Here Comes the Apocalypse: What Happens to America's Critical Minerals Industry When Washington Stops Financing Its Promises?

written by Jack Lifton | November 12, 2026

"When the government money stops, the factories that can manufacture qualified products for paying customers will remain the foundation of an American critical minerals industry. Those that cannot will have to confront the economic reality that government financing has postponed." – Jack Lifton, Co-Founder & Co-Chair, Critical Minerals Institute (CMI)

The apocalypse approaching America's critical minerals industry may not be the interruption of its supply of minerals, metals, and materials from China. It may instead be the collapse of the government financing that has allowed an increasing number of proposed American critical minerals supply chains to exist on paper without demonstrating that they can operate commercially. The original meaning of the word apocalypse was a revelation, an unveiling of what had previously been hidden. I think that this meaning is particularly appropriate to the circumstances now developing in the United States. The withdrawal, or even a substantial reduction, of government financial support would reveal which of our proposed critical minerals enterprises are genuine industrial businesses and which are financial constructs dependent on Washington's continued generosity.

In his monumental recent history, *The Economic Government of the World: 1933–2023*, the economic historian Martin Daunton writes,

near the bottom of page 1147, **“The economies of China and America are interconnected but politically opposed, a situation that will cause problems in any future crisis.”** I believe that this observation describes the fundamental problem confronting the American government’s attempt to reconstruct domestic critical minerals supply chains. We are economically interconnected with China because American manufacturers have spent decades purchasing minerals, metals, components, and finished products from Chinese industrial enterprises that have become the world’s dominant suppliers of many of these materials. We are politically opposed because Washington has increasingly come to regard this commercial dependence as a national security threat. The problem is that recognizing a threat does not automatically create the industrial capabilities necessary to eliminate it.

China’s industrial policy for critical minerals was not developed in response to a sudden political realization that the country depended on a foreign competitor. It developed over about a quarter of a century, building on an already substantial industrial foundation as part of a national effort to expand China’s manufacturing economy, increase its technological sophistication, employ its growing industrial workforce, and move steadily upward through the value chains of manufactured products. The production of rare earths, lithium chemicals, battery materials, specialty metals, permanent magnets, and other technology materials became integrated into the development of Chinese manufacturing industries that consumed them. China did not simply finance the construction of mines and separation plants in the hope that customers would eventually appear. It developed industrial systems in which raw-material production, processing into usable industrial forms, and manufacturer consumption grew together.

This distinction is fundamental. **Over roughly the last two**

years, the United States has greatly intensified its efforts to finance domestic critical minerals production through a fragmented collection of government programs, departments, agencies, loans, grants, purchase commitments, price guarantees, and direct or indirect investments. These initiatives have been superimposed on a manufacturing economy that long ago surrendered much of its domestic capability to process critical minerals into the forms industrial consumers require. The American government is attempting to finance the reconstruction of supply chains whose commercial foundations have been weakened by decades of globalization, outsourcing, and the financialization of industrial management. China, by contrast, developed much of its critical minerals processing capability alongside the growth of the manufacturing industries that created the demand for its output.

The difference between these two approaches cannot be measured by comparing spending alone. Industrial development is not a financial transaction. It is the cumulative result of technical experience, trained personnel, process engineering, equipment manufacturing, product qualification, customer relationships, and the continuous improvement of production methods. A government can provide the money to build a factory, but it cannot purchase twenty-five years of operating experience and install it along with the equipment. It cannot decree that a product will meet an automotive manufacturer’s specifications, that a metallurgical process will operate continuously at its projected recovery rate, or that the resulting material will be competitive in price and quality with an established foreign supplier. These are industrial achievements, not financial projections.

I have spent more than sixty years in the technology metals business, and I have watched the American industrial economy change from one in which manufacturing companies understood and

often controlled substantial portions of their supply chains to one in which financial considerations increasingly determined where and how products were made. The justification for outsourcing was generally that someone else could manufacture a material or component more cheaply, allowing the American original equipment manufacturer to reduce costs, inventory, and investment in production facilities. What too often went ignored was that the supplier was acquiring the technical experience, skilled workforce, and manufacturing capability the American purchaser was relinquishing. Over time, the apparent financial efficiency of the individual transaction contributed to the erosion of the industrial system upon which the purchaser ultimately depended.

China was among the principal beneficiaries of this transformation, although it would be a mistake to attribute its industrial success entirely to American mistakes. Chinese industrial policy deliberately encouraged the accumulation of manufacturing capabilities, technical knowledge, infrastructure, and supply relationships. Its domestic market expanded, its manufacturers became increasingly sophisticated, and its government supported industries that it considered essential to the country’s economic development. Enormous costs, wasteful investments, failed enterprises, and substantial overcapacity followed. China’s system was neither costless nor uniformly efficient. Nevertheless, the industrial capabilities created through this long process cannot be duplicated merely by announcing American projects with comparable nominal production capacities.

This is why I regard the present American approach to critical minerals financing with considerable skepticism. We are financing proposed capacities before establishing the capabilities needed to operate them, and we are often doing so without first determining whether qualified domestic customers

exist for the products to be manufactured. A rare earth separation plant is not a permanent magnet factory. A permanent magnet factory is not an electric motor factory. A mine producing a mineral concentrate is not necessarily the beginning of a commercially viable domestic supply chain. Each step requires its own technologies, its own economic justification, and, most importantly, customers whose specifications and purchasing requirements determine whether the output has commercial value. The correct way to construct an industrial supply chain is to work backward from the requirements of the original equipment manufacturer, not forward from the promotional claims of a mineral deposit owner.

