

CRITICAL MINERAL CONSISTENCY ACT OF 2024

NOVEMBER 1, 2024.—Committed to the Committee of the Whole House on the State of the Union and ordered to be printed

Mr. WESTERMAN, from the Committee on Natural Resources,
submitted the following

R E P O R T

together with

DISSENTING VIEWS

[To accompany H.R. 8446]

[Including cost estimate of the Congressional Budget Office]

The Committee on Natural Resources, to whom was referred the bill (H.R. 8446) to amend the Energy Act of 2020 to include critical materials in the definition of critical mineral, and for other purposes, having considered the same, reports favorably thereon with an amendment and recommends that the bill as amended do pass.

The amendment is as follows:

Strike all after the enacting clause and insert the following:

SECTION 1. SHORT TITLE.

This Act may be cited as the “Critical Mineral Consistency Act of 2024”.

SEC. 2. CRITICAL MATERIALS INCLUDED AS CRITICAL MINERALS.

Section 7002 of the Energy Act of 2020 (30 U.S.C. 1606) is amended—

(1) in subsection (a)(3)(A), to read as follows:

“(A) IN GENERAL.—The term ‘critical mineral’ means—

“(i) any mineral, element, substance, or material designated as critical by the Secretary under subsection (c); and

“(ii) a critical material as determined by the Secretary of Energy under paragraph (2)(A).”; and

(2) in subsection (c)(5), by adding at the end the following:

“(C) INCLUSION OF CRITICAL MATERIALS.—Not later than 45 days after the date on which the Secretary of Energy determines a non-fuel mineral, element, substance, or material to be a critical material under subsection (a)(2)(A), the Secretary shall update the list of critical minerals published under paragraph (3) to include such critical material.”.

PURPOSE OF THE LEGISLATION

The purpose of H.R. 8446 is to amend the Energy Act of 2020 to include critical materials in the definition of critical mineral, and for other purposes.

BACKGROUND AND NEED FOR LEGISLATION

The Energy Act of 2020, which sets the definition of critical minerals, also directs the Secretary of the Department of Energy (DOE) to develop a critical materials list that includes all minerals on the Department of the Interior United States Geological Survey's (USGS) Critical Mineral List (CML) but adds: "any non-fuel mineral, element, substance, or material that the Secretary of Energy determines: (i) has a high risk of supply chain disruption; and (ii) serves an essential function in one or more energy technologies, including technologies that produce, transmit, store, and conserve energy." DOE's methodology for material determination is forward-looking, accounting for international demand scenarios and growth trajectories specifically for energy technologies. On the other hand, while USGS is working on incorporating forecasting metrics as stipulated by the Energy Act of 2020, current criteria use historical data to determine supply risk to the U.S. economy and national security.

DOE's 2023 Critical Materials List, unlike the USGS CML, contains copper, electrical steel, fluorine, silicon, and silicon carbide. H.R. 8446 would ensure that the materials on the DOE list would also appear on the USGS CML—just as all minerals on USGS's list appear on DOE's list.

COMMITTEE ACTION

H.R. 8446 was introduced on May 17, 2024, by Rep. Juan Ciscomani (R-AZ). The bill was referred to the Committee on Natural Resources, and within the Committee to the Subcommittee on Energy and Mineral Resources. On June 4, 2024, the Subcommittee on Energy and Mineral Resources held a hearing on the bill. On June 12, 2024, the Committee on Natural Resources met to consider the bill. The Subcommittee on Energy and Mineral Resources was discharged from further consideration of H.R. 8446 by unanimous consent. Representative Pete Stauber (R-MN) offered an Amendment in the Nature of a Substitute designated Stauber_053. The amendment was agreed to by voice vote. Representative Melanie Stansbury (D-NM) offered an amendment to the Amendment in the Nature of a Substitute designated Stansbury #1. The amendment was not agreed to by a roll call vote of 14 yeas to 18 nays, as follows:

Committee on Natural Resources								
U.S. House of Representatives								
118th Congress								
Date: June 12, 2024				Roll Call: #3				
Meeting on / Amendment on: Stansbury #1 amendment to Stauber_053 ANS to H.R. 8446 (Rep. Ciscomani), To amend the Energy Act of 2020 to include critical materials in the definition of critical mineral, and for other purposes.								
MEMBERS	Yea	Nay	Pres	MEMBERS	Yea	Nay	Pres	
Mr. Westerman, AR, Chairman		X		Mr. Grijalva, AZ, Ranking				
Mr. Lamborn, CO		X		Ms. Napolitano, CA	X			
Mr. Wittman, VA		X		Mr. Sablan, CNMI	X			
Mr. McClintock, CA		X		Mr. Huffman, CA	X			
Mr. Gosar, AZ				Mr. Gallego, AZ				
Mr. Graves, LA		X		Mr. Neguse, CO				
Mrs. Radewagen, AS				Mr. Levin, CA	X			
Mr. LaMalfa, CA		X		Ms. Porter, CA	X			
Mr. Webster, FL				Ms. Leger Fernandez, NM	X			
Ms. González-Colón, PR				Ms. Stansbury, NM	X			
Mr. Fulcher, ID		X		Mrs. Peltola, AK	X			
Mr. Stauber, MN		X		Ms. Ocasio-Cortez, NY				
Mr. Curtis, UT		X		Mr. Mullin, CA	X			
Mr. Tiffany, WI		X		Ms. Hoyle, OR	X			
Mr. Carl, AL		X		Ms. Kamlager-Dova, CA	X			
Mr. Rosendale, MT		X		Mr. Magaziner, RI	X			
Mrs. Boebert, CO		X		Ms. Volinquez, NY				
Mr. Bentz, OR		X		Mr. Casa, HI				
Ms. Kiggans, VA		X		Mrs. Dingell, MI	X			
Mr. Moylan, Guam		X		Ms. Lee, NV	X			
Mr. Hunt, TX								
Mr. Collins, GA		X						
Ms. Luna, FL								
Mr. Duarte, CA								
Ms. Hageman, WY		X						
				TOTAL:	14	18		

The bill, as amended, was ordered favorably reported to the House of Representatives by a roll call vote of 19 yeas to 13 nays, as follows:

