

117TH CONGRESS
2D SESSION

S. _____

To require the Secretary of Energy to provide technology grants to strengthen domestic mining education, and for other purposes.

IN THE SENATE OF THE UNITED STATES

Mr. BARRASSO (for himself and Mr. MANCHIN) introduced the following bill;
which was read twice and referred to the Committee on

A BILL

To require the Secretary of Energy to provide technology grants to strengthen domestic mining education, and for other purposes.

1 *Be it enacted by the Senate and House of Representa-*
2 *tives of the United States of America in Congress assembled,*

3 **SECTION 1. SHORT TITLE.**

4 This Act may be cited as the “Technology Grants to
5 Strengthen Domestic Mining Education Act of 2022” or
6 the “Mining Schools Act of 2022”.

7 **SEC. 2. TECHNOLOGY GRANTS TO STRENGTHEN DOMESTIC**
8 **MINING EDUCATION.**

9 (a) **DEFINITIONS.**—In this section:

1 (1) BOARD.—The term “Board” means the
2 Mining Professional Development Advisory Board
3 established by subsection (d)(1).

4 (2) MINING INDUSTRY.—The term “mining in-
5 dustry” means the mining industry of the United
6 States, consisting of the search for, and extraction,
7 beneficiation, refining, smelting, and processing of,
8 naturally occurring metal and nonmetal minerals
9 from the earth.

10 (3) MINING PROFESSION.—The term “mining
11 profession” means the body of jobs directly relevant
12 to—

13 (A) the exploration, planning, execution,
14 and remediation of metal and nonmetal mining
15 sites; and

16 (B) the extraction, including the separa-
17 tion, refining, alloying, smelting, concentration,
18 and processing, of mineral ores.

19 (4) MINING SCHOOL.—The term “mining
20 school” means—

21 (A) a mining, metallurgical, geological, or
22 mineral engineering program accredited by the
23 Accreditation Board for Engineering and Tech-
24 nology, Inc., that is located at an institution of
25 higher education (as defined in section 101 of

1 the Higher Education Act of 1965 (20 U.S.C.
2 1001)); and

3 (B) a geology or engineering program or
4 department that is located at a 4-year public in-
5 stitution of higher education (as so defined) lo-
6 cated in a State the gross domestic product of
7 which in 2020 was not less than
8 \$2,000,000,000 in the combined categories of
9 “Mining (except oil and gas)” and “Support ac-
10 tivities for mining”, according to the Bureau of
11 Economic Analysis.

12 (5) SECRETARY.—The term “Secretary” means
13 the Secretary of Energy.

14 (b) DOMESTIC MINING EDUCATION STRENGTHENING
15 PROGRAM.—The Secretary shall establish a program to
16 strengthen domestic mining education under which the
17 Secretary shall award competitive grants to mining schools
18 for the purpose of recruiting and educating the next gen-
19 eration of mining engineers and other qualified profes-
20 sionals to meet the future energy and mineral needs of
21 the United States.

22 (c) GRANTS.—

23 (1) IN GENERAL.—In carrying out the grant
24 program established under subsection (b), the Sec-

1 retary shall award not more than 10 grants each
2 year to mining schools.

3 (2) SELECTION REQUIREMENTS.—

4 (A) IN GENERAL.—To the maximum ex-
5 tent practicable, the Secretary shall select re-
6 cipients for grants under paragraph (1) to en-
7 sure geographic diversity among grant recipi-
8 ents to ensure that region-specific specialties
9 are developed for region-specific geology.

10 (B) TIMELINE.—

11 (i) IN GENERAL.—The Secretary shall
12 award the first grants under paragraph (1)
13 by not later than 1 year after the date of
14 enactment of this Act.

15 (ii) SUBSEQUENT GRANTS.—Each
16 year following the first year in which
17 grants are awarded pursuant to clause (i),
18 the Secretary shall award subsequent
19 grants by not later than 1 year after the
20 date on which the grants were awarded the
21 previous year.

