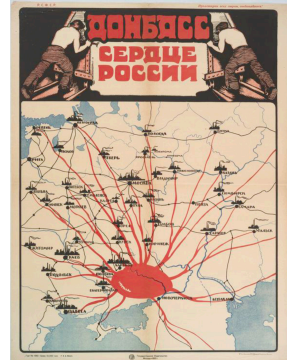


# Coal extraction data

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Climate Accountability Institute  
File started: 11 January 2005  
Last modified: July 2019



1921 Russian poster, Donets Basin is the heart of Russia.

## Ukraine

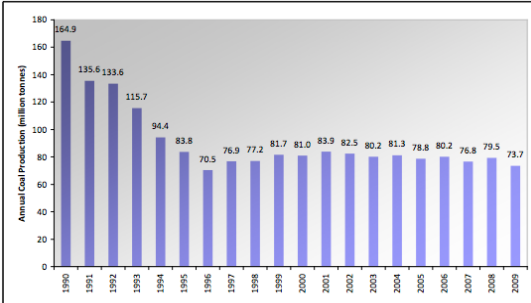
yellow column indicates original reported units

www. location

### Production / Extraction data

Year	Lignite & Sub-bituminous		Bituminous & Anthracite		Metallurgical	Total	Total
	Gross production	Gross production	Gross production	Gross production	Gross production	Gross production	Gross production
	Million tons/yr	Million tons/yr	Million tons/yr	Million tons/yr	Million tons/yr	Million tons/yr	Million tonnes/yr

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Ukraine coal production 1990-2009, BP.

Included in Former Soviet Union (FSU) coal production 1990-1991

#### EIA coal stats:

EIA total primary coal excludes metallurgical

EIA coal production data for Ukraine 1992-2010 (see page 2 for details).

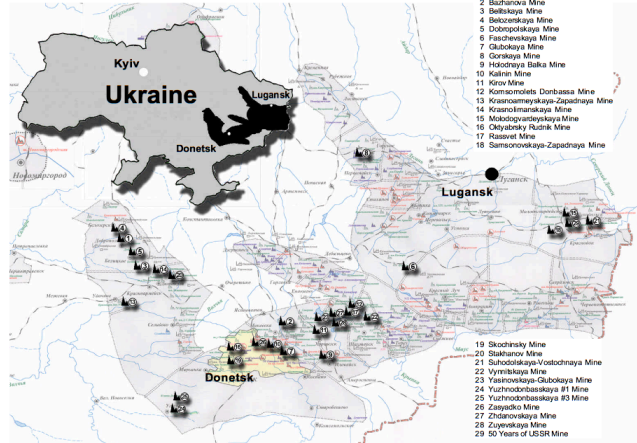
Year	Lignite	Sub-bituminous	Bituminous	Anthracite
	million tons	million tons	million tons	million tons
1991				
1992		0.5	61.1	32.9
1993		0.4	52.3	28.2
1994		0.4	42.8	23.1
1995		0.3	37.8	20.4
1996		0.2	28.2	15.2
1997		0.2	29.0	15.6
1998		0.2	29.5	15.9
1999		0.3	31.1	16.8
2000		0.3	30.9	16.7
2001		0.3	30.5	16.5
2002		0.3	30.5	16.4
2003		0.3	31.8	17.1
2004		0.2	29.5	15.9
2005		0.2	29.9	16.1
2006		0.3	30.5	16.5
2007		0.3	31.8	17.1
2008		0.3	31.9	17.2
2009		0.2	29.5	15.9
2010		0.2	28.5	15.4
2011		0.3	31.0	16.7
2012		0.3	32.4	17.5
2013		0.3	31.9	17.2
2014		0.2	27.6	9.6
2015		0.1	23.0	3.1
2016		0.1	24.2	3.4
2017		-	-	-
2018		-	-	-