Committee on Natural Resources								
U.S. House of Representatives								
118th Congress								
Date: June 12, 2024				Roll Call: #4				
Meeting on / Amendment on: On Favorably Reporting, as amended, H.R. 8446 (Rep. Ciscomani), To amend the Energy Act of 2020 to include critical materials in the definition of critical mineral, and for other purposes.								
MEMBERS	Yea	Nay	Pres	MEMBERS	Yea	Nay	Pres	
Mr. Westerman, AR, Chairman	X			Mr. Grijalva, AZ, Ranking				
Mr. Lamborn, CO	X			Ms. Napolitano, CA		X		
Mr. Wittman, VA	X			Mr. Sablan, CNMI		X		
Mr. McClintock, CA	X			Mr. Huffman, CA		X		
Mr. Gosar, AZ				Mr. Gallego, AZ				
Mr. Graves, LA	X			Mr. Neguse, CO				
Mrs. Radewagen, AS				Mr. Levin, CA		X		
Mr. LaMalfa, CA	X			Ms. Porter, CA		X		
Mr. Webster, FL				Ms. Leger Fernandez, NM		X		
Ms. González-Colón, PR				Ms. Stansbury, NM		X		
Mr. Fulcher, ID	X			Mrs. Peltola, AK		X		
Mr. Stauber, MN	X			Ms. Ocasio-Cortez, NY				
Mr. Curtis, UT	X			Mr. Mullin, CA		X		
Mr. Tiffany, WI	X			Ms. Hayle,OR		X		
Mr. Carl, AL	X			Ms. Kamlagar-Dove, CA		X		
Mr. Rosendale, MT	X			Mr. Magaziner, RI		X		
Mrs. Boebert, CO	X			Ms. Velázquez, NY				
Mr. Bentz, OR	X			Mr. Casa, HI				
Ms. Kiggans, VA	X			Mrs. Dingell, MI		X		
Mr. Moylan, Guam	X			Ms. Lee, NV	X			
Mr. Hunt, TX								
Mr. Collins, GA	X							
Ms. Luna, FL								
Mr. Duarte, CA								
Ms. Hageman, WY	X							
				TOTAL:	19	13		

HEARINGS

For the purposes of clause 3(c)(6) of House rule XIII, the following hearing was used to develop or consider this measure: hearing by the Subcommittee on Energy and Mineral Resources held on June 4, 2024.

SECTION-BY-SECTION ANALYSIS

Section 1. Short title

Designates the bill as the “Critical Mineral Consistency Act of 2024”.

Section 2. Critical materials included as critical minerals

Amends Section 7002 of the Energy Act of 2020, adding critical materials designated by the Secretary of Energy to the definition of critical minerals. This section also stipulates that the Secretary of the Interior must update the CML no later than 45 days after the Secretary of Energy deems a commodity as a critical material.

COMMITTEE OVERSIGHT FINDINGS AND RECOMMENDATIONS

Regarding clause 2(b)(1) of rule X and clause 3(c)(1) of rule XIII of the Rules of the House of Representatives, the Committee on Natural Resources’ oversight findings and recommendations are reflected in the body of this report.

COMPLIANCE WITH HOUSE RULE XIII AND
CONGRESSIONAL BUDGET ACT

1. *Cost of Legislation and the Congressional Budget Act.* With respect to the requirements of clause 3(c)(2) and (3) of rule XIII of the Rules of the House of Representatives and sections 308(a) and 402 of the Congressional Budget Act of 1974, the Committee has received the following estimate for the bill from the Director of the Congressional Budget Office:

H.R. 8446, Critical Mineral Consistency Act of 2024			
As ordered reported by the House Committee on Natural Resources on June 12, 2024			
By Fiscal Year, Millions of Dollars	2024	2024-2029	2024-2034
Direct Spending (Outlays)	0	0	0
Revenues	0	0	0
Increase or Decrease (-) in the Deficit	0	0	0
Spending Subject to Appropriation (Outlays)	0	2	not estimated
Increases <i>net direct spending</i> in any of the four consecutive 10-year periods beginning in 2035?	No	Statutory pay-as-you-go procedures apply?	No
		Mandate Effects	
Increases <i>on-budget deficits</i> in any of the four consecutive 10-year periods beginning in 2035?	No	Contains intergovernmental mandate?	No
		Contains private-sector mandate?	No

H.R. 8446 would require the U.S. Geological Survey (USGS) to update its list of minerals essential to the United States’ economy

or national security to include any materials that the Department of Energy (DOE) has designated as critical for energy technologies.

Currently, there are five materials designated as critical by DOE that are not included in the USGS's list of critical minerals. If those materials were added to the list, the agency would be required to identify all known sources of each material and annually report on each material's projected supply and demand. Using information from the USGS about the costs of its current assessments, CBO estimates that listing and assessing the five additional materials would cost \$1 million over the 2024–2029 period.

If DOE designates new materials after enactment, the USGS would be required to include them on its list and in subsequent annual reports. Using information about the timing of past updates to DOE's list and the costs of the USGS's current assessments, CBO estimates that listing and reporting on any new DOE designations would cost \$1 million over the 2024–2029 period.

In total, CBO estimates that implementing H.R. 8446 would cost \$2 million over the 2024–2029 period; any related spending would be subject to the availability of appropriated funds.

The CBO staff contact for this estimate is Emma Uebelhor. The estimate was reviewed by H. Samuel Papenfuss, Deputy Director of Budget Analysis.

PHILLIP L. SWAGEL,
Director, Congressional Budget Office.

2. General Performance Goals and Objectives. As required by clause 3(c)(4) of rule XIII, the general performance goal or objective of this bill is to amend the Energy Act of 2020 to include critical materials in the definition of critical mineral, and for other purposes.

EARMARK STATEMENT

This bill does not contain any Congressional earmarks, limited tax benefits, or limited tariff benefits as defined under clause 9(e), 9(f), and 9(g) of rule XXI of the Rules of the House of Representatives.

UNFUNDED MANDATES REFORM ACT STATEMENT

According to the Congressional Budget Office, H.R. 8446 contains no unfunded mandates as defined by the Unfunded Mandates Reform Act.

EXISTING PROGRAMS

Directed Rule Making. This bill does not contain any directed rule makings.

Duplication of Existing Programs. This bill does not establish or reauthorize a program of the federal government known to be duplicative of another program. Such program was not included in any report from the Government Accountability Office to Congress pursuant to section 21 of Public Law 111–139 or identified in the most recent Catalog of Federal Domestic Assistance published pursuant to the Federal Program Information Act (Public Law 95–220, as amended by Public Law 98–169) as relating to other programs.

APPLICABILITY TO LEGISLATIVE BRANCH

The Committee finds that the legislation does not relate to the terms and conditions of employment or access to public services or accommodations within the meaning of section 102(b)(3) of the Congressional Accountability Act.

PREEMPTION OF STATE, LOCAL OR TRIBAL LAW

Any preemptive effect of this bill over state, local, or tribal law is intended to be consistent with the bill's purposes and text and the Supremacy Clause of Article VI of the U.S. Constitution.

