

Table 7

IMPORT AND EXPORT OF MINERAL RAW MATERIALS AND SELECTED SEMI-FINISHED PRODUCTS
IN 2017

Mineral raw materials	Import		Export	
	Quantity (kg)	Value (PLN thousand)	Quantity (kg)	Value (PLN thousand)
I. FUELS				
Total:	47,254,594,765	59,694,152	20,035,004,275	21,307,753
Natural gas	Data not available due to the confidentiality of the information			
Crude oil	23,981,224,177	34,111,869	319,280,835	458,392
Petroleum products	8,989,163,682	17,620,204	4,959,632,168	8,160,143
Hard coal, including:	12,880,350,393	5,601,848	7,103,235,286	3,160,946
- anthracite	422,468,426	228,725	63,041,349	33,205
- humic, coke, nonintegrated	3,630,235,505	2,624,134	2,753,036,912	1,733,234
- humic without coke, powder, nonintegrated	6,460,476,693	1,986,254	140,660,802	38,770
- other (without anthracite and humic)	2,352,952,325	756,254	4,142,452,230	1,350,775
- briquet	14,217,444	6,482	4,043,993	4,963
Brown coal	356,424,682	106,112	257,843,469	30,026
Coal gas other than from crude oil	684	339	14,200	269
Chemical products	291,845,014	549,408	548,014,735	809,227
Coke and semi-coke	209,307,884	154,386	6,494,123,759	7,128,833
Products from ennobled coal	50,781,376	510,038	109,146,980	929,339
Bitumen and natural asphalt, bituminous schist	316,332,383	974,339	187,083,179	609,021
II. METALS				
Total:	11,342,206 732	23,202,879	3,205,911,881	21,860,676
Aluminum, including:	1,095,946,839	7,183,215	508,577,541	3,195,882
- ores and concentrates	44,917,437	33,809	132,375	291
- wastes containing Al	8,306,401	27,041	15,743,992	42,252
- non-alloys, non-processed	161,546,124	1,259,175	9,928,144	81,088
- alloys	497,663,473	4,288,255	224,191,806	1,725,005
- wastes and scrap	228,812,082	1,179,870	242,040,610	1,295,367
- powders and flakes	1,940,054	25,368	2,485,129	31,963
- compounds	152,761,268	369,697	14,055,485	19,918
Antimony, including:	1,133,996	34,146	172,179	5,576
- non-processed, powders, wastes, scrap	163,198	5,332	139,904	4,547
- compounds	970,798	28,814	32,275	1,029
Barium: (see: Strontium and barium or barium compounds in: Chemicals)				
Beryllium:	48,414	124	240	35
- non-processed, wastes, scrap, powders	0	0	240	35
- compounds	48,414	124	0	0
Bismuth:				
- non-processed., powders, scrap	30,768	1,341	2,799	120
Cerium, including:	628,463	39,748	16,781	1,367
- compounds	627,944	39,645	16,508	1,319
- Fe-Ce alloys	519	102	273	47
Chromium, including:	37,258,278	52,051	10,293,595	24,771
- ores and concentrates	34,657,783	24,650	1,565,798	3,194
- non-processed, alloys, powders, scrap	848,875	3,994	8,453,702	17,116
- compounds	1,751,620	23,406	274,095	4,461
Tin, including:	7,331,717	344,050	867,366	67,460
- ores and concentrates	71,625	1,109	0	0
- ash and remains containing mainly Sn	1,597,495	38,787	0	0
- non-alloys	893,441	73,872	812,934	64,449
- alloys	810,354	40,208	15,267	1,694
- wastes and scrap	3,939,266	188,135	14,165	424

Mineral raw materials	Import		Export	
	Quantity (kg)	Value (PLN thousand)	Quantity (kg)	Value (PLN thousand)
- compounds	19,536	1,939	25,000	894
Zinc, including:	321,471,736	1,705,828	139,800,706	1,390,177
- ores and concentrates	186,467,194	541,283	499,708	222
- ash and remains containing mainly Zn	17,021,316	64,520	7,464,737	55,661
- non-alloy	54,948,417	619,255	90,648,962	964,939
