

Table 7

**IMPORT AND EXPORT OF MINERAL RAW MATERIALS AND SELECTED SEMI-FINISHED PRODUCTS
IN 2023**

Mineral raw materials	Import			Export		
	Quantity (kg)	Value (PLN k)	Value (EUR k)	Quantity (kg)	Value (PLN k)	Value (EUR k)
I. FUELS						
Total:	55,417,749,668	129,628,011	28,331,258	18,477,512,030	40,409,839	8,835,918
Natural gas	Data not available due to the confidentiality of information					
Crude oil	25,004,001,907	64,821,454	14,186,231	180,617,338	439,082	95,888
Petroleum products	12,005,723,767	43,349,340	9,494,423	4,219,006,216	15,240,668	3,342,367
Hard coal, including:	16,927,924,964	15,276,924	3,301,968	4,759,838,089	5,041,175	1,100,290
- anthracite	78,453,878	145,106	31,333	4,743,245	8,155	1,799
- humic, coke, nonintegrated (<i>coke coal</i>)	2,164,983,752	2,715,030	589,537	3,226,407,488	3,734,718	815,124
- humic without coke, powder, nonintegrated (<i>energy coal</i>)	4,825,298,925	3,759,234	817,432	277,867,159	186,857	41,236
- other (without anthracite and humic) (<i>energy coal</i>)	9,839,509,053	8,641,518	1,860,136	1,219,999,443	1,084,849	236,304
- briquet	19,679,356	16,036	3,530	30,820,754	26,595	5,826
Brown coal	255,678,514	195,246	42,818	5,994,599	6,000	1,335
Coal gas other than from crude oil	1,000	207	45	32	2	1
Chemical products	332,122,114	1,018,739	221,952	2,026,983,377	4,283,658	935,068
Coke and semi-coke	117,058,322	204,030	44,737	6,860,872,137	11,644,710	2,540,751
Products from ennobled coal	88,467,647	2,481,622	540,809	92,483,399	1,927,323	422,086
Bitumen and natural asphalt, bituminous schist	400,530,145	2,130,769	465,473	274,860,848	1,774,013	386,481
II. METALS						
Total:	8,330,277,443	35,547,782	7,758,414	4,503,116,239	43,687,323	9,551,261
Aluminum, including:	919,136,501	8,085,019	1,768,406	584,791,009	5,058,285	1,105,989
- ores and concentrates	57,905,175	70,232	15,442	131,951	618	135
- wastes containing Al	1,879,680	2,973	650	17,176,063	63,103	13,807
- alloys	482,674,220	5,729,585	1,253,223	248,370,278	2,700,227	590,648
- wastes and scrap	237,251,214	1,689,579	369,348	304,613,864	2,215,074	484,059
- powders and flakes	863,230	19,718	4,327	1,669,728	29,437	6,451
- compounds	138,562,982	572,933	125,416	12,829,125	49,828	10,888
Antimony, including:	1,351,553	64,339	14,108	183,308	7,534	1,672
- non-processed, powders, wastes, scrap	36,831	2,041	444	18,653	989	216
- compounds	1,314,722	62,298	13,663	164,655	6,545	1,456
Barium (see: Strontium and barium or barium compounds in: CHEMICALS)						
Berillium:						
- compounds	5	2	0	0	0	0
Bismuth:						
- non-processed, powders, scrap, wastes	26,920	1,160	254	3,945	172	37
Chromium, including:	10,501,336	52,023	11,362	1,061,506	7,794	1,693
- ores and concentrates	9,019,586	20,651	4,514	304,694	744	161
- non-processed, alloys, powders, scrap	254,484	6,634	1,450	706,035	5,534	1,202
- compounds	1,227,266	24,738	5,399	50,777	1,516	330
Tin, including:	8,300,951	482,264	105,683	3,504,555	400,955	88,003
- ores and concentrates	320,325	9,668	2,164	0	0	0
- ash and remains containing Sn	3,143,228	107,094	23,269	15	0	0
- non-alloys	1,078,861	113,074	24,779	3,476,902	398,405	87,447
- alloys	1,088,368	88,994	19,510	8,765	897	196
- wastes and scrap	2,652,487	161,556	35,553	14,007	1,061	230
- compounds	17,682	1,880	409	4,866	592	129
