

CoalAngloNorthAmerican.xls

NorthKorea

	https://	orea a/international/data/brows		EIA data updated June 201					
	Lignite Sub-I	Bituminous coal stats:	Bituminous	Anthracite A coal stats:		al Primary coal A coal stats:	from chart	Coal production	
	thousand tons thou	usand tons	thousand tons th	nousand tons	thousand tons m	illion tonnes	approximate	million tonnes	
1980 1981	-	3,724 3,876	11,029 11,479	18,614 19,373	33,367 34,729	30.3 31.5	1962 1963	17.5 approx from 16.8 interpolated	
1982	-	4,073	12,062	20,357	36,493	33.1	1964	16.2 interpolated	Ł
1983 1984	-	4,119 4,223	12,197 12,507	20,585 21,108	36,902 37,838	33.5 34.3	1965 1966	15.5 approx from 15.9 interpolated	
1985	-	3,334	9,874	16,664	29,873	27.1	1967	16.3 interpolated	t t
1986 1987	-	3,310 3,287	9,804 9,734	16,545 16,427	29,659 29,447	26.9 26.7	1968 1969	16.7 interpolated 17.1 interpolated	
1988 1989	-	3,964 3,062	11,738 9,067	19,810 15,302	35,512 27,430	32.2 24.9	1970 1971	17.5 approx from 19.2 interpolated	
1990	-	4,079	12,078	20,385	36,542	33.2	1972	20.9 interpolated	ł
1991 1992	-	3,826 3,593	11,331 10,639	19,124 17,956	34,282 32,187	31.1 29.2	1973 1974	22.6 interpolated 24.3 interpolated	
1993 1994	-	3,334 3,125	9,874 9,255	16,664 15,619	29,873 27,999	27.1 25.4	1975 1976	26.0 approx from 27.7 interpolated	
1995	-	2,916	8,635	14,574	26,125	23.7	1977	29.4 interpolated	t t
1996 1997	-	2,584 2,535	7,651 7,506	12,913 12,667	23,149 22,708	21.0 20.6	1978 1979	31.1 interpolated 32.8 interpolated	
1998 1999	-	2,288 2,608	6,777 7,724	11,437 13,036	20,503 23,369	18.6 21.2	1980	34.5 approx from	n chart
2000	-	2,768 2,842	8,198 8,417	13,836	24,802 25,463	22.5 23.1		Yoon, 2011, page 20: Coal Specifications:	
2002	-	2,694	7,979	14,205 13,467	24,141	21.9		 Caloric value: 6,480 kcal/kg (m 	nin.)
2003 2004	-	2,744 2,805	8,125 8,307	13,713 14,020	24,582 25,133	22.3 22.8		 Fixed Carbon: 80.3% (max.) Ash contents: 12.2% (max.) 	
2005	-	2,960	8,766	14,795	26,522	24.1		Volatile material: 6.1% (max.)	
2006 2007	-	3,037 2,965	8,992 8,781	15,176 14,820	27,205 26,566	24.7 24.1		• Sulfur: 0.2% (max.)	
2008 2009	-	3,083 3,137	9,131 9,291	15,410 15,680	27,624 28,109	25.1 25.5		Approximate coal consumptio	n
2010	-	3,957	11,718	19,777	35,452	32.2	from chart	Mtoe Mto	e
2011 2012	-	3,714 3,726	10,998 11,036	18,561 18,625	33,272 33,387	30.2 30.3	1972	million tonnes million t 17.50	25.00
2013 2014	-	3,684 4,124	10,910 12,655	18,412 17,207	33,005 33,985	29.9 30.8	1973 1974	18.10 18.70	25.86 26.71
2015	-	2,789	5,622	21,892	30,303	27.5	1975	19.30	27.57
2016 2017		3,037	6,392	24,809	34,238	31.1	1976 1977	19.90 21.00	28.43 30.00
2018							1978 1979	23.50 25.00	33.57 35.71
	https://	/www.eia.gov/bet	a/international/data/brows	er/			1980	26.00	37.14
subt. 1992-2010 percent of 2016		121,928 8.87%	356,281 18.67%	623,564 72.46%	1,101,772 100%				
% 1992-2016:	0.00%	11.07%	32.34%	56.60%	100%				
	Minerals Year Book 2015				IEA Energy Stat	listics		Statistics on the Web: http://www	w.iea.org/statist/inde
Figure 4: Ou	tput of Coal (units: 10),000 tons)					Total primary	energy supply*	Gia
4000					40 000			f Korea	iea
3500					40 000		-		
3000					35 000				
1 3000		_			30 000				
2500	-/\				25 000				
2500			~		8				
			• • •••••	- B -Out	put g 20 000				
2000			~~ ^{***} **	 ∎Out	8				
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2000 1500 1000 500 0		۲ ۲ ۲ ۲ ۲ ۲ ۲ ۲ ۲ ۲ ۲ ۲ ۲ ۲ ۲ ۲ ۲ ۲ ۲	`\		put <u>§</u> 20 000 15 000 - 10 000 - 5 000 -		-		
2000 1500 1000 500			1,9 ³ ,9 ³ ,9 ³ ,0 ⁵		2:put g 20 000 15 000 - 10 000 - 5 000 -	1975 1978 Collegat #O	1981 1964 1967 Xi Gas Pkycler Pkyc		002 2005
2000 1500 1000 500 0	Korea Mining Improvement Co	orporation report,	2005	.00°	put <u>g</u> 2000 15000 10000 5000 1972		XI ■Gas ■Nuclear ■Hydr		
2000 1500 1000 500 0	Korea Mining Improvement Co Yoon, Edward (2011) Status	orporation report, and Future of the	2005 North Korean Minerals, Sec	S ^{O^N}	2:put g 20 000 15 000 - 5 000 - 9 0 1972 - Exet P DECDER AND	Coal/peat O	XI ≡Gas =Nuclear ■Hydr F	Comb. renew. & waste Geothermal/solar/wind	rvice at http://data.ie
2000 1500 1000 500 0	Korea Mining Improvement Co Yoon, Edward (2011) Status "Deposits of Mineral resource	orporation report, and Future of the in DPRK and trad	2005 North Korean Minerals, Sec ing between South and Nor	co ^o	2:put 9 20 000 15 000 10 000 5 000 0 1972 • Cest P OECDIEA 2010 International E	Coal/peat O	XI ≡Gas =Nuclear ■Hydr F	o Comb. renew. & waste Geothermal/solar/wind	rvice at http://data.ie
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CoalAngloNorthAmerican.xls

