MINING'S ROLE IN OUR ECONOMIC RECOVERY

The Covid Pandemic and Economic Crisis Make This the Worst Possible Time for Legislation That Would Reduce Domestic Mining and Exacerbate Supply Chain Vulnerabilities

CONGRESS IS CONSIDERING THREE PROBLEMATIC MINING BILLS

The U.S. Geological Survey's 2020 Mineral Commodity Summaries shows the U.S. produced $86.3 billion of non-fuel mineral resources in 2019 that industries like steel, electronics, and aerospace used to make $3.13 billion in value-added products. Despite this important contribution to our economy, Congress is evaluating three ill-conceived bills that would thwart future development of the nation's mineral resources: 1) **H.R. 2579** (Grijalva); 2) **S. 1386** (Udall/Heinrich); and 3) **H.R. 5598** (McCollum).

These bills would put important mineral resources completely off-limits to development. H.R. 2579 and S. 1386 propose draconian amendments to the U.S. Mining Law that governs locatable mineral exploration and development on public lands in the western U.S. Both H.R. 2579 and S. 1386 would eliminate the security of land tenure needed to attract investment in domestic mineral exploration and development; create numerous obstacles to make mine permitting more costly, time-consuming, and difficult; and impose unworkable royalty and taxation schemes. H.R. 5598 prohibits future development of the world-class copper-nickel-platinum-cobalt deposits in Minnesota's Superior National Forest.

If any of these bills are passed, they will increase our already excessive reliance on mineral imports and eliminate jobs for our citizens. Even worse, by reducing domestic mineral production, these bills would enhance China's and Russia's leverage as producers of many essential minerals used throughout our economy in infrastructure, technology, manufacturing, conventional and renewable energy, and national defense. These bills would also forfeit much-needed, well-paying U.S. mining jobs. According to the National Mining Association, the average metal mining salary in 2016 was $88,800.

MINING IS A CRITICAL INFRASTRUCTURE INDUSTRY

In its March 28, 2020 *Guidance on the Essential Critical Infrastructure Workforce,* the Department of Homeland Security, Cybersecurity and Infrastructure Security Agency classified the mining sector as part of the critical manufacturing infrastructure workforce necessary for the country's response to the coronavirus. The guidance document states: "workers necessary for mining and production of critical minerals, materials and associated essential supply chains" are part of the critical workforce that should maintain their work schedules to aid in the United States' response to the coronavirus outbreak."

MINERAL IMPORTS CREATE SUPPLY CHAIN VULNERABILITIES

Relying on non-allied foreign countries for essential minerals makes us vulnerable to supply-chain disruptions. As the Covid-19 crisis clearly illustrates, depending on China for critical supply-chain materials like copper, which has important antimicrobial and anti-viral properties, poses a serious threat. Despite

our abundant domestic copper resources, the U.S. imported 35% of the copper we used in 2019, and relied on China and other countries to smelt and refine much of the copper that we do mine. According to the International Copper Study Group, China accounted for over 40% of world copper smelter production in 2018. There are only three copper smelters in the U.S. – one in Utah and two in Arizona.

Although the U.S. is blessed with a rich mineral endowment, the U.S. Geological Survey's 2019 Mineral Commodity Summary shows we import many minerals besides copper:

- We are 100 % reliant on foreign countries, including Russia and China, for 18 important minerals including the rare earth minerals that are needed to manufacture the magnets in wind turbines.
- 68% of the silver we use, including antimicrobial silver in medical applications, is imported.
- We import at least 50% of 30 other minerals from foreign countries.
- Our reliance on foreign minerals has increased at an alarming rate since 1995.

The dramatic decline in the production of domestic minerals is due in large part to unfavorable policies that have substantially chilled investment in domestic mineral exploration and development and have put public lands off limits to mining. Additionally, our time-consuming and costly permitting process does not compare favorably to other mineral-rich countries like Canada and Australia that have stringent environmental protection requirements but much more practical mineral development and investment policies.

H.R. 2579 IS DESIGNED TO REDUCE MINING ON WESTERN PUBLIC LANDS

- Eliminates mining claims and substitutes an impractical minerals leasing system.
- Puts more land off-limits to mineral exploration and development, completely disregarding the fact that mines can only be developed where minerals have been discovered.
- Authorizes federal land managers to deny a permit or revoke a lease at any time.
- Changes current life-of-mine permits to a 20-year lease with no assurance that leases may be renewed beyond the 20-year primary term.
- Creates onerous and impractical environmental standards that make mining difficult if not impossible.
- Ignores existing comprehensive environmental protection regulations that prohibit unnecessary impacts, safeguard all aspects of the environment, and effectively mitigate mining impacts.
- Disregards current financial assurance requirements that guarantee mines will be reclaimed. In Nevada alone, state regulators and federal agencies hold over $3.15 billion in reclamation bonds.
- Imposes a retroactive royalty on pre-existing claims that will result in takings litigation.
- Establishes a confiscatory prospective royalty and a displaced materials fee that will render most deposits uneconomic to develop.
- Will substantially chill private-sector investment in mineral exploration and development.
- Will exacerbate our reliance on foreign minerals and increase our mineral supply chain vulnerabilities.