- alloys	10,899,421	136,389	5,994,051	70,605
- wastes and scrap	7,289,118	55,761	7,300,838	61,530
- powders, dust and flakes	4,793,189	61,984	1,409,836	10,768
- compounds	40,053,081	226,636	26,482,574	226,452
Zirkon, including:	1,405,470	6,991	927	42
- ores and concentrates	1,346,520	6,045	800	5
- non-processed, powders, wastes	58,950	946	127	37
Galium, indium, thallium:				
- non-processed, scrap, wastes, powders	360	332	11	40
Germanium, including:	39,270	1,521	15,078	1,463
- non-processed, scrap, wastes, powders	6	59	0	0
- compounds	39,264	1,462	15,078	1,463
Hafnium:				
- non-processed, scrap	0	1	0	0
Cadmium, including:	230	47	2,300	22
- non-processed, scrap, powders	128	43	0	0
- compounds	102	3	2,300	22
Coabl, including:	39,312	7,045	13,991	2,510
- ores and concentrates	1	23	0	0
- non-processed, powders, wastes, scrap	17,876	3,994	12,038	2,297
- compounds	21,435	3,028	1,953	214
Lithium:				
- compounds	269,510	15,924	49,196	3,176
Magnesium, including:	153,715,725	260,237	36,135,801	60,166
- metallic	7,676,436	78,173	223,622	2,307
- scrap, wastes, powders	2,195,788	21,033	3,690,005	31,024
- compounds	143,843,501	161,031	32,222,174	26,835
Manganese, including:	122,443,430	172,955	62,784,876	55,465
- ores	109,676,640	101,542	62,161,066	50,522
- non-processed, scrap, wastes, powders	1,562,589	11,327	438,443	2,568
- compounds	11,204,201	60,086	185,367	2,376
Alkalic metals (excluding sodium):	2,845	300	325	22
Precious metals, including:	4,576,660	1,750,487	6,534,437	2,552,664
- ores and concentrates	1,303	51	39	3,309
- wastes, scrap (excluding Au, Pt)	1,097,004	168,885	2,335,544	249,838
- non jewelry products (excluding Au, Pt), catalysts	44,333	18,185	28,406	7,586
- compounds	3,434,020	1,563,366	4,170,448	2,291,931
Rare earth elements; yttrium, scandium (unresolved), including:				
- non-alloy, not mixed., mixtures, alloys	52,295	187	0	0
Copper, including:	266,086,074	3,305,054	357,691,695	7,363,657
- ores and concentrates	152,161,054	1,407,381	18,209,082	91,050
- wastes containing Cu	0	0	619,866	1,963
- copper mattes and cement copper	0	0	1,732,340	13,855

Mineral raw materials	Import		Export	
	Quantity (kg)	Value (PLN thousand)	Quantity (kg)	Value (PLN thousand)
- unrefined (anodes for electro-refining)	16,339,229	404,142	16,444	1,206
- refined (cathodes etc.)	4,437,525	100,731	251,745,862	5,906,874
- alloys (brass, bronze, alpaca etc.; transitional alloys)	2,123,962	41,585	3,106,646	71,798
- wastes, Cu scrap	44,694,413	813,685	18,422,910	362,555
- wastes and alloys scrap	35,730,654	434,435	51,864,178	797,643
- powders and flakes	343,079	15,581	1,579,111	42,632
- compounds	10,256,158	87,514	10,395,256	74,081
Molybdenum, including:	1,073,954	42,064	2,309,782	95,840
- ores and concentrates	269,710	10,603	926,151	37,400
- non-processed, wastes, scrap	116,363	3,005	188,849	11,348
- powders	413	73	0	0
- compounds	687,468	28,383	1,194,782	47,092
Nickel, including:	5,337,161	239,099	4,184,735	75,250
- ores and concentrates	1,505	8	0	0
- non-alloy and indirect metallurgical products	3,712,871	149,637	659,091	27,892
- non-processed alloys	204,008	22,171	42,769	4,557
- wastes and scrap of non-alloy	112,012	4,734	564	22
- wastes and alloys scrap	73,684	1,449	1,364,671	24,330
