

Table 7

IMPORT AND EXPORT OF MINERAL RAW MATERIALS AND SELECTED SEMI-FINISHED PRODUCTS
IN 2018

Mineral raw materials	Import		Export	
	Quantity (kg)	Value (PLN thousand)	Quantity (kg)	Value (PLN thousand)
I. FUELS				
Total:	56,144,682,663	79,776,144	18,572,673,837	24,875,229
Natural gas	Data not available due to the confidentiality of the information			
Crude oil	27,197,250,748	49,274,895	241,217,533	452,124
Petroleum products	8,149,610,410	19,159,907	5,605,521,290	10,774,899
Hard coal, including:	19,257,551,470	7,902,247	4,916,244,267	2,566,481
- anthracite	395,526,885	206,428	50,594,681	32,825
- humic, coke, nonintegrated	3,519,856,708	2,629,243	2,922,581,858	1,733,202
- humic without coke, powder, nonintegrated	10,588,398,692	3,460,264	82,426,550	24,958
- other (without anthracite and humic)	4,741,541,979	1,601,310	1,852,127,181	770,151
- briquet	12,227,206	5,002	8,513,997	5,345
Brown coal	320,601,068	102,787	287,311,323	36,131
Coal gas other than from crude oil	814	353	1,606	30
Chemical products	383,717,960	875,762	561,189,690	1,111,048
Coke and semi-coke	211,986,985	174,435	6,577,733,247	7,888,578
Products from ennobled coal	62,366,331	921,072	107,279,589	1,181,004
Bitumen and natural asphalt, bituminous schist	352,161,134	1,287,456	209,259,480	835,684
II. METALS				
Total:	11,689,266,132	23,969,591	3,594,332,417	22,717,003
Aluminum, including:	1,181,990,558	8,024,448	555,952,846	3,630,882
- ores and concentrates	59,868,753	48,602	536,465	1,341
- wastes containing Al	4,343,057	11,554	14,145,572	38,047
- non-alloys, non-processed	195,524,882	1,572,605	21,471,645	176,623
- alloys	509,042,743	4,572,113	252,686,636	1,973,805
- wastes and scrap	263,018,825	1,363,337	250,438,457	1,376,617
- powders and flakes	1,314,228	20,440	2,899,207	39,140
- compounds	148,878,070	435,797	13,774,864	25,308
Antimony, including:	1,171,804	34,544	80,926	2,555
- non-processed, powders, wastes, scrap	88,963	3,053	38,471	1,268
- compounds	1,082,841	31,491	42,455	1,287
Barium (see: Strontium and barium or barium compounds in: Chemicals)				
Beryllium:				
- non-processed, wastes, scrap, powders	1	1	0	0
Bismuth:				
- non-processed., powders, scrap	22,526	937	1,457	59
Cerium, including:	1,335,588	45,184	9,647	1,647
- compounds	1,334,145	45,115	9,004	1,599
- Fe-Ce alloys	1,443	69	643	47
Chromium, including:	32,798,170	59,094	10,429,622	27,162
- ores and concentrates	30,752,339	31,237	1,376,120	3,155
- non-processed, alloys, powders, scrap	514,177	4,554	8,755,812	19,481
- compounds	1,531,654	23,303	297,690	4,526
Tin, including:	9,134,972	402,819	1,306,283	98,655
- ores and concentrates	108,097	1,034	0	0
- ash and remains containing Sn	2,415,700	54,829	0	0
- non-alloys	1,205,539	91,445	1,256,188	94,328
- alloys	1,399,926	67,897	23,632	2,465
- wastes and scrap	3,980,851	185,409	9,409	298
- compounds	24,859	2,206	17,054	1,564
Zinc, including:	304,056,794	1,638,959	122,748,722	1,258,827
- ores and concentrates	167,003,203	450,206	1,578,045	9,535

Mineral raw materials	Import		Export	
	Quantity (kg)	Value (PLN thousand)	Quantity (kg)	Value (PLN thousand)
- ash and remains containing mainly Zn	17,701,951	64,167	7,880,890	57,648
- non-alloy	55,128,705	623,003	78,630,498	878,502
- alloys	13,252,809	159,924	5,571,792	64,806
