

## Calendar No. 385

116TH CONGRESS  
1ST SESSION**S. 2393**

To promote a 21st century energy workforce, and for other purposes.

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## IN THE SENATE OF THE UNITED STATES

JULY 31, 2019

Mr. HEINRICH (for himself, Mr. MANCHIN, and Mr. BOOKER) introduced the following bill; which was read twice and referred to the Committee on Energy and Natural Resources

DECEMBER 18, 2019

Reported by Ms. MURKOWSKI, with an amendment

[Strike out all after the enacting clause and insert the part printed in *italie*]

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**A BILL**

To promote a 21st century energy workforce, 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 “Clean Energy Jobs  
5 Act of 2019”.

6 **SEC. 2. DEFINITIONS.**

7 In this Act:

1           (1) APPRENTICESHIP.—The term “apprentice-  
2           ship” means an apprenticeship registered under the  
3           Act of August 16, 1937 (29 U.S.C. 50 et seq.) (com-  
4           monly known as the “National Apprenticeship Act”).

5           (2) EDUCATIONAL INSTITUTION.—The term  
6           “educational institution” means—

7                   (A) an elementary school;

8                   (B) a secondary school; and

9                   (C) an institution of higher education.

10          (3) ELEMENTARY SCHOOL.—The term “elemen-  
11          tary school” has the meaning given the term in sec-  
12          tion 8101 of the Elementary and Secondary Edu-  
13          cation Act of 1965 (20 U.S.C. 7801).

14          (4) ENERGY-RELATED INDUSTRY.—The term  
15          “energy-related industry” includes each of the fol-  
16          lowing industries:

17                   (A) The energy efficiency industry.

18                   (B) The renewable energy industry.

19                   (C) The chemical manufacturing industry.

20                   (D) The utility industry.

21                   (E) The alternative fuels industry.

22                   (F) The pipeline industry.

23                   (G) The nuclear energy industry.

24                   (H) The oil and gas industry.

25                   (I) The coal industry.

1           (5) INSTITUTION OF HIGHER EDUCATION.—The  
2 term “institution of higher education” has the  
3 meaning given the term in section 102 of the Higher  
4 Education Act of 1965 (20 U.S.C. 1002).

5           (6) LABOR ORGANIZATION.—The term “labor  
6 organization” has the meaning given the term in  
7 section 2 of the National Labor Relations Act (29  
8 U.S.C. 152).

9           (7) LOCAL WORKFORCE DEVELOPMENT  
10 BOARD.—The term “local workforce development  
11 board” has the meaning given the term “local  
12 board” in section 3 of the Workforce Innovation and  
13 Opportunity Act (29 U.S.C. 3102).

14          (8) MINORITY-SERVING INSTITUTION.—The  
15 term “minority-serving institution” means—

16           (A) a Hispanic-serving institution (as de-  
17 fined in section 502(a) of the Higher Education  
18 Act of 1965 (20 U.S.C. 1101a(a)));

19           (B) a Tribal College or University (as de-  
20 fined in section 316(b) of the Higher Education  
21 Act of 1965 (20 U.S.C. 1059e(b)));

22           (C) an Alaska Native-serving institution  
23 (as defined in section 317(b) of the Higher  
24 Education Act of 1965 (20 U.S.C. 1059d(b)));

1           (D) a Native Hawaiian-serving institution  
2           (as defined in section 317(b) of the Higher  
3           Education Act of 1965 (20 U.S.C. 1059d(b)));

4           (E) a Predominantly Black Institution (as  
5           defined in section 318(b) of the Higher Edu-  
6           cation Act of 1965 (20 U.S.C. 1059e(b)));

7           (F) a Native American-serving nontribal  
8           institution (as defined in section 319(b) of the  
9           Higher Education Act of 1965 (20 U.S.C.  
10          1059f(b))); and

11          (G) an Asian American and Native Amer-  
12          ican Pacific Islander-serving institution (as de-  
13          fined in section 320(b) of the Higher Education  
14          Act of 1965 (20 U.S.C. 1059g(b))).

15          (9) SECONDARY SCHOOL.—The term “sec-  
16          ondary school” has the meaning given the term in  
17          section 8101 of the Elementary and Secondary Edu-  
18          cation Act of 1965 (20 U.S.C. 7801).

19          (10) SECRETARY.—The term “Secretary”  
20          means the Secretary of Energy.

21          (11) STATE WORKFORCE DEVELOPMENT  
22          BOARD.—The term “State workforce development  
23          board” has the meaning given the term “State  
24          board” in section 3 of the Workforce Innovation and  
25          Opportunity Act (29 U.S.C. 3102).

1           (12) WORKFORCE DEVELOPMENT PROGRAM.—

2           The term “workforce development program” has the  
3           meaning given the term in section 3 of the Work-  
4           force Innovation and Opportunity Act (29 U.S.C.  
5           3102).

6   **SEC. 3. ENERGY WORKFORCE DEVELOPMENT PROGRAM.**

7           (a) ESTABLISHMENT.—The Secretary shall establish  
8           and carry out a comprehensive and nationwide program  
9           (referred to in this section as the “program”) in accord-  
10          ance with this section to improve education and training  
11          for jobs in energy-related industries (including manufac-  
12          turing, engineering, construction, and retrofitting jobs in  
13          energy-related industries) to increase the number of  
14          skilled workers trained to work in energy-related indus-  
15          tries.