- powders and flakes	120,655	12,816	6,910	928
- compounds	1,112,426	48,286	2,110,730	17,522
Niobium and rhenium:				
- non-processed, scrap, wastes, powders	2	7	2,866	3,998
Lead, including:	105,222,920	907,019	127,737,666	684,068
- ores and concentrates	1,238,483	6,531	61,063,026	62,662
- wastes containing Pb	24,340	19	0	0
- refined and unrefined, non-processed	72,177,310	668,410	36,650,964	339,340
- alloys	6,829,482	67,204	25,606,928	256,242
- wastes and scrap	23,327,212	156,265	3,296,054	14,572
- powders and flakes	2	0	10	0
- compounds	1,626,091	8,590	1,120,684	11,252
Radioactive elements (unresolved):	10,003	31,210	20,171	74,271
Palladium:				
- raw, in the form of powder	1,946	199,961	86	9,388
Platinum, including:	60,587	381,396	126,392	62,303
- raw, in the form of powder	2,159	253,872	135	14,818
- wastes, scrap	56,754	7,114	68,087	34,155
- catalysts	1,674	120,410	58,170	13,330
Rhodium:				
- raw, in the form of powder	319	42,788	0	26
Mercury:				
- metallic	18,123	367	85	10
Sodium:				
- metallic	55,504	1,233	6,000	142
Silver, including:	135,212	118,200	1,303,963	2,516,919
- raw and in the form of semi-product	80,237	79,060	1,243,615	2,504,143
- powder	16,044	6,250	125	248
- compounds	38,931	32,890	60,223	12,529
Strontium: (see: Strontium and barium or compounds in: Chemicals)				
Tantalum:				
- non-processed, powders, wastes, scrap	9	4	1,419	330
Thorium:				
- non-processed, powders, wastes, scrap	152	16	2,259	146
Titanium, including:	178,944,401	914,306	27,083,794	267,421
- ores and concentrates	103,062,636	99,625	0	0

Mineral raw materials	Import		Export	
	Quantity (kg)	Value (PLN thousand)	Quantity (kg)	Value (PLN thousand)
- wastes	24,000	83	0	0
- non-processed, powders, wastes, scrap	93,566	2,298	1,407,336	15,047
- compounds	75,764,199	812,300	25,676,458	252,374
Uranium:	529	21,802	0	0
- ores	0	6	0	0
- compounds, alloys, ceramic products enriched in U-235	529	21,793	0	0
- compounds, alloys, ceramic products depleted in U-235	0	3	0	0
Vanadium, including:	5,168	378	760	45
- non-processed, wastes, powders	1	4	0	0
- compounds	5,167	374	760	45
Calcium:				
- metallic	121,359	1,777	263,635	2,339
Tungsten, including:	41,419	5,999	212,071	13,436
- powders, non-processed, wastes, scrap	13,155	3,149	196,926	13,290
- compounds	28,264	2,849	15,145	146
Gold, including:	2,414	131,180	1,739	148,640
- powder	1	16	0	2
- raw other than powder	713	105,714	872	130,930
- wastes, scrap	668	346	867	17,708
- compounds	1,032	25,104	0	0
Iron, including:	8,738,032,330	5,248,351	1,670,284,127	3,161,456
- ores and concentrates	7,385,488,697	2,203,086	16,529,975	6,609
- wastes rich in Fe	17,916,718	2,328	0	0
- non-alloy pig iron	234,841,630	331,444	62,631,732	100,168
- alloy pig iron	210,360	478	0	0
- ferroalloy	248,428,799	1,407,069	150,553,310	803,750
- products from the direct deoxidation of ores	65,896	85	1	2
- purity > 99.94%	55,002	189	40,977	114
- wastes and scrap	773,806,879	886,112	1,414,282,625	2,099,994
- pellets and powders, pig cast iron and steel	27,550,323	88,552	10,916,174	38,136
- compounds	49,668,026	329,008	15,329,333	112,684
Other metal ores:	536,199	223	23,000	72
Wastes from metals metallurgy:	299,252,012	28,635	249,370,661	19,747
III. CHEMICALS				
Total:	6,213,216,188	5,935,859	5,180,450,717	4,507,834