CHANGES IN EXISTING LAW MADE BY THE BILL, AS REPORTED

In compliance with clause 3(e) of rule XIII of the Rules of the House of Representatives, changes in existing law made by the bill, as reported, are shown as follows (existing law proposed to be omitted is enclosed in black brackets, new matter is printed in italics, and existing law in which no change is proposed is shown in roman):

ENERGY ACT OF 2020

DIVISION Z—ENERGY ACT OF 2020

* * * * *

TITLE VII—CRITICAL MINERALS

* * * * *

SEC. 7002. MINERAL SECURITY.

(a) DEFINITIONS.—In this section:

(1) BYPRODUCT.—The term “byproduct” means a critical mineral—

(A) the recovery of which depends on the production of a host mineral that is not designated as a critical mineral; and

(B) that exists in sufficient quantities to be recovered during processing or refining.

(2) CRITICAL MATERIAL.—The term “critical material” means—

(A) any non-fuel mineral, element, substance, or material that the Secretary of Energy determines—

(i) has a high risk of a supply chain disruption; and

(ii) serves an essential function in 1 or more energy technologies, including technologies that produce, transmit, store, and conserve energy; or

(B) a critical mineral.

(3) CRITICAL MINERAL.—

[(A) IN GENERAL.—The term “critical mineral” means any mineral, element, substance, or material designated as critical by the Secretary under subsection (c).]

(A) *IN GENERAL.—The term “critical mineral” means—*

(i) any mineral, element, substance, or material designated as critical by the Secretary under subsection (c); and

(ii) a critical material as determined by the Secretary of Energy under paragraph (2)(A).

(B) EXCLUSIONS.—The term “critical mineral” does not include—

(i) fuel minerals;

(ii) water, ice, or snow;

(iii) common varieties of sand, gravel, stone, pumice, cinders, and clay.

(4) INDIAN TRIBE.—The term “Indian Tribe” has the meaning given the term in section 4 of the Indian Self-Determination and Education Assistance Act (25 U.S.C. 5304).

(5) SECRETARY.—The term “Secretary” means the Secretary of the Interior.

(6) STATE.—The term “State” means—

- (A) a State;
 - (B) the District of Columbia;
 - (C) the Commonwealth of Puerto Rico;
 - (D) Guam;
 - (E) American Samoa;
 - (F) the Commonwealth of the Northern Mariana Islands;
- and
- (G) the United States Virgin Islands.

(7) INSTITUTION OF HIGHER EDUCATION.—The term “institution of higher education” means—

- (A) an institution of higher education (as defined in section 101(a) of the Higher Education Act of 1965 (20 U.S.C. 1001(a))); or
- (B) a postsecondary vocational institution (as defined in section 102(c) of the Higher Education Act of 1965 (20 U.S.C. 1002(c))).

(b) POLICY.—

(1) IN GENERAL.—Section 3 of the National Materials and Minerals Policy, Research and Development Act of 1980 (30 U.S.C. 1602) is amended—

(A) by striking paragraph (3) and inserting the following:

“(3) establish an analytical and forecasting capability for identifying critical mineral demand, supply, and other factors to allow informed actions to be taken to avoid supply shortages, mitigate price volatility, and prepare for demand growth and other market shifts;”;

(B) in paragraph (6), by striking “and” after the semicolon at the end; and

(C) by striking paragraph (7) and inserting the following:

“(7) facilitate the availability, development, and environmentally responsible production of domestic resources to meet national material or critical mineral needs;

“(8) avoid duplication of effort, prevent unnecessary paperwork, and minimize delays in the administration of applicable laws (including regulations) and the issuance of permits and authorizations necessary to explore for, develop, and produce critical minerals and to construct critical mineral manufacturing facilities in accordance with applicable environmental and land management laws;

“(9) strengthen—

“(A) educational and research capabilities at not lower than the secondary school level; and

“(B) workforce training for exploration and development of critical minerals and critical mineral manufacturing;

“(10) bolster international cooperation through technology transfer, information sharing, and other means;

“(11) promote the efficient production, use, and recycling of critical minerals;

“(12) develop alternatives to critical minerals; and

“(13) establish contingencies for the production of, or access to, critical minerals for which viable sources do not exist within the United States.”

(2) CONFORMING AMENDMENT.—Section 2(b) of the National Materials and Minerals Policy, Research and Development Act of 1980 (30 U.S.C. 1601(b)) is amended by striking “(b) As used in this Act, the term” and inserting the following:

“(b) DEFINITIONS.—In this Act:

“(1) CRITICAL MINERAL.—The term ‘critical mineral’ means any mineral, element, substance, or material designated as critical by the Secretary under section 7002(c) of the Energy Act of 2020.

“(2) MATERIALS.—The term”.

(c) CRITICAL MINERAL DESIGNATIONS.—

(1) DRAFT METHODOLOGY AND LIST.—The Secretary, acting through the Director of the United States Geological Survey (referred to in this subsection as the “Secretary”), shall publish in the Federal Register for public comment—

(A) a description of the draft methodology used to identify a draft list of critical minerals;

(B) a draft list of minerals, elements, substances, and materials that qualify as critical minerals; and

(C) a draft list of critical minerals recovered as byproducts and their host minerals.

(2) AVAILABILITY OF DATA.—If available data is insufficient to provide a quantitative basis for the methodology developed under this subsection, qualitative evidence may be used to the extent necessary.

(3) FINAL METHODOLOGY AND LIST.—After reviewing public comments on the draft methodology and the draft lists published under paragraph (1) and updating the methodology and lists as appropriate, not later than 45 days after the date on which the public comment period with respect to the draft methodology and draft lists closes, the Secretary shall publish in the Federal Register—

(A) a description of the final methodology for determining which minerals, elements, substances, and materials qualify as critical minerals;

(B) the final list of critical minerals; and

(C) the final list of critical minerals recovered as byproducts and their host minerals.

(4) DESIGNATIONS.—

(A) IN GENERAL.—For purposes of carrying out this subsection, the Secretary shall maintain a list of minerals, elements, substances, and materials designated as critical, pursuant to the final methodology published under paragraph (3), that the Secretary determines—

(i) are essential to the economic or national security of the United States;

(ii) the supply chain of which is vulnerable to disruption (including restrictions associated with foreign political risk, abrupt demand growth, military conflict, violent unrest, anti-competitive or protectionist behaviors, and other risks throughout the supply chain); and

(iii) serve an essential function in the manufacturing of a product (including energy technology-, defense-, currency-, agriculture-, consumer electronics-, and health care-related applications), the absence of which would have significant consequences for the economic or national security of the United States.

(B) INCLUSIONS.—Notwithstanding the criteria under paragraph (3), the Secretary may designate and include on the list any mineral, element, substance, or material determined by another Federal agency to be strategic and critical to the defense or national security of the United States.

(C) REQUIRED CONSULTATION.—The Secretary shall consult with the Secretaries of Defense, Commerce, Agriculture, and Energy and the United States Trade Representative in designating minerals, elements, substances, and materials as critical under this paragraph.