- wastes and scrap	12,840,288	89,824	9,880,743	86,144
- powders, dust and flakes	4,226,571	60,424	1,756,692	13,088
- compounds	33,903,267	191,412	17,450,062	149,103
Zirkon, including:	1,858,346	11,806	69,423	490
- ores and concentrates	1,799,935	11,110	69,206	482
- non-processed, powders, wastes, scrap	58,411	696	217	7
Galium, indium, thallium:				
- non-processed, scrap, wastes, powders	941	406	398	231
Germanium, including:	57,380	2,054	1	7
- non-processed, scrap, wastes, powders	4	32	1	7
- compounds	57,376	2,022	0	0
Hafnium:				
- non-processed, scrap	1	1	130	22
Iridium, osmium, ruthenium:				
- raw, powders	0	43	0	0
Cadmium, including:	408	42	800	9
- non-processed, scrap, powders	55	27	0	0
- compounds	353	15	800	9
Cobalt, including:	40,447	9,320	15,635	2,426
- non-processed, powders, wastes, scrap	20,791	5,450	11,769	1,688
- compounds	19,656	3,870	3,866	738
Lithium:				
- compounds	249,762	17,240	32,185	2,202
Magnesium, including:	150,900,522	302,146	40,568,858	63,273
- metallic, non-processed	9,314,498	92,905	174,139	1,750
- scrap, wastes, powders	2,130,734	19,128	3,520,570	30,348
- compounds	139,455,290	190,113	36,874,149	31,175
Manganese, including:	116,726,583	181,020	113,571,695	118,297
- ores	102,595,700	93,673	111,807,805	105,972
- non-processed, scrap, wastes, powders	2,947,229	22,069	1,302,439	9,314
- compounds	11,183,654	65,278	461,451	3,010
Alkalic metals (excluding sodium)	16,227	370	0	0
Precious metals, including:	3,820,583	1,394,599	6,139,085	2,518,884
- ores and concentrates	560	49	0	0
- wastes, scrap (excluding Au, Pt)	1,258,205	299,364	1,890,256	341,042
- non jewelry products (excluding Au, Pt), catalysts	55,098	19,740	3,861	2,868
- compounds	2,506,720	1,075,445	4,244,968	2,174,974
Rare earth elements; yttrium, scandium (unresolved), including:				
- non-alloy, not mixed., mixtures, alloys	21,884	118	4	6
Copper, including:	257,252,279	2,922,235	467,011,707	7,338,545
- ores and concentrates	127,568,391	1,090,907	149,790,252	542,248
- wastes containing Cu	13,921	262	1,002,903	6,817
- copper mattes and cement Cu	227,399	5,537	1,900,240	15,149
- unrefined (anodes for electro-refining)	4,476,059	108,362	35,732	2,306
- refined (cathodes etc.)	3,596,674	83,384	209,702,512	4,920,366
- alloys (brass, bronze, alpaca etc.; transitional alloys)	2,449,227	51,651	3,375,425	81,756
- wastes, scrap	57,110,365	1,000,500	30,054,014	618,905
- wastes and alloys scrap	52,771,207	491,725	60,563,789	1,041,796
- powders and flakes	344,940	14,257	1,037,118	39,352

Mineral raw materials	Import		Export	
	Quantity (kg)	Value (PLN thousand)	Quantity (kg)	Value (PLN thousand)
- compounds	8,694,096	75,650	9,549,722	69,849
Molybdenum, including:	1,064,566	53,328	1,215,952	61,988
- ores and concentrates	229,171	12,218	33,300	1,580
- non-processed, wastes, scrap	84,490	1,534	36,991	1,399
- powders	504	87	0	0
- compounds	750,401	39,489	1,145,661	59,008
Nickel, including:	5,155,273	265,170	3,505,953	71,938
- non-alloy and indirect metallurgical products	4,105,320	199,526	569,763	29,257
- non-processed alloys	214,250	28,095	41,300	4,424
- wastes and scrap of non-alloy	363	10	5,772	283
- wastes and alloys scrap	34,173	1,319	976,367	16,448
- powders and flakes	91,749	10,667	9,230	1,209
