\*THIS LANGUAGE IS PROVIDED IN RESPONSE TO A REQUEST FOR TECHNICAL DRAFTING ASSISTANCE AND DOES NOT NECESSARILY REPRESENT THE POSITION OF THE DEPARTMENT OF ENERGY OR THE ADMINISTRATION.\*

(Original Signature of Member)

116<sub>TH</sub> CONGRESS 1ST SESSION

H. R. |

To amend title II of the Department of Energy Organization Act to reauthorize an office within the Department of Energy, to direct the Secretary of Energy to establish and carry out a comprehensive, nationwide energy-related industries jobs program, and for other purposes.

## IN THE HOUSE OF REPRESENTATIVES

## A BILL

To amend title II of the Department of Energy Organization Act to reauthorize an office within the Department of Energy, to direct the Secretary of Energy to establish and carry out a comprehensive, nationwide energy-related industries jobs program, and for other purposes.

- 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; TABLE OF CONTENTS.
- 4 (a) Short Title.—This Act may be cited as the
- 5 "Blue Collar to Green Collar Jobs Development Act of
- 6 2019".

1	(b) The table of contents for
1	(b) T <sub>ABLE OF</sub> C <sub>ONTENTS</sub> .—The table of contents for
2	this Act is as follows:
	Sec. 1. Short title; table of contents.
	TITLE I—OFFICE OF ECONOMIC IMPACT, DIVERSITY, AND EMPLOYMENT
	Sec. 101. Name of office. Sec. 102. Energy workforce development programs. Sec. 103. Authorization.
	TITLE II—ENERGY WORKFORCE DEVELOPMENT
	Sec. 201. Energy workforce development. Sec. 202. Energy workforce grant program. Sec. 203. Definitions.
3	TITLE I—OFFICE OF ECONOMIC
4	IMPACT, DIVERSITY, AND EM-
5	PLOYMENT
6	SEC. 101. NAME OF OFFICE.
7	(a) $I_N$ $G_{ENERAL}$ .—Section 211 of the Department of
8	Energy Organization Act (42 U.S.C. 7141) is amended—
9	(1) in the section heading, by striking " $_{ m MINOR}$ -
10	ITY ECONOMIC IMPACT" and inserting "ECONOMIC
11	IMPACT, DIVERSITY, AND EMPLOYMENT"; and
12	(2) in subsection (a), by striking "Office of Mi-
13	nority Economic Impact" and inserting "Office of
14	Economic Impact, Diversity, and Employment".
15	(b) Conforming Amendment.—The table of con-
16	tents for the Department of Energy Organization Act is

"Sec. 211. Office of Economic Impact, Diversity, and Employment.".

17 amended by amending the item relating to section 211 to

18 read as follows:

1	SEC. 102.	. ENERGY	WORKFORCE	DEVELOPMENT	PRO-
2		GRAMS.			
3	Sect	ion 211 of	the Departme	ent of Energy O	rganiza-
4	tion Act (	(42 U.S.C.	7141) is ame	nded—	
5		(1) by red	lesignating su	bsections (f) ar	nd (g) as
6	subs	ections (g	and (h), resp	pectively; and	
7		(2) by ins	erting after su	bsection (e) the	e fol-
8	lowi	ng:			
9	"(f)"	The Secret	tary, acting th	rough the Direc	tor, shall
10	establish	and carry	out the progr	ams described i	n sections
11	201 and 2	202 of the	Blue Collar to	Green Collar J	lobs De-
12	velopme	nt Act of 2	2019.".		
13	SEC. 103. AU	JTHORIZATIO	ON.		
14	Subs	section (h	) of section 2:	11 of the Depar	tment of
15	Energy C	Organizati	on Act (42 U.	S.C. 7141), as r	edesig-
16	nated by	section 10	of this Act,	s amended by s	triking
17	"not to e	xceed \$3,0	000,000 for fi	scal year 1979,	not toex-
18	ceed \$5,0	000,000 f	or fiscal year 1	980, and not to	exceed
19	\$6,000,0	oo for fisc	al year 1981. O	f the amounts so	appro-
20	priated e	ach fiscal	year, not less	than 50 percen	t shall be
21	available	for purpo	oses of financi	al assistance ui	nder sub-
22	section (	e)." and in	serting "\$100	,000,000 for e	ach offis-
23	cal years	2020 thro	ough 2024.".		

