## AMENDMENT IN THE NATURE OF A SUBSTITUTE

## TO H.R. (IT NOT FOR MAYOUP (IDTD\_DOI) OFFERED BY M. WELOCK

[Page and line numbers refer to version of IDTD\_\_\_\_001 with timestamp of August 29, 2019 at 1:39PM noticed by the Committee on Science, Space, and Technology.]

Strike all after the enacting clause and insert the following:

## 1 SECTION 1. SHORT TITLE.

- This Act may be cited as the "Clean Industrial Tech-
- 3 nology Act of 2019" or the "CIT Act of 2019".
- 4 SEC. 2. PURPOSE.
- 5 The purpose of this Act and the amendments made
- 6 by this Act is to encourage the development and evaluation
- 7 of innovative technologies aimed at increasing—
- 8 (1) the technological and economic competitive-
- 9 ness of industry and manufacturing in the United
- 10 States; and
- 11 (2) the emissions reduction of nonpower indus-
- trial sectors.

1	SEC. 3. INDUSTRIAL EMISSIONS REDUCTION TECHNOLOGY
2	DEVELOPMENT PROGRAM.
3	(a) IN GENERAL.—The Energy Independence and
4	Security Act of 2007 is amended by inserting after section
5	453 (42 U.S.C. 17112) the following:
6	"SEC. 454. INDUSTRIAL EMISSIONS REDUCTION TECH-
7	NOLOGY DEVELOPMENT PROGRAM.
8	"(a) DEFINITIONS.—In this section:
9	"(1) DIRECTOR.—The term 'Director' means
10	the Director of the Office of Science and Technology
11	Policy.
12	"(2) ELIGIBLE ENTITY.—The term 'eligible en-
13	tity' means—
14	"(A) a scientist or other individual with
15	knowledge and expertise in emissions reduction;
16	"(B) an institution of higher education;
17	"(C) a nongovernmental organization;
18	"(D) a National Laboratory;
19	"(E) a private entity; and
20	"(F) a partnership or consortium of 2 or
21	more entities described in subparagraphs (B)
22	through $(\mathbf{E})$ .
23	"(3) Emissions reduction.—
24	"(A) IN GENERAL.—The term 'emissions
25	reduction' means the reduction of net nonwater

1	greenhouse gas emissions to the atmosphere by
2	energy services and industrial processes.
3	"(B) Exclusion.—The term 'emissions
4	reduction' does not include the elimination of
5	carbon embodied in the principal products of in-
6	dustrial manufacturing.
7	"(4) Institution of higher education.—
8	The term 'institution of higher education' has the
9	meaning given the term in section 101 of the Higher
10	Education Act of 1965 (20 U.S.C. 1001).
11	"(5) Program.—The term 'program' means
12	the program established under subsection $(b)(1)$ .
13	"(b) Industrial Emissions Reduction Tech-
14	NOLOGY DEVELOPMENT PROGRAM.—
15	"(1) IN GENERAL.—Not later than 1 year after
16	the date of enactment of the CIT Act of 2019, the
17	Secretary, in coordination with the Director and in
18	consultation with the heads of relevant Federal
19	agencies, National Laboratories, industry, and insti-
20	tutions of higher education, shall establish a re-
21	search, development, and demonstration program to
22	further the development of innovative industrial
23	emissions reduction technologies that—

1	"(A) increase the technological and eco-
2.	nomic competitiveness of industry and manufac-
3	turing in the United States; and
4	"(B) achieve emissions reduction in
5	nonpower industrial sectors.
6	"(2) Focus.—In carrying out the program re-
7	ferred to in paragraph (1), the Secretary shall, to
8	the maximum extent practicable, focus on research
9	and technology goals established by the emissions re-
10	duction roadmap developed under section 455.
11	"(3) COORDINATION.—In carrying out the pro-
12	gram, the Secretary shall, to the maximum extent
13	practicable—
14	"(A) coordinate with each relevant office in
15	the Department and any other Federal agency;
16	"(B) coordinate and collaborate with the
17	Industrial Technology Innovation Advisory
18	Committee established under section 455; and
19	"(C) coordinate with the energy-intensive
20	industries program established under section
21	452.
22	"(4) Leverage of existing resources.—In
23	carrying out the program, the Secretary shall lever-
24	age, to the maximum extent practicable—

