Mineral production and 2050 projected annual demand from energy technologies (in tons, thousands)

Mineral	2018	2019	2020e	2050 projected annual demand from energy technologies	2050 projected annual demand from energy technologies as percentage of 2018 annual production
Aluminum	60,000	63,200	65,200	5,583	9%
Chromium	36,000	44,800	40,000	366	1%
Cobalt	140	144	140	644	460%
Copper	21,000	20,400	20,000	1,378	7%
Graphite	930	1,100	1,100	4,590	494%
Indium	0.75	0.968	0.9	173	231%
Iron	1,200,000	1,520,000	1,500,000	7,584	1%
Lead	4,400	4,720	4,400	781	18%
Lithium	85	86	82	415	488%
Manganese	18,000	19,600	18,500	694	4%
Molybdenum	300	294	300	33	11%
Nickel	2,300	2,610	2,500	2,268	99%
Silver	27	26.5	25	15	56%
Titanium	6,100	8,400	8,200	3	0%
Vanadium	73	86.8	86	138	189%

Source: Data for annual production sourced from the US Geological Survey