

Table 7

IMPORT AND EXPORT OF MINERAL RAW MATERIALS AND SELECTED SEMI-FINISHED PRODUCTS
IN 2016

Mineral raw materials	Import		Export	
	Quantity (kg)	Value (PLN thousand)	Quantity (kg)	Value (PLN thousand)
I. FUELS				
Total:	41,930,218,807	44,678,596	24,320,486,154	18,979,308
Natural gas	Data not available due to the confidentiality of the information			
Crude oil	25,098,300,671	27,891,057	223,708,938	260,245
Petroleum products	7,263,270,813	12,475,497	6,901,168,627	9,814,853
Hard coal, including:	8,314,343,609	2,554,104	9,099,740,186	2,595,005
- anthracite	299,186,243	128,787	20,691,226	12,140
- humic, coke, nonintegrated	2,209,897,511	1,011,867	2,437,799,292	955,502
- humic without coke, powder, nonintegrated	4,232,679,951	992,388	607,775,476	137,454
- other (without anthracite and humic)	1,558,224,298	414,876	6,030,505,672	1,485,282
- briquet	14,355,606	6,186	2,968,520	4,627
Brown coal	316,410,434	104,791	217,312,400	26,159
Coal gas other than from crude oil	755	333	1,168	18
Chemical products	283,090,785	447,056	597,533,188	599,568
Coke and semi-coke	122,619,413	63,753	6,970,200,955	4,467,981
Products from ennobled coal	38,130,214	405,866	82,535,452	772,446
Bitumen and natural asphalt, bituminous schist	314,401,224	671,919	183,365,234	426,428
II. METALS				
Total:	10,742,840,465	18,212,704	3,084,729,447	18,671,792
Aluminum, including:	996,851,184	5,875,874	461,543,461	2,691,888
- ores and concentrates	48,300,951	29,563	2,200	11
- wastes containing Al	4,488,240	15,976	9,555,864	24,742
- non-alloys, non-processed	157,866,716	1,076,127	6,931,835	50,318
- alloys	432,885,105	3,288,187	216,630,335	1,545,476
- wastes and scrap	237,966,212	1,118,812	217,636,617	1,032,459
- powders and flakes	2,238,848	25,934	1,643,269	21,875
- compounds	113,105,112	321,275	9,143,341	17,007
Antimony, including:	1,071,629	23,282	168,812	4,150
- non-processed, powders, wastes, scrap	98,512	2,645	59,593	1,706
- compounds	973,117	20,636	109,219	2,444
Barium: (see: Strontium and barium or barium compounds in: Chemicals)				
Bismuth:				
- non-processed., powders, scrap	33,742	1,420	3,071	134
Cerium, including:	327,292	17,466	4,701	290
- compounds	324,969	17,091	4,391	243
- Fe-Ce alloys	2,323	375	310	47
Chromium, including:	26,287,333	47,566	8,092,367	19,950
- ores and concentrates	23,374,076	18,527	797,124	1,274
- non-processed, alloys, powders, scrap	1,091,467	3,998	6,913,765	13,202
- compounds	1,821,790	25,042	381,478	5,474
Tin, including:	7,217,938	299,521	356,895	25,343
- ores and concentrates	43,340	71	0	0
- ash and remains containing mainly Sn	1,586,616	34,013	0	0
- non-alloys	937,967	66,759	276,968	20,781
- alloys	572,130	30,002	41,120	3,072
- wastes and scrap	4,050,135	165,901	29,547	956
- compounds	27,750	2,074	9,260	535
Zinc, including:	270,228,057	1,177,134	158,336,749	1,179,243
- ores and concentrates	144,622,927	348,493	15	0

Mineral raw materials	Import		Export	
	Quantity (kg)	Value (PLN thousand)	Quantity (kg)	Value (PLN thousand)
- ash and remains containing mainly Zn	18,215,626	56,728	7,107,095	41,296
- non-alloy	49,926,927	418,799	106,839,253	862,014
- alloys	9,334,956	88,815	5,812,007	49,063
- wastes and scrap	10,339,385	49,415	6,060,234	39,290