4

## 1 TITLE II—ENERGY WORKFORCE 2 DEVELOPMENT

3	SEC. 201. ENERGY WORKFORCE DEVELOPMENT.
4	(a) I <sub>N</sub> G <sub>ENERAL</sub> .—Subject to the availability of ap-
5	propriations, the Secretary, acting through the Director
6	of the Office of Economic Impact, Diversity, and Employ-
7	ment, shall establish and carry out a comprehensive, na-
8	tionwide program to improve education and training for
9	jobsinenergy-relatedindustries, includingmanufacturing
10	engineering, construction, and retrofitting jobs in such en-
11	ergy-related industries, in order to increase the number
12	of skilled workers trained to work in such energy-related
13	industries, including by—
14	(1) encouraging underrepresented groups, in-
15	cluding religious and ethnic minorities, women, vet-
16	erans, individuals with disabilities, unemployed en-
17	ergy workers, and socioeconomically disadvantaged
18	individuals to enter into the science, technology, en-
19	gineering, and mathematics (in this section referred
20	to as "STEM") fields;
21	(2) encouraging the Nation's educational insti-
22	tutions to equip students with the skills,
23	mentorships, training, and technical expertise nec-
24	essary to fill the employment opportunities vital to

1	managing and operating the Nation's energy-related
2	industries;
3	(3) providing students and other candidates for
4	employment with the necessary skills and certifi-
5	cations for skilled, semiskilled, and highly skilled
6	jobs in such energy-related industries;
7	(4) strengthening and more fully engaging De-
8	partment of Energy programs and laboratories in
9	carrying out the Department's Minorities in Energy
10	Initiative; and
11	(5) to the greatest extent possible, collaborating
12	with and supporting existing State workforce devel-
13	opment programs to maximize program efficiency.
14	(b) PRIORITY.—In carrying out the program estab-
15	lished under subsection (a), the Secretary shall prioritize
16	the education and training of underrepresented groups for
17	jobs in energy-related industries.
18	(c) DIRECT Assistance.—In carrying out the pro-
19	$gram\ established\ under\ subsection\ (a), the\ Secretary\ shall$
20	provide direct assistance (including financial assistance
21	awards, technical expertise, and internships) to edu-
22	cational institutions, local workforce development boards,
23	State workforce development boards, nonprofit organiza-
24	tions, labor organizations, and apprenticeship programs.

The Secretary shall distribute such direct assistance in a

Commented [A1]: State Workforce Development Boards are mentioned, but consider also including Federal-State Regional Commissions, like the Appalachia Regional Commission, Delta Regional Authority, Denali Commission, Northern Border Regional Commission, Northern Great Plains Regional Commission, and the Southeast Crescent Regional Commission.

1	manner proportional to the needs of, and demand for jobs
2	in, energy-related industries, consistent with information
3	obtained under subsections (e)(3) and (i).
4	(d) CLEARINGHOUSE.—In carrying out the program
5	established under subsection (a), the Secretary shall estab-
6	lish a clearinghouse to—
7	(1) maintain and update information and re-
8	sources on training programs for jobs in energy-re-
9	lated industries, including manufacturing, engineer-
10	ing, construction, and retrofitting jobs in such en-
11	ergy-related industries; and
12	(2) act as a resource for educational institu-
13	tions, local workforce development boards, State
14	workforce development boards, nonprofit organiza-
15	tions, labor organizations, and apprenticeship pro-
16	grams that would like to develop and implement
17	training programs for such jobs.
18	(e) Collaboration and Report.—In carrying out
19	the program established under subsection (a), the Sec-
20	retary—
21	(1) shall collaborate with educational institu-
22	tions, local workforce development boards, State
23	workforce development boards, nonprofit organiza-
24	tions, labor organizations, apprenticeship programs,
25	and energy-related industries;