16          (b) WORKFORCE DEVELOPMENT.—

17                  (1) IN GENERAL.—In carrying out the program,  
18          the Secretary shall—

19                          (A) encourage underrepresented groups,  
20                          including religious and ethnic minorities,  
21                          women, veterans, individuals with disabilities,  
22                          unemployed energy workers, and socioeconomic-  
23                          ally disadvantaged individuals, to enter into  
24                          science, technology, engineering, and mathe-  
25                          matics fields;

1           (B) encourage educational institutions to  
2 provide students with mentors and equip stu-  
3 dents with the skills, training, and technical ex-  
4 pertise necessary to fill the employment oppor-  
5 tunities vital to managing and operating en-  
6 ergy-related industries;

7           (C) provide internships, fellowships,  
8 traineeships, apprenticeships, and employment  
9 at the Department of Energy, including at Na-  
10 tional Laboratories;

11          (D) provide research grants and technical  
12 assistance to institutions of higher education,  
13 with priority given to minority-serving institu-  
14 tions;

15          (E) provide students and other candidates  
16 for employment with the necessary skills and  
17 certifications for skilled, semiskilled, and highly  
18 skilled jobs in energy-related industries;

19          (F) ensure that the program is in align-  
20 ment with the Minorities in Energy Initiative of  
21 the Department of Energy;

22          (G) engage with other programs and lab-  
23 oratories in the Department of Energy that are  
24 carrying out the Minorities in Energy Initiative  
25 of the Department of Energy; and

1           (H) to the maximum extent practicable,  
2           collaborate with and support State workforce  
3           development programs to maximize the effi-  
4           ciency of the program.

5           (2) PRIORITY.—In carrying out the program,  
6           the Secretary shall prioritize the education and  
7           training of underrepresented groups for jobs in en-  
8           ergy-related industries.

9           (c) DIRECT ASSISTANCE.—

10           (1) IN GENERAL.—To carry out the program,  
11           the Secretary shall provide direct assistance (includ-  
12           ing financial assistance awards, technical expertise,  
13           and guidance on internships) to educational institu-  
14           tions, local workforce development boards, State  
15           workforce development boards, nonprofit organiza-  
16           tions, labor organizations, and apprenticeship pro-  
17           grams.

18           (2) DISTRIBUTION.—The Secretary shall dis-  
19           tribute direct assistance under paragraph (1) in a  
20           manner that—

21                   (A) is proportional to the needs of, and de-  
22                   mand for jobs in, an energy-related industry;  
23                   and

24                   (B) is consistent with the information ob-  
25                   tained under subsections (e)(3) and (j).

1       (d) RESOURCE CENTER.—The Secretary shall estab-  
2 lish an online resource center—

3           (1) to maintain and update information and re-  
4 sources on training programs for jobs in energy-re-  
5 lated industries (including manufacturing, engineer-  
6 ing, construction, and retrofitting jobs in energy-re-  
7 lated industries); and

8           (2) as a resource for educational institutions,  
9 local workforce development boards, State workforce  
10 development boards, nonprofit organizations, labor  
11 organizations, and apprenticeship programs that  
12 would like to develop and implement training pro-  
13 grams for the jobs described in paragraph (1).

14       (e) COLLABORATION AND REPORT.—In carrying out  
15 the program, the Secretary shall—

16           (1) collaborate with educational institutions,  
17 local workforce development boards, State workforce  
18 development boards, nonprofit organizations, labor  
19 organizations, apprenticeship programs, and energy-  
20 related industries;

21           (2) to facilitate the sharing of best practices  
22 and approaches that best suit local, State, and na-  
23 tional needs, encourage and foster collaboration,  
24 mentorship, and partnership between—



1           (A) industry, local workforce development  
2           boards, State workforce development boards,  
3           nonprofit organizations, labor organizations,  
4           and apprenticeship programs that provide effec-  
5           tive training programs for jobs in energy-re-  
6           lated industries; and

7           (B) educational institutions that seek to  
8           establish those programs; and

9           (3) collaborate with the Commissioner of the  
10          Bureau of Labor Statistics, the Secretary of Com-  
11          merce, the Director of the Bureau of the Census,  
12          and energy-related industries—

13           (A) to develop a comprehensive and de-  
14           tailed understanding of the workforce needs of  
15           and job opportunities in energy-related indus-  
16           tries, by State and by region; and

17           (B) to publish an annual report on job ere-  
18           ation in the energy-related industries described  
19           in subparagraphs (A) through (L) of subsection  
20           (j)(2).

21          (f) GUIDELINES FOR EDUCATIONAL INSTITU-  
22          TIONS.—

23           (1) IN GENERAL.—The Secretary, in collabora-  
24           tion with the Secretary of Education, the Secretary  
25           of Commerce, the Secretary of Labor, and the Direc-

1 tor of the National Science Foundation, shall de-  
2 velop and provide to educational institutions vol-  
3 untary guidelines or best practices for providing  
4 graduates with skills necessary for jobs in energy-re-  
5 lated industries (including manufacturing, engineer-  
6 ing, construction, and retrofitting jobs in energy-re-  
7 lated industries).

8 (2) INPUT FROM INDUSTRY.—In carrying out  
9 paragraph (1), the Secretary shall solicit input from  
10 energy-related industries.