- powders, dust and flakes	4,416,766	48,363	358,284	2,694
- compounds	33,371,470	166,521	32,159,861	184,885
Zirkon, including:	749,398	3,881	24,200	111
- ores and concentrates	744,114	3,637	24,200	111
- non-processed, powders, wastes	5,284	244	0	0
Galium, indium, thallium:				
- non-processed, scrap, wastes, powders	353	424	17	27
Germanium, including:	15,920	872	2,027	237
- non-processed, scrap, wastes, powders	1	17	0	0
- compounds	15,919	855	2,027	237
Hafnium:				
- non-processed, scrap	1	7	1	3
Iridium, osmium, ruthenium:				
- raw, powders	0	23	0	0
Cadmium, including:	1,795	41	26,150	234
- non-processed, scrap, powders	1,542	31	0	0
- compounds	253	10	26,150	234
Coabl, including:	41,539	5,797	9,710	950
- non-processed, powders, wastes, scrap	20,137	4,107	3,202	442
- compounds	21,402	1,690	6,508	508
Lithium:				
- compounds	348,594	17,711	38,871	2,267
Magnesium, including:	143,750,418	263,430	35,307,409	57,323
- metallic	7,737,247	73,405	202,618	1,855
- scrap, wastes, powders	2,402,892	21,019	2,999,316	26,624
- compounds	133,610,279	169,007	32,105,475	28,844
Manganese, including:	98,965,135	113,407	32,873,947	24,592
- ores	86,696,710	47,231	32,199,681	19,637
- non-processed, scrap, wastes, powders	1,618,124	11,294	328,023	1,761
- compounds	10,650,301	54,883	346,243	3,193
Alkalic metals (excluding sodium):	18	27	0	0
Precious metals, including:	5,100,210	1,379,794	4,837,812	1,940,115
- ores and concentrates	520	48	174	13,684
- wastes, scrap (excluding Au, Pt)	905,889	83,236	1,945,030	154,787
- no jewelry products (excluding Au, Pt), catalysts	65,715	25,914	55,296	16,337
- compounds	4,128,086	1,270,597	2,837,312	1,755,307
Rare earth elements; yttrium, scandium (unresolved), including:				
- non-alloy, not mixed., mixtures, alloys	554,242	1,161	700	20
Copper, including:	288,399,424	3,167,592	423,726,809	6,336,345
- ores and concentrates	172,151,285	1,294,476	75,939,880	336,147
- wastes containing Cu	0	0	75,081	476
- copper mattes and cement copper	0	0	2,091,645	13,922
- unrefined (anodes for electro-refining)	25,767,423	540,702	9,903	609
- refined (cathodes etc.)	3,912,189	74,517	253,769,999	4,952,339

Mineral raw materials	Import		Export	
	Quantity (kg)	Value (PLN thousand)	Quantity (kg)	Value (PLN thousand)
- alloys (brass, bronze, alpaca etc.; transitional alloys)	2,560,217	45,340	3,107,411	62,358
- wastes, Cu scrap	47,416,377	821,310	27,878,618	266,338
- wastes and alloys scrap	28,806,686	313,497	51,137,485	616,229
- powders and flakes	434,030	17,546	1,110,490	35,881
- compounds	7,351,217	60,203	8,606,297	52,046
Molybdenum, including:	1,152,376	32,342	1,321,750	46,797
- ores and concentrates	386,379	12,710	153,061	5,046
- non-processed, wastes, scrap	218,976	1,483	125,397	3,944
- powders	20,658	680	0	0
- compounds	526,363	17,469	1,043,292	37,807
Nickel, including:	5,077,548	206,639	5,271,263	76,765
- non-alloy and indirect metallurgical products	3,141,319	126,271	903,148	35,428
- non-processed alloys	254,386	24,862	41,100	1,621
- wastes and scrap of non-alloy	395	13	11,923	441
- wastes and alloys scrap	173,971	2,986	977,586	9,979
- powders and flakes	850,420	37,799	21,132	1,332