(2) shall encourage and foster collaboration,
mentorships, and partnerships among industry, local
workforce development boards, State workforce de-
velopment boards, nonprofit organizations, labor or-
ganizations, and apprenticeship programs that cur-
rently provide effective training programs for jobs in
energy-related industries and educational institutions
that seek to establish these types of programs in
order to share best practices and approaches that
best suit local, State, and national needs; and
(3) shall collaborate with the Bureau of Labor
Statistics, the Department of Commerce, the Bureau
of the Census, and energy-related industries to—
(A) develop a comprehensive and detailed
understanding of the workforce needs of such
energy-related industries, and job opportunities
in such energy-related industries, by State and
by region; and
(B) publish an annual report on job cre-
ation in the energy-related industries described
in subsection (i)(2).
(f) Guidelines for Educational Institu-
TIONS.—
(1) $I_{N \text{ GENERAL}}$ .—In carrying out the program
established under subsection (a), the Secretary, in

Commented [A2]: For this kind of proposed investment, it seems that it would be necessary to have a current baseline of the participation of the "underrepresented groups" in energy related industries. Some sectors (like solar) have associations that produce their own jobs and diversity reports. There is no national, standardized, comprehensive dataset, particularly in regard to the participation of underrepresented populations in the sector. One of the challenges is that the BLS classifications do not correlate to or include the gamut of jobs in the energy sector. Without a baseline, how would progress over time be measured? Without a comprehensive understanding of the current workforce, how would needs be quantified?

Commented [A3]: Suggest expanding this to also include an annual count/census of jobs in addition to annual job creation.

1011

1213

14

1516

17

18 19

20

21

2223

24

1	collaboration with the Secretary of Education, the
2	Secretary of Commerce, the Secretary of Labor, and
3	the National Science Foundation, shall develop vol-
4	untary guidelines or best practices for educational
5	institutions to help provide graduates with the skills
6	necessary for jobs in energy-related industries, in-
7	cluding manufacturing, engineering, construction,
8	and retrofitting jobs in such energy-related indus-
9	tries.

Commented [A4]: This list may leave out some occupations in the electric power sector like linemen and plant operators.

- (2)  $I_{NPUT}$ .—The Secretary shall solicit input from energy-related industries in developing guidelines or best practices under paragraph (1).
- (3) ENERGY EFFICIENCY AND CONSERVATION
  INITIATIVES.—The guidelines or best practices developed under paragraph (1) shall include grade-specific guidelines for teaching energy efficiency technology, manufacturing efficiency technology, community energy resiliency, and conservation initiatives to educate students and families.
- (4) STEM EDUCATION.—The guidelines or best practices developed under paragraph (1) shall promote STEM education in educational institutions as it relates to job opportunities in energy-related industries.

1	(g) Outreach to Minority-serving Institu-
2	TIONS.—In carrying out the program established under
3	subsection (a), the Secretary shall—
4	(1) give special consideration to increasing out-
5	reach to minority-serving institutions;
6	(2) make resources available to minority-serving
7	institutions with the objective of increasing the num-
8	ber of skilled minorities and women trained for jobs
9	in energy-related industries, including manufac-
10	turing, engineering, construction, and retrofitting
11	jobs in such energy-related industries;
12	(3) encourage energy-related industries to im-
13	prove the opportunities for students of minority-
14	serving institutions to participate in industry intern-
15	ships and cooperative work-study programs; and
16	(4) partner with the Department of Energy lab-
17	oratories to increase underrepresented groups' par-
18	ticipation in internships, fellowships, traineeships,
19	and employment at all Department of Energy lab-
20	oratories.
21	(h) Outreach to Displaced and Unemployed
22	E <sub>NERGY</sub> W <sub>ORKERS</sub> .—In carrying out the program estab-
23	lished under subsection (a), the Secretary shall—
24	(1) give special consideration to increasing out-
25	reach to employers and job trainers preparing dis-