11 (3) ENERGY EFFICIENCY AND CONSERVATION  
12 INITIATIVES.—The voluntary guidelines or best prac-  
13 tices developed under paragraph (1) shall include  
14 grade-specific guidelines for teaching students and  
15 families of students energy efficiency technology,  
16 manufacturing efficiency technology, community en-  
17 ergy resiliency, and conservation initiatives.

18 (4) STEM EDUCATION.—The guidelines or best  
19 practices developed under paragraph (1) shall pro-  
20 mote education in science, technology, engineering,  
21 and mathematics as it relates to job opportunities in  
22 the energy-related industries described in subsection  
23 (j)(2).

24 (g) OUTREACH TO MINORITY-SERVING INSTITU-  
25 TIONS.—The Secretary shall—

1           (1) give special consideration to increasing out-  
2 reach to minority-serving institutions;

3           (2) make resources available to minority-serving  
4 institutions to increase the number of skilled minori-  
5 ties and women qualified for jobs in energy-related  
6 industries (including manufacturing, engineering,  
7 construction, and retrofitting jobs in energy-related  
8 industries);

9           (3) encourage energy-related industries to im-  
10 prove opportunities for students of minority-serving  
11 institutions to participate in industry internships  
12 and cooperative work-study programs; and

13           (4) work with the laboratories of the Depart-  
14 ment of Energy to increase the participation of  
15 underrepresented groups in internships, fellowships,  
16 training programs, and employment at those labora-  
17 tories.

18       (h) **OUTREACH TO DISPLACED AND UNEMPLOYED**  
19 **ENERGY WORKERS.**—The Secretary shall—

20           (1) give special consideration to increasing out-  
21 reach to employers and job trainers preparing dis-  
22 placed and unemployed energy workers for emerging  
23 jobs in energy-related industries (including manufac-  
24 turing, engineering, construction, and retrofitting  
25 jobs in energy-related industries);

1           (2) make resources available to institutions that  
2           serve displaced and unemployed energy workers to  
3           increase the number of individuals trained for jobs  
4           in energy-related industries (including manufac-  
5           turing, engineering, construction, and retrofitting  
6           jobs in energy-related industries); and

7           (3) encourage energy-related industries to im-  
8           prove opportunities for displaced and unemployed  
9           energy workers to participate in industry internships  
10          and cooperative work-study programs.

11          (i) ENROLLMENT IN TRAINING AND APPRENTICE-  
12 SHIP PROGRAMS.—The Secretary shall collaborate with  
13 industry, local workforce development boards, State work-  
14 force development boards, nonprofit organizations, labor  
15 organizations, and apprenticeship programs to help iden-  
16 tify students and other candidates, including from under-  
17 represented communities such as minorities, women, and  
18 veterans, to enroll in training and apprenticeship pro-  
19 grams for jobs in energy-related industries.

20          (j) GUIDELINES TO DEVELOP SKILLS FOR AN EN-  
21 ERGY INDUSTRY WORKFORCE.—The Secretary shall, in  
22 collaboration with energy-related industries—

23           (1) identify the areas within each energy-related  
24           industry that has the greatest demand for workers;  
25           and

1           (2) develop guidelines for the skills necessary to  
2 work in each of the following energy-related indus-  
3 tries:

4           (A) The energy efficiency industry, includ-  
5 ing work in conservation, weatherization, retro-  
6 fitting, and inspection and auditing of the in-  
7 dustry.

8           (B) The renewable energy industry, includ-  
9 ing work in the development, engineering, man-  
10 ufacturing, and production of renewable energy  
11 from renewable energy sources (such as solar,  
12 hydropower, wind, and geothermal energy).

13           (C) The community energy resiliency in-  
14 dustry, including work in installation of rooftop  
15 solar, battery storage, and microgrid tech-  
16 nologies.

17           (D) The fuel cell and hydrogen energy in-  
18 dustry.

19           (E) The manufacturing industry, including  
20 work in operations technology, operations and  
21 design in additive manufacturing, 3-dimensional  
22 printing, advanced composites and advanced  
23 aluminum and other metal alloys, industrial en-  
24 ergy efficiency management systems (including

1 power electronics), and other innovative tech-  
2 nologies.

3 (F) The chemical manufacturing industry,  
4 including work in construction (such as welding,  
5 pipefitting, and tool and die making) and in the  
6 position of instrument and electrical technician,  
7 machinist, chemical process operator, engineer,  
8 quality and safety professional, or reliability en-  
9 gineer.

10 (G) The utility industry, including work in  
11 the generation, transmission, and distribution  
12 of electricity and natural gas, and in the posi-  
13 tion of electrician, dispatcher, utility technician,  
14 operator, lineworker, engineer, scientist, or in-  
15 formation technology specialist.

16 (H) The alternative fuels industry, includ-  
17 ing work in biofuel development and production.

18 (I) The pipeline industry, including work  
19 in pipeline construction and maintenance and in  
20 the position of engineer or technical advisor.

21 (J) The nuclear industry, including in the  
22 position of scientist, engineer, technician, math-  
23 ematician, or security personnel.

24 (K) The oil and gas industry, including in  
25 the position of scientist, engineer, technician,

1 mathematician, petrochemical engineer, or geol-  
 2 ogist.

