

The Czech Republic mine production and mineral reserves – Overview in the year 2006

Mineral	Specifications	Mine production		R e s e r v e s											
		2006	Category in English wording	Reserves of the given category in		Reserves of the given category in		Reserves of the given category in		Reserves of the given category in		Reserves of the given category in			
				2006	Category in Czech wording	2006	Category in Czech wording	2006	Category in Czech wording	2006	Category in Czech wording	2006	Category in Czech wording		
Energy minerals															
Bituminous coal	ths tonnes	13 017		16 063 718		1 587 320		5 869 966		8 606 432		134 060			
Brown coal	ths tonnes (Czech Statistical Office presents so-called sales mine production which is production of marketable brown coal and reaches on average about 95 % of given mine production)	48 915		9 192 305		2 562 306		2 305 437		4 324 562		978 839			
Crude oil	ths tonnes	259		32 277		12 315		8 609		11 397		2 135			
Lignite	ths tonnes	459		976 895		205 030		615 273		156 862		2 544			
Natural gas	mil m ³ – ths tonnes	146		46 811		4 109		40 593		2 106		28 160			
Uranium	Concentrate production, tonnes U (corresponds to sales production (without beneficiation losses))	358		135 812		1 671		19 476		114 665		677			
Industrial minerals															
Barite	ths tonnes	0		569		0		0		569		0			
Bentonite	ths tonnes (including mining of montmorillonite clays overburden of kaolins since 2004)	267		327 155		53 893		177 893		95 369		19 096			
Clays	ths tonnes	561		944 607		188 102		411 630		344 875		47 867			
Diatomite	ths tonnes	53		4 361		4 123		328		0		4 431			
Dolomite	ths tonnes	409		514 554		79 427		340 843		94 284		12 048			
Feldspar	ths tonnes	487		65 497		24 518		27 566		13 413		10 447			
Feldspar substitutes	ths tonnes	31		200 030		0		200 030		0		21 685			
Fluorspar	ths tonnes	0		2 033		0		0		2 033		0			
Foundry sand	ths tonnes	773		387 667		137 955		81 907		167 805		78 681			
Gmstones	Pyrope bearing rock	ths tonnes	39	19 196		3 412		12 895		2 889		214			
	Moldavite (tectite) bearing rock	ths m ³	95	880		0		877		3		701			
Glass sand	ths tonnes (1 m ³ = 1.8 tonnes)	171		1 584		0		1579		5		1 262			
Graphite	ths tonnes	963		260 917		92 382		25 947		142 588		84 754			
Gypsum	ths tonnes	5		14 165		1 327		4 041		8 797		56			
Kaolin	Raw, ths tonnes (total production of all technological grades)	3 768		1 204 349		191 326		567 110		445 113		51 153			
Limestones and corrective additives for cement production	Beneficiated, ths tonnes	673		0		0		0		0		0			
Silica minerals	ths tonnes	10 441		4 295 554		1 699 360		1 804 009		792 185		1 540 364			
		0		28 455		4 463		23 283		709		1 452			
Construction minerals															
Brick clays and related minerals	Mine production in reserved deposits, ths m ³ (decrease of mineral reserves by mine production)	1 268		566 217		229 270		240 315		96 632		71 165			
	Mine production in reserved deposits, ths tonnes (1m ³ = 1.8 tonnes) (decrease of mineral reserves by mine production)	2 282		1 019 191		412 686		432 567		173 938		128 097			
	Mine production in non-reserved deposits, ths m ³ (estimate)	300		687 311		65 464		515 373		106 474		1 613			
	Mine production in non-reserved deposits, ths tonnes (1m ³ = 1.8 tonnes) (estimate)	522		1 237 160		117 835		927 671		191 653		2 903			
Crushed stone	Mine production in reserved deposits, ths m ³ (decrease of mineral reserves by mine production)	14 093		2 254 873		1 130 527		996 531		127 815		650 020			
	Mine production in reserved deposits, ths tonnes (1m ³ = 2.7 tonnes) (decrease of mineral reserves by mine production)	38 051		6 088 157		3 052 423		2 690 634		345 101		1 755 054			
	Mine production in non-reserved deposits, ths m ³ (estimate)	1 300		1 034 345		46 599		907 355		80 391		17 907			
	Mine production in non-reserved deposits, ths tonnes (1m ³ = 2.7 tonnes) (estimate)	3 510		2 792 732		125 817		2 449 859		217 056		48 349			
Dimension stone	Mine production in reserved deposits, ths m ³ (decrease of mineral reserves by mine production)	242		191 821		83 667		67 998		40 156		81 193			
	Mine production in reserved deposits, ths tonnes (1m ³ = 2.7 tonnes) (decrease of mineral reserves by mine production)	653		517 917		225 901		183 595		108 421		219 221			
	Mine production in non-reserved deposits, ths m ³ (estimate)	55		33 426		2 674		27 836		2 916		2 436			
	Mine production in non-reserved deposits, ths tonnes (1m ³ = 2.7 tonnes) (estimate)	149		90 250		7 220		75 157		7 873		6 577			
Sand and gravel	Mine production in reserved deposits, ths m ³ (decrease of mineral reserves by mine production)	9 110		2 151 237		1 150 463		772 580		228 194		316 221			
	Mine production in reserved deposits, ths tonnes (1m ³ = 1.8 tonnes) (decrease of mineral reserves by mine production)	16 398		3 872 227		2 070 833		1 390 644		410 749		569 198			
	Mine production in non-reserved deposits, ths m ³ (estimate)	6 000		2 084 865		103 787		1 737 933		243 165		47 006			
	Mine production in non-reserved deposits, ths tonnes (1m ³ = 1.8 tonnes) (estimate)	10 800		3 752 757		186 781		3 128 279		437 697		84 611			
Metallic ores (not mined in the Czech Republic)															
Copper	ths tonnes Cu	0		51		0		0		51		0			
Gold	tonnes Au	0		240		49		35		156		0			
Lead	ths tonnes Pb	0		162		0		0		162		0			
Manganese	ths tonnes ore	0		138 801		0		0		138 801		0			
Silver	tonnes Ag	0		533		0		0		533		0			
Tin	ths tonnes Sn	0		164		0		0		164		0			
Tungsten	ths tonnes W	0		70		0		0		70		0			
Zinc	ths tonnes Zn	0		477		0		0		477		0			