1	"(A) existing resources and programs of
2	the Department and other relevant Federal
3	agencies; and
4	"(B) public-private partnerships.
5	"(c) Grants, Contracts, Cooperative Agree-
6	MENTS, AND DEMONSTRATION PROJECTS.—
7	"(1) Grants.—In carrying out the program,
8	the Secretary shall award grants on a competitive
9	basis to eligible entities for projects that the Sec-
10	retary determines would best achieve the goals of the
11	program.
12	"(2) CONTRACTS AND COOPERATIVE AGREE-
13	MENTS.—In carrying out the program, the Secretary
14	may enter into contracts and cooperative agreements
15	with eligible entities and Federal agencies for
16	projects that the Secretary determines would further
17	the purposes of the program.
18	"(3) Demonstration projects.—In sup-
19	porting technologies developed under this section,
20	the Secretary may fund demonstration projects that
21	test and validate technologies described in subsection
22	(e).
23	"(4) Cost sharing.—In awarding funds under
24	this section, the Secretary shall require cost sharing

1	in accordance with section 988 of the Energy Policy
2	Act of 2005 (42 U.S.C. 16352).
3	"(d) Sunset.—The Secretary may not award grants,
4	enter into contracts or cooperative agreements, or take
5	any other action to carry out the program under this sec-
6	tion after September 30, 2024.
7	"(e) Spending Limitation.—No additional funds
8	are authorized to be appropriated to earry out this section,
9	and this section shall be carried out using amounts other-
10	wise available for such purpose.".
11	(b) TECHNICAL AMENDMENT.—The table of contents
12	of the Energy Independence and Security Act of 2007
13	(Public Law 110–140; 121 Stat. 1494) is amended by in-
14	serting after the item relating to section 453 the following:
	"Sec. 454. Industrial emissions reduction technology development program.".
15	SEC. 4. INDUSTRIAL TECHNOLOGY INNOVATION ADVISORY
16	COMMITTEE.
17	(a) IN GENERAL.—The Energy Independence and
18	Security Act of 2007 is amended by inserting after section
19	454 (as added by section 3(a)) the following:
	434 (as added by section 3(a)) the following:
20	"SEC. 455. INDUSTRIAL TECHNOLOGY INNOVATION ADVI-
20 21	
	"SEC. 455. INDUSTRIAL TECHNOLOGY INNOVATION ADVI-
21	"SEC. 455. INDUSTRIAL TECHNOLOGY INNOVATION ADVI- SORY COMMITTEE.
21 22	"SEC. 455. INDUSTRIAL TECHNOLOGY INNOVATION ADVI- SORY COMMITTEE.  "(a) DEFINITIONS.—In this section:

1	"(2) DIRECTOR.—The term 'Director' means
2	the Director of the Office of Science and Technology
3	Policy.
4	"(3) Emissions reduction.—The term 'emis-
5	sions reduction' has the meaning given the term in
6	section 454(a).
7	"(4) Program.—The term 'program' means
8	the industrial emissions reduction technology devel-
9	opment program established under section
10	454(b)(1).
11	"(b) Establishment.—Not later than 180 days
12	after the date of enactment of the CIT Act of 2019, the
13	Secretary, in coordination with the Director, shall estab-
14	lish an advisory committee, to be known as the 'Industrial
15	Technology Innovation Advisory Committee'.
16	"(c) Membership.—
17	"(1) Appointment.—The Committee shall be
18	comprised of not fewer than 14 members, who shall
19	be appointed by the Secretary, in coordination with
20	the Director.
21	"(2) Representation.—Members appointed
22	pursuant to paragraph (1) shall include—
23	"(A) not less than 1 representative of each
24	relevant Federal agency, as determined by the
25	Secretary;

1	"(B) not less than 2 representatives of
2	labor groups;
3	"(C) not less than 3 representatives of the
4	research community, which shall include aca-
5	demia and National Laboratories;
6	"(D) not less than 2 representatives of
7	nongovernmental organizations;
8	"(E) not less than 6 representatives of in-
9	dustry, the collective expertise of which shall
10	cover every focus area described in section
11	454(e); and
12	"(F) any other individual whom the Sec-
13	retary, in coordination with the Director, deter-
14	mines to be necessary to ensure that the Com-
15	mittee is comprised of a diverse group of rep-
16	resentatives of industry, academia, independent
17	researchers, and public and private entities.
18	"(3) Chair.—The Secretary shall designate a
19	member of the Committee to serve as Chair.
20	"(d) Duties.—
21	"(1) IN GENERAL.—The Committee shall—
22	"(A) in consultation with the Secretary
23	and the Director, develop the missions and
24	goals of the program, which shall be consistent

1	with the purposes of the program described in
2	section 454(b)(1); and
3	"(B) advise the Secretary and the Director
4	with respect to the program—
5	"(i) by identifying and evaluating any
6	technologies being developed by the private
7	sector relating to the focus areas described
8	in section 454(e);
9	"(ii) by identifying technology gaps in
10	the private sector in those focus areas, and
11	making recommendations to address those
12	${f gaps};$
13	"(iii) by surveying and analyzing fac-
14	tors that prevent the adoption of emissions
15	reduction technologies by the private sec-
16	tor; and
17	"(iv) by recommending technology
18	screening criteria for technology developed
19	under the program to encourage adoption
20	of the technology by the private sector; and
21	"(C) develop the roadmap described in
22	paragraph (2).
23	"(2) Emissions reduction roadmap.—
24	"(A) Purpose.—The purpose of the road-
25	map developed under paragraph (1)(C) is to