3 ~~(L)~~ The coal industry, including in the po-  
 4 sition of coal miner, engineer, developer and  
 5 manufacturer of state-of-the-art coal facilities,  
 6 technology vendor, coal transportation worker  
 7 or operator, or mining equipment vendor.

8 **SEC. 4. ENERGY WORKFORCE GRANT PROGRAM.**

9 (a) DEFINITIONS.—In this section:

10 (1) ELIGIBLE ENTITY.—The term “eligible enti-  
 11 ty” means a business or labor management organi-  
 12 zation that—

13 (A)(i) is directly involved with energy effi-  
 14 ciency, renewable energy technology, or reduc-  
 15 tion in greenhouse gas emissions, as determined  
 16 by the Secretary; or

17 (ii) works on behalf of a business or labor  
 18 management organization that is directly in-  
 19 volved with energy efficiency, renewable energy  
 20 technology, or reduction in greenhouse gas  
 21 emissions, as determined by the Secretary; and

22 (B) provides services related to—

23 (i) renewable electric energy genera-  
 24 tion, including solar, wind, geothermal, hy-

1 dropower, and other renewable electric en-  
2 ergy generation technologies;

3 (ii) energy efficiency, including energy  
4 efficient lighting, heating, ventilation, and  
5 air conditioning, air source heat pumps,  
6 advanced building materials, insulation and  
7 air sealing, and other high efficiency prod-  
8 ucts and services, and auditing and inspec-  
9 tion in energy efficiency;

10 (iii) grid modernization or energy  
11 storage, including smart grid, microgrid  
12 and other distributed energy solutions, de-  
13 mand response management, and home en-  
14 ergy management technology;

15 (iv) advanced technologies that im-  
16 prove the conversion, use, and storage of  
17 carbon dioxide produced from fossil fuels,  
18 including carbon capture and storage and  
19 direct air capture;

20 (v) nuclear energy, including nuclear  
21 research, development, demonstration, and  
22 commercial application; or

23 (vi) fuel cell and hybrid fuel cell gen-  
24 eration.



1           (2) LABOR MANAGEMENT ORGANIZATION.—The  
2 term “labor management organization” includes a  
3 nonprofit organization or qualified youth or con-  
4 servation corps that provides training to individuals  
5 to work for an eligible entity that is a business, or  
6 works on behalf of an eligible entity that is a busi-  
7 ness.

8           (b) ESTABLISHMENT.—

9           (1) IN GENERAL.—The Secretary shall establish  
10 a program to provide grants to eligible entities to  
11 pay the wages of a new or existing employee during  
12 the time period in which the employee receives train-  
13 ing to work in the renewable energy sector, energy  
14 efficiency sector, or grid modernization sector.

15           (2) GUIDELINES.—Not later than 60 days after  
16 the date of enactment of this Act, the Secretary, in  
17 consultation with stakeholders, contractors, and or-  
18 ganizations that work to advance existing residential  
19 energy efficiency, shall establish guidelines for the  
20 program under paragraph (1) to determine the cri-  
21 teria for—

22                   (A) the wages or stipends that shall be  
23 paid using the grant funds; and

24                   (B) training received by an employee that  
25 qualifies under the program.

1       ~~(c) GRANTS.—~~

2               ~~(1) IN GENERAL.—~~An eligible entity desiring a  
3       ~~grant under subsection (b)(1)~~ shall submit to the  
4       Secretary an application at such time, in such man-  
5       ner, and containing such information as the Sec-  
6       retary may require.

7               ~~(2) PRIORITY FOR TARGETED COMMUNITIES.—~~

8       In providing grants under subsection (b)(1), the Sec-  
9       retary shall give priority to an eligible entity that—

10              ~~(A) recruits employees—~~

11                      ~~(i) from the one or more communities~~  
12                      ~~that are served by the eligible entity; and~~

13                      ~~(ii) that are minorities; women; vet-~~  
14                      ~~erans; individuals who are or were foster~~  
15                      ~~children; or individuals who are transition-~~  
16                      ~~ing from fossil energy sector jobs; and~~

17              ~~(B) provides trainees with the opportunity~~  
18       to obtain real-world experience.

19              ~~(3) USE OF GRANTS.—~~An eligible entity may  
20       use a grant received under subsection (b)(1)—

21              ~~(A) in the case of an eligible entity with 20~~  
22       or fewer employees, to pay not more than—

23                      ~~(i) 45 percent of the wages of an em-~~  
24                      ~~ployee for the duration of the training; if~~

1 the training is provided by the eligible enti-  
2 ty; and

3 (ii) 90 percent of the wages of an em-  
4 ployee for the duration of the training; if  
5 the training is provided by an entity other  
6 than the eligible entity;

7 (B) in the case of an eligible entity with 21  
8 to 99 employees; to pay not more than—

9 (i) 37.5 percent of the wages of an  
10 employee for the duration of the training;  
11 if the training is provided by the eligible  
12 entity; and

13 (ii) 75 percent of the wages of an em-  
14 ployee for the duration of the training; if  
15 the training is provided by an entity other  
16 than the eligible entity; and

17 (C) in the case of an eligible entity with  
18 not less than 100 employees; to pay not more  
19 than—

20 (i) 25 percent of the wages of an em-  
21 ployee for the duration of the training; if  
22 the training is provided by the eligible enti-  
23 ty; and

24 (ii) 50 percent of the wages of an em-  
25 ployee for the duration of the training; if

1           the training is provided by an entity other  
2           than the eligible entity.

