



EARTHWORKS

The Honorable Debra Haaland

Secretary of the Department of Interior  
1849 C Street, N.W.  
Washington, DC 20240

*Re: Copper Should Not Be Designated as a Critical Mineral*

Dear Secretary Haaland,

The signatories of this letter are concerned about the recent efforts to urge you to include copper on the U.S. Geological Survey's Critical Minerals List (CML). We believe a Feb. 2, 2023 letter sent to the Interior Department from several U.S. Senators, including Arizona senators Mark Kelly and Kyrsten Sinema, is based on unsupported and misleading assertions.

The senators' letter relies heavily on a report produced by the Copper Development Association Inc. (CDA), which is a copper industry trade association. The CDA used incomplete data to reach a factually unsupported conclusion that copper should be included on CML. The CDA analysis is seriously flawed because it is based on poor methodology, incomplete data, and it therefore reached the wrong conclusion.

We are deeply concerned that attempts to influence the regulatory process to include copper on the CML is directly related to efforts by the two largest foreign-owned mining companies in the world to build the Resolution Copper Mine in Arizona. Successfully pressuring the Department of Interior to manipulate its rigorous CML analysis and place copper on the CML for political reasons would provide a convenient justification to senators to support the Resolution Mine, regardless of the massive negative impacts to Indigenous culture, the environment and rapidly diminishing water supplies in the midst of a megadrought gripping the Southwest.

The Interior Department must rely on consistent methodologies, comprehensive data, and an unbiased interpretation of the data when determining which minerals are included on the CML and not on the lobbying efforts of industry or pressure for politicians parroting its position. This letter provides sound evidence that copper does not fit the necessary definition as a critical mineral and that efforts to justify copper's inclusion are based on faulty analysis.

The USGS has repeatedly and correctly concluded that copper is not a critical mineral because it has "low disruption potential and low trade exposure." We strongly support USGS's conclusion.

**Alternative methodology:** The CDA report acknowledges it uses a methodology for calculating copper's supply risk that it describes as a "*significant departure*" from the USGS methodology. Both methodologies rightly conclude that copper has high economic vulnerability, because it is so useful. For this reason, USGS analyzes copper's trade exposure *across its whole supply chain*. The CDA report's most significant departure from the USGS's methodology is calculating trade exposure using data inputs from the Harmonized Schedules for only refined copper, which is only one element of the domestic copper supply chain. This approach grossly understates the amount of copper available to U.S. industry by ignoring "apparent consumption" from recycled scrap metals.

By contrast, the USGS's methodology included refined copper as well as the Harmonized Schedules for copper-dependent semi-fabricated products, including some products used in portions of the steel sector. The imports (and some exports) of brass and scrap steel contain enormous amounts of copper which can be extracted and reused. Recycled copper accounted for *32% of U.S. copper consumption in 2022*, according to USGS.

Not only does U.S. industry rely heavily on recycled copper, the country also diversifies its imports of various copper products (beyond refined copper). Therefore, USGS has rightly concluded that the U.S. has low exposure to trade disruptions. The availability of recycled copper and a diverse supply chain are two primary reasons why USGS determined copper is not included on the CML.

**Incomplete net import reliance data:** Not only does the CDA methodology exclude major sources of copper other than refined copper, CDA's report relies on limited data for refined copper thereby exaggerating the nation's reliance on refined copper imports. For example, it states that the net import reliance for refined copper in 2022 was 48% based on data from the first half of that year. However, the 2023 USGS Commodities report, which uses annual data for 2022, identifies a net import reliance for refined copper of 41%. USGS also found that net import reliance for refined copper *declined* from 2021 to 2022 (44% to 41% respectively).

**Low potential for supply disruption:** The USGS 2022 Mineral Commodity Summaries also underscore copper's low supply disruption potential. It shows that U.S. imports of refined copper are met by reliable foreign trade partners. U.S. imports of refined copper from 2018-2021 include Chile (64%), Canada (20%), and Mexico (11%).

The CDA report also omits important information that is necessary for an unbiased understanding of the copper supply chain. It contends that the increase in copper production from Russia, China, Iran and North Korea is an ominous threat to the U.S. supply chain. Yet the most recent data from the same source also demonstrates that imports from allied nations account for copper's low disruption potential. Furthermore, the report's reference to North Korea is misleading or perhaps a mistake. North Korea has negligible refined copper production and is not included in the 2023 USGS Commodities Report (See below). The Republic of Korea (South Korea) is included due to its refinery capacity.

**World Mine and Refinery Production and Reserves:** Reserves for Australia, Canada, Chile, China, Peru, Poland, the United States, and Zambia were revised based on company and Government reports.

	Mine production		Refinery production		Reserves <sup>6</sup>
	2021	2022 <sup>e</sup>	2021	2022 <sup>e</sup>	
United States	1,230	1,300	971	1,000	44,000
Australia	813	830	385	380	797,000
Canada	550	530	287	310	7,600
Chile	5,620	5,200	2,270	2,100	190,000
China	1,910	1,900	10,500	11,000	27,000
Congo (Kinshasa)	1,740	2,200	1,450	1,700	31,000
Germany	—	—	615	620	—
Indonesia	731	920	290	300	24,000
Japan	—	—	1,510	1,600	—
Kazakhstan	510	580	500	510	20,000
Korea, Republic of	—	—	647	660	—
Mexico	734	740	473	470	53,000
Peru	2,300	2,200	336	290	81,000
Poland	391	390	578	590	30,000
Russia	<sup>e</sup> 940	1,000	981	1,100	62,000
Zambia	842	770	354	350	19,000
Other countries	<u>2,850</u>	<u>3,400</u>	<u>3,170</u>	<u>3,000</u>	<u>200,000</u>
World total (rounded)	21,200	22,000	25,300	26,000	890,000

We urge you to continue to prioritize a consistent and evidence-based approach to decision making. Through such a process, we strongly believe the evidence will conclude that copper is not a legitimate candidate for inclusion on the USGS's Critical Minerals List.

Sincerely

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