Zinc, including:	279,168,655	1,573,363	342,831	107,576,723	1,293,076	282,342
- ores and concentrates	168,028,248	595,411	129,388	276,490	734	164
- ash and remains containing mainly Zn	22,552,270	67,165	14,717	8,916,980	77,441	16,890
- non-alloy	27,398,434	366,334	79,892	74,760,641	972,302	212,244
- alloys	12,068,721	168,953	36,978	3,741,468	50,130	11,028
- wastes and scrap	7,579,662	62,548	13,582	6,681,464	58,819	12,869

Mineral raw materials	Import			Export		
	Quantity (kg)	Value (PLN k)	Value (EUR k)	Quantity (kg)	Value (PLN k)	Value (EUR k)
- powders, dust and flakes	13,327,030	116,239	25,313	1,600,441	9,192	1,999
- compounds	28,214,290	196,712	42,961	11,599,239	124,458	27,138
Zirkon, including:	1,147,453	17,653	3,850	2,623,556	30,178	6,682
- ores and concentrates	1,107,306	16,363	3,566	2,616,921	30,069	6,658
- non-processed, powders, wastes, scrap	40,147	1,290	284	6,635	109	23
Galium, indium, thallium:						
- non-processed, scrap, wastes, powders	225	264	58	0	0	0
Germanium, including:	284,270	13,003	2,810	7,432	469	100
- non-processed, scrap, wastes, powders	5,043	105	23	5,031	40	9
- compounds	279,227	12,898	2,787	2,401	429	92
Hafnium:						
- non-processed, scrap	6	20	4	0	0	0
Iridium, osmium, ruthenium:						
- raw, powders	100	5,621	1,235	0	158	34
Cadmium, including:	1,929	129	29	659,478	9,946	2,202
- non-processed, scrap, powders	1,929	122	27	659,428	9,943	2,201
- compounds	0	7	2	50	3	1
Cobalt, including:	50,489	8,088	1,763	12,106	2,443	532
- ores and concentrates	211	67	15	0	0	0
- non-processed, powders, wastes, scrap	9,467	3,258	715	2,543	1,332	288
- compounds	40,811	4,764	1,033	9,563	1,112	244
Lithium:						
- compounds	1,107,197	231,739	50,176	1,312,496	395,171	83,972
Magnesium, including:	113,035,734	349,153	76,343	46,025,741	98,235	21,425
- metallic, non-processed	7,389,639	133,392	29,129	62,155	1,072	237
- scrap, wastes, powders	1,788,891	27,147	5,909	2,579,980	48,866	10,669
- compounds	103,857,204	188,614	41,305	43,383,606	48,296	10,518
Manganese, including:	15,121,894	133,071	29,068	12,523,499	26,601	5,771
- ores	2,535,111	9,404	2,065	11,882,275	12,797	2,730
- non-processed, scrap, wastes, powders	2,790,779	35,491	7,740	252,161	4,763	1,062
- compounds	9,796,004	88,176	19,263	389,063	9,041	1,980
Alkaline metals (excluding sodium)	5	54	12	1	0	0
Precious metals, including:	9,393,577	3,361,217	733,292	15,460,774	8,872,001	1,937,499
- ores and concentrates	0	0	0	4	4	1
- wastes, scrap (excluding Au, Pt)	1,705,956	385,087	84,277	2,328,693	900,214	196,705
- non jewelry products (excluding Au, Pt), catalysts	360,314	148,317	32,239	311,830	327,577	70,989
- compounds	7,327,307	2,827,812	616,775	12,820,247	7,644,206	1,669,804
Rare earth elements, including:	551,229	27,947	5,973	59,785	9,566	1,001
- yttrium, scandium (unresolved) non-alloy, not mixed, mixtures, alloys	800	36	8	0	0	0
- cerium, including:	550,429	27,911	6,167	59,785	9,566	2,105
- compounds	548,397	27,698	6,120	58,430	9,410	2,070
- Fe-Ce alloys	2,032	213	47	1,355	156	34
Copper, including:	364,928,836	7,263,756	1,584,475	414,030,989	13,416,222	2,934,888
- ores and concentrates	198,056,526	2,795,327	607,907	2,856,294	8,422	1,852
- wastes containing Cu	8	0	0	868,459	8,926	1,942
- copper mattes and cement Cu	2	2	0	1,927,468	20,398	4,462