- compounds	709,418	25,552	1,903,521	20,317
Niobium and rhenium:				
- non-processed, scrap, wastes, powders	2	1	1,151	4,703
Lead, including:	116,486,802	946,330	105,906,863	660,562
- ores and concentrates	499,075	1,639	37,295,861	59,465
- wastes containing Pb	218	3	56,496	298
- refined and unrefined, non-processed	84,001,803	726,657	40,971,868	354,851
- alloys	8,990,137	91,319	23,496,768	220,163
- wastes and scrap	18,002,398	99,614	2,934,502	14,741
- powders and flakes	12	3	0	0
- compounds	4,993,159	27,096	1,151,368	11,043
Radioactive elements (unresolved)	4,781	36,832	18,732	86,128
Palladium:				
- raw and in the form of powder	3,230	376,690	142	9,202
Platinum, including:	55,066	267,281	136,039	75,867
- raw, in the form of powder	1,813	191,369	173	3,442
- wastes, scrap	51,401	2,903	88,663	60,143
- catalysts	1,852	73,010	47,203	12,282
Rhodium:				
- raw, in the form of powder	519	137,134	22	660
Mercury:				
- metallic	5,251	190	0	0
Sodium:				
- metallic	40,904	1,178	2,100	71
Silver, including:	268,551	119,992	1,228,381	2,097,770
- raw and in the form of semi-product	203,243	73,785	1,155,524	2,085,452
- powder	13,104	3,065	671	570
- compounds	52,204	43,143	72,186	11,748
Strontium (see: Strontium and barium or compounds in: Chemicals)				
Tantalum:				
- non-processed, powders, wastes, scrap	162	11	998	1,071
Thorium:				
- non-processed, powders, wastes, scrap	16,385	217	707	8
Titanium, including:	170,248,509	1,063,199	27,316,049	311,368
- ores and concentrates	75,061,005	84,842,	0	0
- non-processed, powders, wastes, scrap	162,540	3,588	1,130,552	10,410
- compounds	95,024,964	974,769	26,185,497	300,958
Uranium:	35	56	54,481	4,489
- compounds, alloys, ceramic products containing U-natural	5	1	0	0
- compounds, alloys, ceramic products enriched in U-235	0	10	0	0
- compounds, alloys, ceramic products depleted in U-235	30	45	54,481	4,489

Mineral raw materials	Import		Export	
	Quantity (kg)	Value (PLN thousand)	Quantity (kg)	Value (PLN thousand)
Vanadium:				
- compounds	8,266	592	5,000	760
Calcium:				
- metallic	108,359	1,608	4,474	78
Tungsten, including:	55,914	9,479	825,999	48,328
- non-processed, powders, wastes, scrap	37,800	7,384	289,861	20,259
- compounds	18,114	2,095	536,138	28,069
Gold, including:	1,396	129,481	2,870	265,890
- powder	0	7	2	333
- raw other than powder	758	103,552	1,308	190,336
- wastes, scrap	290	2,088	1,555	75,217
- compounds	348	23,835	5	4
Iron, including:	8,965,777,076	5,475,479	1,965,126,471	3,912,001
- ores and concentrates	7,513,181,942	1,999,400	18,550,450	12,102
- wastes rich in Fe	37,343,820	3,896	8	0
- non-alloy pig iron	274,740,565	395,194	81,082,304	133,404
- alloy pig iron	452	4	0	0
- ferroalloy	266,438,922	1,676,090	169,632,119	1,030,353
- products from the direct deoxidation of ores	2,547	56	0	0
- Fe of purity > 99.94%	34,504	145	183,350	1,441
- wastes and scrap	793,275,693	969,176	1,667,866,275	2,578,500
- pellets and powders, pig cast iron and steel	29,159,782	97,738	12,489,625	37,369
- compounds	51,598,849	333,780	15,322,340	118,833
Other metal ores	1,072,006	428	0	0
Wastes from metals metallurgy	366,029,188	31,330	170,945,709	39,385
III. CHEMICALS				
Total:	6,043,971,562	6,116,733	4,750,761,406	4,641,242
Arsenic	70,203	614	12,956	134