H.R. 5598 WOULD ELIMINATE MINING IN THE SUPERIOR NATIONAL FOREST

- Eliminates access to one of the largest undeveloped copper-nickel-platinum-cobalt deposits in the world in Minnesota's Superior National Forest.
- Limits U.S. access to domestic minerals that are critical to manufacturing, economic security, renewable and conventional energy, and national defense.
- Locks our country out of the nickel industry. Roughly 95% of known domestic nickel resources are in Minnesota.

- Permanently places important copper, nickel, platinum group metals, and cobalt deposits off-limits to development. These metals are key elements needed in the green economy for electric batteries, wind turbines, solar panels, and electric and hybrid vehicles.
- Minnesota's vast iron-ore resources makes Minnesota the 4th largest non-fuel producing state according to the U.S. Geological Survey. Development of the copper-nickel-platinum-cobalt projects in the Superior National Forest would enhance Minnesota's standing as one of the most important mining states in the country. These mines would operate under comprehensive and stringent state and federal environmental protection regulations.

NEW WORLD BANK GROUP STUDY IDENTIFIES ESSENTIAL MINERALS

The May 2020 World Bank Group report, "Minerals for Climate Action: The Mineral Intensity of the Clean Energy Transition," identifies the 17 minerals shown below that are essential to low-carbon energy technologies. According to the U.S. Geological Survey, in 2019, the U.S. relied on imports for all of these minerals.

	Wind	Solar photovoltaic	Concentrated solar power	Hydro	Geothermal	Energy Storage	Nuclear	Coal	Gas	Carbon capture and storage	Import Reliance	Exporting Countries
Aluminum*	■	■				■	■	■	■		> 75%	Jamaica, Brazil, Guinea, Guyana
Chromium	■			■	■	■	■	■	■	■	72%	Norway, Japan, China, Canada
Cobalt						■		■	■	■	78%	South Africa, Kazakhstan, Russia
Copper	■	■	■	■	■	■	■	■	■	■	35%	Chile, Canada, Mexico
Graphite						■					100%	China, Mexico, Canada, India
Indium		■					■				100%	China, Canada, Republic of Korea, Taiwan
Iron Ore	■					■					21%	Canada, Brazil, Republic of Korea
Lead	■	■		■		■	■				30%	Canada, Mexico, Republic of Korea, India
Lithium						■					>25%	Argentina, Chile, China
Manganese	■			■	■	■		■	■	■	100%	South Africa, Gabon, Australia, Georgia
Molybdenum	■	■		■	■		■	■	■	■	<20%	Peru, Chile, Canada, Mexico
Rare Earths**	■										100%	China, Estonia, Japan, Malaysia
Nickel	■	■		■	■	■	■	■	■	■	47%	Canada, Norway, Australia, Finland
Silver		■	■				■				68%	Mexico, Canada, Peru, Poland
Titanium			■	■			■	■	■		86%	Japan, Kazaksran, Ukraine, China, Russia
Vanadium						■	■	■			94%	Austria, Canada, Russia, Republic of Korea
Zinc	■	■		■		■	■				87%	Canada, Mexico, Australia, Peru
Total	10	8	2	8	6	11	11	9	8	6		

