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

IN THE SENATE OF THE UNITED STATES

Mr. HEINRICH introduced the following bill; which was read twice and referred to the Committee on

A BILL

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

Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled,

SECTION 1. SHORT TITLE.

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

SEC. 2. DEFINITIONS.

In this Act:

(1) APPRENTICESHIP.—The term “apprenticeship” means an apprenticeship registered under the Act of August 16, 1937 (29 U.S.C. 50 et seq.) (commonly known as the “National Apprenticeship Act”).
(2) Educational institution.—The term “educational institution” means—
(A) an elementary school;
(B) a secondary school; and
(C) an institution of higher education.

(3) Elementary school.—The term “elementary school” has the meaning given the term in section 8101 of the Elementary and Secondary Education Act of 1965 (20 U.S.C. 7801).

(4) Energy-related industry.—The term “energy-related industry” includes each of the following industries:
(A) The energy efficiency industry.
(B) The renewable energy industry.
(C) The chemical manufacturing industry.
(D) The utility industry.
(E) The alternative fuels industry.
(F) The pipeline industry.
(G) The nuclear energy industry.
(H) The oil and gas industry.
(I) The coal industry.

(5) Institution of higher education.—The term “institution of higher education” has the meaning given the term in section 102 of the Higher Education Act of 1965 (20 U.S.C. 1002).
(6) LABOR ORGANIZATION.—The term “labor organization” has the meaning given the term in section 2 of the National Labor Relations Act (29 U.S.C. 152).

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

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

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

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

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

(D) a Native Hawaiian-serving institution (as defined in section 317(b) of the Higher Education Act of 1965 (20 U.S.C. 1059d(b)));
(E) a Predominantly Black Institution (as defined in section 318(b) of the Higher Education Act of 1965 (20 U.S.C. 1059e(b)));

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

(G) an Asian American and Native American Pacific Islander-serving institution (as defined in section 320(b) of the Higher Education Act of 1965 (20 U.S.C. 1059g(b))).

(9) SECONDARY SCHOOL.—The term “secondary school” has the meaning given the term in section 8101 of the Elementary and Secondary Education Act of 1965 (20 U.S.C. 7801).

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

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

(12) WORKFORCE DEVELOPMENT PROGRAM.—The term “workforce development program” has the meaning given the term in section 3 of the Work-

SEC. 3. ENERGY WORKFORCE DEVELOPMENT PROGRAM.

(a) Establishment.—The Secretary shall establish and carry out a comprehensive and nationwide program (referred to in this section as the “program”) in accordance with this section to improve education and training for jobs in energy-related industries (including manufacturing, engineering, construction, and retrofitting jobs in energy-related industries) to increase the number of skilled workers trained to work in energy-related industries.

(b) Workforce Development.—

(1) In general.—In carrying out the program, the Secretary shall—

(A) encourage underrepresented groups, including religious and ethnic minorities, women, veterans, individuals with disabilities, unemployed energy workers, and socioeconomically disadvantaged individuals, to enter into science, technology, engineering, and mathematics fields;

(B) encourage educational institutions to provide students with mentors and equip students with the skills, training, and technical ex-
expertise necessary to fill the employment opportunities vital to managing and operating energy-related industries;

(C) provide internships, fellowships, traineeships, apprenticeships, and employment at the Department of Energy, including at National Laboratories;

(D) provide research grants and technical assistance to institutions of higher education, with priority given to minority-serving institutions;

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

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

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

(H) to the maximum extent practicable, collaborate with and support State workforce
development programs to maximize the efficiency of the program.

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

(e) DIRECT ASSISTANCE.—

(1) IN GENERAL.—To carry out the program, the Secretary shall provide direct assistance (including financial assistance awards, technical expertise, and guidance on internships) to educational institutions, local workforce development boards, State workforce development boards, nonprofit organizations, labor organizations, and apprenticeship programs.