Year	Metallurgical	Total	Total
	million tons	million tons	million tonnes
1991			
1992	41.5	136.0	123
1993	35.6	116.5	106
1994	29.1	95.4	87
1995	25.7	84.1	76
1996	19.2	62.8	57
1997	19.7	64.6	59
1998	20.0	65.6	60
1999	21.1	69.2	63
2000	21.0	68.8	62
2001	20.8	68.0	62
2002	20.7	67.9	62
2003	21.6	70.8	64
2004	20.0	65.7	60
2005	20.3	66.5	60
2006	20.7	68.0	62
2007	21.6	70.8	64
2008	21.7	71.0	64
2009	20.1	65.7	60
2010	19.4	63.6	58
2011	21.1	69.1	63
2012	22.0	72.2	66
2013	21.7	71.0	64
2014	13.3	50.6	46
2015	11.7	38.0	34
2016	11.6	39.3	36
2017	-	-	34
2018	-	-	34

Year	BP StatRev 2018
	Mt
1991	
1992	135.3
1993	116.7
1994	95.9
1995	85.4
1996	71.5
1997	77.7
1998	77.9
1999	82.4
2000	81.5
2001	84.3
2002	83.2
2003	80.9
2004	82.0
2005	79.6
2006	80.8
2007	77.2
2008	79.9
2009	74.4
2010	77.3
2011	85.2
2012	87.3
2013	84.8
2014	64.0
2015	38.5
2016	41.7
2017	34.2
2018	34.4

U.S. Environmental Protection Agency (2001) Coal Mine Methane in Ukraine: Opportunities For Production and Investment in the Donets Coal Basin, Washington DC, 127 pp., [www.epa.gov/cmop/docs/ukraine\\_handbook.pdf](http://www.epa.gov/cmop/docs/ukraine_handbook.pdf)

Map 1: General Mine Location Map



<b>Total</b>	-	<b>7</b>	<b>817</b>	<b>417</b>	<b>541</b>	<b>1,781</b>	<b>1,685</b>
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Coal Types:	Lignite:	Sub-Bituminous	Bituminous	Anthracite	Metallurgical	Total
		0.00%	0.37%	45.86%	23.4%	30.38%

**EIA statistics, "International Energy Statistics" 1980 - forward**

**Ukraine**

EIA data updated June 2019

Lignite EIA coal stats: thousand tons	Sub-bituminous EIA coal stats: thousand tons	Bituminous EIA coal stats: thousand tons	Anthracite EIA coal stats: thousand tons	Metallurgical EIA coal stats: thousand tons	Total Primary coal EIA coal stats: thousand tons
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**BP StatRev 2018**  
million sh tons    Mt

