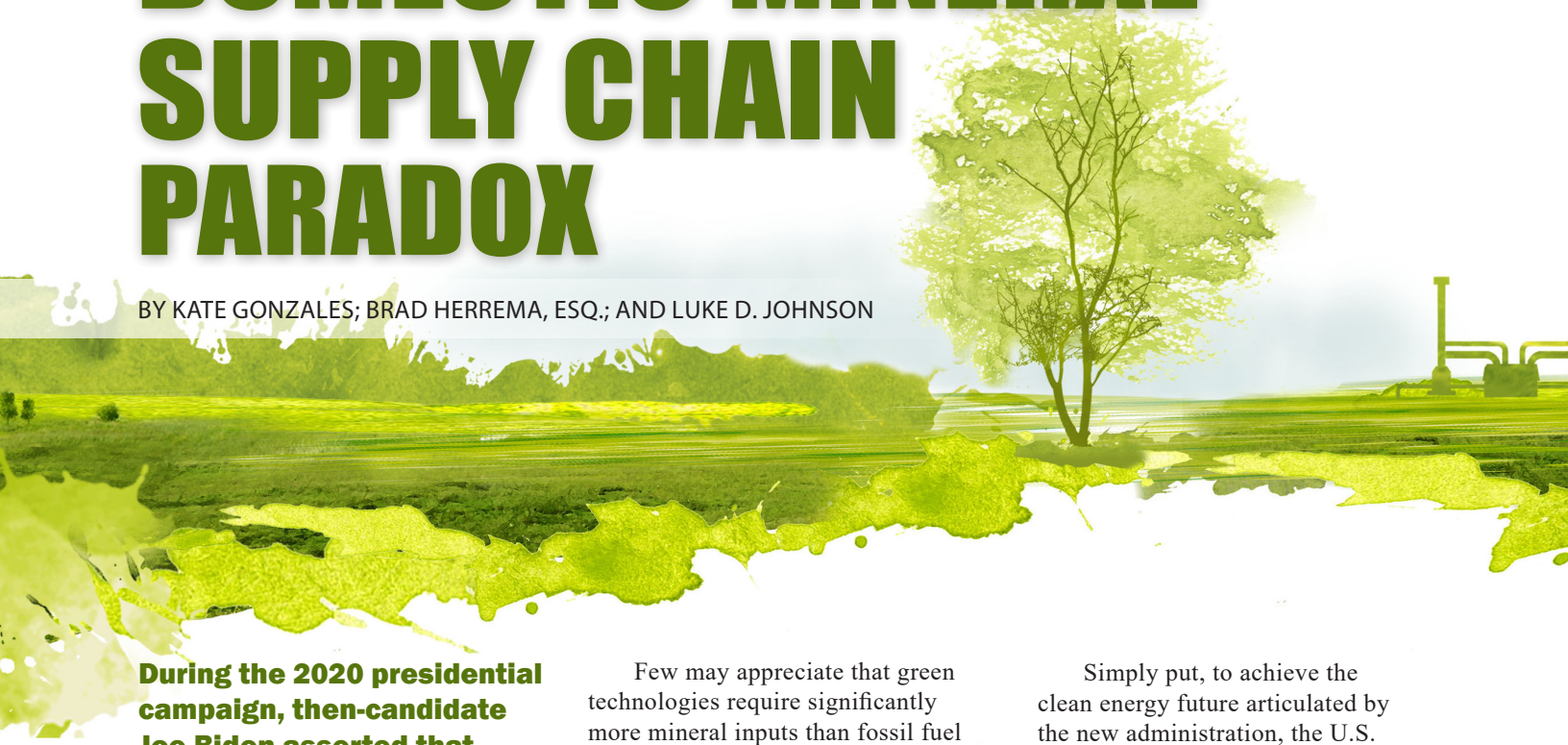
THE GREEN ENERGY DOMESTIC MINERAL SUPPLY CHAIN PARADOX

BY KATE GONZALES; BRAD HERREMA, ESQ.; AND LUKE D. JOHNSON



During the 2020 presidential campaign, then-candidate Joe Biden asserted that his administration would take quick action to build critical energy supply chains necessary for the realization of a green energy future tied to taking on climate change. It came as no surprise then to see on April 22, 2021, President Biden quickly set a goal for the U.S. of 50-52 percent reduction of greenhouse gas emissions from 2005 levels to be achieved by 2030.[1] Aggressive executive orders have also accompanied this action. The White House has stated this goal is evidence of President Biden's "focus on building back better in a way that will create millions of good-paying, union jobs, ensure economic competitiveness, advance environmental justice, and improve the health and security of communities across America."[2]

Few may appreciate that green technologies require significantly more mineral inputs than fossil fuel counterparts. As an example, an electric vehicle requires approximately six times more minerals than a conventional car.[3] Wind turbines, solar panels, nuclear power plants, and electric vehicles all require the availability of large amounts of new minerals. The current domestic supply of these minerals simply does not come anywhere near being able to provide the mineral supply chains necessary to reach the goal set by President Biden. Some have posited the answer can be found primarily in recycling, but even the most aggressive estimates fall far short of projected future demand, particularly if one takes their cues from the urgency of aggressive clean energy goals.[4] Others have suggested the need may have to be met by a heavier reliance upon mining in countries with lower labor and environmental permitting standards. It is hard to imagine this scenario being an acceptable answer for policymakers.