Arsenic:	55,525	480	36,100	358
Barium, including:	15,871,303	27,089	690,568	1,458
- witherite	1,101	4	0	0
- barite	11,551,778	16,778	98,948	176
- compounds	4,318,424	10,307	591,620	1,282
Boron, including:	16,171,419	41,577	4,777,761	14,983
- boron	5,331	317	9,670	47
- natural borate minerals	5,131,574	7,609	2,480,929	4,387
- compounds	11,034,514	33,652	2,287,162	10,549
Bromine, including:	1,747,566	9,999	421,808	4,397
- bromine	10,104	343	4,932	176
- compounds	1,737,462	9,655	416,876	4,221
Fluorine, including:	12,494,869	26,854	124,201	586
- fluorine	527	94	0	0
- fluorite	9,502,409	12,123	75,569	195
- compounds	2,991,933	14,637	48,632	391
Phosphorus, including:	1,277,323,453	707,319	47,748,285	227,541
- phosphorus	26,335,066	255,779	9,820,700	113,623
- phosphorites	1,213,138,958	358,319	34,084	25
- pfsphates fertilizers	52,583	681	645,869	959

Mineral raw materials	Import		Export	
	Quantity (kg)	Value (PLN thousand)	Quantity (kg)	Value (PLN thousand)
- compounds	37,796,846	92,540	37,247,632	112,934
Helium:	125,381	21,764	508,248	81,020
Iodine, including:	53,717	4,243	4,784	745
- iodine	9,260	816	1,316	152
- compounds	44,457	3,428	3,468	593
Carbide:	14,029,042	36,373	44,685	148
Silica: (siliceous rocks, diatomaceous earth, rottenstone, diatomaceous rock)	4,953,872	11,573	196,633	457
Silicon, including:	126,951,383	890,491	66,352,929	272,122
- silicon	25,126,786	243,132	2,578,555	53,657
- compounds	101,824,597	647,358	63,774,374	218,465
Fertilizers, including:	2,300,454,848	2,188,247	2,468,257,642	2,288,028
- nitrogen	1,335,222,206	1,036,456	1,717,832,451	1,346,507
- multi-compound	965,232,642	1,151,791	750,425,191	941,522
Mineral pigments:	889,361	3,328	24,887	202
Potassium:	1,027,634,878	1,071,891	28,639,745	57,625
- potassium fertilizers	982,967,010	946,161	19,456,092	21,965
- compounds	44,667,868	125,730	9,183,653	35,660
Selenium and tellurium, including:	158,983	13,368	287,122	12,151
- selenium	34,572	4,631	16,375	2,372
- tellurium	1,424	274	0	0
- compounds	122,987	8,462	270,747	9,779
Sulfur, including:	95,730,983	106,915	986,813,418	273,369
- iron pyrites non-roasted	740,739	2,907	45,025	76
- raw or unrefined	25,602,813	6,412	482,893,795	124,904
- refined	3,777,306	25,112	88,112,122	66,872
- sublimed or precipitated, colloid	5,216	60	7,521,558	2,045
- sulphuric acid, oleum	8,296,455	6,789	296,006,538	31,972
- compounds	57,308,454	65,635	112,234,380	47,499
Sodium, including:	1,182,114,661	563,096	1,525,127,569	1,206,225
- rock salt for chemical processing	211,809,494	43,713	29,159,123	6,430
- denatured salt for industrial purposes	1,847,356	2,395	27,991,460	16,954
- food salt for people	54,269,222	47,296	32,897,935	15,610
- food salt for animals	578,062,753	77,385	334,871,732	91,562
- brine	1,589,222	1,419	179,171	1,463
- compounds	334,536,614	390,887	1,100,028,148	1,074,207
Strontium and barium, including:	873,617	5,282	16,826	211
- strontium and barium	2,811	74	6,200	135
- compounds	870,806	5,207	10,626	76
Calcium:				
- compounds	136,454,944	211,252	50,394,332	66,418
IV. ROCKS				
Total:	7,285,301,088	2,861,921	4,782,952,157	2,618,335
Bentonites:	202,346,568	64,863	33,347,163	38,305
Cement, including:	935,754,328	230,833	591,995,912	246,501