3           (4) GRANT AMOUNT.—An eligible entity may  
4           not receive more than \$100,000 per fiscal year  
5           under subsection (b)(1).

6           (d) AUTHORIZATION OF APPROPRIATIONS.—There is  
7           authorized to be appropriated to carry out this section  
8           \$100,000,000 for each of fiscal years 2020 through 2024.

9           **SECTION 1. SHORT TITLE.**

10           *This Act may be cited as the “Clean Energy Jobs Act*  
11 *of 2019”.*

12           **SEC. 2. DEFINITIONS.**

13           *In this Act:*

14           (1) APPRENTICESHIP.—*The term “apprentice-*  
15 *ship” means an apprenticeship registered under the*  
16 *Act of August 16, 1937 (29 U.S.C. 50 et seq.) (com-*  
17 *monly known as the “National Apprenticeship Act”).*

18           (2) ENERGY-RELATED INDUSTRY.—*The term*  
19 *“energy-related industry” means an industry in*  
20 *which a substantial quantity of economic activity, in*  
21 *the determination of the Secretary, is economic activ-*  
22 *ity relating to—*

23                   (A) *clean energy generation, transmission,*  
24 *distribution, consumption, storage, and conserva-*  
25 *tion;*

1                   (B) carbon capture;

2                   (C) fuels production or transportation; or

3                   (D) community energy resilience.

4                   (3) *INSTITUTION OF HIGHER EDUCATION.*—The  
5 term “institution of higher education” has the mean-  
6 ing given the term in section 101 and subparagraphs  
7 (A) and (B) of section 102(a)(1) of the Higher Edu-  
8 cation Act of 1965 (20 U.S.C. 1001, 1002(a)(1)).

9                   (4) *LABOR ORGANIZATION.*—The term “labor or-  
10 ganization” has the meaning given the term in sec-  
11 tion 2 of the National Labor Relations Act (29 U.S.C.  
12 152).

13                   (5) *LOCAL EDUCATIONAL AGENCY.*—The term  
14 “local educational agency” has the meaning given the  
15 term in section 8101 of the Elementary and Sec-  
16 ondary Education Act of 1965 (20 U.S.C. 7801).

17                   (6) *LOCAL WORKFORCE DEVELOPMENT BOARD.*—  
18 The term “local workforce development board” has the  
19 meaning given the term “local board” in section 3 of  
20 the Workforce Innovation and Opportunity Act (29  
21 U.S.C. 3102).

22                   (7) *MINORITY-SERVING INSTITUTION.*—The term  
23 “minority-serving institution” means—

1           (A) a *Hispanic-serving institution* (as de-  
2           fined in section 502(a) of the *Higher Education*  
3           *Act of 1965* (20 U.S.C. 1101a(a)));

4           (B) a *Tribal College or University* (as de-  
5           fined in section 316(b) of the *Higher Education*  
6           *Act of 1965* (20 U.S.C. 1059c(b)));

7           (C) an *Alaska Native-serving institution* (as  
8           defined in section 317(b) of the *Higher Edu-*  
9           *cation Act of 1965* (20 U.S.C. 1059d(b)));

10          (D) a *Native Hawaiian-serving institution*  
11          (as defined in section 317(b) of the *Higher Edu-*  
12          *cation Act of 1965* (20 U.S.C. 1059d(b)));

13          (E) a *Predominantly Black Institution* (as  
14          defined in section 318(b) of the *Higher Edu-*  
15          *cation Act of 1965* (20 U.S.C. 1059e(b)));

16          (F) a *Native American-serving nontribal*  
17          *institution* (as defined in section 319(b) of the  
18          *Higher Education Act of 1965* (20 U.S.C.  
19          1059f(b))); and

20          (G) an *Asian American and Native Amer-*  
21          *ican Pacific Islander-serving institution* (as de-  
22          fined in section 320(b) of the *Higher Education*  
23          *Act of 1965* (20 U.S.C. 1059g(b))).

24          (8) *SECONDARY SCHOOL*.—The term “secondary  
25          school” has the meaning given the term in section

1       8101 of the *Elementary and Secondary Education*  
2       *Act of 1965 (20 U.S.C. 7801).*

3               (9) *SECRETARY.*—*The term “Secretary” means*  
4       *the Secretary of Energy.*

5               (10) *STATE EDUCATIONAL AGENCY.*—*The term*  
6       *“State educational agency” has the meaning given the*  
7       *term in section 8101 of the Elementary and Sec-*  
8       *ondary Education Act of 1965 (20 U.S.C. 7801).*

9               (11) *STATE WORKFORCE DEVELOPMENT*  
10       *BOARD.*—*The term “State workforce development*  
11       *board” has the meaning given the term “State board”*  
12       *in section 3 of the Workforce Innovation and Oppor-*  
13       *tunity Act (29 U.S.C. 3102).*

14              (12) *WORKFORCE DEVELOPMENT PROGRAM.*—  
15       *The term “workforce development program” has the*  
16       *meaning given the term in section 3 of the Workforce*  
17       *Innovation and Opportunity Act (29 U.S.C. 3102).*