- compounds	657,057	14,709	3,316,374	27,963
Niobium and rhenium:				
- non-processed, scrap, wastes, powders	4	2	116	690
Lead, including:	94,007,549	693,431	121,515,774	562,648
- ores and concentrates	1,800,400	8,219	59,682,245	80,058
- wastes containing Pb	40,151	77	14,745	78
- refined and unrefined, non-processed	68,363,757	534,168	36,924,376	286,423
- alloys	1,996,351	16,900	19,764,781	171,261
- wastes and scrap	21,662,033	132,479	4,011,945	15,130
- powders and flakes	6	1	4,508	65
- compounds	144,851	1,586	1,113,174	9,633
Radioactive elements (unresolved):	13,946	34,727	11,457	64,653
Palladium:				
- raw, in the form of powder	1,326	100,591	18	1,405
Platinum, including:	51,327	270,014	127,167	49,539
- raw, in the form of powder	1,862	240,631	2	214
- wastes, scrap	49,220	7,570	112,809	46,527
- catalysts	245	21,814	14,356	2,798
Rhodium:				
- raw, in the form of powder	248	21,439	0	0
Mercury:				
- metallic	16,874	808	0	0
Sodium:				
- metallic	71,232	783	0	0
Silver, including:	252,414	105,374	1,284,607	2,742,700
- raw and in the form of semi-product	115,561	69,432	1,260,398	2,705,026
- powder	23,793	9,124	15,532	33,118
- compounds	113,060	26,818	8,677	4,556
Strontium: (see: Strontium and barium or compounds in: Chemicals)				
Tantalum:				
- non-processed, powders, wastes, scrap	0	0	106	82
Thorium:				
- non-processed, powders, wastes, scrap	9,212	211	1,973	131
Titanium, including:	148,461,803	669,456	23,967,041	192,219
- ores and concentrates	81,037,759	63,706	0	0
- wastes	4	2	0	0
- non-processed, powders, wastes, scrap	207,758	2,720	987,784	9,101
- compounds	67,216,282	603,028	22,979,257	183,118

Mineral raw materials	Import		Export	
	Quantity (kg)	Value (PLN thousand)	Quantity (kg)	Value (PLN thousand)
Uranium:				
- compounds, alloys, ceramic products enriched in U-235	0	0	48	0
Vanadium, including:	1,664	105	250	16
- non-processed, wastes, powders	1	0	0	0
- compounds	1,663	105	250	16
Calcium:				
- metallic	102,117	1,225	89,242	921
Tungsten, including:	50,567	6,338	131,124	7,768
- ores and concentrates	0	0	1,000	27
- powders, non-processed, wastes, scrap	10,925	3,035	129,119	7,334
- compounds	39,642	3,303	1,005	408
Gold, including:	822	25,834	5,307	31,572
- powder	2	16	11	1,747
- raw other than powder	49	7,264	72	10,411
- wastes, scrap	0	2	5,223	19,411
- compounds	771	18,552	1	4
Iron, including:	8,340,106,404	3,616,938	1,640,337,948	2,595,703
- ores and concentrates	7,040,008,511	1,407,370	292,400	256
- wastes rich in Fe	7,334,430	1,483	0	0
- non-alloy pig iron	207,329,408	209,525	80,683,933	91,610
- alloy pig iron	833,174	955	0	0
- ferroalloy	238,622,999	941,311	163,319,254	632,373
- products from the direct deoxidation of ores	290	35	24	2
- purity > 99.94%	766,362	1,269	581	6
- wastes and scrap	778,580,681	684,368	1,372,522,529	1,728,406
- pellets and powders, pig cast iron and steel	25,780,685	81,986	9,823,299	35,598
- compounds	40,849,864	288,635	13,695,928	107,454
Other metal ores:	21,146,247	440	0	0
Wastes from metals metallurgy:	291,994,344	25,671	165,293,114	14,835
III. CHEMICALS				
Total:	5,759,903,721	5,983,876	4,147,737,769	3,684,385
Arsenic:	34,394	429	16,150	167
Barium, including:	16,044,415	28,602	567,465	1,434