(5) SUBSEQUENT REVIEW.—

(A) IN GENERAL.—The Secretary, in consultation with the Secretaries of Defense, Commerce, Agriculture, and Energy and the United States Trade Representative, shall review the methodology and list under paragraph (3) and the designations under paragraph (4) at least every 3 years, or more frequently as the Secretary considers to be appropriate.

(B) REVISIONS.—Subject to paragraph (4)(A), the Secretary may—

(i) revise the methodology described in this subsection;

(ii) determine that minerals, elements, substances, and materials previously determined to be critical minerals are no longer critical minerals; and

(iii) designate additional minerals, elements, substances, or materials as critical minerals.

(C) INCLUSION OF CRITICAL MATERIALS.—*Not later than 45 days after the date on which the Secretary of Energy determines a non-fuel mineral, element, substance, or material to be a critical material under subsection (a)(2)(A), the Secretary shall update the list of critical minerals published under paragraph (3) to include such critical material.*

(6) NOTICE.—On finalization of the methodology and the list under paragraph (3), or any revision to the methodology or list under paragraph (5), the Secretary shall submit to Congress written notice of the action.

(d) RESOURCE ASSESSMENT.—

(1) IN GENERAL.—Not later than 4 years after the date of enactment of this Act, in consultation with applicable State (including geological surveys), local, academic, industry, and other entities, the Secretary (acting through the Director of the United States Geological Survey) or a designee of the Secretary, shall complete a comprehensive national assessment of each critical mineral that—

(A) identifies and quantifies known critical mineral resources, using all available public and private information and datasets, including exploration histories; and

(B) provides a quantitative and qualitative assessment of undiscovered critical mineral resources throughout the United States, including probability estimates of tonnage and grade, using all available public and private information and datasets, including exploration histories.

(2) SUPPLEMENTARY INFORMATION.—In carrying out this subsection, the Secretary may carry out surveys and field work (including drilling, remote sensing, geophysical surveys, topographical and geological mapping, and geochemical sampling and analysis) to supplement existing information and datasets available for determining the existence of critical minerals in the United States.

(3) PUBLIC ACCESS.—Subject to applicable law, to the maximum extent practicable, the Secretary shall make all data and metadata collected from the comprehensive national assessment carried out under paragraph (1) publically and electronically accessible.

(4) TECHNICAL ASSISTANCE.—At the request of the Governor of a State or the head of an Indian Tribe, the Secretary may provide technical assistance to State governments and Indian Tribes conducting critical mineral resource assessments on non-Federal land.

(5) PRIORITIZATION.—

(A) IN GENERAL.—The Secretary may sequence the completion of resource assessments for each critical mineral such that critical minerals considered to be most critical under the methodology established under subsection (c) are completed first.

(B) REPORTING.—During the period beginning not later than 1 year after the date of enactment of this Act and ending on the date of completion of all of the assessments required under this subsection, the Secretary shall submit to Congress on an annual basis an interim report that—

(i) identifies the sequence and schedule for completion of the assessments if the Secretary sequences the assessments; or

(ii) describes the progress of the assessments if the Secretary does not sequence the assessments.

(6) UPDATES.—The Secretary may periodically update the assessments conducted under this subsection based on—

(A) the generation of new information or datasets by the Federal Government; or

(B) the receipt of new information or datasets from critical mineral producers, State geological surveys, academic institutions, trade associations, or other persons.

(7) ADDITIONAL SURVEYS.—The Secretary shall complete a resource assessment for each additional mineral or element subsequently designated as a critical mineral under subsection (c)(5)(B) not later than 2 years after the designation of the mineral or element.

(8) REPORT.—Not later than 2 years after the date of enactment of this Act, the Secretary shall submit to Congress a re-

port describing the status of geological surveying of Federal land for any mineral commodity—

(A) for which the United States was dependent on a foreign country for more than 25 percent of the United States supply, as depicted in the report issued by the United States Geological Survey entitled “Mineral Commodity Summaries 2021”; but

(B) that is not designated as a critical mineral under subsection (c).

(e) REPORT OF SMALL BUSINESS ADMINISTRATION.—Not later than 1 year and 300 days after the date of enactment of this Act, the Administrator of the Small Business Administration shall submit to the applicable committees of Congress a report that assesses the performance of Federal agencies with respect to—

(1) complying with chapter 6 of title 5, United States Code (commonly known as the “Regulatory Flexibility Act”), in promulgating regulations applicable to the critical minerals industry; and

(2) performing an analysis of the efficiency of regulations applicable to the critical minerals industry, including those that are disproportionately burdensome to small businesses.

(f) FEDERAL REGISTER PROCESS.—

(1) DEPARTMENTAL REVIEW.—Absent any extraordinary circumstance, and except as otherwise required by law, the Secretary and the Secretary of Agriculture shall ensure that each Federal Register notice described in paragraph (2) shall be—

(A) subject to any required reviews within the Department of the Interior or the Department of Agriculture; and

(B) published in final form in the Federal Register not later than 45 days after the date of initial preparation of the notice.

(2) PREPARATION.—The preparation of Federal Register notices required by law associated with the issuance of a critical mineral exploration or mine permit shall be delegated to the organizational level within the agency responsible for issuing the critical mineral exploration or mine permit.

(3) TRANSMISSION.—All Federal Register notices regarding official document availability, announcements of meetings, or notices of intent to undertake an action shall be originated in, and transmitted to the Federal Register from, the office in which, as applicable—

(A) the documents or meetings are held; or

(B) the activity is initiated.

(4) APPLICATION OF CERTAIN PROVISIONS.—

(A) IN GENERAL.—Subsection (f) shall also apply to—

(i) an exploration project in which the presence of a byproduct is reasonably expected, based on known mineral companionality, geologic formation, mineralogy, or other factors; and

(ii) a project that demonstrates that a byproduct is of sufficient grade that, when combined with the production of a host mineral, the byproduct is economic to recover, as determined by the applicable Secretary in accordance with subparagraph (B), and that the byproduct will be recovered in commercial quantities.