Barium, including:	15,103,883	25,595	227,407	452
- witherite	50	0	0	0
- barite	11,720,906	16,624	151,587	273
- compounds	3,382,927	8,970	75,820	178
Boron, including:	15,549,230	36,848	4,618,894	11,149
- boron	2,704	98	6,446	31
- natural borate minerals	5,252,877	7,680	2,701,332	4,797
- compounds	10,293,649	29,070	1,911,116	6,321
Bromine, including:	1,965,314	11,505	725,062	7,452
- bromine	3,021	105	1,359	39
- compounds	1,962,293	11,400	723,703	7,414
Fluorine, including:	9,502,060	24,819	325,276	1,761
- fluorine	299	47	0	0
- fluorite	6,568,096	8,894	150,668	226
- compounds	2,933,665	15,878	174,608	1,535
Phosphorus, including:	1,244,625,408	733,201	171,446,686	367,493
- phosphorus	30,251,358	279,710	9,921,182	104,445
- phosphorites	1,172,562,245	343,879	54,564	32
- phosphates fertilizers	6,023,843	8,136	107,813,557	84,578
- compounds	35,787,962	101,475	53,657,383	178,438
Helium	287,276	27,970	536,479	92,728
Iodine, including:	61,152	5,611	28,735	2,785
- iodine	29,939	2,834	26,464	2,483
- compounds	31,213	2,777	2,271	302
Carbide	14,430,205	36,775	73,891	291
Silica (siliceous rocks, diatomaceous earth, rottenstone, diatomaceous rock)	5,036,467	11,780	269,531	562
Silicon, including:	131,849,368	938,418	91,433,453	414,546
- silicon	35,059,563	328,318	4,366,110	58,755
- compounds	96,789,805	610,100	87,067,343	355,791
Fertilizers, including:	2,120,615,467	2,144,034	2,538,128,024	2,425,759

Mineral raw materials	Import		Export	
	Quantity (kg)	Value (PLN thousand)	Quantity (kg)	Value (PLN thousand)
- nitrogen	1,191,220,102	979,108	1,897,053,839	1,540,487
- multi-compound	929,395,365	1,164,927	641,074,185	885,272
Mineral pigments, ochre	731,243	2,298	28,416	180
Potassium:	1,045,166,242	1,155,139	37,020,996	71,132
- potassium fertilizers	990,500,560	1,011,651	26,444,079	30,236
- compounds	54,665,682	143,488	10,576,917	40,896
Selenium and tellurium, including:	175,569	18,320	270,085	9,790
- selenium	95,859	10,342	13,375	2,068
- tellurium	6,255	1,774	0	0
- compounds	73,455	6,204	256,710	7,722
Sulfur, including:	91,526,135	88,440	958,269,661	344,806
- iron pyrites	531,378	2,114	23,950	19
- raw or unrefined	19,365,011	5,005	406,449,575	162,967
- refined	211,520	1,570	94,261,118	78,931
- sublimed or precipitated, colloid	806,247	1,443	5,955,005	1,795
- sulphuric acid, oleum	9,715,308	6,742	345,339,945	51,578
- compounds	60,896,671	71,565	106,240,068	49,517
Sodium, including:	1,217,511,874	627,803	909,772,291	825,759
- rock salt for chemical processing	230,587,387	47,897	1,855,367	630
- denatured salt for industrial purposes	2,085,785	2,710	32,705,048	17,890
- food salt for people	56,844,033	34,530	79,599,137	37,426
- food salt for animals	568,869,143	68,599	300,190,843	88,717
- brine	1,052,955	1,108	389,505	549
- compounds	358,072,571	472,959	495,032,391	680,547
Strontium and barium, including:	1,408,115	6,197	94,900	560
- strontium and barium	13,576	396	3,400	85
- Sr compounds	1,394,539	5,802	91,500	475
Calcium:				
- compounds	129,764,466	227,563	37,573,563	64,463
IV. ROCKS				
Total:	9,350,224,190	3,493,007	5,700,524,354	2,973,268
Asbestos:				
- raw, flakes, powder	0	0	625	0
Bentonites	226,289,325	72,293	36,804,903	40,387
Cement, including:	1,142,758,070	283,353	422,191,688	252,447