- unrefined (anodes for electro-refining)	1,591,247	64,456	13,556	19,043	783	179
- refined (cathodes etc.)	8,699,716	274,426	60,120	302,640,120	10,933,795	2,391,874
- alloys (brass, bronze, alpaca etc.; transitional alloys)	2,823,534	99,416	21,675	5,170,307	126,509	27,744
- wastes, scrap	105,459,508	3,221,181	704,331	31,934,108	876,658	191,545
- wastes and alloys scrap	46,300,842	741,460	162,193	51,819,523	1,238,369	270,988
- powders and flakes	243,791	16,710	3,655	464,628	22,911	5,003
- compounds	1,753,662	50,778	11,038	16,331,039	179,451	39,299
Molybdenum, including:	1,780,613	115,252	25,140	1,575,119	102,078	22,330
- ores and concentrates	636,037	79,863	17,440	801,117	13,308	2,932
- non-processed, wastes, scrap	572,772	19,449	4,239	27,562	2,017	436
- powders	1,253	533	117	50	49	10

Mineral raw materials	Import			Export		
	Quantity (kg)	Value (PLN k)	Value (EUR k)	Quantity (kg)	Value (PLN k)	Value (EUR k)
- compounds	570,551	15,407	3,344	746,390	86,704	18,951
Nickel, including:	5,481,778	513,683	111,778	4,227,066	134,317	29,335
- ores and concentrates	0	0	0	6,597	33	7
- non-alloy and indirect metallurgical products	2,409,197	228,121	49,672	477,646	49,438	10,759
- non-processed alloys	504,128	130,025	28,375	7,160	2,058	455
- wastes and scrap of non-alloy	553,105	13,312	2,933	1,707	150	32
- wastes and alloys scrap	247,414	7,146	1,544	1,193,365	35,585	7,763
- powders and flakes	104,331	19,050	4,163	39,423	1,996	434
- compounds	1,663,603	116,029	25,092	2,501,168	45,056	9,884
Niobium and rhenium:						
- non-processed, scrap, wastes, powders	20,669	471	100	8,618	1,804	390
Lead, including:	109,996,341	1,174,618	256,602	80,900,643	896,413	195,374
- ores and concentrates	847,867	7,211	1,572	171,389	313	68
- wastes containing Pb	368,477	3,733	818	84,600	532	115
- refined and unrefined, non-processed	82,369,491	866,997	189,421	41,940,362	448,004	97,553
- alloys	14,184,044	181,570	39,644	35,208,065	421,706	91,961
- wastes and scrap	7,180,113	57,884	12,580	2,064,121	12,617	2,744
- powders and flakes	12,277	556	121	0	0	0
- compounds	5,034,072	56,667	12,446	1,432,106	13,242	2,902
Radioactive elements (unresolved)	1,259	67,894	14,902	14,345	91,325	20,014
Palladium:						
- raw and in the form of powder	9,422	1,746,526	381,607	16	2,398	524
Platinum, including:	76,781	1,320,233	290,455	84,307	180,669	39,660
- raw, in the form of powder	8,319	1,101,978	241,783	22	2,821	617
- wastes, scrap	67,331	9,842	2,136	77,776	166,294	36,535
- catalysts	1,131	208,414	46,536	6,509	11,553	2,508
Rhodium:						
- raw, in the form of powder	748	737,675	159,415	6	5,823	1,272
Mercury:						
- metallic	398	203	45	0	0	0
Sodium:						
- metallic	32,944	1,288	282	63	5	1
Silver, including:	457,721	171,415	37,542	1,967,011	4,188,036	916,481
- raw and in the form of semi-product	258,156	93,176	20,334	1,962,158	4,184,380	915,682
- powder	179,454	47,020	10,338	670	95	21
- compounds	20,111	31,220	6,869	4,183	3,561	778
Strontium (see: Strontium and barium or compounds in: CHEMICALS)						
Thorium:						
- alloys, mixtures, cermets containing Th	1,270	32	7	137	9	2
Titanium, including:	137,274,940	1,123,933	245,883	36,600,831	401,105	87,821
- ores and concentrates	56,785,203	66,771	14,653	12,949,500	15,582	3,532
- non-processed, powders, wastes, scrap	3,284,776	80,604	17,626	3,508,878	106,537	23,279