(2) DISTRIBUTION.—The Secretary shall distribute direct assistance under paragraph (1) in a manner that—

(A) is proportional to the needs of, and demand for jobs in, an energy-related industry; and

(B) is consistent with the information obtained under subsections (e)(3) and (j).

(d) RESOURCE CENTER.—The Secretary shall establish an online resource center—
(1) to maintain and update information and re-
resources on training programs for jobs in energy-re-
lated industries (including manufacturing, engineer-
ing, construction, and retrofitting jobs in energy-re-
lated industries); and

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

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

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

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

(A) industry, local workforce development
boards, State workforce development boards,
nonprofit organizations, labor organizations,
and apprenticeship programs that provide effective training programs for jobs in energy-related industries; and

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

(3) collaborate with the Commissioner of the Bureau of Labor Statistics, the Secretary of Commerce, the Director of the Bureau of the Census, and energy-related industries—

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

(B) to publish an annual report on job creation in the energy-related industries described in subparagraphs (A) through (L) of subsection (j)(2).

(f) GUIDELINES FOR EDUCATIONAL INSTITUTIONS.—

(1) IN GENERAL.—The Secretary, in collaboration with the Secretary of Education, the Secretary of Commerce, the Secretary of Labor, and the Director of the National Science Foundation, shall develop and provide to educational institutions voluntary guidelines or best practices for providing
graduates with skills necessary for jobs in energy-related industries (including manufacturing, engineering, construction, and retrofitting jobs in energy-related industries).

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

(3) ENERGY EFFICIENCY AND CONSERVATION INITIATIVES.—The voluntary guidelines or best practices developed under paragraph (1) shall include grade-specific guidelines for teaching students and families of students energy efficiency technology, manufacturing efficiency technology, community energy resiliency, and conservation initiatives.

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

(g) OUTREACH TO MINORITY-SERVING INSTITUTIONS.—The Secretary shall—

(1) give special consideration to increasing outreach to minority-serving institutions;
(2) make resources available to minority-serving institutions to increase the number of skilled minorities and women qualified for jobs in energy-related industries (including manufacturing, engineering, construction, and retrofitting jobs in energy-related industries);

(3) encourage energy-related industries to improve opportunities for students of minority-serving institutions to participate in industry internships and cooperative work-study programs; and

(4) work with the laboratories of the Department of Energy to increase the participation of underrepresented groups in internships, fellowships, training programs, and employment at those laboratories.

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

(1) give special consideration to increasing outreach to employers and job trainers preparing displaced and unemployed energy workers for emerging jobs in energy-related industries (including manufacturing, engineering, construction, and retrofitting jobs in energy-related industries);

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

(3) encourage energy-related industries to improve opportunities for displaced and unemployed energy workers to participate in industry internships and cooperative work-study programs.

(i) Enrollment in Training and Apprenticeship Programs.—The Secretary shall collaborate with industry, local workforce development boards, State workforce development boards, nonprofit organizations, labor organizations, and apprenticeship programs to help identify students and other candidates, including from underrepresented communities such as minorities, women, and veterans, to enroll in training and apprenticeship programs for jobs in energy-related industries.

(j) Guidelines to Develop Skills for an Energy Industry Workforce.—The Secretary shall, in collaboration with energy-related industries—

(1) identify the areas within each energy-related industry that has the greatest demand for workers; and
(2) develop guidelines for the skills necessary to work in each of the following energy-related industries:

(A) The energy efficiency industry, including work in conservation, weatherization, retrofitting, and inspection and auditing of the industry.

(B) The renewable energy industry, including work in the development, engineering, manufacturing, and production of renewable energy from renewable energy sources (such as solar, hydropower, wind, and geothermal energy).

(C) The community energy resiliency industry, including work in installation of rooftop solar, battery storage, and microgrid technologies.

(D) The fuel cell and hydrogen energy industry.

(E) The manufacturing industry, including work in operations technology, operations and design in additive manufacturing, 3-dimensional printing, advanced composites and advanced aluminum and other metal alloys, industrial energy efficiency management systems (including
power electronics), and other innovative technologies.