- cements	1,021,659,999	265,087	416,330,170	250,194
- cement clinker	121,098,071	18,266	5,861,518	2,253
Dolomite:				
- raw, burned, consolidated	132,901,127	14,594	25,196,380	10,717
Gypsum, including:	166,199,189	99,261	496,928,203	263,717
- gypsum, anhydrite	22,026,344	5,415	90,497,445	3,593
- gypsum plasters	54,550,700	29,590	44,520,333	22,202
- gypsum, construction products	89,622,145	64,255	361,910,425	237,922
Clay (excluding refractory and foundry), including:	134,902,589	213,772	7,196,820	5,106
- other clays	99,504,230	26,341	6,912,157	4,562
- andalusite, cyanite, sillimanite, mullite	22,994,072	178,602	185,752	450
- chamotte and dinas earth	12,404,287	8,828	98,911	95
Natural graphite	12,446,595	55,670	120,463	521
Dimension and crushed stones, including	4,077,339,537	815,304	1,831,276,472	234,660
- Dimension stones:	393,900,487	505,196	212,515,435	166,437
- crude or roughly worked	137,543,166	136,627	150,664,738	60,951
- cutted to blocks and plates of a maximum thickness equal 25 cm	4,896,996	4,121	6,069,870	5,701
- building elements	250,549,769	363,012	32,732,128	98,401
- other	910,556	1,436	23,048,699	1,384
- Crushed stones:	3,683,439,050	310,108	1,618,761,037	68,223
- pitchers, curbs etc.	62,690,644	32,242	60,764,545	27,243
- crushed aggregates	3,620,748,406	277,866	1,557,996,492	40,980

Mineral raw materials	Import		Export	
	Quantity (kg)	Value (PLN thousand)	Quantity (kg)	Value (PLN thousand)
Gemstones and decorative stones non-processed, including:	24,524	57,710	5,675	5,761
- diamonds	276	42,519	3	1,349
- other	24,248	15,191	5,672	4,413
Kaolin, including:	145,330,654	76,748	16,805,617	7,638
- raw	95,406,413	58,152	14,332,653	5,884
- burned	49,924,241	18,596	2,472,964	1,754
Corundum and other abrasives, including:	17,024,151	17,342	3,930,463	7,704
- corundum, emery, garnet, raw and preliminary processed	17,023,461	16,082	3,929,240	7,652
- ash and powder from diamonds and from other natural stones	690	1,260	1,223	52
Chalk	99,951,088	25,704	25,009,349	8,791
Natural aggregates (pebbles, gravel, flintstones)	1,272,501,702	51,532	173,328,841	6,336
Quartz	757,034	1,267	389,167	282
Quartzite	75,565,839	4,761	12,533,253	2,937
Insulating materials	237,304,099	587,930	325,240,240	1,302,680
Refractory materials, including:	633,553,425	562,087	134,499,682	389,783
- magnesite	64,458,234	219,159	260,544	1,086
- refractory clay	487,587,417	126,097	12,444,747	7,358
- refractory mass and grounds	79,237,668	207,031	78,222,306	191,396
- products containing magnesite, dolomite or chromite	2,270,106	9,800	43,572,085	189,943
Mica, including:	2,842,260	22,544	205,919	1,225
- raw, powder	2,344,089	7,509	189,190	348
- mica products	498,171	15,035	16,729	876
Minerals and rocks of technical importance	261,106,006	291,872	100,307,601	252,594
Natural polishing materials:				
- raw pumice and other	1,129,656	1,203	160,776	3,494
Sands, including:	28,079,246	22,059	585,020,660	48,906
- siliceous and quartzitic	23,641,456	19,046	245,886,126	40,376
- other	4,437,790	3,013	339,134,534	8,530
Feldspar	416,926,961	78,509	142,410	84
Talc:				
- talc, steatite	40,452,087	64,227	1,795,647	3,271
Peat and peat products	209,435,743	77,230	66,915,812	29,250
Lime:				
- limestone flux, lime	224,839,026	73,267	1,501,433,500	124,226