18   **SEC. 3. ENERGY WORKFORCE DEVELOPMENT PROGRAM.**

19       (a) *ESTABLISHMENT.*—*The Secretary shall establish*  
20       *and carry out a comprehensive and nationwide program*  
21       *(referred to in this section as the “program”) in accordance*  
22       *with this section to improve education and training for jobs*  
23       *in energy-related industries (including manufacturing, en-*  
24       *gineering, construction, and retrofitting jobs in energy-re-*  
25       *lated industries) to increase the number of skilled workers*

1 *trained to work in energy-related industries with existing*  
2 *or expected worker shortages.*

3 *(b) WORKFORCE DEVELOPMENT.—*

4 *(1) IN GENERAL.—In carrying out the program,*  
5 *the Secretary shall—*

6 *(A) encourage underrepresented groups, in-*  
7 *cluding religious and ethnic minorities, women,*  
8 *veterans, individuals with disabilities, unem-*  
9 *ployed energy workers, and socioeconomically*  
10 *disadvantaged individuals, to enter into science,*  
11 *technology, engineering, and mathematics fields;*

12 *(B) encourage secondary schools and insti-*  
13 *tutions of higher education to equip students*  
14 *with the skills, training, and technical expertise*  
15 *necessary to fill existing or expected worker*  
16 *shortages in energy-related industries;*

17 *(C) provide internships, fellowships,*  
18 *traineeships, and apprenticeships at the Depart-*  
19 *ment of Energy, including at National Labora-*  
20 *tories;*

21 *(D) provide energy workforce-related re-*  
22 *search grants and technical assistance to institu-*  
23 *tions of higher education, with priority given to*  
24 *minority-serving institutions;*



1           (E) provide students and other candidates  
2           for employment with the necessary skills and cer-  
3           tifications for high-skill, high-wage, or in-de-  
4           mand jobs in energy-related industries;

5           (F) ensure that the program is in alignment  
6           with the Minorities in Energy Initiative of the  
7           Department of Energy;

8           (G) engage with other programs that are  
9           carrying out the Minorities in Energy Initiative  
10          of the Department of Energy; and

11          (H) to the maximum extent practicable, col-  
12          laborate with and support State workforce devel-  
13          opment programs to maximize the efficiency of  
14          the program.

15          (2) *PRIORITY.*—In carrying out the program, the  
16          Secretary shall prioritize the education and training  
17          of underrepresented groups for jobs in energy-related  
18          industries.

19          (c) *DIRECT ASSISTANCE.*—

20                (1) *IN GENERAL.*—To carry out the program, the  
21          Secretary shall provide direct assistance (including fi-  
22          nancial assistance awards, technical expertise, and  
23          guidance) to local educational agencies, local work-  
24          force development boards, State educational agencies,  
25          State workforce development boards, institutions of

1 *higher education, nonprofit organizations, labor orga-*  
2 *nizations, and apprenticeship programs.*

3 (2) *DISTRIBUTION.*—*The Secretary shall dis-*  
4 *tribute direct assistance under paragraph (1) in a*  
5 *manner that—*

6 (A) *is reflective of the needs of, and demand*  
7 *for jobs in, an energy-related industry; and*

8 (B) *is consistent with the information ob-*  
9 *tained under subsections (e)(4) and (j).*

10 (d) *RESOURCE CENTER.*—*The Secretary shall estab-*  
11 *lish an online resource center—*

12 (1) *to maintain and update information and re-*  
13 *sources on training programs for jobs in energy-re-*  
14 *lated industries (including manufacturing, engineer-*  
15 *ing, construction, and retrofitting jobs in energy-re-*  
16 *lated industries); and*

17 (2) *as a resource for local educational agencies,*  
18 *State educational agencies, institutions of higher edu-*  
19 *cation, local workforce development boards, State*  
20 *workforce development boards, nonprofit organiza-*  
21 *tions, labor organizations, and apprenticeship pro-*  
22 *grams working to develop and implement training*  
23 *programs for the jobs described in paragraph (1).*

24 (e) *COLLABORATION AND REPORT.*—*In carrying out*  
25 *the program, the Secretary shall—*

1           (1) *collaborate with local educational agencies,*  
2           *State educational agencies, institutions of higher edu-*  
3           *cation, local workforce development boards, State*  
4           *workforce development boards, nonprofit organiza-*  
5           *tions, labor organizations, apprenticeship programs,*  
6           *and energy-related industries;*

7           (2) *facilitate the sharing of best practices and*  
8           *approaches that best suit local, State, and national*  
9           *needs;*

10          (3) *encourage and foster collaboration,*  
11          *mentorship, and partnership between—*

12                 (A) *industry, local workforce development*  
13                 *boards, State workforce development boards, non-*  
14                 *profit organizations, labor organizations, and*  
15                 *apprenticeship programs that provide effective*  
16                 *training programs for jobs in energy-related in-*  
17                 *dustries; and*

18                 (B) *local educational agencies, State edu-*  
19                 *cational agencies, and institutions of higher edu-*  
20                 *cation that seek to establish those programs; and*

21          (4) *collaborate with the Secretary of Labor, the*  
22          *Commissioner of the Bureau of Labor Statistics, the*  
23          *Secretary of Commerce, the Director of the Bureau of*  
24          *the Census, and energy-related industries—*

1           (A) to develop a comprehensive and detailed  
2           understanding of the workforce needs of, and job  
3           opportunities in, energy-related industries, by  
4           State and by region; and

5           (B) to publish an annual report on job cre-  
6           ation in the sectors of energy-related industries  
7           identified under subsection (j)(1).