- compounds	77,204,961	976,558	213,604	20,142,453	278,986	61,010
Uranium:						
- compounds, alloys, ceramic products depleted in U-235	0	0	0	250	4	1
Vanadium, including:	22,254	4,161	913	72,758	218	47
- non-processed, wastes, powders	22,223	4,149	910	0	0	0
- compounds	31	12	3	72,758	218	47
Calcium:						
- metallic	2,201,145	47,687	10,458	10,386	174	38
Tungsten, including:	52,271	11,531	2,555	319,012	31,565	6,797
- ores and concentrates	2,000	9,023	1,950	0	0	0
- non-processed, powders, wastes, scrap	43,428	9,839	2,185	299,555	29,563	6,371
- compounds	6,843	1,683	369	19,457	2,002	426
Gold, including:	990	182,048	39,610	2,409	620,593	136,260
- powder	4	539	117	3	750	167
- raw other than powder	548	143,705	31,216	2,197	571,425	125,462
- wastes, scrap	9	1,446	310	207	48,415	10,630

Mineral raw materials	Import			Export		
	Quantity (kg)	Value (PLN k)	Value (EUR k)	Quantity (kg)	Value (PLN k)	Value (EUR k)
- compounds	429	36,357	7,967	2	3	1
Iron, including:	5,603,234,246	6,515,314	1,417,551	3,187,058,012	7,396,009	1,618,655
- ores and concentrates	3,983,154,587	1,999,643	435,245	99,607,787	52,781	11,273
- wastes rich in Fe	44,607,536	11,834	2,593	9,663,690	4,184	916
- non-alloy pig iron	198,253,085	407,003	88,793	63,026,480	149,023	32,608
- alloy pig iron	3,440,114	24,955	5,450	7,860	562	126
- ferroalloy	345,079,870	1,990,493	431,561	280,513,405	1,654,211	362,810
- products from the direct deoxidation of ores	65,435,545	99,607	21,682	74,428,714	116,699	25,368
- Fe of purity > 99.94%	12,642	72	16	274,383	3,851	837
- wastes and scrap	890,590,714	1,414,763	308,236	2,636,180,116	5,167,254	1,130,633
- pellets and powders, pig cast iron and steel	27,232,848	136,017	29,741	9,603,027	53,144	11,612
- compounds	45,427,305	430,925	94,234	13,752,550	194,299	42,471
Other metal ores	3	0	0	2	1	0
Wastes from metals metallurgy	744,901,995	135,435	29,783	347,524	5,345	1,175
III. CHEMICALS						
Total:	5,062,839,991	10,310,977	2,259,422	3,894,884,836	8,039,080	1,752,854
Arsenic	44,804	438	94	23,250	249	55
Barium, including:	15,393,900	37,999	8,303	1,579,125	1,887	414
- witherite	32,000	88	19	0	0	0
- barite	13,026,957	28,616	6,255	1,464,165	1,000	220
- compounds	2,334,943	9,295	2,029	114,960	887	194
Boron, including:	11,665,762	70,114	15,372	3,431,243	17,366	3,782
- boron	22,383	276	61	0	0	0
- natural borate minerals	1,558,350	3,187	696	965,960	2,720	590
- compounds	10,085,029	66,650	14,615	2,465,283	14,645	3,191
Bromine, including:	3,873,270	30,302	6,621	799,981	11,567	2,548
- bromine	6,532	292	63	14	12	3
- compounds	3,866,738	30,010	6,558	799,967	11,554	2,546
Fluorine, including:	11,750,364	174,876	38,456	1,561,817	8,902	1,931
- fluorite	8,477,910	18,486	4,036	956,549	2,786	612
- compounds	3,272,454	156,390	34,420	605,268	6,117	1,320
Phosphorus, including:	168,742,607	387,914	85,053	89,213,236	312,107	68,105
- phosphorites	107,710,961	70,003	15,628	0	1	0
- pphosphates fertilizers	23,808,561	47,747	10,597	58,579,215	87,645	19,261
- compounds	37,223,085	270,164	58,828	30,634,021	224,461	48,843
Helium	227,757	50,345	11,036	575,140	387,042	85,045
Iodine, including:	95,389	20,649	4,495	33,120	10,778	2,336
- iodine	44,088	13,692	2,979	21,173	7,392	1,598
- compounds	51,301	6,957	1,516	11,947	3,386	737
Carbide	9,271,337	55,949	12,199	10,373	182	40