- (B) REQUIREMENT.—In making the determination under subparagraph (A)(ii), the applicable Secretary shall consider the cost effectiveness of the byproducts recovery.
- (g) RECYCLING, INNOVATION, EFFICIENCY, AND ALTERNATIVES.—
- (1) ESTABLISHMENT.—The Secretary of Energy (referred to in this subsection as the “Secretary”) shall conduct a program (referred to in this subsection as the “program”) of research, development, demonstration, and commercialization—
- (A) to develop alternatives to critical materials that do not occur in significant abundance in the United States;
 - (B) to promote the efficient production, use, and recycling of critical materials, with special consideration for domestic critical materials, throughout the supply chain;
 - (C) to ensure the long-term, secure, and sustainable supply of critical materials; and
 - (D) to prioritize work in areas that the private sector by itself is not likely to undertake due to financial or technical limitations.
- (2) COOPERATION.—In carrying out the program, the Secretary shall cooperate with appropriate—
- (A) Federal agencies, including the Department of the Interior;
 - (B) the National Laboratories;
 - (C) critical material producers, processors, and manufacturers;
 - (D) trade associations;
 - (E) academic institutions (including students and postdoctoral staff at institutions of higher education);
 - (F) small businesses;
 - (G) nongovernmental organizations; and
 - (H) other relevant entities or individuals.
- (3) ENERGY INNOVATION HUB.—In carrying out the program, the Secretary may use an Energy Innovation Hub authorized under section 206 of the Department of Energy Research Coordination Act (42 U.S.C. 18632).
- (4) ACTIVITIES.—Under the program, the Secretary shall carry out activities that include the identification and development of—
- (A) alternative materials, particularly materials available in abundance within the United States and not subject to potential supply restrictions, that lessen the need for critical materials;
 - (B) alternative energy technologies or alternative designs of existing energy technologies, particularly technologies or designs that use materials that—
 - (i) occur in abundance in the United States; and
 - (ii) are not subject to potential supply restrictions;
 - (C) technologies or process improvements that minimize the use and content, or lead to more efficient use, of critical materials across the full supply chain;
 - (D) innovative technologies and practices to diversify commercially viable and sustainable domestic sources of critical materials, including technologies for recovery from waste streams;

(E) technologies, process improvements, or design optimizations that facilitate the recycling of critical materials, and options for improving the rates of collection of products and scrap containing critical materials from post-consumer, industrial, or other waste streams;

(F) advanced critical material extraction, production, separation, alloying, or processing technologies that decrease the energy consumption, environmental impact, and costs of those activities, including—

(i) efficient water and wastewater management strategies;

(ii) technologies and management strategies to control the environmental impacts of radionuclides in ore tailings;

(iii) technologies for separation and processing; and

(iv) technologies for increasing the recovery rates of coproducts and byproducts from host metal ores;

(G) commercial markets, advanced storage methods, energy applications, and other beneficial uses of critical materials; and

(H) advanced theoretical, computational, and experimental tools necessary to support the crosscutting research and development needs of diverse critical minerals stakeholders.

(5) PLAN.—

(A) IN GENERAL.—Not later than 1 year after the date of enactment of this Act, the Secretary shall submit to Congress a plan to carry out the program.

(B) INCLUSIONS.—The plan under subparagraph (A) shall include a description of—

(i) the research and development activities to be carried out under the program during the subsequent 2 years;

(ii) the expected contributions under the program to the creation of innovative methods and technologies for the efficient and sustainable provision of critical materials to the domestic economy;

(iii) the expected activities under the program to mitigate the environmental and health impacts of the extraction, processing, manufacturing, use, recovery, and recycling of critical materials; and

(iv) how the program will promote the broadest possible participation by academic, industrial, and other contributors and the public.

(6) COORDINATION AND NONDUPLICATION.—To the maximum extent practicable, the Secretary shall ensure that the activities carried out under this subsection are coordinated with, and do not duplicate the efforts of, other programs within the Federal Government, including the work underway by the Critical Materials Institute and the National Minerals Information Center.

(7) STANDARD OF REVIEW.—Not later than 2 years after the date of enactment of this Act, the Secretary shall conduct a review of activities carried out under the program to determine

the achievement of the technical milestones identified under paragraph (8)(D)(i)(I).

(8) CRITICAL MATERIALS CONSORTIUM.—

(A) IN GENERAL.—Not later than 1 year after the date of enactment of this Act, the Secretary shall establish and operate a Critical Materials Consortium (referred to in this paragraph as the “Consortium”) for the purpose of supporting the program by providing, to the maximum extent practicable, a centralized entity for multidisciplinary, collaborative, critical materials research and development.

(B) LEADERSHIP.—If an Energy Innovation Hub authorized under section 206 of the Department of Energy Research Coordination Act (42 U.S.C. 18632) that is focused on critical materials exists on the date of enactment of this Act, the Secretary shall leverage the personnel and expertise of the Energy Innovation Hub to manage the Consortium for not less than 3 years following the date on which the Consortium is established.

(C) MEMBERSHIP.—The members of the Consortium shall be representatives from relevant Federal agencies, the National Laboratories, the National Minerals Information Center, institutions of higher education, private sector entities, multiinstitutional collaborations, and other appropriate entities.

(D) RESPONSIBILITIES.—The Consortium shall—

(i) develop and implement a multiyear plan that—

(I) identifies technical goals and milestones for the program;

(II) utilizes the high performance computing capabilities of the Department; and

(III) leverages the expertise of the National Laboratories and the United States Geological Survey; and

(ii) submit an annual report to the Secretary summarizing the activities of the Consortium, including an evaluation of the role of the Consortium in the achievement of the technical milestones identified under clause (i)(I).

(E) SUNSET; TERMINATION.—

(i) IN GENERAL.—The Secretary may provide support to the Consortium for a period of not more than 10 years, subject to the availability of appropriations.

(ii) MERIT REVIEW.—Not later than 5 years after the date on which the Consortium is established, the Secretary shall conduct a rigorous merit review to determine whether the Consortium helped the program achieve the technical milestones identified under subparagraph (D)(i)(I).

(iii) TERMINATION.—If the Secretary determines that the Consortium has not helped the program achieve the technical milestones identified under subparagraph (D)(i)(I), the Secretary may terminate any financial or technical support that the Department provides to the Consortium.

(9) REPORTS.—Not later than 2 years after the date of enactment of this Act, and annually thereafter, the Secretary shall submit to Congress a report summarizing the activities, findings, and progress of the program.

(10) AUTHORIZATION OF APPROPRIATIONS.—There are authorized to be appropriated to the Secretary to carry out this subsection—

- (A) \$125,000,000 for fiscal year 2021;
- (B) \$105,000,000 for fiscal year 2022;
- (C) \$100,000,000 for fiscal year 2023;
- (D) \$135,000,000 for fiscal year 2024; and
- (E) \$135,000,000 for fiscal year 2025.

(h) CRITICAL MATERIALS SUPPLY CHAIN RESEARCH FACILITY.—

(1) IN GENERAL.—The Secretary of Energy (referred to in this subsection as the “Secretary”) shall support construction of a Critical Materials Supply Chain Research Facility (referred to in this subsection as the “facility”).

(2) REQUIREMENTS.—The facility—

- (A) shall be used to further enable research, development, demonstration, and commercialization activities throughout the supply chain for critical materials; and
- (B) shall provide an integrated, rapidly reconfigurable research platform.

