MINERALS: AMERICA'S STRENGTH



Minerals provide the raw materials required for nearly every industry and consumer product, feeding our manufacturing, defense, medical and energy supply chains. They inspire the innovation of new technologies, and are vital to our national security. They propel our economy and enable America to compete globally.

Mineral Facts

Minerals — The technologies that define innovation today all depend on a growing number of minerals. The World Bank estimates that mineral demands could grow 500 to 1,000 percent by the year 2050 to meet the demands from wind, solar and geothermal power, and energy storage technologies.

- Jobs 1 million American jobs are supported by minerals mining. Nearly 400,000 people are directly employed, and nearly 600,000 are indirectly employed.
- Wages A job in U.S. metals mineral mining is one of the highest paying in the private sector with an average salary of over \$105,000 a year (55 percent higher than the combined average for all industrial jobs) and often climbing well above \$110,000 for experienced workers.
- Value \$815 billion worth of processed mineral materials were used by sectors including construction, manufacturing and agriculture to add \$3.6 trillion to the U.S. economy.

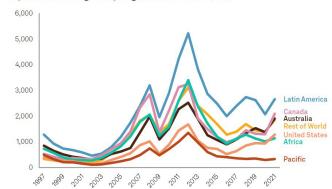
Despite the benefits provided by domestic minerals mining, the U.S. is not performing to its minerals potential. American manufacturers currently rely on foreign suppliers for more than half the minerals they use. Our ability to put our minerals to work is hindered by a costly and inefficient regulatory structure that thwarts investment and expansion.

Consider:

- The percentage of worldwide exploration spending commanded by the U.S. for metals mining has dropped from 20 percent of total investments in 1993 to only about 10 percent today.
- The U.S. is 100 percent dependent on imports for 15 different minerals and more than 50 percent import dependent for an additional 36 mineral commodities.

These trends are unsustainable in a highly competitive world economy where the growing demand for minerals and the need for supply stability is a growing concern. We need to address the length, complexity and uncertainty of the permitting process that is driving investment from U.S. shores. A duplicative permitting process that takes five to ten years to navigate puts the U.S. last among top mining countries when ranked on mining permitting delays.

Exploration budgets by region, 1997-2021 (\$M)



Source: S&P Global, 2021

Selected Major Metals and Minerals Used in Electric Vehicles

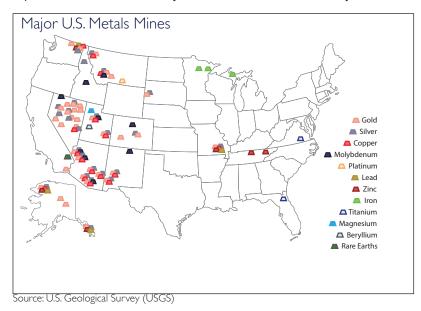
| Amount (lbs.) | Import Dependence |
|---------------|---------------------------------------|
| 2,000 | 14% |
| 400 | 75% |
| 200 | 41% |
| 60 | 56% |
| 40 | 45% |
| 30 | 76% |
| 22 | 76% |
| | 2,000 400 200 60 40 30 |



Sources: USGS; USGS Mineral Commodity Summaries 2023; Copper Development Association; Tesla; NMA research

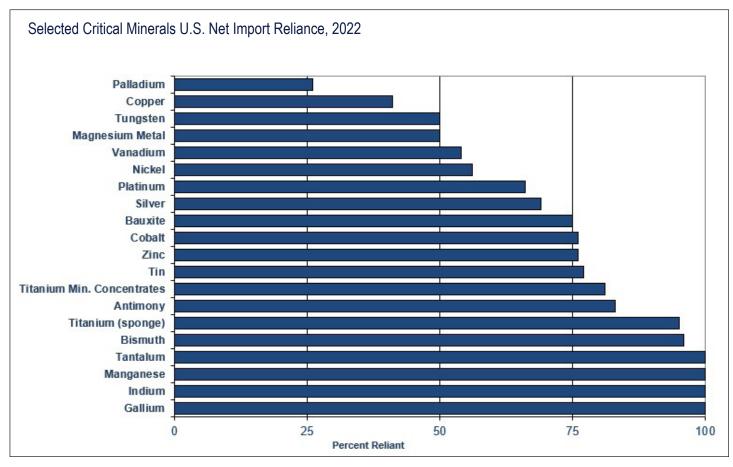
Congressional Permitting Solutions:

The Fiscal Responsibility Act of 2023 (Public Law 118-5), which was signed into law on June 3, 2023 as part of congressional debt ceiling negotiations contained key permitting improvements. Of specific note, the Act amended the National Environmental Policy Act to: (1) impose a two-year time limit on Environmental Impact Statements and a one-year limit on Environmental Analy-



ses (EAs); (2) limit EISs to 150 pages (or 300 pages for analyses of enormous complexity; require the designation of a lead federal agency to conduct required analyses; and (4) limit consideration of environmental impacts to those that are reasonably foreseeable. While the FRA represented progress on permitting solutions, there is more work to be done. Several important pieces introduced in the 118th Congress contain additional permitting

reforms that should be enacted. The Lower Energy Cost Act (H.R. 1), the Spur Permitting of Underdeveloped Resources Act (Spur Act) (H.R. 1456), the Revitalizing the Economy by Simplifying Timelines and Assuring Regulatory Transparency Act (S. 1449) and the Building American Energy Security Act (S. 1399) address other pitfalls of our current outdated and underperforming system by supporting and promoting U.S. mineral independence and federal agency accountability. Provisions in these bills minimize duplication, provide regulatory certainty by preventing the withdrawal of permits that are being complied with, place time limits on court decisions related to NEPA, shorten time limits for Endangered Species Act consultations, and improve the Federal Register process for mining projects to reduce delays. These permitting solutions will foster greater investment in domestic mining projects and ensure a secure and sustainable supply of minerals for national security, the economy and industrial production, while never shortchanging environmental standards.



Source: USGS Mineral Commodity Summaries 2023