



How Can U.S. Safely Mine Minerals Critical to a Carbon-Free Economy?

Last year, the International Energy Agency warned that, according to current supply projections, the world may not have enough needed minerals to power a carbon-free world. Today's shortfalls, the agency alerted in a report, "Raises the risk of delayed or more expensive energy transitions." Renewable energy technologies like solar power, wind farms, and electric vehicles require more critical minerals—such as lithium, nickel, copper, and cobalt—for their technology to work than their fossil fuel counterparts. For example, the average EV requires six times as many of these vital minerals as a conventional car; onshore wind uses nine times more than a gas-fired power plant.

Recognizing this growing demand, the Biden administration announced in October an influx of \$2.8 billion under the Bipartisan Infrastructure Law toward domestic production of batteries and battery minerals. Yet extracting

more minerals means more mining—a process that can entail significant environmental and social impacts. They include potential water quality concerns, intrusions onto Indigenous nations, and harms to biodiversity, among others. Recent lawsuits over mines like the Lithium Americas mine in northern Nevada and the Rosemont copper mine near Tucson, Arizona, further highlight this growing controversy.

We ask a group of experts: How can we incentivize strong environmental and social safeguards for mining critical minerals? What reforms are needed in existing regulations, such as the General Mining Act of 1872? Could technological innovations like recycling of electric batteries and other components play a role? And fundamentally, how can policymakers ensure enough critical mineral supplies for clean energy without harming the lands and people affected by mining?



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Time to Build a Reliable Minerals Supply Chain

By Mark Compton

American miners and the minerals we produce are indispensable to modern society, providing the foundation for infrastructure, technology, manufacturing, health care, and national defense. Minerals also are essential to fighting climate change and for zero-emission technologies such as wind turbines, solar panels, storage batteries, and electric vehicles. As these technologies are deployed in ever-greater numbers, the demand for minerals is skyrocketing. Our nation must do more to keep up.

The World Bank sees mineral demand for advanced energy technologies jumping by nearly 500 percent by the year 2050, and as important as recycling is, it cannot meet this burgeoning demand. The International Energy Agency estimates that by 2040, recycling metals from spent batteries could supply only ten percent of the minerals that will be needed. The reality is we need more mining.

Congress has taken note of this incredible surge in demand and, through legislation such as the Bipartisan Infrastructure Law and the Inflation Reduction Act, has decided that it is unwise and dangerous to rely on hostile or unstable countries to supply our country's minerals. The clear message: Now is the time to get serious about building a reliable mineral supply chain.

The mining industry stands ready to help build that supply chain right here in America. Can it be done with strong environmental and social safeguards? The answer is a resounding yes.

Unfortunately, the United States is currently at a distinct disadvantage compared to China in securing access to the metals that are vital for the clean energy transition—because nearly two-thirds of our public lands are off-

limits to mining. Where mining is still allowed, we face significant permitting barriers that serve as disincentives to mineral exploration, development, and investment. The protracted mineral exploration and mine permitting processes are fraught with uncertainties, take too long, and cost too much.

These factors, paired with relentless litigation, chill investment in U.S. mineral exploration and development. The specter of unfavorable legislative or administrative proposals also raises uncertainty about domestic mining policies, making companies reluctant to invest the hundreds of millions (sometimes billions) of dollars necessary to explore for and develop minerals in the United States.

Hardrock mineral deposits have unique geologic, geochemical, and metallurgical characteristics that distinguish them from other minerals, such as coal, oil, or gas. The General Mining Law provides the necessary framework and security of tenure and certainty required to attract mineral investment—and to take the risk to find that needle-in-a-haystack, one-in-a-thousand economically viable deposit. Any changes to the Mining Law must be responsive to this geologic reality.

It's important to note that streamlining the permitting process can be accomplished without weakening environmental protection, because modern U.S. mines comply with the same environmental laws and regulations as every other industry. Additionally, surface management and reclamation laws specifically govern mineral exploration and mining projects. Unlike many other industries, miners must reclaim the land when mining is completed and provide state and federal regulators with reclamation bonds and other forms of financial assurance to guarantee the mine will be properly reclaimed.

Current environmental regulations require mines to be designed, built, operated, and closed using environmental safeguards that provide comprehensive protection. Plus, states have programs that evaluate each one's unique geo-

logical, environmental, and social factors, resulting in custom-tailored and effective regulatory requirements. In fact, they are often the models other countries use in establishing their own standards and programs. A new major federal set of standards and practices are not only unnecessary, but would create years of implementation challenges, discouraging development and investment at a time when it is needed most.

