated to have the capacity to produce 35,000 metric tons per year of phosphoric acid. Along with the construction of the factory, a project to renovate phosphate rock mines had begun at the Chungsan, the Pungnyeong, and the Young-yu Mines (An, 2020c; DPRK Today, 2020; Rhee, 2020, p. 13).

Mineral Fuels and Related Materials

Uranium.—Since North Korea asked the International Atomic Energy Agency (IAEA) inspectors to leave the country in April 2009, the IAEA had no access to North Korea for implementing the Non-Proliferation of Nuclear Weapons Safeguards Agreement. The Pyongsan uranium facilities in Hwangbuk Province were considered core components of the country's nuclear program. Based on satellite imagery from November, the Pyongsan uranium mine and its associated concentration plant continued operations even after multiple typhoons in 2020. Although flooding was found along the stream adjacent to the Pyongsan facilities, the facilities seemed not to have been seriously damaged by these late summer typhoons (International Atomic Energy Agency, 2020, p. 2, 5; Makowsky and others, 2020).

MINERAL INDUSTRY HIGHLIGHTS IN 2021

In 2021, North Korea's nominal GDP was \$31.4 billion, of which the manufacturing sector accounted for 18%, and the construction sector and the mining sector, 10% each. The country's real GDP decreased by 0.1% owing to decreases in the output of mining (a 12% decrease) and manufacturing (a 3.3% decrease) (Bank of Korea, 2022, p. 1, 6).

North Korea's exports of mineral products in 2021 were valued at \$18 million, which accounted for 22% of total exports (\$82 million); those of base metals and articles of base metal were valued at \$32 million. Imports of mineral products were valued at \$372 million, accounting for 59% of total imports (\$631 million); those of base metals and articles of base metal were valued at \$177,000 (Statistics Korea, 2022a; Zen Innovations AG, 2023).

North Korea's production of mined tungsten in 2021 was estimated to have decreased by 88%, and that of anthracite and lignite, by 18% each. The decreases resulted from the continued border closure with China and the suspension of trade. The number of mines in North Korea in 2021 was estimated to remain the same as in 2020: 242 metal mines, 241 coal mines, and 227 industrial mineral mines (table 1; Korea Trade-Investment Promotion Agency, 2022; Statistics Korea, 2022c).

In January, the Government of North Korea announced the new 5-year economic development plan starting in 2021.

The plan emphasized the importance of the metal (especially iron and steel) and chemical industries. These two industries were considered the main sectors for future development to overcome the country's economic difficulties in attaining self-sufficiency in production (Cha, 2021).

In August, the law on forest was supplemented with 1 chapter containing 19 articles for a unified and planned approach to the creation and management of forests. The amendment to the forest law was expected to strengthen controls over deforestation as well as prohibit unauthorized mining activities (Rodong Sinmun, The, 2021a).

In September, the coal mining company Myongchon Area Coal Mining Complex completed the reconstruction of the Soksong Mine in Hambuk Province. The mine was anticipated to supply high-quality lignite to metal, chemical, and electric power industries in the area (Rodong Sinmun, The, 2021b).

Outlook

In the medium term, the tighter 2017 U.N. sanctions placed on North Korea's trade will likely continue to lead to decreases in North Korea's output of major mineral commodities, such as copper and magnesite. As long as the demand from China remains stable, however, North Korea may increase its output and export of nonsanctioned mineral commodities, such as molybdenum and tungsten, after the pandemic is over. Fertilizer output is expected to increase once the Suncheon Phosphatic Fertilizer Factory reaches its full capacity. The new 5-year economic development plan is likely to boost iron and steel production in the coming years. Because the Soksong Mine started operations, and because cement factories are expected to replace anthracite with lignite to reduce consumption of imported heavy fuel oil, lignite output may likely increase. In the long term, the mineral industry will likely remain important to North Korea's economy but may continue to face challenges, such as the shortage of electricity, infrastructure, and investment.