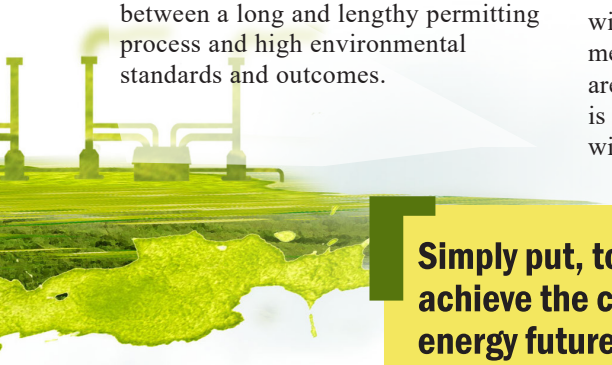
Simply put, to achieve the clean energy future articulated by the new administration, the U.S. must have access to more minerals through reliable domestic supply chains, outside the control of its adversaries. This need will require the new administration to confront a growing paradox—the current permitting process for mining projects that produce the necessary copper, cobalt, lithium, nickel, zinc, and other important minerals, including rare earths, necessary for green energy projects routinely can require more than a decade to successfully navigate.

Thus, the existing permitting process that has grown more and more complex over the years through a growing set of regulatory and litigation-driven demands may ultimately prove to be a substantial obstacle in reaching the Biden administration's green energy aspirations. This paradox was highlighted recently by U.S. Sen. Lisa Murkowski (R-Alaska), a former chair of the Senate Energy and Natural

Resources Committee and a frequent Republican cooperator with the new White House.

"The question here," she said, "is whether the administration is willing to accept what is going to be necessary in order to achieve this goal to have these secure supply chains. It is going to require approval of mining projects, and that has been a challenge for us."[5]

While a superficial response from some may suggest that a more predictable and reliable permitting process is about lowering environmental standards, there is simply no necessary correlation between a long and lengthy permitting process and high environmental standards and outcomes.



Getting to a "yes" or "no" decision on permits necessary for new mining projects need not span three or more presidential administrations to reach an environmentally sensitive and appropriate outcome, even while still involving public stakeholders.

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With western lands rich in mineral deposits at the center of many key federal decisions, Nevada and other western states sit at the nexus of whether these climate goals are realized or stymied. If the administration decides to facilitate reliable and predictable domestic mineral supply chains, it will have several opportunities to make its mark. As the new administration reviews rules for how to apply what the courts have said regarding the interpretation of Waters of the United States (WOTUS), it has the discretion to simplify or complicate the obtaining of permits under Section 404 of the Clean Water Act. Reviews under the National Environmental Policy Act (NEPA) can be simplified to get to a good environmental outcome more efficiently while meaningful consultation requirements with states, tribes, and other stakeholders need not be rendered more complicated. More often than not, a key part of the decision-making process includes senior administration officials who empower permitting agencies to make decisions.

There is also, of course, a natural intersection between water and mineral development. This is not a small matter of concern in Nevada, which remains the driest state in the country. Consequently, one area to watch closely will be how critical water needs are met under state water law. Like many areas throughout the country, Nevada is seeing a change in weather patterns with extended drought periods and very intense wet periods. These changes can affect the timing of water availability and, depending on the supply source, may have local, regional, or even statewide impacts. At the same time, the information available to the state's Division of Water Resources (NDWR) regarding its water supplies is based on a series of reports that are 50-70 years old—and NDWR estimates it will take years and substantial financial investment to update and modernize the data it relies upon.

In March, Adam Sullivan, then-acting state engineer, presented to the Nevada State Assembly Committee on Natural Resources regarding "Water Resource Management Challenges." His presentation described that, against the backdrop of the changing water-availability landscape, increasing development and demands on Nevada's water supplies are resulting in conflicts that are testing Nevada's ability to satisfy all potential interests, needs, and uses. Nevada's water laws are founded on the doctrine of prior-appropriation—"first in time, first in right." Sullivan opined that Nevada has no well-established management strategies for balancing the needs of competing interests, and that Nevada's existing statutory structure creates only winners and losers—no middle ground. At the same time, Nevada courts have been more inclined to grant equitable relief that softens the impacts of the state's prior appropriation regime. The conflicts themselves, as well as the ability to seek equitable relief in the courts and water right claimants' willingness to do so, have led to increasing litigation, which further complicates the state engineer's attempts to administer the existing statutes and regulations. As we pursue the clean energy future and new projects are permitted, the struggle to meet the demands for water availability will continue to increase. The development of new technologies and successful management strategies will be key to enabling projects to be more efficient and responsible with water than ever before.