1	placed and unemployed energy workers for emerging
2	jobs in energy-related industries, including manufac-
3	turing, engineering, construction, and retrofitting
4	jobs in such energy-related industries;
5	(2) make resources available to institutions
6	serving displaced and unemployed energy workers
7	with the objective of increasing the number of indi-
8	viduals trained for jobs in energy-related industries,
9	including manufacturing, engineering, construction,
10	and retrofitting jobs in such energy-related indus-
11	tries; and
12	(3) encourage energy-related industries to im-
13	prove opportunities for displaced and unemployed
14	energy workers to participate in industry internships
15	and cooperative work-study programs.
16	(i) Guidelines to Develop Skills for an En-
17	ERGY INDUSTRY WORKFORCE.—In carrying out the pro-
18	$gram\ established\ under\ subsection\ (a), the\ Secretary\ shall,$
19	in collaboration with energy-related industries—
20	(1) identify the areas of with the greatest de-
21	mand for workers in each such industry; and
22	(2) develop guidelines for the skills necessary
23	for work in the following energy-related industries:
24	(A) Energy efficiency industry, including
25	work in energy efficiency, conservation, weath-

1	erization, retrofitting, or as inspectors or audi-
2	tors.
3	(B) Renewable energy industry, including
4	work in the development, engineering, manufac-
5	turing, and production of renewable energy
6	from renewable energy sources (such as solar,
7	hydropower, wind, or geothermal energy).
8	(C) Community energy resiliency industry,
9	including work in the installation of rooftop
10	solar, in battery storage, and in microgrid tech-
11	nologies.
12	(D) Fuel cell and hydrogen energy indus-
13	try.
14	(E) Manufacturing industry, including
15	work as operations technicians, in operations
16	and design in additive manufacturing, 3-D
17	printing, and advanced composites and ad-
18	vanced aluminum and other metal alloys, indus-
19	trial energy efficiency management systems, in-
20	cluding power electronics, and other innovative
21	technologies.
22	(F) Chemical manufacturing industry, in-
23	cluding work in construction (such as welders,
24	pipefitters, and tool and die makers) or as in-

strument and electrical technicians, machinists,

Commented [A5]: Based on the list of technologies below, it might make sense to call this the "Advanced manufacturing industry", to differentiate it from manufacturing writ large.

1	chemical process operators, engineers, quality
2	and safety professionals, and reliability engi-
3	neers.
4	(G) Utility industry, including work in the
5	generation, transmission, and distribution of
6	electricity and natural gas, such as utility tech-
7	nicians, operators, lineworkers, engineers, sci-
8	entists, and information technology specialists.
9	(H) Alternative fuels industry, including
.0	work in biofuel development and production.
1	(I) Pipeline industry, including work in
2	pipeline construction and maintenance or work
13	as engineers or technical advisors.
4	(J) Nuclear industry, including work as
15	scientists, engineers, technicians, mathemati-
16	cians, or security personnel.
17	(K) Oil and gas industry, including work
18	as scientists, engineers, technicians, mathemati-
9	cians, petrochemical engineers, or geologists.
20	(L) Coal industry, including work as coal
21	miners, engineers, developers and manufactur-
2	ers of state-of-the-art coal facilities, technology
23	vendors, coal transportation workers and opera-

tors, or mining equipment vendors.

Commented [A6]: Recommend the addition of "electricians" and "dispatchers" as examples of utility workers to ensure these categories of utility workers are considered when guidelines are developed.