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TABLE 1
NORTH KOREA: PRODUCTION OF MINERAL COMMODITIES¹

(Metric tons, gross weight, unless otherwise specified)

| Commodity ² | 2017 | 2018 | 2019 | 2020 | 2021 |
|---|----------------------|--------------------|---------------------|--------|--------|
| METALS | | | | | |
| Copper: ^c | | | | | |
| Mine, concentrates, Cu content | 10,000 | 10,000 | 10,000 | 10,000 | 10,000 |
| Smelter: | | | | | |
| Primary | 10,000 | 10,000 | 10,000 | 10,000 | 10,000 |
| Secondary | 5,000 | 5,000 | 5,000 | 5,000 | 5,000 |
| Refinery: | | | | | |
| Primary | 10,000 | 10,000 | 10,000 | 10,000 | 10,000 |
| Secondary | 5,000 | 5,000 | 5,000 | 5,000 | 5,000 |
| Gold, mine, Au content ^c | 1,000 | 1,000 | 1,000 | 1,000 | 1,000 |
| | kilograms | | | | |
| Iron ore, mine: | | | | | |
| Gross weight | 5,740 | 3,280 | 2,830 | 2,580 | 2,650 |
| | thousand metric tons | | | | |
| Fe content | 3,560 | 2,030 | 1,750 | 1,600 | 1,640 |
| | do. | | | | |
| Iron and steel, raw steel | 1,090 | 810 | 680 | 730 | 662 |
| | do. | | | | |
| Lead: ^c | | | | | |
| Mine, Pb content | 35,000 | 30,000 | 26,000 | 24,000 | 25,000 |
| Refinery, primary | 2,000 | 2,000 | 3,000 | 3,000 | 3,000 |
| Silver, mine, Ag content ^c | 20,000 | 20,000 | 20,000 | 20,000 | 20,000 |
| | kilograms | | | | |
| Tungsten, mine, concentrate, W content ^c | 310 | 1,410 | 1,130 | 410 | 50 |
| Zinc: ^c | | | | | |
| Mine, Zn content | 20,000 | 20,000 | 20,000 ^r | 20,000 | 20,000 |
| Smelter, primary and secondary | 15,000 | 10,000 | 10,000 | 10,000 | 10,000 |
| INDUSTRIAL MINERALS | | | | | |
| Cement, hydraulic | 6,840 | 5,830 | 5,600 | 5,690 | 5,960 |
| | thousand metric tons | | | | |
| Graphite: ^c | | | | | |
| Amorphous | 1,000 | 3,600 ^r | 3,600 ^r | 3,600 | 3,600 |
| Crystalline flake | 4,500 | 4,500 ^r | 4,500 ^r | 4,500 | 4,500 |
| Magnesite ^c | 380,000 | 70,000 | 70,000 | 70,000 | 70,000 |
| Nitrogen, ammonia, N content | 70 ^e | 70 ^e | 35 ^e | -- | -- |
| | thousand metric tons | | | | |
| Salt, sea salt ^e | 100,000 | 100,000 | 100,000 | 70,000 | 70,000 |
| MINERAL FUELS AND RELATED MATERIALS | | | | | |
| Coal: | | | | | |
| Anthracite | 15,200 | 12,700 | 14,200 | 13,300 | 10,920 |
| | thousand metric tons | | | | |
| Lignite ³ | 6,500 | 5,420 | 6,060 | 5,700 | 4,680 |
| | do. | | | | |
| Total | 21,700 | 18,100 | 20,300 | 19,000 | 15,600 |
| | do. | | | | |
| Coke, metallurgical | 176 | 181 ^r | 136 ^r | 112 | 102 |
| | do. | | | | |

^eEstimated. ^rRevised. do. Ditto. -- Zero.

¹Table includes data available through January 12, 2023. All data are reported unless otherwise noted. Totals and estimated data are rounded to no more than three significant digits.

²In addition to the commodities listed, cadmium, ferrosilicon, fertilizer, molybdenum, phosphate rock, pig iron, rare-earth, refined petroleum products, sand and gravel, silica, sulfur, stone, and uranium may have been produced, but available information was inadequate to make reliable estimates of output.

³Lignite is referred to as bituminous coal in North Korea.

TABLE 2
NORTH KOREA: STRUCTURE OF THE MINERAL INDUSTRY IN 2021

(Thousand metric tons unless otherwise specified)