Proactive and early stakeholder engagement also has become a business standard for modern mineral exploration and mining companies. There is an industry-wide sincere desire to build long-term, collaborative, and beneficial working relationships with all stakeholders, where companies are committed to making a proposed mine the best possible project for the area's economy and people in a socially and environmentally responsible manner.

Mines must be able to attract and retain a qualified workforce. Employees want to live in nearby communities that are safe and welcoming places to raise a family and that offer good schools, medical and emergency services, adequate shopping, recreational opportunities, and other services and amenities. Often located in rural areas, a mining operation can become a community's and even a region's best opportunity to improve the quality of life for everyone.

Americans and the environment lose when we offshore our mineral requirements. Relying on other countries, even our allies, for the minerals we need has created our current, risky mineral import dependence. Made in America must include "mined in America" and sourcing minerals from U.S. mines that use state-of-the-art environmental protection measures, put a premium on worker health and safety, and are committed to the communities in which they operate. Now that is a win-win.

Mark Compton is executive director of the American Exploration & Mining Association.

Mining Reform Crucial to Energy Revolution

By Allison Henderson

The last mineral rush in the United States left a toxic legacy of contaminated soils and water, kidney failure, and cancer. On the Navajo Nation, uranium still shows up in the bloodstreams of newborn babies.

Indeed, more than 500 abandoned mines litter the nation. All kinds of hardrock mining have poisoned lands and waters, and taxpayers have been stuck with the cleanup bill. According to the Environmental Protection Agency, metals mining has contaminated more than 40 percent of western watersheds, and the industry is the single-largest source of toxic waste releases in the country. The estimated cleanup cost for U.S. Forest Service lands alone is more than \$6 billion.

Now there's a new mineral rush underway, sparked in part by the much-needed transition to solar power, electric cars, and battery storage. We can avoid death and destruction in this new mineral rush, but only if the mining industry is no longer allowed to run roughshod over public lands and communities, as it has for generations. We can protect people and the environment from irreversible damage while meeting the mineral demands of transitioning to 100 percent renewable energy.

During the ongoing climate and extinction crises, marginalized communities and wildlife should not shoulder the costs of polluted waters and decimated lands. We need a two-pronged approach—prioritizing investment in recycling and innovation to reduce the need for new minerals, and simultaneously modernizing hardrock mining laws.

The Department of Energy's conditional commitment in February

of \$2 billion to Redwood Materials, using funding from the Inflation Reduction Act, was a promising development. This Nevada-based company is building a circular supply chain, localizing material flows and producing anode and cathode components in the United States using as many recycled batteries as possible.

Robust recycling systems are essential for reusing and reconfiguring batteries, magnets, and solar panels. The administration needs to create strong incentives for collection systems, so minerals like lithium, copper, and cobalt don't end up in landfills. Policies are also needed to create incentives for recycling items that have small quantities of minerals, such as smart gadgets. It's time for the United States to embrace these efforts, as the European Union is doing.

Technological innovation and restructuring are significant parts of this first prong. The Climate and Community Project found that focusing on the built environment and electrified transportation technologies is a crucial lever for reducing mining-related harm.

By decreasing car dependency, right-sizing electric vehicle batteries, and creating a robust recycling system, the project's report said, the nation can reduce lithium demand by up to 92 percent by 2050 compared to the most lithium-intensive scenarios. These types of policies are key to deploying clean energy equitably and minimizing environmental harms.

The second prong is modernizing outdated mining laws and rules. Hardrock mining is governed by a law from the settler-colonial era. Under the 1872 Mining Act, public lands are generally free and open to mining exploration. Unfortunately, many land managers claim the law ties their hands in preventing widespread destruction.

This presents numerous conflicts for people and the environment, from destruction of sacred hot springs to extinction risks for plants and

animals. Hardrock mining threatens irreversible water depletion in the West, which is already experiencing the driest period in more than 1,200 years under a climate-induced mega-drought.

A leasing system for public lands mining, like what's in place for oil and gas extraction, would allow for comprehensive resource planning, including identifying areas of least conflict and areas unsuitable for extraction because of harm to communities, sacred lands, or ecosystems.