22 (3) RECOMMENDATIONS OF THE BOARD.—In
23 selecting recipients for grants under paragraph (1)
24 and determining the amount of each grant, the Sec-
25 retary shall take into consideration the recommenda-

1 tions of the Board under subparagraphs (A) and (B)
2 of subsection (d)(3).

3 (4) USE OF FUNDS.—A mining school receiving
4 a grant under paragraph (1) shall use the grant
5 funds—

6 (A) to recruit students to the mining
7 school; and

8 (B) to enhance and support programs re-
9 lated to, as applicable—

10 (i) mining, mineral extraction effi-
11 ciency, and related processing technology;

12 (ii) emphasizing critical mineral and
13 rare earth element exploration, extraction,
14 and refining;

15 (iii) reclamation technology and prac-
16 tices for active mining operations;

17 (iv) the development of reprocessing
18 systems and technologies that facilitate
19 reclamation that fosters the recovery of re-
20 sources at abandoned mine sites;

21 (v) mineral extraction methods that
22 reduce environmental and human impacts;

23 (vi) technologies to extract, refine,
24 separate, melt, or produce minerals, in-
25 cluding rare earth elements;

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1 (vii) reducing dependence on foreign
2 energy and mineral supplies through in-
3 creased domestic critical mineral produc-
4 tion;

5 (viii) enhancing the competitiveness of
6 United States energy and mineral tech-
7 nology exports;

8 (ix) the extraction or processing of co-
9 inciding mineralization, including rare
10 earth elements, within coal, coal processing
11 byproduct, overburden, or coal residue;

12 (x) enhancing technologies and prac-
13 tices relating to mitigation of acid mine
14 drainage, reforestation, and revegetation in
15 the reclamation of land and water re-
16 sources adversely affected by mining;

17 (xi) enhancing exploration and charac-
18 terization of new or novel deposits, includ-
19 ing rare earth elements and critical min-
20 erals within phosphate rocks, uranium
21 bearing deposits, and other nontraditional
22 sources;

23 (xii) meeting challenges of extreme
24 mining conditions, such as deeper deposits
25 or offshore or cold region mining; and

1 (xiii) mineral economics, including
2 analysis of supply chains, future mineral
3 needs, and unconventional mining re-
4 sources.

5 (d) MINING PROFESSIONAL DEVELOPMENT ADVI-
6 SORY BOARD.—

7 (1) IN GENERAL.—There is established an advi-
8 sory board, to be known as the “Mining Professional
9 Development Advisory Board”.

10 (2) COMPOSITION.—The Board shall be com-
11 posed of 6 members, to be appointed by the Sec-
12 retary not later than 180 days after the date of en-
13 actment of this Act, of whom—

14 (A) 3 shall be individuals who are actively
15 working in the mining profession and for the
16 mining industry; and

17 (B) 3 shall have experience in academia
18 implementing and operating professional skills
19 training and education programs in the mining
20 sector.

21 (3) DUTIES.— The Board shall—

22 (A) evaluate grant applications received
23 under subsection (c) and make recommenda-
24 tions to the Secretary for selection of grant re-
25 cipients under that subsection;

1 (B) propose the amount of the grant for
2 each applicant recommended to be selected
3 under subparagraph (A); and

4 (C) perform oversight to ensure that grant
5 funds awarded under subsection (c) are used
6 for the purposes described in paragraph (4) of
7 that subsection.

8 (4) TERM.—A member of the Board shall serve
9 for a term of 4 years.

10 (5) VACANCIES.—A vacancy on the Board—

11 (A) shall not affect the powers of the
12 Board; and

13 (B) shall be filled in the same manner as
14 the original appointment was made by not later
15 180 days after the date on which the vacancy
16 occurs.

17 (e) AUTHORIZATION OF APPROPRIATIONS.—

18 (1) IN GENERAL.—There is authorized to be
19 appropriated to carry out this section \$10,000,000
20 for each of fiscal years 2023 through 2030.

21 (2) REQUIREMENT.—At the end of each fiscal
22 year, any amounts made available under paragraph
23 (1) for that fiscal year that are not awarded as
24 grants under subsection (c) shall be returned to the
25 Treasury.