

Some Advice on Critical Minerals Security for President-elect, Trump

written by Jack Lifton | November 10, 2024

The cobbled-together policies of the Biden administration to create a secure domestic American controlled supply of critical mineral resources, and the capability and capacity to process them into end-user forms for both the consumer and military economies, have failed. This is due to the assignment of the creation and execution of those policies to groups and individuals chosen for political purposes rather than subject matter knowledge, experience, planning abilities, and both budget and manufacturing management skills.

To address and solve the problem, we must first recognize that there are two critical minerals markets in the United States, the consumer and the military.

Then we must understand that the solution for the military of the problem of securing domestic supplies of minerals and processing abilities necessary for national security DOES NOT IMPLY that the problem of the supply of the same minerals and their processing for the consumer economy has in any way been solved!

Only for the small segment of demand by the military is price **not** the driver of supply.

For the consumer economy price *is* the sole driver of supply.

The financializers who have captured the critical minerals based supply industries in the United States spend their efforts on manipulating share prices. So that they can sell their own

shares and accumulate wealth. The actual competitive (by cost) production of critical minerals and direct support for processing them into useful forms, economically, is of no interest to most of them, and, even if they had some semblance of pride or love of country, they just don't understand supply chains or which parts of them are the choke points in such chains.

My suggestion to fix this problem is that the government now carefully read, understand and then **amend** the flaws in Title VII of the (1951!) Defense Production Act.

The relevant part of the DPA is:

Section 705, which allows agency heads delegated the authority to address the problem to **obtain information from industry, as necessary or appropriate, for the administration of the DPA, including through industry studies to assess the capabilities of the U.S. industrial base to support national defense and subpoenas.**

But, as any experienced manufacturing or marketing executive can tell you: Such "studies" are held company confidential to preserve competitive advantage and are not distributed to outsiders.

USGS data is not the solution to the problem of industrial secrecy. The USGS data from domestic companies is, by law, kept private.

I do not have a ready solution for the absence of real data from the public domain, but even so there is an over-riding flaw in the government's approach to critical minerals supply security. It is that vertical financial as well as manufacturing integration is necessary for the building, for example, of a rare earth permanent magnet supply chain for the domestic

consumer products manufacturing sector.

The military, to ensure its needs, just smoothes out the supply chain sector losses with subsidies, but research and development must proceed commercial scale development and mistakes, a common feature of engineering trial and error, mean a re-start is necessary, which for commercial enterprises can be financially deadly and so is often swept under the rug by financial managers who complain that engineers are too cautious and "we will go with what we have."

Some components of a total supply chain cannot be profitable freestanding on their own, but since they are necessary they must be supported by distributing their costs onto other supply chain component areas that can bear them and remain profitable. Only, if the end-user product can be sold profitably will the consumer market consider its development.

There is no way to accurately plan and determine the time and costs necessary to construct and bring into operation a first-time product supply chain. Yet financial managers often fail to even recognize much less mitigate this risk. Governmental managers are clueless.

We all recognize that national security is a government priority, but government needs to recognize that maintaining our standard of living is also a priority, and that a strong industrial policy to support that priority cannot be formulated or executed by politically chosen bureaucrats or academics. It must take its direction from the industries to be supported.

This is what I think is missing from policy making and execution for critical minerals.