Federal policies should also force mining companies to pay for cleaning up the toxic sites and polluted waters they've left behind. Representative Raúl Grijalva's Clean Energy Minerals Reform Act would help protect people and the environment from hardrock mining's ravages. The Forest Service and the Bureau of Land Management have to bring mining oversight into the 21st century. In 2021 the Center for Biological Diversity joined with nine tribes and Indigenous organizations and 30 conservation groups to petition the bureau to modernize hardrock mining regulations. The petition provides detailed suggestions to reduce conflicts and stop perpetuating hardrock mining's toxic legacy.

These measures would protect water quality and quantity, respect treaty rights, and safeguard wildlife and their habitats. The Biden administration created a working group and articulated its vision for responsible mineral production. That's encouraging, but there must be action, not just words.

We have to create an innovative circular economy and muscularize mining laws to ramp up deployment of renewable energy. Safeguarding what's left of our precious planet, not corporate greed, should be the guiding star. History has shown that death and destruction accompany a mineral rush. We must learn from it.

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Biden Can Lead as We Enter the Electric Era

By Andrew Mergen

Thacker Pass, located in rural Humboldt County, Nevada, is at the center of a court battle over mining in the United States. It is a controversy that highlights the need for mining reforms. The proposed lithium mine at Thacker Pass is deemed essential to the transition to a net-zero economy. But the mine is opposed by landowners, environmentalists, and Indian tribes who allege that the government has failed to properly protect the landscape. That a mine controversy in Humboldt should focus our attention is fitting. The county is named after the Humboldt River, which was, in turn, named after Alexander von Humboldt—a legendary naturalist and geographer who described humankind's ability to alter the climate in 1831.

Humboldt the explorer was an exemplar of the Age of Enlightenment. The period's values included democracy, tolerance, and scientific decisionmaking. Today the recovery of mineral resources in the United States is governed by the product of a different age. The 1872 Mining Law and its predecessors favored business interests. The law encouraged the development of mineral resources on public lands in a manner that virtually codifies a right to mine. This one-sided focus ensures constant controversy and litigation in an era well informed of the devastating consequences mining can have for the environment. Reform is necessary and, with change, a mining regime can be crafted that is less subject to the controversy and court action that slows the acquisition of minerals critical to the electric era.

The Mining Law is much criticized. It massively subsidizes mining companies who pay no royalties on

the minerals removed from federal lands. This means the public obtains no direct revenue from mining operations that result in billions of dollars in profits for private companies. As many of these companies have foreign parent corporations, these profits are leaving the United States.

In addition, the Mining Law's single-minded focus on mineral development has resulted in considerable harm to the environment. Metals mining is the county's largest source of toxic waste. These effects often disproportionately affect Native communities. A recent study determined that most U.S. reserves of cobalt, copper, lithium, and nickel are located within 35 miles of Native American reservations. Even though these lands are outside of reservation boundaries, they are usually within traditional tribal territory and contain areas of profound cultural and religious significance to members. But Native American communities have historically not been meaningfully engaged on the development of the extraction of mineral resources.

Enlightened mining reform would ensure that royalties are paid to the U.S. Treasury for the benefit of all Americans. A leasing system, akin to the system that governs oil-and-gas development on federal lands, would provide a mechanism for royalties while at the same time eliminating the "right to mine," a key component of the 1872 act. Furthermore, a leasing system would provide multiple avenues for tribal consultation. And a leasing system is more susceptible to the inclusion of meaningful environmental safeguards.

The difficulty is that a leasing system would require an act of Congress. Congress has resisted mining law reform for decades. The question becomes: Can the Executive Branch alone take steps to bring enlightenment to mining? The answer is yes.

There are three measures toward a reformed mining regime that the Biden administration could undertake immediately. First, the federal government must insist on a meaningful

mining plan of operations. Before mining can commence under the 1872 act, a mining plan of operation must be approved. Federal land managers have sometimes been wary of imposing environmental restrictions on mine operators for fear of sparking a takings lawsuit alleging that the environmental conditions are so onerous that they make mining impossible and, hence, extinguish a property right subject to compensation by the government. But recent cases, arising around bans on gold dredging operations, show that land managers have more leeway than often appreciated in conditioning mining on environmental standards.

Second, the courts have recognized the ability of federal land managers to protect important Native American cultural and religious areas from disturbance. Here, as in the past, the government has underestimated its authority. Federal land managers should, in consultation, actively designate non-use areas and proactively protect tribal landscapes.