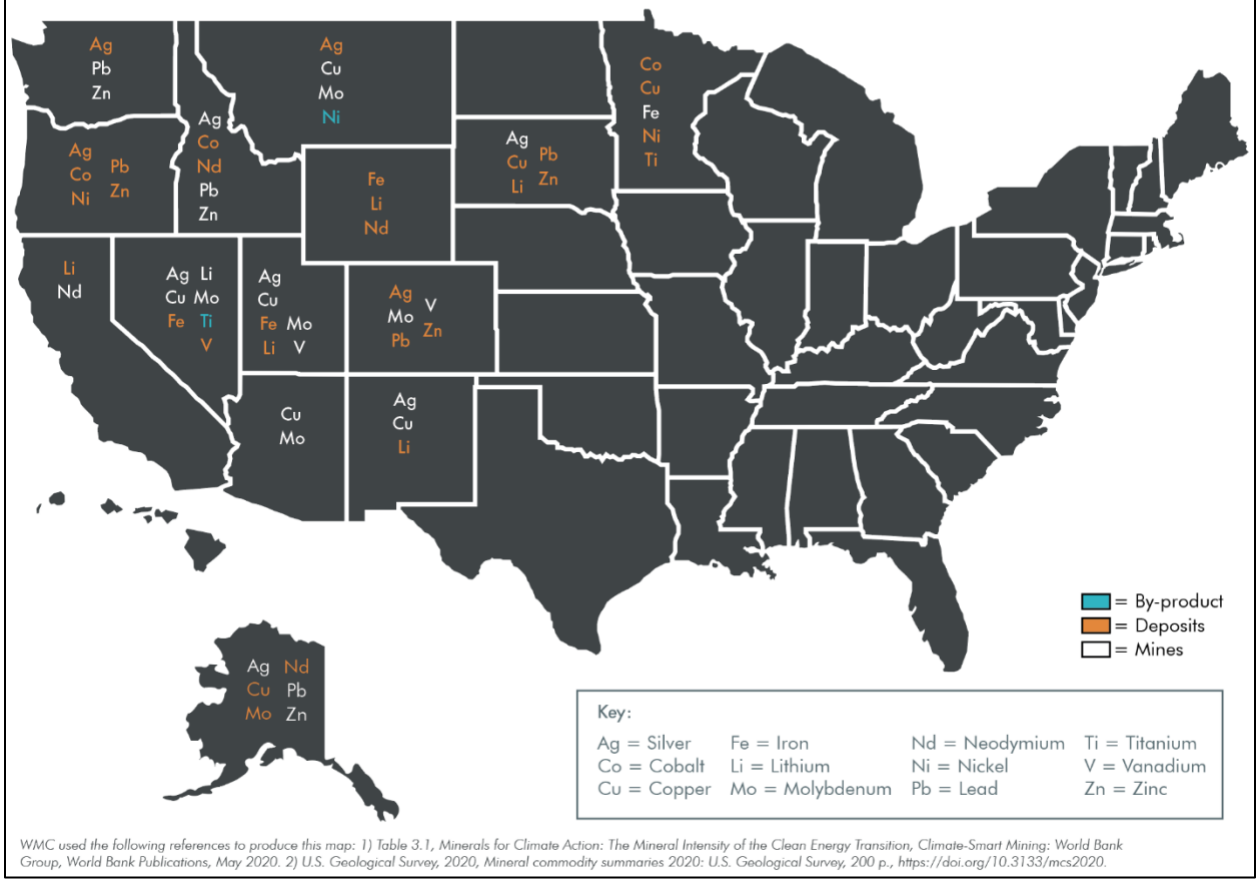
*** Bauxite, ** Neodymium**

Sources for table: https://doi.org/10.3133/mcs202 and http://pubdocs.worldbank.org/en/961711588875536384/Minerals-for-Climate-Action-The-Mineral-Intensity-of-the-Clean-Energy-Transition.pdf

BILLS WOULD IMPACT MINERALS USED IN LOW-CARBON TECHNOLOGIES

The U.S. is fortunate to have significant mines and deposits of many of the 17 minerals identified by the World Bank Group. Unfortunately, proposed legislation would curtail mining and mineral exploration on public lands in the western U.S. and in Minnesota's Superior National Forest where important mines and deposits of these minerals are located.

H.R. 2579/S. 1386 AND H.R. 5598 WOULD ADVERSELY IMPACT MINING IN STATES WHERE MINERALS NEEDED FOR LOW-CARBON TECHNOLOGIES ARE LOCATED



WMC used the following references to produce this map: 1) Table 3.1, Minerals for Climate Action: The Mineral Intensity of the Clean Energy Transition, Climate-Smart Mining: World Bank Group, World Bank Publications, May 2020. 2) U.S. Geological Survey, 2020, Mineral commodity summaries 2020: U.S. Geological Survey, 200 p., https://doi.org/10.3133/mcs2020.

Now more than ever, the national agenda demands domestic minerals for our country's security, global economic competition, technology, energy, and infrastructure.

Congress should not enact H.R. 2579/S.1386 or H.R. 5598, which would put more lands off-limits to mining and make mine permitting more costly and difficult.

About WMC

WMC is a grassroots organization with over 200 members nationwide. Our members work in all sectors of the mining industry including hardrock and industrial minerals, coal, energy generation, manufacturing, transportation, and service industries. We hold annual Washington, D.C. Fly-Ins to meet with members of Congress and their staff and federal land management and regulatory agencies to discuss issues of importance to both the hardrock and coal mining sectors. For more information about WMC, please contact Emily Arthun at Emily.Arthun@gmail.com or visit our website at: www.wmc-usa.org