Managing complex water needs for mineral development and finding a smoother and more predictable path for environmental permitting are challenges that are likely to remain at the forefront of meeting the new administration's aggressive climate goals. The trajectory of the present permitting process is simply incompatible with domestic supply-chain objectives and their accompanying climate goals. There is no need to lower standards in order to make good environmental permitting decisions more expeditiously and predictably. While the jury remains out on how these challenges will be met, given the urgency of the goals set, inaction on these critical issues will have indicated a choice in itself.

ENDNOTES:

1. The U.S. Government. (2021, April 22). FACT SHEET: President Biden Sets 2030 Greenhouse Gas Pollution Reduction Target Aimed at Creating Good-Paying Union Jobs and Securing U.S. Leadership on Clean Energy Technologies. The White House. https://www.whitehouse.gov/briefing-room/statements-releases/2021/04/22/fact-sheet-president-biden-sets-2030-greenhouse-gas-pollution-reduction-target-aimed-at-creating-good-paying-union-jobs-and-securing-u-s-leadership-on-clean-energy-technologies/.

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2. The U.S. Government. (2021, April 22). FACT SHEET: President Biden Sets 2030 Greenhouse Gas Pollution Reduction Target Aimed at Creating Good-Paying Union Jobs and Securing U.S. Leadership on Clean Energy Technologies. The White House. https://www.whitehouse.gov/briefing-room/statements-releases/2021/04/22/fact-sheet-president-biden-sets-2030-greenhouse-gas-pollution-reduction-target-aimed-at-creating-good-paying-union-jobs-and-securing-u-s-leadership-on-clean-energy-technologies/.
3. IEA (2021), The Role of Critical Minerals in Clean Energy Transitions, IEA, Paris https://www.iea.org/reports/the-role-of-critical-minerals-in-clean-energy-transitions.
4. IEA (2021), The Role of Critical Minerals in Clean Energy Transitions, IEA, Paris https://www.iea.org/reports/the-role-of-critical-minerals-in-clean-energy-transitions.
5. Scott, D., & Lee, S. (2021, June). Pitfalls Await Biden's Bid to Boost Mineral Mining for EVs (1). Bloomberg Law. https://news.bloomberglaw.com/environment-and-energy/pitfalls-await-bidens-bid-to-boost-u-s-mineral-mining-for-evs.

KATE GONZALES is a member of Brownstein Hyatt Farber Schreck's Energy, Environment & Resource Strategies (EERS) Group. She provides clients insight into Democratic priorities and fresh intelligence on where and when policy is likely to move. Previously, Gonzales served as a legislative aide in the U.S. House office of then-Rep. Kyrsten Sinema (D-Arizona) and moved with her to the U.S. Senate, where she served as a policy advisor handling the space, science, agriculture, energy, environment, and natural resources portfolio. She was the office liaison to the Senate Commerce Committee and managed the senator's role as ranking member of the Commerce Subcommittee on Aviation and Space. During her time in the Senate, Gonzales oversaw the drafting and introduction of multiple pieces of legislation and evaluated their impacts on businesses and constituents.

BRADLEY HERREMA leads Brownstein Hyatt Farber Schreck's water practice group, is a director emeritus of the Groundwater Resources Association of California after serving as director for 11 years and shares his extensive water knowledge through frequent articles and presentations. Herrema serves as counsel to the Chino Basin Watermaster, which oversees the implementation of a groundwater rights adjudication in the Southern California Inland Empire. Actively engaged in the implementation of California's Sustainable Groundwater Management Act (SGMA) of 2014, he helps clients develop property portfolio strategies to manage land and water assets.

LUKE D. JOHNSON is co-chair of Brownstein Hyatt Farber Schreck's Energy, Environment & Resource Strategies (EERS) Group. During his career, Johnson has secured critical permits for multi-billion-dollar oil and gas projects and has represented emerging industries as the U.S. continues to invest heavily in renewable energy. He has served in a variety of roles in the executive branch, most recently as former deputy director of policy and programs at the Bureau of Land Management within the Department of the Interior. Prior, he served as a senior policy advisor to former U.S. Sen. Robert Bennett (R-Utah) and as professional staff on the House Natural Resources Committee. In addition to his tenure in government, Johnson served as vice president of policy and government affairs for the National Ocean Industries Association.