(3) AUTHORIZATION OF APPROPRIATIONS.—There are authorized to be appropriated to the Secretary to fund the design and construction of the facility, to remain available until expended—

- (A) \$10,000,000 for fiscal year 2021;
- (B) \$30,000,000 for fiscal year 2022; and
- (C) \$35,000,000 for fiscal year 2023.

(i) CRITICAL MATERIALS RESEARCH DATABASE AND INFORMATION PORTAL.—

(1) IN GENERAL.—In carrying out the program established under subsection (g)(1), the Secretary and the Secretary of Energy (referred to in this subsection as the “Secretaries”), in consultation with the Director of the National Science Foundation, shall establish and operate a Critical Materials Information Portal (referred to in this subsection as the “Portal”) to collect, catalogue, disseminate, and archive information on critical materials.

(2) COOPERATION.—In carrying out paragraph (1), the Secretaries shall leverage the expertise of the National Minerals Information Center, the Office of Scientific and Technical Information, and the Critical Materials Consortium established under subsection (g)(8)(A).

(3) PURPOSE.—The purpose of the Portal is to support the development of a web-based platform to provide public access to a database of computed information on known and predicted critical materials and related material properties and computational tools in order—

- (A) to accelerate breakthroughs in critical materials identification and design;
- (B) to strengthen the foundation for technologies that will enable more sustainable recycling, substitution, use, and recovery and minimize the environmental impacts of

methods for extraction, processing, and manufacturing of critical materials; and

(C) to drive the development of advanced materials for applications that span the missions of the Department of Energy and the Department of the Interior (referred to in this subsection as the “Departments”) in energy, environment, and national security.

(4) ACTIVITIES.—In carrying out this subsection, the Secretaries shall—

(A) conduct cooperative research with industry, academia, and other research institutions to facilitate the design of novel materials, including critical materials and substitutes for critical materials;

(B) leverage existing high-performance computing systems to conduct high throughput calculations and develop computing and data mining algorithms for the prediction of material properties, including a focus on critical materials;

(C) leverage and support research in mineralogy and mineral chemistry to enhance the understanding, prediction, and manipulation of critical materials;

(D) assist scientists and engineers in making the fullest possible use of the relevant data holdings of the Departments, including the scientific and technical data generated by the research and development activities funded under subsection (g);

(E) seek and incorporate other information on critical materials to enhance the Departments’ utility for program participants and other users; and

(F) manage and make available to researchers and the public accessible, curated, standardized, secure, and privacy-protected data sets from the public and private sectors for the purposes of critical materials research and development activities.

(5) PROPRIETARY INFORMATION.—In carrying out this subsection, the Secretaries shall ensure, consistent with section 5(f) of the National Materials and Minerals Policy, Research and Development Act of 1980 (30 U.S.C. 1604(f)), that—

(A) no person uses the information and data collected for the Portal for a purpose other than the development of, or reporting of, aggregate data in a manner such that the identity of the person or firm who supplied the information is not discernible and is not material to the intended uses of the information;

(B) no person discloses any information or data collected for the Portal unless the information or data has been transformed into a statistical or aggregate form that does not allow the identification of the person or firm who supplied particular information; and

(C) procedures are established to require the withholding of any information or data collected for the Portal if at least 1 of the Secretaries determines that the withholding is necessary to protect proprietary information, including any trade secrets or other confidential information.

(j) ANALYSIS AND FORECASTING.—

(1) CAPABILITIES.—In order to evaluate existing critical mineral policies and inform future actions that may be taken to avoid supply shortages, mitigate price volatility, and prepare for demand growth and other market shifts, the Secretary (acting through the Director of the United States Geological Survey) or a designee of the Secretary, in consultation with the Energy Information Administration, academic institutions, and others in order to maximize the application of existing competencies related to developing and maintaining computer-models and similar analytical tools, shall conduct and publish the results of an annual report that includes—

(A) as part of the annually published Mineral Commodity Summaries from the United States Geological Survey, a comprehensive review of critical mineral production, consumption, and recycling patterns, including—

- (i) the quantity of each critical mineral domestically produced during the preceding year;
- (ii) the quantity of each critical mineral domestically consumed during the preceding year;
- (iii) market price data or other price data for each critical mineral;
- (iv) an assessment of—

(I) critical mineral requirements to meet the national security, energy, economic, industrial, technological, and other needs of the United States during the preceding year;

(II) the reliance of the United States on foreign sources to meet those needs during the preceding year; and

(III) the implications of any supply shortages, restrictions, or disruptions during the preceding year;

- (v) the quantity of each critical mineral domestically recycled during the preceding year;

- (vi) the market penetration during the preceding year of alternatives to each critical mineral;

- (vii) a discussion of international trends associated with the discovery, production, consumption, use, costs of production, prices, and recycling of each critical mineral as well as the development of alternatives to critical minerals; and

- (viii) such other data, analyses, and evaluations as the Secretary finds are necessary to achieve the purposes of this subsection; and

(B) a comprehensive forecast, entitled the “Annual Critical Minerals Outlook”, of projected critical mineral production, consumption, and recycling patterns, including—

- (i) the quantity of each critical mineral projected to be domestically produced over the subsequent 1-year, 5-year, and 10-year periods;

- (ii) the quantity of each critical mineral projected to be domestically consumed over the subsequent 1-year, 5-year, and 10-year periods;

- (iii) an assessment of—

(I) critical mineral requirements to meet projected national security, energy, economic, industrial, technological, and other needs of the United States;

(II) the projected reliance of the United States on foreign sources to meet those needs; and

(III) the projected implications of potential supply shortages, restrictions, or disruptions;

(iv) the quantity of each critical mineral projected to be domestically recycled over the subsequent 1-year, 5-year, and 10-year periods;

(v) the market penetration of alternatives to each critical mineral projected to take place over the subsequent 1-year, 5-year, and 10-year periods;

(vi) a discussion of reasonably foreseeable international trends associated with the discovery, production, consumption, use, costs of production, and recycling of each critical mineral as well as the development of alternatives to critical minerals; and

(vii) such other projections relating to each critical mineral as the Secretary determines to be necessary to achieve the purposes of this subsection.

(2) PROPRIETARY INFORMATION.—In preparing a report described in paragraph (1), the Secretary shall ensure, consistent with section 5(f) of the National Materials and Minerals Policy, Research and Development Act of 1980 (30 U.S.C. 1604(f)), that—

(A) no person uses the information and data collected for the report for a purpose other than the development of or reporting of aggregate data in a manner such that the identity of the person or firm who supplied the information is not discernible and is not material to the intended uses of the information;

(B) no person discloses any information or data collected for the report unless the information or data has been transformed into a statistical or aggregate form that does not allow the identification of the person or firm who supplied particular information; and

(C) procedures are established to require the withholding of any information or data collected for the report if the Secretary determines that withholding is necessary to protect proprietary information, including any trade secrets or other confidential information.