Notes:

Bituminous coal	The calorific value of mined coal (88 % of total reserves) Qir is mostly 23 – 30 MJ/kg and ash content Ad between 10 and 30 %. Additional 7 % of total reserves have the calorific value Qir between 16 – 20 MJ/kg in average and ash content Ad between 24 and 40 %, 3 % of total reserves have the average calorific value Qir mostly 18 – 22 MJ/kg and ash content Ad 20 - 40 % and 2 % of total reserves have the average calorific value Qir mostly 11-14 MJ/kg and ash content Ad 34 - 61 %
Brown coal	73 % of the total reserves have calorific value Qir 10.04 – 17.25 MJ/kg, ash content Ad between 8.70 and 43.50 % and sulfur content Sd 0.50 – 2.70 %. 19 % of the total reserves have calorific value Qir about 10 MJ/kg, ash content Ad between 20 and 40 % and sulfur content Sd 2 – 4 %, 8 % of the total reserves have calorific value Qir 11.70 – 13.10 MJ/kg, ash content Ad 19.50 – 24.00 % and sulfur content Sd 0.70 – 1.30 %
Lignite	The total reserves have calorific value Qir 9.10 – 9.46 MJ/kg, ash content Ad 22.70 – 23.70 % and sulfur content Sd 1.55 – 1.65 %
Construction minerals	Reserved mineral deposits are owned by the Czech Republic. Non-reserved deposits (especially lot of sand and gravel, crushed stone and brick clay deposits) are a constituent part of the land and are owned by landowners