

THE MINERAL INDUSTRY OF NORTH KOREA

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North Korea's economic activities remain under state control. Economic activity continues to emphasize traditional methods of boosting production through intense labor inputs. In 1998, the Government requested guidance from the World Bank on establishing a market economy. Industrial production was interrupted frequently by power shortages (Far Eastern Economic Review, 1999).

The country produced a variety of minerals; however, most of them were for domestic consumption. Anthracite coal is the most abundant energy resource for the country. Coal resources are mainly in the Pyongyang area and in the valley of the Chongchon River. Lignite is concentrated in the North Hamgyong Province. Coal accounted for more than 80% of primary energy consumption. The decline of coal production was caused by aging of existing mining equipment and facilities.

Annual iron ore production was estimated to be at the 10-

million-ton level in the 1990's. Iron ores were mined near Musan and the Tumen River, at Tokchon and in the provinces of North Pyongan and South Hwanghae. Magnesite mines were concentrated in the Tanch'n District in South Hamgyang Province. Other important minerals in North Korea were gold, graphite, lead, silver, tungsten, and zinc.

Western geologists believe that there is a potential for commercial quantities of hydrocarbons in the Hambury and Sinpo areas. Beach Petroleum of Australia and Taurus Petroleum of Sweden were engaged in exploration activities in the country.

Reference Cited

Far Eastern Economic Review, 1999, Korea-North, *in* Asia 1999 yearbook: Far Eastern Economic Review, p. 139.

TABLE 1
NORTH KOREA: ESTIMATED PRODUCTION OF MINERAL COMMODITIES 1/

(Metric tons unless otherwise specified)

Commodity 2/ METALS	1994	1995	1996	1997	1998
Cadmium metal, smelter	100	100	100	100	100
Copper:					
Mine output, Cu content	16,000	16,000	16,000	15,000	14,000
Metal:					
Smelter:					
Primary	23,000	24,000	24,000	24,000	23,000
Secondary	5,000	5,000	5,000	5,000	4,500
Total	28,000	29,000	29,000	29,000	27,500
Refined:					
Primary	22,000	22,000	23,000	23,000	23,000
Secondary	5,000	5,000	5,000	5,000	5,000
Total	27,000	27,000	28,000	28,000	28,000
Gold, mine output, Au content kilograms	5,000	5,000	5,000	5,000	4,500
Iron and steel:					
Iron ore and concentrate, marketable:					
Gross weight thousand tons	11,000	11,000	11,000	10,000	10,000
Fe content do.	4,900	5,100	5,100	4,900	4,700
Metal:					
Pig iron do.	6,600	6,600	6,600	6,600	5,000
Ferroalloys, unspecified do.	15 r/	12 r/	10 r/	10 r/	10
Steel, crude do.	1,500 r/	1,200 r/	1,000 r/	1,000 r/	1,000
Lead:					
Mine output, Pb content	80,000	80,000	80,000	75,000	70,000
Metal:					
Smelter, primary	70,000	70,000	65,000	65,000	60,000
Refined:					
Primary	75,000	75,000	75,000	75,000	75,000
Secondary	5,000	5,000	5,000	5,000	5,000
Total	80,000	80,000	80,000	80,000	80,000
Silver, mine output, Ag content	50	50	50	50	45
Tungsten, mine output, W content	900	900	900	900	800
Zinc:					
Mine output, Zn content	210,000	210,000	210,000	210,000	200,000
Metal, primary	200,000	200,000	200,000	200,000	180,000
INDUSTRIAL MINERALS					
Barite	110,000	120,000	110,000	120,000	100,000
Cement, hydraulic thousand tons	17,000	17,000	17,000	17,000	17,000
Fluorspar	40,000	40,000	39,000	39,000	30,000
Graphite	38,000	40,000	40,000	40,000	35,000
Magnesite, crude thousand tons	1,600	1,600	1,600	1,600	1,500
Nitrogen, N content of ammonia do.	600	600	600	600	550
Phosphate rock	510,000	520,000	520,000	520,000	450,000
Salt, all types	600,000	600,000	590,000	590,000	550,000
Sulfur thousand tons	250	250	250	260	250
Talc, soapstone, pyrophyllite	180,000	180,000	180,000	180,000	150,000
MINERAL FUELS AND RELATED MATERIALS					
Coal:					
Anthracite thousand tons	70,000	71,000	70,000	70,000	55,000
Lignite do.	20,000	20,000	20,000	20,000	30,000
Total do.	90,000	91,000	90,000	90,000	85,000
Coke do.	3,000	3,000	2,900	2,900	2,000
Petroleum refinery products:					
Gasoline thousand 42-gallon barrels	8,600	8,600	8,500	8,500	8,000
Jet fuel and kerosene do.	1,800	1,800	1,700	1,700	1,500
Distillate fuel oil do.	7,900	7,800	7,700	7,700	7,500
Residual fuel oil do.	4,300	4,200	4,200	4,100	4,000
Refinery fuel and other products do.	2,400	2,400	2,300	2,300	2,000
Total do.	25,000	24,800	24,400	24,300	23,000

r/ Revised.

1/ Table includes data available through September 29, 1999.

2/ In addition to the commodities listed, crude construction materials, such as sand and gravel and other varieties of stone, presumably are produced, but available information is inadequate to make reliable estimates of output levels.