- cements	887,904,891	227,747	498,322,727	232,293
- cement clinker	47,849,437	3,086	93,673,185	14,208
Dolomite:				
- raw, burned, consolidated	148,861,106	15,952	23,755,662	9,798
Gypsum, including:	146,370,175	86,761	481,673,573	261,649
- gypsum, anhydrite	22,243,035	5,911	79,384,667	3,087
- gypsum plasters	58,214,978	30,916	48,917,008	23,898
- gypsum, construction products	65,912,162	49,934	353,371,898	234,664
Clay (excluding refractory and foundry), including:	106,087,970	117,571	5,956,216	3,776

Mineral raw materials	Import		Export	
	Quantity (kg)	Value (PLN thousand)	Quantity (kg)	Value (PLN thousand)
- clays	73,698,169	20,762	5,852,323	3,647
- andalusite, cyanite, sillimanite, mullite	23,420,311	89,893	17,233	39
- chamotte and dinas earth	8,969,490	6,916	86,660	91
Natural graphite:	12,189,367	49,298	702,262	4,383
Dimension and crushed stones, including	3,218,210,323	750,496	1,096,588,868	188,496
- Dimension stones:	475,311,962	522,877	169,535,091	142,784
- crude or roughly worked	215,481,587	150,945	127,933,819	53,657
- cutted to blocks and plates of a maximum thickness equal 25 cm	3,995,018	3,923	7,844,869	5,828
- building elements	254,120,604	366,557	31,626,231	83,021
- other.	1,714,753	1,452	2,130,172	279
- Crushed stones:	2,742,898,361	227,619	927,053,777	45,712
- pitchers, curbs etc.	31,904,631	17,775	41,158,876	14,876
- crushed aggregates	2,710,993,730	209,844	885,894,901	30,836
Gemstones and decorative stones non-processed, including:	25,883	51,466	1,875	13,200
- diamonds	162	40,580	3	704
- other	25,721	10,887	1,872	12,496
Kaolin, including:	146,272,342	77,999	17,644,388	7,079
- raw	106,424,303	61,281	15,124,613	5,372
- burned	39,848,039	16,718	2,519,775	1,708
Corundum and other abrasives, including:	12,841,344	12,742	779,662	3,571
- corundum, emery, garnet, raw and preliminary processed	12,840,515	11,212	779,656	3,550
- ash and powder from diamonds and from other natural stones	829	1,529	6	21
Chalk:	156,730,950	35,843	13,213,885	5,526
Natural aggregates (pebbles, gravel, flintstones):	536,095,756	20,274	180,629,455	6,158
Quartz:	1,404,906	3,307	4,515,214	424
Quartzite:	63,934,629	3,445	7,756,170	3,017
Insulating materials:	198,422,240	472,151	299,229,944	1,162,728
Refractory materials, including:	483,505,691	411,905	149,521,186	309,815
- magnesite	38,618,751	105,132	854,361	2,036
- refractory clay	376,481,884	114,254	11,637,657	5,604
- refractory mass and grounds	65,816,281	182,203	94,487,063	157,233
- products containing magnesite, dolomite or chromite	2,588,775	10,315	42,542,105	144,942
Mica, including:	2,311,183	24,606	19,092	1,331
- raw, powder	1,808,316	7,048	11,082	540
- mica products	502,867	17,558	8,010	791
Minerals and rocks of technical importance	242,359,394	235,544	72,029,970	193,385
Natural polishing materials:				
- raw pumice and other	1,518,525	1,522	144,868	3,033
Sands, including:	150,729,953	27,646	622,376,732	41,472
- siliceous and quartzitic	21,582,919	23,628	259,294,772	32,934
- other	129,147,034	4,019	363,081,960	8,537
Feldspar:	295,488,556	55,445	207,413	116
Talc:				
- talc, steatite	36,349,714	57,674	637,051	1,390
Peat and peat products	179,164,490	65,609	56,629,664	21,555
Lime:				
- limestone flux, lime	187,490,185	54,578	1,180,225,596	113,184