8           (f) *BEST PRACTICES FOR EDUCATIONAL INSTITU-*  
9           *TIONS.—*

10           (1) *IN GENERAL.—The Secretary, in collabora-*  
11           *tion with the Secretary of Education, the Secretary of*  
12           *Commerce, the Secretary of Labor, and the Director*  
13           *of the National Science Foundation, shall develop and*  
14           *provide to local educational agencies, State edu-*  
15           *catational agencies, or institutions of higher education*  
16           *best practices for providing postsecondary students*  
17           *with skills necessary for jobs in energy-related indus-*  
18           *tries (including manufacturing, engineering, con-*  
19           *struction, and retrofitting jobs in energy-related in-*  
20           *dustries).*

21           (2) *INPUT FROM INDUSTRY.—In carrying out*  
22           *paragraph (1), the Secretary shall solicit input from*  
23           *energy-related industries, especially energy-related in-*  
24           *dustries with existing or expected worker shortages.*

1           (3) *STEM EDUCATION.*—*The best practices de-*  
2 *veloped under this subsection shall promote education*  
3 *in science, technology, engineering, and mathematics*  
4 *as it relates to job opportunities in the sectors of en-*  
5 *ergy-related industries identified under subsection*  
6 *(j)(1).*

7           (4) *ENERGY EFFICIENCY AND COMMUNITY EN-*  
8 *ERGY RESILIENCY INITIATIVES.*—*The Secretary shall*  
9 *develop and provide best practices for teaching ele-*  
10 *mentary and secondary students and the families of*  
11 *those students about energy efficiency and community*  
12 *energy resiliency.*

13          (g) *OUTREACH TO MINORITY-SERVING INSTITU-*  
14 *TIONS.*—*The Secretary shall—*

15           (1) *give special consideration to increasing out-*  
16 *reach to minority-serving institutions;*

17           (2) *make resources available to minority-serving*  
18 *institutions to increase the number of skilled minori-*  
19 *ties and women qualified for jobs in energy-related*  
20 *industries (including manufacturing, engineering,*  
21 *construction, and retrofitting jobs in energy-related*  
22 *industries);*

23           (3) *encourage energy-related industries to im-*  
24 *prove opportunities for students of minority-serving*

1 *institutions to participate in industry internships*  
2 *and cooperative work-study programs; and*

3 *(4) work with the Directors of the National Lab-*  
4 *oratories to increase the participation of underrep-*  
5 *resented groups in internships, fellowships, training*  
6 *programs, and employment at those laboratories.*

7 *(h) OUTREACH TO DISPLACED AND UNEMPLOYED EN-*  
8 *ERGY WORKERS.—The Secretary shall—*

9 *(1) give special consideration to increasing out-*  
10 *reach to employers and job trainers preparing dis-*  
11 *placed and unemployed energy workers for emerging*  
12 *jobs in energy-related industries (including manufac-*  
13 *turing, engineering, construction, and retrofitting jobs*  
14 *in energy-related industries);*

15 *(2) make resources available to institutions that*  
16 *serve displaced and unemployed energy workers to in-*  
17 *crease the number of individuals trained for jobs in*  
18 *energy-related industries (including manufacturing,*  
19 *engineering, construction, and retrofitting jobs in en-*  
20 *ergy-related industries); and*

21 *(3) encourage energy-related industries to im-*  
22 *prove opportunities for displaced and unemployed en-*  
23 *ergy workers to participate in industry internships*  
24 *and cooperative work-study programs.*

1           (i) *ENROLLMENT IN TRAINING AND APPRENTICESHIP*  
2 *PROGRAMS.*—*The Secretary shall collaborate with industry,*  
3 *local workforce development boards, State workforce devel-*  
4 *opment boards, nonprofit organizations, labor organiza-*  
5 *tions, and apprenticeship programs to help identify stu-*  
6 *dents and other candidates, including from underrep-*  
7 *resented communities such as minorities, women, and vet-*  
8 *erans, to enroll in training and apprenticeship programs*  
9 *for jobs in energy-related industries.*

10           (j) *GUIDELINES TO DEVELOP SKILLS FOR AN ENERGY*  
11 *INDUSTRY WORKFORCE.*—*The Secretary shall, in collabora-*  
12 *tion with energy-related industries, identify the sectors*  
13 *within each energy-related industry that have the greatest*  
14 *demand for workers and develop guidelines for the skills*  
15 *necessary to work in those sectors.*

16           (k) *RULE OF CONSTRUCTION.*—*Nothing in this section*  
17 *authorizes any department, agency, officer, or employee of*  
18 *the Federal government to exercise any direction, super-*  
19 *vision, or control over—*

20                 (1) *the curriculum, program of instruction, or*  
21 *instructional content of any State, local educational*  
22 *agency, or school; or*

23                 (2) *the selection of library resources, textbooks, or*  
24 *other printed or published instructional materials*

1       *used by any State, local educational agency, or*  
2       *school.*

3   **SEC. 4. ENERGY WORKFORCE PILOT PROGRAM.**

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

5           *(1) ELIGIBLE ENTITY.—The term “eligible enti-*  
6       *ty” means a business or labor management organiza-*  
7       *tion that—*