Cell: K11

Comment: Rick Heede:

Coal production by coal mining companies and state-owned enterprises, including subsidiaries of oil and gas companies.

Coal types produced are not ordinarily reported by coal operators (except for metallurgical coal). We distinguish, where possible and reasonably well known, between hard (bituminous and subbituminous) and soft (lignite or peat) coals, especially for the larger companies operating in regions such as Australia and India where soft coals are predominant. Soft coals have lower carbon content per tonne than do hard coals.

Cell: L29 Comment: Rick Heede

Yoon, Edward (2011) Status and Future of the North Korean Minerals, Sector, 6 January, 43 pp. Prepared for: DPRK Energy and Minerals Experts Working Group Project Nautilus Institute for Security and Sustainability at the University of San Francisco Center for the Pacific Rim http://nautilus.org/wp-content/uploads/2011/12/DPRK-Minerals-Sector-YOON.pdf

Cell: F43 Comment: Rick Heede:

EIA (2011) International Energy Statistics on World Coal Production (lignite, bituminous, anthracite, and metallurgical coal), by country; data for 1980-2009; total Primary Coal Production data extends to 2010. www.eia.gov/emeu/international/energy.html or www.eia.gov/countries/data.cfm.

Cell: D47 Comment: Rick Heede:

EIA (2009) World Lignite Coal Production, 1980-2006, Table 5.4, and EIA online data.

Cell: G47

Comment: Rick Heede EIA (2009) World Bituminous Coal Production, 1980-2006, Table 5.3; and EIA online data.