Federal land managers should affirmatively seek a better understanding of the Native American cultural and sacred landscape. At present, under-resourced land managers only investigate the landscape after a proposal has been put forward, but many critical mineral localities are known now and there is no reason that cultural resources in the vicinity cannot be surveyed immediately as well. Informed consultation depends on land managers knowing the landscape.

Finally, the administration needs to invest in a trained workforce knowledgeable about mining law, environmental science, and cultural resource management. To be sure, agency resources are finite but, even with limited resources, training efforts can yield substantial results.

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Cooperate Internationally, Reduce Demand

By Scott D. Odell

The United States currently produces a tiny fraction of the global supply of critical minerals required for the clean energy transition. For example, according to the most recent World Mining Data report, it accounts for only 6 percent of copper production, and less than 1 percent of nickel, cobalt, and lithium. In contrast, Chile and Peru together produce 38 percent of copper, Indonesia and the Philippines produce 46 percent of nickel, the Democratic Republic of the Congo produces 67 percent of cobalt, and Australia and Chile produce 75 percent of lithium. China mines more of all four metals than the United States, and processes more of each than any other country. This indicates that the Biden administration is right to invest in domestic metal production to increase the U.S. contribution to clean energy needs.

However, given the years required to finance, approve, and build new mines, these figures also demonstrate that the United States is unlikely to onshore anywhere near the minerals production it will need to reduce its share of GHG emissions within the urgent timeline identified by the Intergovernmental Panel on Climate Change. To keep global average surface temperatures below the threshold of 1.5°C above preindustrial levels by 2100, the global community likely must reduce its currently targeted emissions by 2030.

The United States will thus have to import large amounts of natural resources and/or their end products, such as solar panels, from other countries—including China—for the foreseeable future. The demands of mutual climate security thus necessitate that the world's two largest GHG emitters,

as well as leading mining countries, prioritize cooperation rather than competition over clean energy resources.

With regard to the socioenvironmental concerns implied by mining expansion, the Biden administration and Congress must indeed take domestic action such as reforms to the General Mining Law. But again, even if only for its own interests, the United States must also pay attention to pressures mining places on communities and the environment beyond its borders. The Lithium Americas and Rosemont cases in Nevada and Arizona are but two of more than 700 cases of environmental conflict related to mining worldwide identified by the Environmental Justice Atlas.

Cases in Latin America, where my research is concentrated, demonstrate that grave socioenvironmental concerns—especially related to water—are halting mining projects from local to national scales. In Chile, protests related to glaciers contributed to a termination of the large Pascua-Lama and Andina-244 mining proposals. In Ecuador, residents of Cuenca, the country's third largest city, voted overwhelmingly to block future mining projects, affecting 44 concessions. Most strikingly, El Salvador halted metal mining altogether in the country following a ruling by the International Center for the Settlement of Investment Disputes that reiterated the country's authority over its minerals.

U.S. companies have long been drivers of mining and associated environmental and social harms in Latin America and other world regions. The success of needed international critical mineral partnerships will thus depend on U.S. policy and industry attention to address past wrongs and offer assurances that future mining could and would be conducted responsibly. While strengthening its own socioenvironmental regulations for mining at home, the United States should also take a leading role in establishing international mining standards. In addition to inherent benefits to host countries and communities, this will have

the domestic benefit of protecting U.S. mining interests from offshoring to countries with lower standards.

While these measures are necessary to ensure an adequate supply of clean energy minerals, single-minded efforts to replace fossil-fuel energy with metals-dependent energy will at best be merely sufficient to mitigate global warming. At worst, they will replace climate change with a new crisis: accumulated social and environmental harms from ubiquitous empty mines and full waste facilities in communities around the world.

Thus, the United States and the global community must also pursue mechanisms to reduce consumption of energy and natural resources. A prime example of needed policy reform is the United States' misguided effort to simply switch its transportation infrastructure from dominance by combustion-powered vehicles to electric vehicles, without addressing fundamental overdependence on individual automobiles. Instead, the country should invest in strategies with higher impacts on GHG emissions and smaller mineral requirements, such as public transportation, bicycle infrastructure, and walkable cities.