(F) The chemical manufacturing industry, including work in construction (such as welding, pipefitting, and tool and die making) and in the position of instrument and electrical technician, machinist, chemical process operator, engineer, quality and safety professional, or reliability engineer.

(G) The utility industry, including work in the generation, transmission, and distribution of electricity and natural gas, and in the position of electrician, dispatcher, utility technician, operator, lineworker, engineer, scientist, or information technology specialist.

(H) The alternative fuels industry, including work in biofuel development and production.

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

(J) The nuclear industry, including in the position of scientist, engineer, technician, mathematician, or security personnel.

(K) The oil and gas industry, including in the position of scientist, engineer, technician,
mathematician, petrochemical engineer, or geologist.

(L) The coal industry, including in the position of coal miner, engineer, developer and manufacturer of state-of-the-art coal facilities, technology vendor, coal transportation worker or operator, or mining equipment vendor.

SEC. 4. ENERGY WORKFORCE GRANT PROGRAM.

(a) DEFINITIONS.—In this section:

(1) ELIGIBLE ENTITY.—The term “eligible entity” means a business or labor management organization that—

(A)(i) is directly involved with energy efficiency, renewable energy technology, or reduction in greenhouse gas emissions, as determined by the Secretary; or

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

(B) provides services related to—

(i) renewable electric energy generation, including solar, wind, geothermal, hy-
dropower, and other renewable electric energy generation technologies;

(ii) energy efficiency, including energy efficient lighting, heating, ventilation, and air conditioning, air source heat pumps, advanced building materials, insulation and air sealing, and other high efficiency products and services, and auditing and inspection in energy efficiency;

(iii) grid modernization or energy storage, including smart grid, microgrid and other distributed energy solutions, demand response management, and home energy management technology;

(iv) advanced technologies that improve the conversion, use, and storage of carbon dioxide produced from fossil fuels, including carbon capture and storage and direct air capture;

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

(vi) fuel cell and hybrid fuel cell generation.
(2) LABOR MANAGEMENT ORGANIZATION.—The term “labor management organization” includes a nonprofit organization or qualified youth or conservation corps that provides training to individuals to work for an eligible entity that is a business, or works on behalf of an eligible entity that is a business.

(b) ESTABLISHMENT.—

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

(2) GUIDELINES.—Not later than 60 days after the date of enactment of this Act, the Secretary, in consultation with stakeholders, contractors, and organizations that work to advance existing residential energy efficiency, shall establish guidelines for the program under paragraph (1) to determine the criteria for—

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

(B) training received by an employee that qualifies under the program.
(c) Grants.—

(1) In General.—An eligible entity desiring a grant under subsection (b)(1) shall submit to the Secretary an application at such time, in such manner, and containing such information as the Secretary may require.

(2) Priority for Targeted Communities.—In providing grants under subsection (b)(1), the Secretary shall give priority to an eligible entity that—

(A) recruits employees—

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

(ii) that are minorities, women, veterans, individuals who are or were foster children, or individuals who are transitioning from fossil energy sector jobs; and

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

(3) Use of Grants.—An eligible entity may use a grant received under subsection (b)(1)—

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

(i) 45 percent of the wages of an employee for the duration of the training, if
the training is provided by the eligible entity; and

(ii) 90 percent of the wages of an employee for the duration of the training, if the training is provided by an entity other than the eligible entity;

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

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

(ii) 75 percent of the wages of an employee for the duration of the training, if the training is provided by an entity other than the eligible entity; and

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

(i) 25 percent of the wages of an employee for the duration of the training, if the training is provided by the eligible entity; and

(ii) 50 percent of the wages of an employee for the duration of the training, if
the training is provided by an entity other
than the eligible entity.

(4) **Grant Amount.**—An eligible entity may
not receive more than $100,000 per fiscal year
under subsection (b)(1).

(d) **Authorization of Appropriations.**—There is
authorized to be appropriated to carry out this section
$100,000,000 for each of fiscal years 2020 through 2024.