(k) EDUCATION AND WORKFORCE.—

(1) WORKFORCE ASSESSMENT.—Not later than 1 year and 300 days after the date of enactment of this Act, the Secretary of Labor (in consultation with the Secretary, the Director of the National Science Foundation, institutions of higher education with substantial expertise in mining, institutions of higher education with significant expertise in minerals research, including fundamental research into alternatives, and employers in the critical minerals sector) shall submit to Congress an assessment of the domestic availability of technically trained personnel necessary for critical mineral exploration, development,

assessment, production, manufacturing, recycling, analysis, forecasting, education, and research, including an analysis of—

(A) skills that are in the shortest supply as of the date of the assessment;

(B) skills that are projected to be in short supply in the future;

(C) the demographics of the critical minerals industry and how the demographics will evolve under the influence of factors such as an aging workforce;

(D) the effectiveness of training and education programs in addressing skills shortages;

(E) opportunities to hire locally for new and existing critical mineral activities;

(F) the sufficiency of personnel within relevant areas of the Federal Government for achieving the policies described in section 3 of the National Materials and Minerals Policy, Research and Development Act of 1980 (30 U.S.C. 1602); and

(G) the potential need for new training programs to have a measurable effect on the supply of trained workers in the critical minerals industry.

(2) CURRICULUM STUDY.—

(A) IN GENERAL.—The Secretary and the Secretary of Labor shall jointly enter into an arrangement with the National Academy of Sciences and the National Academy of Engineering under which the Academies shall coordinate with the National Science Foundation on conducting a study—

(i) to design an interdisciplinary program on critical minerals that will support the critical mineral supply chain and improve the ability of the United States to increase domestic, critical mineral exploration, development, production, manufacturing, research, including fundamental research into alternatives, and recycling;

(ii) to address undergraduate and graduate education, especially to assist in the development of graduate level programs of research and instruction that lead to advanced degrees with an emphasis on the critical mineral supply chain or other positions that will increase domestic, critical mineral exploration, development, production, manufacturing, research, including fundamental research into alternatives, and recycling;

(iii) to develop guidelines for proposals from institutions of higher education with substantial capabilities in the required disciplines for activities to improve the critical mineral supply chain and advance the capacity of the United States to increase domestic, critical mineral exploration, research, development, production, manufacturing, and recycling; and

(iv) to outline criteria for evaluating performance and recommendations for the amount of funding that will be necessary to establish and carry out the program described in paragraph (3).

(B) REPORT.—Not later than 2 years after the date of enactment of this Act, the Secretary shall submit to Congress a description of the results of the study required under subparagraph (A).

(3) PROGRAM.—

(A) ESTABLISHMENT.—The Secretary and the Secretary of Labor shall jointly conduct a competitive grant program under which institutions of higher education may apply for and receive 4-year grants for—

(i) startup costs for newly designated faculty positions in integrated critical mineral education, research, innovation, training, and workforce development programs consistent with paragraph (2);

(ii) internships, scholarships, and fellowships for students enrolled in programs related to critical minerals;

(iii) equipment necessary for integrated critical mineral innovation, training, and workforce development programs; and

(iv) research of critical minerals and their applications, particularly concerning the manufacture of critical components vital to national security.

(B) RENEWAL.—A grant under this paragraph shall be renewable for up to 2 additional 3-year terms based on performance criteria outlined under paragraph (2)(A)(iv).

(1) NATIONAL GEOLOGICAL AND GEOPHYSICAL DATA PRESERVATION PROGRAM.—Section 351(k) of the Energy Policy Act of 2005 (42 U.S.C. 15908(k)) is amended by striking “\$30,000,000 for each of fiscal years 2006 through 2010” and inserting “\$5,000,000 for each of fiscal years 2021 through 2029, to remain available until expended”.

(m) AMENDMENTS TO THE NATIONAL MATERIALS AND MINERALS, POLICY, RESEARCH AND DEVELOPMENT ACT OF 1980.—

(1) PROGRAM PLAN.—Section 5 of the National Materials and Minerals Policy, Research and Development Act of 1980 (30 U.S.C. 1604) is amended—

(A) by striking “date of enactment of this Act” each place it appears and inserting “date of enactment of the Energy Act of 2020”;

(B) in subsection (b)(1), by striking “Federal Coordinating Council for Science, Engineering, and Technology” and inserting “National Science and Technology Council”;

(C) in subsection (c)—

(i) in the matter preceding paragraph (1)—

(I) by striking “the Federal Emergency” and all that follows through “Agency, and”; and

(II) by striking “appropriate shall” and inserting “appropriate, shall”;

(ii) by striking paragraphs (1) and (3);

(iii) by redesignating paragraph (2) as paragraph (1);

(iv) in paragraph (1) (as so redesignated)—

(I) by striking “within 1 year after October 21, 1980” and inserting “not later than 1 year after

the date of the enactment of the Energy Act of 2020”;

(II) by striking “which assesses” and inserting “that assesses”; and

(III) by striking “in the case” and all that follows through “subsection, and which” and inserting “and that”; and

(v) by adding at the end the following:

“(2) assess the adequacy and stability of the supply of materials necessary to maintain national security, economic well-being, public health, and industrial production.”; and

(D) in subsection (e), by striking “Bureau of Mines” each place it appears and inserting “United States Geological Survey”.

(2) POLICY.—Section 3 of the National Materials and Minerals Policy, Research and Development Act of 1980 (30 U.S.C. 1602) is amended, in the matter preceding paragraph (1)—

(A) in the first sentence, by striking “The Congress declares that it” and inserting “It”; and

(B) in the second sentence, by striking “The Congress further declares that implementation” and inserting “Implementation”.

(3) IMPLEMENTATION.—Section 4 of the National Materials and Minerals Policy, Research and Development Act of 1980 (30 U.S.C. 1603) is amended, in the matter preceding paragraph (1)—

(A) by striking “For the purpose” and all that follows through “declares that the” and inserting “The”; and

(B) by striking “departments and agencies,” and inserting “departments and agencies to implement the policy described in section 3”.

(n) ADMINISTRATION.—

(1) IN GENERAL.—The National Critical Materials Act of 1984 (30 U.S.C. 1801 et seq.) is repealed.

(2) CONFORMING AMENDMENT.—Section 3(d) of the National Superconductivity and Competitiveness Act of 1988 (15 U.S.C. 5202(d)) is amended in the first sentence by striking “, with the assistance of the National Critical Materials Council as specified in the National Critical Materials Act of 1984 (30 U.S.C. 1801 et seq.),”.