Silica (siliceous rocks, diatomaceous earth, rottenstone, diatomaceous rock)	4,851,294	18,154	3,966	92,690	772	168
Silicon, including:	131,647,003	1,641,945	358,857	84,940,956	698,091	152,218
- silicon	28,988,909	343,034	74,806	3,230,375	42,889	9,339
- compounds	102,658,094	1,298,912	284,051	81,710,581	655,202	142,878
Fertilizers, including:	2,435,735,343	4,497,308	986,796	2,018,268,701	4,490,665	978,511
- nitrogen	1,758,625,251	2,793,950	610,710	1,584,311,509	2,900,854	631,844
- multi-compound	677,110,092	1,703,358	376,085	433,957,192	1,589,811	346,667
Mineral pigments, ochre	246,038	1,313	290	75,879	878	191
Potassium, including:	832,834,415	1,676,775	367,736	91,179,419	278,656	61,093
- potassium fertilizers	782,979,594	1,425,527	312,961	67,490,428	142,876	31,478
- compounds	49,854,821	251,247	54,775	23,688,991	135,779	29,615
Selenium and tellurium, including:	167,327	11,190	2,448	361,203	10,827	2,369
- selenium	101,349	5,569	1,221	44,395	3,462	755
- tellurium	402	201	44	0	0	0
- compounds	65,576	5,420	1,183	316,808	7,365	1,614
Sulfur, including:	65,395,346	124,871	27,329	782,876,380	425,803	92,888
- iron pyrites	421,903	846	185	343,040	909	200

Mineral raw materials	Import			Export		
	Quantity (kg)	Value (PLN k)	Value (EUR k)	Quantity (kg)	Value (PLN k)	Value (EUR k)
- raw or unrefined	4,220	8	2	28,173,621	27,581	5,959
- refined	564,904	2,002	436	103,893,243	114,501	25,010
- sublimed or precipitated, colloid	7,344	112	24	6,161,168	4,245	926
- sulphuric acid, oleum	8,667,066	7,784	1,714	476,481,299	207,110	45,193
- compounds	55,729,909	114,119	24,968	167,824,009	71,456	15,600
Sodium, including:	1,276,867,855	1,222,241	267,341	796,682,470	1,329,157	289,282
- rock salt for chemical processing	266,515,692	70,681	15,446	5,996,735	4,308	940
- denatured salt for industrial purposes	16,302,462	22,636	4,960	18,667,408	21,238	4,649
- food salt for people	62,458,510	62,491	13,693	32,429,082	33,442	7,331
- food salt for animals	453,014,252	125,687	27,634	221,230,661	127,965	28,061
- brine	243,367	2,696	587	3,858,913	7,336	1,610
- compounds	478,333,572	938,050	205,021	514,499,671	1,134,868	246,690
Strontium and barium, including:	620,732	8,224	1,793	90,821	626	137
- strontium and barium	10,702	222	48	0	0,000	0
- compounds	610,030	8,003	1,746	90,821	626	137
Calcium:						
- compounds	94,030,180	288,593	63,032	23,179,853	54,152	11,881
IV. ROCKS						
Total:	7,736,185,733	4,270,891	935,307	4,968,903,728	4,551,788	995,519
Asbestos:						
- raw, fibres	0	0	0	900	12	2
Bentonites	267,263,916	125,340	27,413	34,484,931	62,522	13,665
Cement, including:	1,104,279,696	546,787	120,070	332,776,145	371,639	81,361
- cements	1,102,526,357	544,882	119,650	312,844,613	363,427	79,575
- cement clinker	1,753,339	1,905	420	19,931,532	8,211	1,786
Dolomite:						
- raw, burned, consolidated	240,165,493	39,995	8,743	68,504,499	42,275	9,302
Gypsum, including:	151,266,440	148,628	32,517	303,683,646	339,894	74,095
- gypsum, anhydrite	7,429,563	5,081	1,112	2,709,064	1,319	286
- gypsum plasters	54,549,904	46,589	10,193	40,455,895	29,805	6,521
- gypsum, construction products	89,286,973	96,958	21,212	260,518,687	308,770	67,287
Clay (excluding refractory and foundry), including:	224,029,378	244,958	53,732	17,483,697	30,657	6,695
- other clays	193,126,412	50,553	11,067	977,816	2,964	649