Incentives are also needed to expand recycling infrastructure to keep more metals within the productive system longer. Similarly, regulations are needed to require manufacturers to make mineral-intensive products like electronics repairable, rather than only replaceable. Government funding will also be crucial for the development of products that can maintain functionality with less material.

Climate change is the defining global challenge of our time. To help address it, the United States must work with international partners to decrease energy and minerals consumption and reduce the environmental and social impacts of mining.

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Transition Must Be Just, Equitable and Responsible

By Payal Sampat

The transition to renewable energy is speedily underway. Meeting the ambitious targets necessary to avert climate catastrophe will require scaling up our use of low-carbon energy sources. These solar, wind, and battery technologies currently rely on minerals such as cobalt, lithium, nickel, graphite, copper, and multiple rare earths.

The spike in mineral demand comes at a time when mining is getting dirtier and riskier. Metals mining is the leading contributor of toxic emissions to air, water, and soil in the United States. Globally, it has been linked to human rights violations, forced displacement of communities, and water pollution. Mining metals accounts for 10 percent of the world's greenhouse gas emissions.

Furthermore, 97 percent of nickel, 89 percent of copper, 79 percent of lithium, and 68 percent of cobalt reserves and resources in the United States are located within 35 miles of Native American reservations. This is symptomatic of a global pattern: from Russia to Chile to Papua New Guinea, Indigenous Peoples are at highest risk from the growing appetite for nickel, lithium, cobalt, copper, and other clean energy transition minerals.

Without proactive steps toward more responsible sourcing of minerals for these low-carbon technologies, we run the risk of unintended, yet significant, harm to people, the environment, and even our climate. The choices made at this juncture could either upend the energy transition or present a tremendous opportunity—to center equity, justice, and environmental responsibility, to pair a renewable energy transition with a sustainable materials transition.

Reforms start with the rules gov-

erning mining. Automakers and other downstream buyers of lithium, nickel, copper, and other minerals must be the loudest voices supporting overhaul of the antiquated 1872 U.S. Mining Law and to advance other mandatory provisions to ensure safer mining practices and community consent. Likewise, these large consumers can influence the European Union's Critical Raw Materials Act, currently in draft form, which must be strengthened to recognize Indigenous Peoples' right to free, prior, and informed consent, to require meaningful consultation and to mandate safer mine tailings management. Given that electric vehicle and renewable energy brand reputations are closely intertwined with environmental responsibility, some leading automakers and electronics companies are already asking suppliers to undergo assessments by the multi-sector-governed Initiative for Responsible Mining Assurance, which independently audits environmental and social performance at mines against its published standards.

The next step is responsible recycling and recirculation of minerals: There is significant untapped potential to reuse minerals from batteries and other technologies. 2021 research by the University of Technology, Sydney, found that effective recycling of end-of-life electric vehicle batteries could reduce global EV mineral demand in 2040 by 55 percent for newly mined copper, 25 percent for lithium, and 35 percent for cobalt and nickel. Over the next decade, huge numbers of batteries and other clean energy infrastructure will begin hitting the waste stream.

Now is the time to invest in recycling and reuse systems and to ensure they are implemented responsibly. It is absolutely essential that all take-back, transport, disassembly, and recycling of batteries and renewable energy technologies center environmental justice, protect workers, and minimize environmental toxicity. In December the EU passed new battery

legislation that sets minerals recovery and recycling targets. Congress and the Treasury Department must, at a minimum, harmonize the Inflation Reduction Act's EV mineral sourcing requirements with this EU mandate.

Reducing minerals demand presents opportunities to advance equity. Research and development into new battery chemistries combined with investments in low-carbon public transit could point to future technologies and systems that are less minerals intensive, cleaner, and more equitable. The University of California, Davis, and the Climate + Community Project recently published a new study, "Achieving Zero Emissions With More Mobility and Less Mining," which modelled scenarios for decarbonizing personal transportation in the United States. The research found that driving compact vehicles—thereby reducing battery size—and lessening car dependency through improvements in public transit could slash projected demand for lithium by over 90 percent. These are choices that cities and governments could be making right now that could change the course of our energy and materials transitions—while improving access to mobility and ensuring that the benefits of the clean energy revolution are more equitably accessed.

We must get ahead of the human rights and environmental issues associated with obtaining minerals used in renewable energy technologies—or we risk replacing one harmful form of extraction with another. In order to ensure that the new energy economy we are building is truly clean—as well as just and equitable—we must demand more responsible mineral sourcing, recycling, materials efficiency, and a reduction in overall energy and mineral demand. Our choices at this moment have the potential to catapult us to an enduring renewable energy future, as well as to build a more sustainable minerals economy.