I	(J) ENROLLMENT IN TRAINING AND APPRENTICE-
2	ship $P_{\text{ROGRAMS}}$ .—In carrying out the program estab-
3	lished under subsection (a), the Secretary shall work with
4	industry, local workforce development boards, State work-
5	force development boards, nonprofit organizations, labor
6	organizations, and apprenticeship programs to help iden-
7	tify students and other candidates, including fromunder-
8	represented communities such as minorities, women, and
9	veterans, to enroll into training and apprenticeship pro-
10	grams for jobs in energy-related industries.
11	(k) Authorization of Appropriations.—There
12	are authorized to be appropriated to carry out this section
13	\$20,000,000 for each of fiscal years 2020 through 2024.
14	SEC. 202. ENERGY WORKFORCE GRANT PROGRAM.
15	(a) Program.—
16	(1) E <sub>STABLISHMENT</sub> .—Subject to the avail-
17	ability of appropriations, the Secretary, acting
18	through the Director of the Office of Economic Im-
19	pact, Diversity, and Employment, shall establish and
20	carry out a program to provide grants to eligible
21	businesses to pay the wages of new and existing em-
22	ployees during the time period that such employees
23	are receiving training to work in the renewable en-
24	ergy sector, energy efficiency sector, or grid mod-
25	ernization sector.

l	(2) G <sub>UIDELINES</sub> .—Not later than 60 days after
2	the date of enactment of this Act, the Secretary, in
3	consultation with stakeholders, contractors, and or-
4	ganizations that work to advance existing residential
5	energy efficiency, shall establish guidelines to iden-
6	tify training that is eligible for purposes of the pro-
7	gram established pursuant to paragraph (1).
8	(b) E <sub>LIGIBILITY</sub> .—To be eligible to receive a grant
9	under the program established under subsection (a) or a
0	business or labor management organization that is directly
1	involved with energy efficiency or renewable energy tech-
2	nology, or working on behalf of any such business, shall
3	provide services related to—
4	(1) renewable electric energy generation, includ-
5	ing solar, wind, geothermal, hydropower, and other
6	renewable electric energy generation technologies;
7	(2) energy efficiency, including energy efficient
8	lighting, heating, ventilation, and air conditioning,
9	air source heat pumps, advanced building materials,
20	insulation and air sealing, and other high efficiency
21	products and services, including auditing and inspec-
22	tion;
23	(3) grid modernization or energy storage, in-
24	cluding smart grid, microgrid and other distributed

Commented [A7]: Given that this program is meant to provide training for efficiency, renewable, and grid modernization sectors, the specific focus on residential retrofits seems too narrow.

1	energy solutions, demand response management, and
2	home energy management technology; or
3	(4) fuel cell and hybrid fuel cell generation.
4	(c) U <sub>SE OF</sub> G <sub>RANTS</sub> .—An eligible business with—
5	(1) 20 or fewer employees may use a grant pro-
6	vided under the program established under sub-
7	section (a) to pay up to—
8	(A) 45 percent of an employee's wages for
9	the duration of the training, if the training is
10	provided by the eligible business; and
11	(B) 90 percent of an employee's wages for
12	the duration of the training, if the training is
13	provided by an entity other than the eligible
14	business;
15	(2) 21 to 99 employees may use a grant pro-
16	vided under the program established under sub-
17	section (a) to pay up to—
18	(A) 37.5 percent of an employee's wages
19	for the duration of the training, if the training
20	is provided by the eligible business; and
21	(B) 75 percent of an employee's wages for
22	the duration of the training, if the training is
23	provided by an entity other than the eligible
24	business; and

1	(3) 100 employees or more may use a grant
2	provided under the program established under sub-
3	section (a) to pay up to—
4	(A) 25 percent of an employee's wages for
5	the duration of the training, if the training is
6	provided by the eligible business; and
7	(B) 50 percent of an employee's wages for
8	the duration of the training, if the training is
9	provided by an entity other than the eligible
10	business.
11	(d) Priority for Targeted Communities.—In
12	providing grants under the program established under
13	subsection (a), the Secretary shall give priority to eligible
14	businesses that—
15	(1) recruit employees—
16	(A) from the communities that the busi-
17	nesses serve; and
18	(B) that are minorities, women, persons
19	who are or were foster children, persons who
20	are transitioning from fossil energy sector jobs,
21	or veterans; and
22	(2) provide trainees with the opportunity to ob-
23	tain real-world experience.