8                   *(A)(i) is directly involved with energy effi-*  
9                   *ciency, renewable energy technology, or reduction*  
10                  *in greenhouse gas emissions, as determined by*  
11                  *the Secretary; or*

12                   *(ii) works on behalf of a business or labor*  
13                  *management organization that is directly in-*  
14                  *volved with energy efficiency, renewable energy*  
15                  *technology, or reduction in greenhouse gas emis-*  
16                  *sions, as determined by the Secretary; or*

17                  *(B) provides services related to—*

18                    *(i) energy efficiency and renewable en-*  
19                    *ergy technology deployment and mainte-*  
20                    *nance;*

21                    *(ii) grid modernization; or*

22                    *(iii) reduction in greenhouse gas emis-*  
23                    *sions through the use of other low-carbon*  
24                    *technologies.*



1           (2) *LABOR MANAGEMENT ORGANIZATION.*—*The*  
2           *term “labor management organization” includes a*  
3           *nonprofit organization or qualified youth or conserva-*  
4           *tion corps that provides training to individuals to*  
5           *work for an eligible entity that is a business, or works*  
6           *on behalf of an eligible entity that is a business.*

7           (3) *PILOT PROGRAM.*—*The term “pilot program”*  
8           *means the pilot program established under subsection*  
9           *(b).*

10          (b) *ESTABLISHMENT.*—*The Secretary of Labor, in con-*  
11          *sultation with the Secretary and in accordance with section*  
12          *169(b) of the Workforce Innovation and Opportunity Act*  
13          *(29 U.S.C. 3224(b)), shall establish a pilot program to pro-*  
14          *vide competitively awarded cost-shared grants to eligible en-*  
15          *tities to pay for on-the-job training of a new or existing*  
16          *employee to work—*

17                 (1) *in renewable energy, energy efficiency, or*  
18                 *grid modernization; or*

19                 (2) *on the reduction of greenhouse gas emissions.*

20          (c) *GRANTS.*—

21                 (1) *IN GENERAL.*—*An eligible entity desiring a*  
22                 *grant under the pilot program shall submit to the*  
23                 *Secretary of Labor an application at such time, in*  
24                 *such manner, and containing such information as the*  
25                 *Secretary of Labor may require.*

1           (2) *PRIORITY FOR TARGETED COMMUNITIES.*—*In*  
2           *providing grants under the pilot program, the Sec-*  
3           *retary of Labor shall give priority to an eligible enti-*  
4           *ty that—*

5                   (A) *recruits employees—*

6                           (i) *from the 1 or more communities*  
7                           *that are served by the eligible entity; and*

8                           (ii) *that are minorities, women, vet-*  
9                           *erans, individuals who are or were foster*  
10                           *children, or individuals who are*  
11                           *transitioning from fossil energy sector jobs;*

12                   (B) *provides trainees with the opportunity*  
13                   *to obtain real-world experience; and*

14                   (C) *has fewer than 100 employees.*

15           (3) *USE OF GRANT FOR FEDERAL SHARE.*—

16                   (A) *IN GENERAL.*—*An eligible entity shall*  
17                   *use a grant received under the pilot program to*  
18                   *pay the Federal share of the cost of providing on-*  
19                   *the-job training for an employee, in accordance*  
20                   *with subparagraph (B).*

21                   (B) *FEDERAL SHARE AMOUNT.*—*The Fed-*  
22                   *eral share described in subparagraph (A) shall*  
23                   *not exceed—*

1                   (i) *in the case of an eligible entity with*  
 2                   20 or fewer employees, 45 percent of the cost  
 3                   of on-the-job-training for an employee;

4                   (ii) *in the case of an eligible entity*  
 5                   with not fewer than 21 employees and not  
 6                   more than 99 employees, 37.5 percent of the  
 7                   cost of on-the-job-training for an employee;  
 8                   and

9                   (iii) *in the case of an eligible entity*  
 10                  with not fewer than 100 employees, 25 per-  
 11                  cent of the cost of on-the-job-training for an  
 12                  employee.

13                  (4) *EMPLOYER PAYMENT OF NON-FEDERAL*  
 14                  *SHARE.—*

15                  (A) *IN GENERAL.—The non-Federal share of*  
 16                  the cost of providing on-the-job training for an  
 17                  employee under a grant received under the pilot  
 18                  program shall be paid in cash or in kind by the  
 19                  employer of the employee receiving the training.

20                  (B) *INCLUSIONS.—The non-Federal share*  
 21                  described in subparagraph (A) may include the  
 22                  amount of wages paid by the employer to the em-  
 23                  ployee during the time that the employee is re-  
 24                  ceiving on-the-job training, as fairly evaluated  
 25                  by the Secretary of Labor.

1           (5) *GRANT AMOUNT.*—*An eligible entity may not*  
2           *receive more than \$100,000 per fiscal year in grant*  
3           *funds under the pilot program.*

4           (d) *AUTHORIZATION OF APPROPRIATIONS.*—*There is*  
5           *authorized to be appropriated to carry out this section*  
6           *\$15,000,000 for each of fiscal years 2020 through 2022.*



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**S. 2393**

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**A BILL**

To promote a 21st century energy workforce, and  
for other purposes.

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DECEMBER 18, 2019

Reported with an amendment