Payal Sampat is the mining program director at Earthworks.

America Must Embrace Its Mineral Potential

By Katie Sweeney

Despite being home to vast and varied natural resources, the United States is facing grave mineral supply chain challenges. Our import reliance has been well-documented and increasingly problematic for decades, reaching an all-time high this year. Pandemic- and war-related challenges are crashing into unprecedented mineral demand driven by the accelerating energy transition and electric vehicle revolution.

Surging minerals needs are outpacing our supply capabilities. There is a distinct mismatch between the time it takes to bring supplies to market and the speed at which new demand is accumulating. We can bring a U.S. battery megafactory online in two years—but bringing the mines and mineral processing facilities online to supply it can take decades.

When searching for solutions to prepare for the tsunami in mineral demand, the answer must be comprehensive and include increased domestic production and processing, strategic alliances with aligned nations, recycling, and remining or reprocessing of extractive wastes. But domestic mining must be at the center of this holistic effort.

While demand for minerals kicks into even higher gear following the Inflation Reduction Act's passage, the U.S. mining industry's potential to meet this demand is stuck in neutral. Incentives to reshore mineral supply chains are colliding with a permitting process and adversarial posture toward mining that can slow, or even block, development.

The Biden administration admits the need to shore up the nation's minerals supply but is working at cross purposes to address the challenge. Land withdrawals, blocked proj-

ects—such as the Twin Metals mine in Minnesota—and persistent rhetoric about deficiencies in the nation's mining laws send an unmistakable signal that the needed expansion of domestic mining is unlikely—perhaps even unwelcome—under this presidency.

There's a stubborn belief by some in the administration—and anti-mining voices in Congress—that a sweeping overhaul of the General Mining Law must be a precondition to expansion of domestic mining. This view—a Trojan Horse of mining opponents who don't want new U.S. mining—claims the law is outdated and lacks needed environmental and community engagement protections.

This criticism of the Mining Law stems from a misperception about the legislation's intent and the complementary legal framework. The law is not—nor was it intended to be—an environmental statute. Importantly, it is complemented by exhaustive federal and state environmental, ecological, reclamation, and financial-assurance regulations.

Given the applicability of over three dozen major environmental laws—including the National Environmental Policy Act, Clean Water Act, Clean Air Act, Endangered Species Act, and National Historic Preservation Act—duplicating these existing standards in a misguided overhaul of the Mining Law would provide no additional environmental benefit.

Rather, there is a pressing need for recognition that the last five decades have ushered in a sea change in environmental awareness in all industrial activities, including mining, that account for federal and state laws and regulations, environmental management systems, design standards, engineering controls, environmental monitoring requirements, best management practices, improved technology, training, and financial assurance.

Modern U.S. mining and its governing environmental laws are world leading. That does not mean there isn't room for further improvement to address legitimate concerns, but such

measures, for instance enhanced tribal consultation, require changes made with a scalpel not a sledgehammer.

The failure to encourage domestic mining—much less create new barriers to it—threatens the deployment of essential energy technologies and will increase reliance on supplies from geopolitical rivals or countries with environmental and labor standards that pale in comparison to our own.

Recycling and materials substitution are no silver bullets. Materials recycling remains in its infancy. Even best-case scenarios demonstrate that new mining is essential. There is no recycling what has not yet been mined.

Materials substitution while helpful can implicate the law of unintended consequences. For example, battery-makers responded to the rapid rise in prices of cobalt and nickel by using more lithium-iron-phosphate chemistry, driving further demand in a tight lithium market and putting accumulating pressure on the phosphorous supply essential to fertilizer production and the food security of billions.

The United States must commit to ramping up domestic mineral production. We are an outlier with peer countries with similar environmental standards in the time it takes to permit new mines—a decade or more to permit mines here while permitting in Canada and Australia takes two to three years. Both countries have committed to ramping up their own supply of energy transition metals, including pursuing new permitting efficiencies. Even the European Union has proposed streamlining its mine permitting process for strategic projects to 24 months.

The United States needs to walk the talk on the minerals challenge. As our mineral needs skyrocket, we can't get where we hope to go without a commitment to build the secure, responsible mineral supply chains our economy and energy future demand.

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