I	(e) L <sub>IMIT</sub> .—An eligible business may not receive
2	more than \$100,000 under the program established under
3	subsection (a) per fiscal year.
4	(f) Authorization of Appropriations.—There
5	are authorized to be appropriated to carry out this section
6	\$70,000,000 for each of fiscal years 2020 through 2024.
7	SEC. 203. DEFINITIONS.
8	In this Act:
9	(1) Apprenticeship.—The term "apprentice-
10	ship" means an apprenticeship registered under the
11	Act of August 16, 1937 (commonly known as the
12	"National Apprenticeship Act"; 50 Stat. 664, chap-
13	ter 663; 29 U.S.C. 50 et seq.).
14	(2) EDUCATIONAL INSTITUTION.—The term
15	"educational institution" means an elementary
16	school, secondary school, or institution of higher
17	education.
18	(3) Elementary school and secondary
19	school.—The terms "elementary school" and "sec-
20	ondary school" have the meanings given such terms
21	in section 8101 of the Elementary and Secondary
22	Education Act of 1965 (20 U.S.C. 7801).
23	(4) Energy-related industry.—The term
24	"energy-related industry" includes, but is not limited to, each of the en-
25	ergy efficiency, renewable energy, chemical manufac-

Commented [A8]: Recommend inserting edit, as the definition of "energy-related" seems limited in scope whereas the list of the "following energy-related industries" on pages 10-12 are more extensive.

1	turing, utility, alternative fuels, pipeline, nuclear en-
2	ergy, oil, gas, and coal industries.
3	(5) Institution of higher education.—The
4	term "institution of higher education" has the
5	meaning given such term in section 102 of the High-
6	er Education Act of 1965 (20 U.S.C. 1002).
7	(6) Labor organization.—The term "labor
8	organization" has the meaning given such term in
9	section 2 of the National Labor Relations Act (29
10	U.S.C. 152).
11	(7) Local workforce development
12	BOARD.—The term "local workforce development
13	board" means a local board, as defined in section 3
14	of the Workforce Innovation and Opportunity Act
15	(29 U.S.C. 3102).
16	(8) Minority-serving institution.—The
17	term "minority-serving institution" means an insti-
18	tution of higher education that is of one of the fol-
19	lowing:
20	(A) Hispanic-serving institution (as de-
21	fined in section 502(a)(5) of the Higher Edu-
22	cation Act of 1965 (20 U.S.C. 1101a(a)(5))).
23	(B) Tribal College or University (as de-
24	fined in section 316(b) of the Higher Education
25	Act of 1965 (20 U.S.C. 1059c(b))).

1	(C) Alaska Native-serving institution (as
2	defined in section 317(b) of the Higher Edu-
3	cation Act of 1965 (20 U.S.C. 1059d(b))).
4	(D) Native Hawaiian-serving institution
5	(as defined in section 317(b) of the Higher
6	Education Act of 1965 (20 U.S.C. 1059d(b))).
7	(E) Predominantly Black Institution (as
8	defined in section 318(b) of the Higher Edu-
9	cation Act of 1965 (20 U.S.C. 1059e(b))).
10	(F) Native American-serving nontribal in-
11	stitution (as defined in section 319(b) of the
12	Higher Education Act of 1965 (20 U.S.C.
13	1059f(b))).
14	(G) Asian American and Native American
15	Pacific Islander-serving institution (as defined
16	in section 320(b) of the Higher Education Act
17	of 1965 (20 U.S.C. 1059g(b))).
18	(9) $S_{\text{ECRETARY}}$ .—The term "Secretary" means
19	the Secretary of Energy.
20	(10) STATE WORKFORCE DEVELOPMENT
21	BOARD.—The term "State workforce development
22	board" means a State board, as defined in section
23	3 of the Workforce Innovation and Opportunity Act
24	(29 U.S.C. 3102).