1980	--	--	--	--	--	--	--	--	--	--	--	191.1
1981	--	--	--	--	--	--	--	--	--	--	--	195.4
1982	--	--	--	--	--	--	--	--	--	--	--	194.1
1983	--	--	--	--	--	--	--	--	--	--	--	193.9
1984	--	--	--	--	--	--	--	--	--	--	--	182.3
1985	--	--	--	--	--	--	--	--	--	--	--	166.3
1986	--	--	--	--	--	--	--	--	--	--	--	137.3
1987	--	--	--	--	--	--	--	--	--	--	--	135.3
1988	--	--	--	--	--	--	--	--	--	--	--	116.7
1989	--	--	--	--	--	--	--	--	--	--	--	95.9
1990	--	--	--	--	--	--	--	--	--	--	--	85.4
1991	--	--	--	--	--	--	--	--	--	--	--	78.9
1992	-	506	61,052	32,941	41,510	136,009	149.2	135.3				195.4
1993	-	434	52,315	28,227	35,569	116,545	128.6	116.7				194.1
1994	-	355	42,802	23,094	29,101	95,352	105.7	95.9				193.9
1995	-	313	37,753	20,370	25,668	84,104	94.1	85.4				182.3
1996	-	234	28,186	15,208	19,164	62,792	78.9	71.5				166.3
1997	-	240	28,984	15,638	19,706	64,568	85.7	77.7				137.3
1998	-	244	29,455	15,893	20,027	65,619	85.8	77.9				135.3
1999	-	258	31,084	16,772	21,134	69,248	90.8	82.4				116.7
2000	-	256	30,878	16,660	20,994	68,788	89.8	81.5				95.9
2001	-	253	30,522	16,468	20,752	67,995	93.0	84.3				85.4
2002	-	252	30,459	16,434	20,709	67,854	91.7	83.2				78.9
2003	-	263	31,783	17,148	21,609	70,803	89.2	80.9				77.7
2004	-	244	29,485	15,909	20,047	65,685	90.4	82.0				71.5
2005	-	248	29,867	16,115	20,307	66,537	87.7	79.6				77.7
2006	-	253	30,515	16,465	20,748	67,981	89.1	80.8				78.9
2007	-	263	31,773	17,143	21,603	70,782	85.1	77.2				85.7
2008	-	264	31,886	17,204	21,679	71,033	88.1	79.9				82.4
2009	-	245	29,508	15,921	20,062	65,736	82.0	74.4				81.5
2010	-	236	28,530	15,394	19,398	63,558	85.2	77.3				84.3
2011	-	257	31,017	16,735	21,088	69,097	93.9	85.2				77.7
2012	-	269	32,421	17,493	22,043	72,226	96.2	87.3				81.5
2013	-	264	31,879	17,200	21,675	71,018	93.4	84.8				84.3
2014	-	188	27,594	9,596	13,252	50,630	70.6	64.0				77.7
2015	-	141	23,036	3,116	11,697	37,990	42.5	38.5				74.4
2016	-	146	24,153	3,393	11,569	39,261	46.0	41.7				77.3
2017	-						37.7	34.2				85.2
2018	-						38.0	34.4				93.9
2019	-											100.0

<https://www.eia.gov/beta/international/data/browser/index.cfm>

subt. 1992-2016	-	6,626	816,937	416,537	541,111	1,781,211
percent of 2016		0.4%	61.5%	8.6%	29.5%	100.0%
% 1992-2016	0.0%	0.4%	45.9%	23.4%	30.4%	100.0%

**Table 34-1. Ukraine's Coal Reserves and Production**

Indicator	Anthracite & Bituminous (million tonnes)	Sub-bituminous & Lignite (million tonnes)	Total (million tonnes)	Global Rank (# and %)
Estimated Proved Coal Reserves (2009)*	15,351	18,522	33,873	6 (4.1%)
Annual Coal Production (2010)**	58.7	0.2	58.9	11 (1.2%)

Source: \*BP (2010); \*\*IEA (2010)

Note on coal production vs washed coal & losses (~25%).

**Table 34-4. Ukraine's CMM Emissions (million cubic meters)**

Emission Category	1990	1991	1992	1993	1994	1995	1996	1997	1998
Underground mining - active	3557.51	3276.00	3161.00	2615.28	2414.07	1945.49	1881.85	1839.08	1852.92
Underground - post-mining	306.41	253.07	251.81	219.87	180.82	160.20	138.05	146.72	146.72
Surface mining - active	12.79	9.91	7.97	5.72	3.68	3.16	2.19	1.97	1.93
Surface - post-mining	1.83	1.41	1.14	0.82	0.52	0.45	0.31	0.28	0.27
Total Emissions	3878.53	3540.40	3421.92	2841.69	2599.10	2109.30	2022.41	1988.05	2001.84
Additional Recovered and Flared	144.77	137.97	88.22	69.38	94.89	89.03	48.06	56.74	83.26

Emission Category	1999	2000	2001	2002	2003	2004	2005	2010*	2015*
Underground mining - active	1819.07	2039.44	1684.68	1911.38	1864.53	1890.53	1837.13		
Underground - post-mining	157.36	156.06	163.33	160.77	156.83	159.02	154.53		
Surface mining - active	1.63	1.47	1.43	1.23	0.88	0.77	0.43		
Surface - post-mining	0.23	0.21	0.20	0.18	0.13	0.11	0.06		
Total Emissions	1978.29	2197.18	1849.65	2073.55	2022.37	2050.42	1992.14	1713.60	1663.9
Additional Recovered and Flared	78.93	72.91	134.28	152.35	148.62	150.69	146.43		