- witherite	100	0	0	0
- barite	10,818,198	16,855	67,906	173
- compounds	5,226,117	11,746	499,559	1,260
Boron, including:	14,285,101	38,891	4,495,624	13,561
- boron	10,485	266	5,440	29
- natural borate minerals	4,791,241	6,973	2,029,285	3,631
- compounds	9,483,375	31,651	2,460,899	9,902
Bromine, including:	1,231,833	7,414	329,373	3,661
- bromine	6,953	236	1,711	61
- compounds	1,224,880	7,177	327,662	3,600
Fluorine, including:	10,575,755	20,534	124,161	584
- fluorine	370	110	0	0
- fluorite	8,241,041	9,955	12,100	21
- compounds	2,334,344	10,469	112,061	564
Phosphorus, including:	1,386,952,739	804,375	98,245,123	248,129
- phosphorus	20,715,674	227,907	8,048,150	96,354
- phosphorites	1,313,157,641	448,897	263,890	575
- phosphates fertilizers	8,827,662	9,863	63,845,540	61,770
- compounds	44,251,762	117,709	26,087,543	89,430
Helium:	105,317	20,785	451,127	68,289
Iodine, including:	36,699	3,925	5,834	972
- iodine	5,689	590	2,269	337
- compounds	31,010	3,335	3,565	635
Carbide:	14,661,103	38,672	250,267	916

Mineral raw materials	Import		Export	
	Quantity (kg)	Value (PLN thousand)	Quantity (kg)	Value (PLN thousand)
Silica: (siliceous rocks, diatomaceous earth, rottenstone, diatomaceous rock)	5,168,037	14,751	266,293	416
Silicon, including:	137,986,326	934,576	45,239,298	175,097
- silicon	26,867,291	251,393	4,178,523	54,160
- compounds	111,119,035	683,183	41,060,775	120,936
Fertilizers, including:	2,026,371,864	2,001,992	2,378,932,230	2,215,223
- nitrogen	1,178,026,963	904,100	1,780,273,622	1,393,962
- multi-compound	848,344,901	1,097,892	598,658,608	821,261
Mineral pigments:	1,080,279	4,082	50,531	366
Potassium:	1,016,862,814	1,144,736	19,746,344	45,739
- potassium fertilizers	971,164,360	1,002,352	11,940,279	13,325
- compounds	45,698,454	142,383	7,806,065	32,414
Selenium and tellurium, including:	179,964	9,312	174,961	7,359
- selenium	20,047	1,979	22,711	1,433
- tellurium	23	7	0	0
- compounds	159,894	7,326	152,250	5,926
Sulfur, including:	74,364,723	93,868	782,648,676	286,898
- iron pyrites non-roasted	1,033,603	4,914	51,612	76
- raw or unrefined	3,558,861	763	423,434,830	147,380
- refined	2,420,968	18,859	34,903,084	49,985
- sublimed or precipitated, colloid	16,397	121	68,220,960	22,407
- sulphuric acid, oleum	13,500,136	8,245	208,675,480	32,803
- compounds	53,834,758	60,965	47,362,710	34,247
Sodium, including:	913,300,488	571,988	768,209,873	547,306
- rock salt for chemical processing	149,381,110	31,823	51,308,744	9,525
- denatured salt for industrial purposes	1,129,293	1,846	26,433,817	16,610
- food salt for people	52,258,179	29,991	30,528,725	16,232
- food salt for animals	314,279,552	45,113	254,328,325	74,536
- brine	212,178	6,814	484,042	7,086
- compounds	396,040,176	456,401	405,126,220	423,317
Strontium and barium, including:	378,219	3,906	17,433	121
- strontium and barium	12,305	294	1,850	50
- Sr compounds	365,914	3,612	15,583	71
Calcium:				
- compounds	140,661,870	244,944	47,984,439	68,266
IV. ROCKS				
Total:	6,816,230,675	2,572,022	4,327,330,810	2,380,504
Bentonites:	177,921,502	46,897	34,268,536	42,316
Cement, including:	905,613,166	229,018	552,583,018	224,874
- cements	882,297,234	227,200	385,981,402	200,779