- andalusite, cyanite, sillimanite, mullite	15,141,506	172,049	37,786	41,264	164	35
- chamotte and dinas earth	15,761,460	22,356	4,880	16,464,617	27,528	6,011
Natural graphite	14,514,349	237,008	51,760	80,135	1,960	436
Dimension and crushed stones, including	3,291,745,245	1,021,943	223,740	2,064,201,516	376,604	82,518
- Dimension stones, including:	369,118,403	619,706	135,578	262,417,264	266,593	58,373
- crude or roughly worked	119,800,345	161,199	35,222	192,587,102	65,079	14,225
- cutted to blocks and plates of a maximum thickness equal 25 cm	4,320,815	7,303	1,598	3,335,121	5,590	1,228
- building elements	210,305,565	449,022	98,277	59,909,412	194,568	42,625
- other	34,691,678	2,182	481	6,585,629	1,356	295
- Crushed stones, including:	2,922,626,842	402,237	88,162	1,801,784,252	110,011	24,145
- pitchers, curbs etc.	53,941,530	36,170	7,960	58,366,142	34,966	7,641
- crushed aggregates	2,868,685,312	366,067	80,202	1,743,418,110	75,045	16,504
Gemstones and decorative stones non-processed, including:	71,164	62,414	13,684	1,092	14,500	3,140
- diamonds	17	44,217	9,701	1	2,702	596
- other	71,147	18,198	3,983	1,091	11,799	2,543
Kaolin, including:	120,780,941	121,182	26,449	28,707,161	36,739	7,990
- raw	65,817,052	98,932	21,591	18,370,408	26,873	5,830
- burned	54,963,889	22,250	4,858	10,336,753	9,866	2,160
Corundum and other abrasives, including:	17,758,663	20,214	4,422	8,921,126	23,874	5,226
- corundum, emery, garnet, raw and preliminary processed	17,757,575	17,801	3,897	8,920,683	23,253	5,093
- ash and powder from diamonds and from other natural stones	1,088	2,413	525	443	621	134
Chalk	79,010,367	41,705	9,137	37,237,851	19,039	4,157

Mineral raw materials	I m p o r t			E x p o r t		
	Quantity (kg)	Value (PLN k)	Value (EUR k)	Quantity (kg)	Value (PLN k)	Value (EUR k)
Natural aggregates, including:	1,138,288,439	48,081	10,564	135,665,980	22,759	5,011
- sands (fine aggregates)	439,528,918	9,873	2,161	53,589,554	11,860	2,606
- gravel (coarse aggregates)	698,759,521	38,208	8,403	82,076,426	10,899	2,405
Quartz	1,330,233	2,674	584	317,904	888	194
Quartzite	28,417,191	4,453	974	13,872,908	4,256	921
Insulating materials	132,691,686	677,233	148,376	285,445,760	2,350,498	514,155
Refractory materials, including:	162,522,694	268,461	58,852	45,812,230	244,096	53,222
- magnesite	46,624,131	128,985	28,331	637,783	2,681	591
- refractory clay	107,716,769	100,866	22,088	11,642,468	8,492	1,833
- products containing magnesite, dolomite or chromite	8,181,794	38,610	8,432	33,531,979	232,924	50,798
Mica, including:	3,214,495	50,107	11,019	546,224	4,117	918
- raw, powder	2,638,605	10,161	2,225	498,994	670	147
- mica products	575,890	39,946	8,794	47,230	3,447	771
Minerals and rocks of technical importance	170,814,145	289,115	63,269	102,659,963	389,603	85,323
Natural polishing materials:						
- raw pumice and other	633,642	3,524	772	64,388	1,257	274
Siliceous and quartzitic (glass) sands	35,803,181	44,457	9,720	321,750,147	66,347	14,529
Feldspar	370,670,722	83,276	18,169	3,634,663	1,559	349
Talc:						
- talc, steatite	51,026,595	103,566	22,644	495,441	2,078	455
Peat and peat products	286,241,288	149,679	32,803	56,855,995	53,209	11,651
Lime:						
- limestone flux, lime	129,887,058	85,772	18,697	1,162,555,421	144,616	31,583