



## Mineral Diplomacy: Educating About the Critical Mineral Challenges of Tomorrow

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Rising demand for critical minerals has renewed interest in reshoring extractive operations and reducing import dependency on foreign adversaries and troubled supply chains for essential elements used in defense and energy applications. Former executive orders (E.O. [13817](#), [13953](#) and [14017](#)) and the recent [Inflation Reduction Act](#) places big wagers on domestic critical mineral supply chains and energy development, yet achieving these high expectations will require massive quantities of critical minerals such as rare earths, lithium, nickel, cobalt, graphite, and manganese.

Despite these continued policy efforts and growing bipartisan recognition of critical mineral issues, a deep asymmetry in public perception and awareness of the extractive sector threatens their implementation. Often referred to as “Not in My Back Yard,” or the [NIMBY phenomenon](#), communities across the country are having difficulties reconciling years of negative attitudes towards mining, while now being told it is essential to reducing climate change and achieving the shared vision of a green future. Governments are now trying to convince their populations that mining is essential when, in fact, it has been all along. This created a [major gap](#) in workforce development and job expertise compared to our allies and adversaries. It also led to a growing deficiency in how politicians, think tanks, and industry leaders interact and engage with the public on extractive issues. Long gone are the days of limited involvement and community relations. So how can the thought leaders of tomorrow engage in this emerging space and shift public thinking on a timescale that meets US national security and economic priorities? Mineral diplomacy provides a path towards this answer.

**Mineral diplomacy** is the process of using minerals as a tool for outreach and community engagement. It breaks down the complexity of supply chain debates into its most simple parts, the rocks and minerals themselves. All high-tech products find their humble origins within in the ground. It is this lost information across the supply chain which makes it difficult for consumers to connect mining back to minerals, instead seeing their cellphone as pieces and parts, not raw minerals. When a mining operation for rare earths opens up, citizens revert back to the negatives, instead of the essential functions mining provides to modern society. This is not to say mining has no environmental concerns that must be monitored, rather informed citizens will allow for better negotiations and solutions to these challenging problems. Knowing and seeing what is being mined and why it matters can make all the difference, especially if environmental regulations are much stronger domestically than abroad.

Mineral diplomacy is not just about changing the hearts and minds of the population, but also educating politicians and industry partners in how to engage on these issues. Politicians are now catching up to years of industry challenges in the critical minerals space and unfortunately many of these processes are time-consuming endeavors. There is now a mad dash by staffers and think tanks to address these problems. However, many of the solutions require years of



development and expertise, not just immediate investment, and political talking points. Industry must also invest more in public relations and education as an essential function of their extractive operations. If major capital is to be invested in a mining project, it is better to be involved from the start.

There are three key parts to mineral diplomacy. First, mineral diplomacy is a way of seeing critical mineral issues through a material lens. It is important to take the journey from mine to end user and to follow the transition of a simple rock or mineral into its final product. Second, connecting back to culture can be a very powerful and engaging tool for reducing NIMBY. For hundreds of years, minerals mined from the ground were the sole purpose of many cities and thriving communities, providing a culture connected back to mining. Finally, mineral diplomacy recognizes that global issues must sometimes be solved by looking domestically. The emerging threats of tomorrow requires the US to heal its own divides and find ways to bring bipartisan solutions to the table. As divisive as mining has been, it has the potential to reunite and bring communities together for a shared vision.

In this pursuit of mineral diplomacy, three immediate actions are recommended. First, a national organization of policymakers, industry, and universities should be developed to provide a national awareness campaign around critical mineral issues. Allies have already developed groups such as the [Minerals Council of Australia](#), [Critical Minerals Association-UK](#), and the [Critical Minerals Institute of Canada](#) to name a few. These groups have become essential actors in education as well as public policy related to domestic mining. CMA-UK played a vital role in the [recent](#) announcement of the UK's first critical minerals strategy. Second, a consortium of international security schools in Washington, D.C. should create a pointed critical minerals program to train future thought leaders. This program should combine both technical and international policy skills providing interdisciplinary capabilities necessary for solving these emerging threats. Finally, companies interested in domestic mining should begin to invest in local education and critical mineral programs at museums. Educating the public will come through community support, curriculum development, and engaging and interactive exhibits which will impact thousands of people a year and encourage future generations to work in the extractive sector.

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