The American government has increasingly become a substitute for the commercial customer in the financing of critical minerals projects. Public money can make a proposed project financially attractive to investors even when its eventual operating economics remain uncertain. Government loans, grants, equity investments, and purchasing commitments may reduce the immediate financial risks to private capital, but they do not necessarily reduce the industrial risks of production. Indeed, they may conceal those risks by allowing projects to advance further than private commercial financing would otherwise permit. When a project is valued primarily on the expectation of continued government support, its financial value depends on political decisions rather than demonstrated industrial performance.

This brings us to the political lesson that I believe Americans are about to learn. Industrial policy in a democracy must operate within a political system in which administrations change, congressional priorities shift, budgets are contested, and public spending is periodically reconsidered. There is nothing inherently wrong with this. It is part of the American constitutional system. But it means that a national industrial reconstruction program requiring decades of consistent effort

cannot safely be based upon the assumption that financial commitments made by one administration, or even one Congress, will necessarily be sustained by its successors. A program that depends on continuous political enthusiasm rather than commercial competitiveness contains a potentially fatal weakness.

The current American critical minerals financing effort has been developed in a remarkably short period compared with the time required to establish the industrial capabilities it is intended to support. The political urgency of reducing dependence on China has encouraged the announcement of financial commitments on a timetable often unrelated to industrial development. Governments can announce financing in days, approve programs in months, and publicize projected production capacities years before a factory can produce a qualified commercial product. Investors may respond immediately to the announcement, but the industrial reality remains governed by metallurgy, chemistry, engineering, construction, operating experience, and customer acceptance. Political time and industrial time are not the same.

I do not suggest that all government participation in developing critical minerals supply chains is unnecessary or undesirable. National security requirements can justify expenditures that ordinary commercial calculations would not. Governments have historically supported the development of industries and technologies that were essential to national defense. But a fundamental difference exists between purchasing a strategically necessary product at a price that supports its production and financing an industrial enterprise without establishing that it can manufacture it. The former creates a customer and a market requirement. The latter may create little more than a continuing demand for additional financing.

Nor should we assume that China’s industrial system is

invulnerable. Its economy faces its own financial, demographic, political, and commercial difficulties. Its industrial policy has produced overcapacity and intense domestic competition, and its dependence upon export markets creates vulnerabilities of its own. Nevertheless, those difficulties do not erase the processing plants, trained workforces, manufacturing infrastructure, and accumulated technical knowledge that China already possesses. The United States cannot close an industrial capability gap simply by pointing to weaknesses in the Chinese economy. We must create and demonstrate the capabilities that our own manufacturers require.

Daunton's observation about the economic interconnection and political opposition of China and America is particularly important because it reminds us that the present situation is not simply a contest between two governments. It is a confrontation between two deeply interconnected industrial economies whose political objectives are increasingly incompatible. American manufacturers still need products from Chinese supply chains even as Washington seeks to reduce that dependence. Chinese manufacturers continue to benefit from international commerce even as Beijing seeks to preserve its strategic industrial advantages. A political or financial crisis could expose the weaknesses of both systems, but not in the same way. A country with operating industrial capacity would enter such a crisis from a fundamentally different position than a country still financing plans to build it.

What, then, happens if Washington's willingness or ability to finance the reconstruction of American critical minerals supply chains diminishes substantially? I suspect we would discover that a considerable portion of the industry's projected future production depended on continued public financing. Projects that had not established competitive operating economics, qualified products, and dependable customers would face the same questions

that private industrial enterprises have always faced. Can they manufacture what the market requires? Can they manufacture it consistently? Can they sell it at a price that covers their costs and provides a return on invested capital? Can they survive without continued federal intervention? These questions are not ideological. They are the fundamental tests of industrial viability.

The resulting financial contraction could be severe, but it might also provide the first clear picture of the actual state of American critical minerals industrial development. We would learn which technologies have progressed beyond laboratory demonstrations, which production facilities can operate continuously, which products industrial customers have qualified, and which management teams understand the difference between raising capital and manufacturing materials. We might also discover that the number of commercially viable enterprises is considerably smaller than the number of projects presently being promoted. Such a revelation would be painful for investors, but useful for a nation trying to rebuild its industrial foundation.

The lesson I draw from China’s experience is not that the United States should imitate China’s political system or its methods of directing capital. It is that industrial capability must be developed systematically, over time, and alongside the industries that consume its products. A successful American critical minerals policy would begin with the requirements of American manufacturers and work backward through the production of components, alloys, metals, chemicals, and mineral concentrates. It would identify missing industrial capabilities, determine which can be restored commercially, and distinguish those that require sustained national security support from those expected to compete in ordinary markets. Above all, it would recognize that developing industrial capability is a

continuing national undertaking, not a succession of politically attractive financing announcements.

The apocalypse, if it comes, will therefore be more than a financial reckoning for America's critical minerals promoters. It will be a political revelation about the limits of trying to rebuild an industrial economy through short-term government financing programs without first establishing a coherent, durable industrial policy. China has spent approximately twenty-five years building an integrated system of production and consumption. America has spent the last two years accelerating a fragmented effort to finance selected portions of a system that it allowed to deteriorate over several decades. The difference is not merely one of money, or even of political will. It is the difference between possessing industrial capability and promising to create it.

When the government money stops, the factories that can manufacture qualified products for paying customers will remain the foundation of an American critical minerals industry. Those that cannot will have to confront the economic reality that government financing has postponed. And perhaps that will be the most valuable revelation of all: **a nation cannot finance its way back to industrial greatness. It must manufacture its way back**.