Source: UNFCCC (2007); \*USEPA (2006) – estimated and projected

Global Methane Initiative (2010) *Coal Mine Methane Country Profiles: Ukraine*, chapter 34, [www.globalmethane.org/tools-resources/coal\\_overview.aspx](http://www.globalmethane.org/tools-resources/coal_overview.aspx)

**Coal methane emissions**

**CMM emissions** Crude CMM rate  
million cubic meters    Cubic meters per tonne

1990	3,878	
1991	3,540	
1992	3,422	27.7
1993	2,842	26.9
1994	2,599	30.0
1995	2,109	27.6
1996	2,022	35.5
1997	1,988	33.9
1998	2,002	33.6
1999	1,978	31.5
2000	2,197	35.2
2001	1,850	30.0
2002	2,074	33.7
2003	2,022	31.5
2004	2,050	34.4
2005	1,992	33.0
2006	1,936	31.4
2007	1,881	29.3
2008	1,825	28.3
2009	1,769	29.7
2010	1,714	29.7

interpolated  
interpolated  
interpolated

Ukraine

**Cell:** G9

**Comment:** Rick Heede:

History: Coal mining began in Ukraine in 1870. In 1913, Donetz produced 87% of the coal in the Russian Empire. It produced 50% of the metallurgical coal of the USSR. Like other Soviet enterprises, coal companies provided social facilities including schools and hospitals.  
Coal mining began in Ukraine in 1870. In 1913, Donetz produced 87% of the coal in the Russian Empire. It produced 50% of the metallurgical coal of the USSR. Like other Soviet enterprises, coal companies provided social facilities including schools and hospitals.  
Ukraine's coal reserves are estimated at 60 billion tonnes, of which 23 billion are proven and probable, and 10 billion tonnes are economically extractable. According to the Ukrainian mining trade union, coal constitutes 95% of Ukraine's domestic energy resources.  
[https://en.wikipedia.org/wiki/Coal\\_in\\_Ukraine](https://en.wikipedia.org/wiki/Coal_in_Ukraine)

**Cell:** D11

**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:** H52

**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](http://www.eia.gov/emeu/international/energy.html) or [www.eia.gov/countries/data.cfm](http://www.eia.gov/countries/data.cfm).

**Cell:** F55

**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](http://www.eia.gov/emeu/international/energy.html) or [www.eia.gov/countries/data.cfm](http://www.eia.gov/countries/data.cfm).

**Cell:** O56

**Comment:** Rick Heede:

BP Statistical Review of World Energy for 2018, June 2019.

**Cell:** K75

**Comment:** Rick Heede:

EIA countries data <http://www.eia.gov/countries/country-data.cfm?fips=UP>

**Cell:** N83

**Comment:** Rick Heede:

CAI adopts coal production data for 2017 and 2018 from the BP Statistical Review 2018.  
Subject to revision once EIA data is available.

**Cell:** J94

**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:** H96

**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:** M157

**Comment:** Rick Heede:

GMI (2010) Ukraine, section 34.1.1: "It should be noted that Table 34-1 contains data on raw coal production. To understand actual coal production in Ukraine, it is more useful to consider washed coal statistics. In 2004, Ukraine produced 80.5 Mmt of raw coal but only 60 million tons of washed coal. Ukrainian coal undergoes substantial washing because of typically high levels of contaminants, which can result in as much as a 25 percent product loss (Rapsun, 2008)."

**Cell:** N163

**Comment:** Rick Heede:

Source: Global Methane Initiative (2010) Coal Mine Methane Country Profiles, Kazakhstan, chapter 20, [www.globalmethane.org/tools-resources/coal\\_overview.aspx](http://www.globalmethane.org/tools-resources/coal_overview.aspx)  
Section 34.1.3: "In 2001, 77 percent of operating mines were considered gassy. At some mines, the natural gas content can exceed 35 cubic meters (m<sup>3</sup>) per tonne of dry ash-free coal (PEER, 2002)."

**Cell:** O191

**Comment:** Rick Heede:

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