- cement clinker	23,315,932	1,818	166,601,616	24,094
Dolomite:				
- raw, burned, consolidated	144,021,213	15,468	28,701,432	11,224
Gypsum, including:	124,488,957	78,494	334,537,496	222,614
- gypsum, anhydrite	23,640,200	7,080	57,130,037	1,002
- gypsum plasters	44,496,552	29,029	52,194,642	24,137
- gypsum, construction products	56,352,205	42,385	225,212,817	197,475
Clay (excluding refractory and foundry), including:	98,402,323	58,834	5,296,299	3,588
- clays	74,294,816	20,003	5,261,496	3,460
- andalusite, cyanite, sillimanite, mullite	18,248,008	32,427	1,042	3
- chamotte and dinas earth	5,859,499	6,404	33,761	126
Natural graphite:	8,064,199	31,869	504,215	2,693

Mineral raw materials	Import		Export	
	Quantity (kg)	Value (PLN thousand)	Quantity (kg)	Value (PLN thousand)
Dimension and crushed stones, including	2,843,316,934	730,030	1,049,822,525	198,043
- Dimension stones:	592,088,876	510,838	184,978,827	156,393
- crude or roughly worked	351,900,375	155,277	143,881,097	62,919
- cutted to blocks and plates of a maximum thickness equal 25 cm	4,216,727	5,295	5,638,228	4,345
- building elements	232,366,395	348,448	33,512,847	87,510
- other.	3,605,379	1,819	1,946,655	1,619
- Crushed stones:	2,251,228,058	219,192	864,843,698	41,650
- pitchers, curbs etc.	25,985,919	13,435	44,272,854	13,224
- crushed aggregates	2,225,242,139	205,757	820,570,844	28,426
Gemstones and decorative stones non-processed, including:	41,531	43,174	2,048	17,531
- diamonds	108	30,547	0	651
- other	41,423	12,628	2,048	16,880
Kaolin, including:	148,227,297	76,591	13,699,483	4,425
- raw	95,639,718	56,480	13,650,522	4,323
- burned	52,587,579	20,112	48,961	102
Corundum and other abrasives, including:	15,717,903	14,194	1,713,091	3,996
- corundum, emery, garnet, raw and preliminary processed	15,717,164	12,740	1,713,085	3,966
- ash and powder from diamonds and from other natural stones	739	1,454	6	30
Chalk:	164,712,739	34,694	16,931,743	7,459
Natural aggregates (pebbles, gravel, flintstones):	503,633,628	17,934	175,802,232	6,206
Quartz:	1,376,211	2,201	113,849	127
Quartzite:	46,890,786	3,546	1,139,737	1,814
Insulating materials:	121,255,008	385,536	261,483,201	975,616
Refractory materials, including:	440,408,390	350,415	126,447,153	318,319
- magnesite	30,468,211	77,252	1,079,696	2,424
- refractory clay	353,193,704	108,074	11,879,690	5,746
- refractory mass and grounds	52,439,581	156,748	74,597,037	170,742
- products containing magnesite, dolomite or chromite	4,306,894	8,340	38,890,730	139,408
Mica, including:	1,936,646	21,041	31,553	1,303
- raw, powder	1,564,527	6,793	25,496	543
- mica products	372,119	14,248	6,057	760
Minerals and rocks of technical importance	216,679,238	232,711	69,919,513	160,531
Natural polishing materials:				
- raw pumice and other	1,014,350	1,357	149,988	3,552
Sands, including:	248,052,288	24,611	499,279,489	40,942
- siliceous and quartzitic	19,216,214	19,715	213,062,975	34,597
- other	228,836,074	4,896	286,216,514	6,345
Feldspar:	347,004,883	68,048	932,120	162
Talc:				
- talc, steatite	36,626,753	54,878	512,670	1,205
Peat and peat products	179,650,889	64,218	44,920,006	16,605
Lime:				
- limestone flux, lime	220,824,730	50,480	1,153,459,419	131,964