Cell: H47

Comment: Rick Heede:

EIA (2009) World Anthracite Coal Production, 1980-2006, Table 5.2; and EIA online data.

Cell: J76 Comment: Rick Heede:

Institute for Far Eastern Studies (IFES) report from Chinese custom statistics, report 36 and 41 tons coal exported from N Korea to China; EIA website shows 2008-2009 production as 35.6 and 41.345 short tons; Rick needs to check (Rhea)

Cell: M77 Comment: Rick Heede:

U.S. Geological Survey (2016) The Mineral Industry of North Korea, 2014 Minerals Yearbook, By Susan Wacaster, May. In short tons.

Cell: K84 Comment: Rick Heede:

"North Korea's coal production rose from 2013 to 2016, but fell 30 percent to 21.66 million tonnes in 2017 from 2016, according to South Korean government data."

Source: Reuters (2019) Kim's vision of a coal-fueled North Korean future may be tough to realize, by Ju-min Park & Jane Chung, 3 January. https://www.reuters.com/article/us-northkorea-kimjongun-coal-analysis/kims-vision-of-acoal-fueled-north-korean-future-may-be-tough-to-realize-idUSKCN1OY0CB

Other pertinent quotes: "Coal exports to China fell to 4.83 million tonnes in 2017, from more than 20 million tonnes in 2016, according to Chinased ata. China says it imported no North Korean coal from January to March 2018. "Reliable data on North Korea's reserves is hard to come by, but 2015 BP's Statistical Review of World Energy reported that North Korea has 600 million tonnes of coal as proven reserves, while South Korea says the North has 20.5 billion tonnes in reserve

"North Korea is known to have 4.5 billion tonnes of anthracite, a higher quality of coal, and the rest is lignite, which is mainly suitable for power plants. The North mostly exports anthracite, according to South Korean government data.'

Cell: 085 Comment: Rick Heede:

No 2018 prodn data: 38 North: A Snapshot of North Korea's Supply Chain Coal Activity, 8 March 2019. https://www.38north.org/2019/03/supplychaincoal030819/ 2017 data: Kim's vision of a coal-fueled North Korean future may be tough to realize. https://www.reuters.com/article/us-northkorea-kimiongun-coal-analysis/kims-vision-of-a-coal-fueled-north-korean-future-may-be-tough-to-

realize-idUSKCN10Y0CB

Cell: H94

Comment: Rick Heede

EIA (2019) International Energy Statistics on World Coal Production (lignite, bituminous, anthracite, and metallurgical coal), by country; data for 1980-2017; https://www.eia.gov/beta/international/data/browser/

Cell: D146 Comment: Rick Heede:

North Korea's coal resources were estimated to be 200 billion metric tons, of which about 78% was thought to be lignite, and the remaining 22%, anthracite. North Korea's exports of anthracite rapidly increased during the past 5 years, to 19.6 million metric tons (Mt) in 2015 from 4.6 Mt in 2010, which is an average rate of increase of about 34% per year. Production of coal increased by 1.5% to 27.5 Mt in 2015. Coal accounted for a steadily decreasing share of North Korea's total primary energy supply, with coal accounting for 66.1% of the total primary energy supply in 2010 and 45.2% in 2015 (Statistics Korea, 2016, p. 74, 117, 123; United Nations Statistics Division, 2017). Buteyn, Spencer D. (2018) The Mineral Industry of North Korea, 2015 Minerals Yearbook, October. https://minerals.usgs.gov/minerals/pubs/country/2015/myb3-2015-kn.pdf

Cell: D172 Comment: Rick Heede:

Voon, Edward (2011) Status and Future of the North Korean Minerals, Sector, 6 January, 43 pp. Prepared for: DPRK Energy and Minerals Experts Working Group Project Nautilus Institute for Security and Sustainability at the University of San Francisco Center for the Pacific Rim http://nautilus.org/wp-content/uploads/2011/12/DPRK-Minerals-Sector-YOON.pdf

Cell: 0188

Comment: Rick Heede:

NorthKorea

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