(3) SAVINGS CLAUSES.—

(A) IN GENERAL.—Nothing in this section or an amendment made by this section modifies any requirement or authority provided by—

(i) the matter under the heading “geological survey” of the first section of the Act of March 3, 1879 (43 U.S.C. 31(a)); or

(ii) the first section of Public Law 87-626 (43 U.S.C. 31(b)).

(B) EFFECT ON DEPARTMENT OF DEFENSE.—Nothing in this section or an amendment made by this section affects the authority of the Secretary of Defense with respect to the work of the Department of Defense on critical material supplies in furtherance of the national defense mission of the Department of Defense.

(C) SECRETARIAL ORDER NOT AFFECTED.—This section shall not apply to any mineral described in Secretarial Order No. 3324, issued by the Secretary on December 3, 2012, in any area to which the order applies.

(o) AUTHORIZATION OF APPROPRIATIONS.—There is authorized to be appropriated to the Secretary to carry out this section \$50,000,000 for each of fiscal years 2021 through 2029.

* * * * *

DISSENTING VIEWS

H.R. 8446 would amend the definition of “critical mineral” in the Energy Act of 2020 to include critical materials from the Department of Energy (DOE) critical materials list. Critical minerals are currently designated by the United States Geological Survey (USGS) in accordance with the mandates of the Energy Act, using peer-reviewed scientific methodology.

Sections 7002(a) and (c) of the Energy Act of 2020 define a “critical mineral” as a non-fuel mineral or mineral material essential to the economic or national security of the U.S. and which has a supply chain vulnerable to disruption. Critical minerals are also characterized as serving an essential function in the manufacturing of a product, the absence of which would have significant consequences for the economy or national security.

USGS maintains the federal critical minerals list; the 2022 list names 50 minerals that are critical to the U.S. economy and national security and are vulnerable to supply chain disruptions. This is a dynamic list, which will be updated at least every three years to reflect mineral supply, demand, production, and evolving mineral supply chain risks. The Energy Act of 2020 created the framework for updating the critical minerals list, requiring the Department of the Interior (DOI) to use the best available science and incorporate interagency and public feedback into the critical mineral designations.

In addition to the USGS critical minerals list, both DOE and the Department of Defense, Defense Logistics Agency (DLA) have their own lists of “critical materials” and “strategic materials,” respectively. These lists are specific to these agencies’ activities and mandates; they draw on the USGS list but include sector-specific analysis and modeling. The DOE list is specific to energy needs, and the DLA list is specific to the needs of defense and includes authorities to stockpile certain materials.

The Biden administration and the 117th Congress made significant investments in domestic research on and production of critical minerals and materials, including tax and permitting incentives under the Inflation Reduction Act (IRA), the Infrastructure Investment and Jobs Act (IIJA), the CHIPS and Science Act, and executive actions invoking the Defense Production Act. Some of these are available exclusively to minerals on the USGS list, but other investments or incentives target strategic or critical materials (materials on the DOD or DOE lists) or a subset of any of these lists. Benefits exclusive to the USGS critical minerals list include expedited permitting under Title 41 of the Fixing Americas Surface Transportation Act (FAST-41) and certain grants from IIJA and the CHIPS and Science Act.

Due to the incentives targeting critical minerals, the USGS critical minerals list and methodologies have come under significant

scrutiny since the publication of the 2022 list. In particular, many have criticized the critical minerals assessment for not including demand projections, relying on past data, and not incorporating modeled future risks.

Unlike USGS's list, the DOE critical materials list is forward-looking and bases criticality determinations on projections of risk and demand in the near (2020–2025) and medium (2025–2030) term.¹ Critics of USGS's critical minerals list methodology have pointed to DOE's more forward-looking list as more useful for informing supply chain planning.

In accordance with the Energy Act of 2020, USGS is working on the 2025 critical minerals list. As USGS testified at the legislative hearing on H.R. 8446, the agency is updating its methodology for the 2025 list to “incorporate a data-driven modeling approach to evaluate potential risks to mineral supply chains.”

Congress should support this inclusive, science-based approach rather than adding minerals to the list through legislative action. Given the significant investments and incentives available to critical minerals, mining interests have made concentrated lobbying efforts to legislatively add specific minerals to the USGS critical minerals list. The major discrepancy between the DOE critical materials list and the USGS critical minerals list is copper, which is currently considered a critical material by DOE but not a critical mineral by USGS. Given industry lobbying for copper to be considered critical and previous legislative pushes to add copper to the USGS critical minerals list, H.R. 8446 can be understood as an attempt to make copper eligible for federal support for critical minerals.

While copper plays an important role in the economy and national security, its supply chain is not currently considered at risk. The U.S. is a significant producer of copper; the USGS estimates that the U.S. mined 1.3 million tons of copper in 2022 from 25 operating copper mines. There are currently multiple additional copper mines in the permitting process, which will likely begin production in several years. The U.S. also has “multiple domestic options for downstream smelting and refining to copper metal.”² Importantly, copper is highly recyclable, and the U.S. supplied about a third of the copper used domestically through recycling in 2022.³ More recycling could go even further toward mitigating supply chain risks while reducing environmental impact.

While the economy is considered vulnerable to a supply disruption for copper, this vulnerability is “mitigated by a relatively low U.S. net import reliance on foreign supplies and a diversity of foreign supply sources.”⁴ Although net import reliance increased from 2018 to 2021, the latest data—published in 2023—show that import reliance decreased from 2021 to 2022; imports decreased even

¹Rowan, Linda R. April 8, 2024. “Critical Mineral Resources: National Policy and Critical Minerals List.” Congressional Research Service. <https://www.crs.gov/Reports/R47982>.

²David Applegate, Director of USGS. Letter to Senators Sinema, Kelly, Manchin, Braun, Warnock, and Romney re: designating copper as a critical mineral. April 13, 2023. <https://subscriber.politicopro.com/eenews/f/eenews/?id=00000188-4953-d998-ab8f-fb5f223b0000>.

³Ibid.

⁴Ibid.

as domestic copper consumption increased.⁵ Furthermore, “American imports of refined copper come predominantly from Chile, Canada, and Mexico, reliable trade partners with whom the U.S. has free trade agreements.”⁶

Copper’s inclusion on DOE’s critical materials list is controversial because DOE’s own analyses do not show copper to be critical in the near term or medium term, although it is considered *near* critical in the medium term.

The critical minerals list is designed to focus attention and resources on the most essential and at-risk mineral supply chains. In adding critical materials to the definition of critical minerals in the Energy Act of 2020, copper would become eligible for production support, research grants, and expedited permitting—potentially siphoning resources from much more at-risk and fragile mineral supply chains to the well-developed copper industry.

RAÚL M. GRIJALVA,
Ranking Member.



⁵ Ibid.

⁶ Ibid.