| Commodity | | Facilities, major operating companies, and major equity owners | Location of main facilities | Annual capacity ^{e,1} |
|------------------------|-------------|--|--|-----------------------------------|
| Cement | | 2.8 Cement Complex | Kyungam and Madong plants, Hwangbuk Province | NA |
| Do. | | Cheonnaeri Cement Factory | Cheonnaeri County, Kangwon Province | 1,200 |
| Do. | | Gomusan Cement Factory | Chongjin, Hambuk Province | 2,000 |
| Do. | | Sangwon Cement Complex | Sangwon County, Hwangbuk Province | 2,000 |
| Do. | | Sunchon Cement Complex | Sunchon, Pyongnam Province | 3,000 |
| Clay | | Ministry of Metallurgical Industry | Jangsan Mine, Pyongnam Province | NA |
| Coal: | | | | |
| Anthracite | | Deokcheon Coal Mining Complex (Ministry of Coal Industry) | Six major mines, Deokcheon, Pyongnam Province | 4,000 |
| Do. | | Gangdong Coal Mining Complex (Ministry of Coal Industry) | Mines of Gangdong Youth, Pyongyang | 3,000 |
| Do. | | Hamnam Coal Mining Complex (Ministry of Coal Industry) | Mines of 12.16, Dungeon, and Gowon, Hamnam Province | 2,500 |
| Do. | | Kujang Coal Mining Complex (Ministry of Coal Industry) | Mines of Ryong-deung and Ryong-moon, Pyongbuk Province | 2,000 |
| Do. | | Sunchon Coal Mining Complex (Ministry of Coal Industry) | Mines of 2.8 Jikdong Youth, Chunsung Youth, Sinchang Youth, and Ryong-dae, Pyongnam Province | 4,500 |
| Lignite ² | | Anju Coal Mining Complex (Ministry of Coal Industry) | Mines of Chungnam and Hwa-poong, Chungnam, Pyongnam Province | 3,800 |
| Do. | | Myongchon Coal Mining Complex (Ministry of Coal Industry) | Soksong Mine, Hambuk Province | NA |
| Do. | | Saebjol Coal Mining Complex (Ministry of Coal Industry) and Northern Coal Mine Enterprise | Mines of Gogunwon, Ryongbuk Youth, 6.13, and Suksung, Hambuk Province | 3,700 |
| Copper: | | | | |
| Mine, Cu content | | Hye-Joong Mineral Industry (Wanxiang Industrial Group, 51%, and Hyesan Youth Copper Mine, 49%) | Hyesan Youth Copper Mine, Ryanggang Province | 15 |
| Do. | | Ministry of Mining Industry | 3.5 Youth Mine, Chagang Province | NA |
| Refined | | Ministry of Metallurgical Industry | Munpyong refinery, Munchon, Kangwon Province | 5 |
| Fertilizer: | | | | |
| Nitrogen | | Hungnam Fertilizer Complex | Plant ³ in Hungnam District | 700 |
| Do. | | Namhung Youth Chemical Complex | Plant in Anju | 550 |
| Phosphoric acid | | Haeju Smeltery | Haeju Phosphate Fertilizer Plant, Haeju | NA |
| Do. | | Sunchon Phosphatic Fertilizer Factory | Plant in Sunchon | 35 |
| Gold, mine, Au content | kilograms | Kumgang Corp. (Ministry of Mining Industry) | Soncheon Mine, Soncheon County, Pyongbuk Province | NA |
| Do. | do. | Ministry of Mining Industry | Daeyoudong Mine, Tongchang County; Sungheung Mine, Hoechang County; Unsan Mine, Unsan County, Pyongbuk Province | NA |
| Do. | do. | Workers' Party Bureau 39 | Daebong Mine, Hyesan, Ryanggang Province | 300 |
| Graphite: | | | | |
| Amorphous | metric tons | Ministry of Metallurgical Industry | Wonri Mine, Gaecheon, Pyongnam Province | 1,100 |
| Crystalline flake | do. | Kwangmyongsong General Corp. | Jeongchon Mine, Yon-an County, Hwangnam Province | 3,000 |
| Do. | do. | Ministry of Metallurgical Industry | Heungsan Mine, Chungdan County, Hwangnam Province | 2,000 |

See footnotes at end of table.

TABLE 2—Continued
NORTH KOREA: STRUCTURE OF THE MINERAL INDUSTRY IN 2021

(Thousand metric tons unless otherwise specified)

