The Hollywood Version of Critical Minerals

written by Jack Lifton | July 31, 2026

"Value is not created where politicians make announcements. Value is added where difficult work is performed repeatedly, economically, and reliably." – Jack Lifton, Co-Chair, Critical Minerals Institute (CMI)

America's discussion of critical minerals has become the Hollywood version of reality.

Hollywood tells stories in which a nation identifies a crisis, appoints a hero, spends a large amount of money, defeats the villain, and lives happily ever after. Industrial history works differently. It is slow, technical, repetitive, and often boring.

The production of critical minerals and the manufacture of critical materials are not industries that respond to speeches, subsidies, or dramatic announcements. They respond to engineering, chemistry, metallurgy, procurement, logistics, financing, customer qualification, and years of reproducible operating performance.

Unfortunately, much of today's discussion in Washington—and, for different reasons, on Wall Street—assumes that industrial reality can be replaced by political narrative. It cannot. The American government has correctly recognized that dependence upon China for critical minerals and critical materials represents a national security problem. The diagnosis is largely correct. The proposed treatments are often not.

Too many policymakers appear to believe that selecting a handful of “national champions,” announcing billion-dollar investments, and issuing press releases constitute rebuilding an industrial base. It does not. An industrial base is not a collection of companies. It is a functioning ecosystem. A rare earth mine is not a rare earth supply chain. A separation plant is not a magnet industry. A magnet factory is not part of the automotive supply chain.

Each stage depends upon every other stage, and every stage must operate at commercial scale, at competitive cost, with consistent quality, and over many years before an original equipment manufacturer is willing to depend upon it. This is not politics. It is procurement. That distinction seems to be poorly understood in both Washington and on Wall Street. Government officials often assume that appropriating money solves technical problems. Investment bankers frequently assume that raising capital solves industrial problems.

Neither assumption is correct. Money is necessary. Money is never sufficient. The limiting factor today is no longer information. It is judgment.

The scientific literature describing rare earth chemistry is available to everyone. The engineering principles are well understood. The equipment can be purchased even when current non-American suppliers refuse foreign purchase orders; in that case, domestic American suppliers can, given enough time and incentives, replace them.

What is scarce is the accumulated industrial judgment required to connect every part of the supply chain into an economically sustainable enterprise. Judgment cannot be legislated.

Nor can it be acquired through financial engineering. It is developed by people who have spent decades solving production problems, qualifying products with demanding customers, recovering from failures, and learning which shortcuts never work. Those people exist. There simply are not enough of them.

Instead, the public discussion has become dominated by narratives. One week, mining is presented as the answer. The next week, recycling is presented as the answer. Then processing. Then magnets. Then another “transformational” acquisition. Each announcement is treated as though it solves the entire problem. None of them does.

Industrial reality is cumulative. Supply chains are constructed one qualified supplier, one reliable customer, one successful production campaign, and one profitable contract at a time. This lack of industrial understanding produces another dangerous illusion. The assumption is that America can recreate in five years what China spent more than forty years building. History suggests otherwise.

Industrialization requires time because competence requires repetition. Factories improve by operating. Engineers improve by making mistakes. Suppliers improve by serving customers. No government appropriation can compress those learning curves indefinitely. Perhaps the greatest misunderstanding is that governments and financial markets can suspend economic reality. They cannot.

If a process costs more than the market will bear, it eventually fails. If a supply chain cannot deliver consistent quality, customers will seek alternatives. If a project cannot earn an economic return, no amount of political enthusiasm will keep it alive indefinitely.

Markets eventually reassert themselves. That is neither ideology nor pessimism. It is industrial history. Does this mean America cannot rebuild secure critical mineral supply chains? Absolutely not. I believe the problem can be solved. But it will not be solved by treating industrial policy as political theater.

It will be solved by understanding how industrial systems actually function. That requires a different type of leadership. Not louder leadership. Better informed leadership. It requires people who understand mining, chemical processing, metallurgy, manufacturing, customer qualification, logistics, and procurement—not as abstract concepts, but as interconnected commercial realities.

The objective should not be to create headlines. The objective should be to create dependable suppliers. For more than sixty years I have watched industrial supply chains succeed and fail. The lesson has remained remarkably consistent. Value is not created where politicians make announcements. Value is added where difficult work is performed repeatedly, economically, and reliably.

We should therefore stop looking for Hollywood endings. Instead, we should begin building real industrial capability. The cameras may lose interest. America’s manufacturers will not.