| Commodity | Facilities, major operating companies, and major equity owners | Location of main facilities | Annual capacity ^{c,1} |
|---------------------------|---|---|-----------------------------------|
| Iron ore, gross weight | Ministry of Metallurgical Industry | Dukhyun Mine, Uiju, Pyongbuk Province | 1,000 |
| Do. | do. | Eun-ryul Mine, Eun-ryul County, Hwangnam Province | 1,600 |
| Do. | do. | Musan Mining Complex, Hambuk Province | 6,000 |
| Iron and steel, raw steel | do. | Kim Chaek Iron and Steel Complex, Chongjin, Hambuk Province | 2,400 |
| Do. | do. | Hwanghae Iron Works, Songrim, Hwangbuk Province | 1,500 |
| Do. | do. | Sungjin Iron and Steel Complex, Kim Chaek, Hambuk Province | 800 |
| Do. | do. | Chollima Steel Works (formerly Kangson Works), Namu District, Pyongnam Province | 750 |
| Do. | do. | September (formerly Dukhyun) Iron and Steel Complex, Uiju, Pyongbuk Province | 700 |
| Lead: | | | |
| Concentrate, gross weight | General Bureau of the Tanchon Area Mining Industry (Ministry of Mining Industry) | Komduck Mine, Tanchon, Hamnam Province | 32 |
| Do. | Ministry of Mining Industry | Eunpa Mine, Eunpa County, Hwangbuk Province | 26 |
| Do. | do. | Seongcheon Mine, Pyongnam Province | 10 |
| Refined | Ministry of Metallurgical Industry | Munpyong refinery, Munchon, Kangwon Province | 32 |
| Magnesia clinker | General Bureau of the Tanchon Area Mining Industry (Ministry of Mining Industry) | Sungjin Refractory Plant, Kim Chaek, Hambuk Province | 300 |
| Do. | do. | Tanchon Magnesia Plant, Tanchon, Hamnam Province | 2,000 |
| Magnesite: | | | |
| Concentrate | do. | Ryongyang Mine, Tanchon, Hamnam Province | 300 |
| Do. | do. | Ssang-ryong Mine, Kim Chaek, Hambuk Province | NA |
| Do. | Chosun Seungli Trading Co. (Ministry of Mining Industry) | Namgye Mine and Saeng-jang Mine, Ryanggang Province | NA |
| Ore | General Bureau of the Tanchon Area Mining Industry (Ministry of Mining Industry) | Daeheung Youth Hero Mine, Tanchon, Hamnam Province | NA |
| Molybdenum, mine | Daeyang-Jungdang Group | Jangjin Mine, Hamnam Province | NA |
| Do. | Ministry of Mining Industry | 3.5 Youth Mine, Chagang Province | NA |
| Phosphate rock | do. | Chungsan Mine, Hamnam Province; Pungnyeon Mine, Pyongbuk Province; Ssang-ryong Mine, Hambuk Province; Young-yu Mine, Pyongnam Province | NA |
| Salt, sea salt | do. | Guisung saltern, Oncheon County, Pyongnam Province | 30 |
| Do. | do. | Kwangmyongsong saltern, Kumya County, Hamnam Province | NA |
| Do. | do. | Kwangryang-man saltern, Oncheon County, Pyongnam Province | NA |
| Do. | do. | Mamyang saltern, Sukcheon County, Pyongnam Province | NA |

See footnotes at end of table.

TABLE 2—Continued
NORTH KOREA: STRUCTURE OF THE MINERAL INDUSTRY IN 2021

(Thousand metric tons unless otherwise specified)

| Commodity | | Facilities, major operating companies, and major equity owners | Location of main facilities | Annual capacity ^{6, 1} |
|---|-------------|---|--|------------------------------------|
| Silver, mine, Ag content | kilograms | Ministry of Mining Industry | Sungheung Mine, Hoechang County, Pyongbuk Province | 6,500 |
| Do. | do. | do. | Unsan Mine, Unsan County, Pyongbuk Province | 6,300 |
| Do. | do. | do. | Daeyoudong Mine, Tongchang County, Pyongbuk Province | 1,400 |
| Tungsten, concentrate, WO ₃ content | | do. | Man-nyon Mine, Sinpyong County, Hwangbuk Province | 4 |
| Uranium, U ₃ O ₈ content | metric tons | Ministry of Atomic Energy Industry | Pyongsan Mine, Hwangbuk Province; Wolbisan Mine, Sunchon, Pyongnam Province | 100 |
| Zinc: | | | | |
| Concentrate, gross weight | | General Bureau of the Tanchon Area Mining Industry (Ministry of Mining Industry) | Komduck Mine, Tanchon, Hamnam Province | 200 |
| Do. | | Ministry of Mining Industry | Eunpa Mine, Eunpa County, Hwangbuk Province | 33 |
| Do. | | do. | Seongcheon Mine, Jangrim Workers District, Pyongnam Province | 15 |
| Refined | | General Bureau of the Tanchon Area Mining Industry (Ministry of Mining Industry) | Tanchon Zinc refinery, Tanchon, Hamnam Province | 100 |
| Do. | | Ministry of Metallurgical Industry | Munpyong refinery, Munchon, Kangwon Province | 110 |

⁶Estimated. Do., do. Ditto. NA Not available.

¹The actual production may have been much less than its capacity because of power shortages and sanctions by the United Nations.

²Lignite is referred to as bituminous coal in North Korea.

³Suspended production in 2019.