1	achieve the goals of the program in the focus
2	areas described in section 454(c).
3	"(B) CONTENTS.—The roadmap developed
4	under paragraph (1)(C) shall—
5	"(i) specify near-term and long-term
6	qualitative and quantitative objectives re-
7	lating to each focus area described in sec-
8	tion 454(c), including research, develop-
9	ment, and demonstration objectives;
10	"(ii) specify the anticipated timeframe
11	for achieving the objectives specified under
12	clause (i);
13	"(iii) include plans for developing
14	emissions reduction technologies that are
15	globally cost-competitive; and
16	"(iv) identify the appropriate role for
17	investment by the Federal Government, in
18	coordination with the private sector, to
19	achieve the objectives specified under
20	elause (i).
21	"(e) Meetings.—
22	"(1) Frequency.—The Committee shall meet
23	not less frequently than 2 times per year, at the call
24	of the Chair.

1	"(2) Initial meeting.—Not later than 30
2	days after the date on which the members are ap-
3	pointed under subsection (b), the Committee shall
4	hold its first meeting.
5	"(f) Committee Report.—
6	"(1) IN GENERAL.—Not later than 2 years
7	after the date of enactment of the CIT Act of 2019,
8	and not less frequently than once every 3 years
9	thereafter, the Committee shall submit to the Sec-
10	retary a report on the progress of achieving the pur-
11	poses of the program.
12	"(2) Contents.—The report under paragraph
13	(1) shall include—
14	"(A) a description of any technology inno-
15	vation opportunities identified by the Com-
16	mittee;
17	"(B) a description of any technology gaps
18	identified by the Committee under subsection
19	(d)(1)(B)(ii);
20	"(C) a review of the management, coordi-
21	nation, and industry utility of the program, in-
22	cluding recommendations for improving and
23	management of the program;
24	"(D) an evaluation of the progress of the
25	program and the research, development, and

1	demonstration activities funded under the pro-
2	$\operatorname{gram};$
3	"(E) a description of the manner in which
4	the Committee has carried out the duties de-
5	scribed in subsection (d)(1) and any relevant
6	findings as a result of carrying out those duties;
7	"(F) the roadmap developed by the Com-
8	mittee under subsection (d)(1)(C);
9	"(G) the progress made in achieving the
10	goals set out in that roadmap;
11	"(H) an assessment of the effectiveness of
12	the program in coordinating efforts within the
13	Department and with other Federal agencies to
14	achieve the purposes of the program.
15	"(g) TERMINATION.—The Committee shall terminate
16	on September 30, 2024.
17	"(h) REPORT TO CONGRESS.—Not later than 60 days
18	after receiving a report from the Committee under sub-
19	section (f), the Secretary shall submit a copy of that re-
20	port to the Committee on Science, Space, and Technology
21	of the House of Representatives and the Committee on
22	Energy and Natural Resources of the Senate.
23	"(i) Applicability of Federal Advisory Com-
24	MITTEE ACT.—Except as otherwise provided in this sec-

1	tion, the Federal Advisory Committee Act (5 U.S.C. App.)
2	shall apply to the Committee.".
3	(b) TECHNICAL AMENDMENT.—The table of contents
4	of the Energy Independence and Security Act of 2007
5	(Public Law 110–140; 121 Stat. 1494) (as amended by
6	section 3(b)) is amended by inserting after the item relat-
7	ing to section 454 the following:
	"Sec. 455. Industrial Technology Innovation Advisory Committee.".
8	SEC. 5. TECHNICAL ASSISTANCE PROGRAM TO IMPLEMENT
9	INDUSTRIAL EMISSIONS REDUCTION.
0	(a) IN GENERAL.—The Energy Independence and
1	Security Act of 2007 is amended by inserting after section
12	455 (as added by section 4(a)) the following:
13	"SEC. 456. TECHNICAL ASSISTANCE PROGRAM TO IMPLE-
4	MENT INDUSTRIAL EMISSIONS REDUCTION.
5	(// \ Y)
	"(a) DEFINITIONS.—In this section:
6	"(a) DEFINITIONS.—In this section: "(1) ELIGIBLE ENTITY.—The term 'eligible en-
6	"(1) ELIGIBLE ENTITY.—The term 'eligible en-
.7	"(1) ELIGIBLE ENTITY.—The term 'eligible entity' means—
.7 .8	"(1) ELIGIBLE ENTITY.—The term 'eligible entity' means— "(A) a State;
16 17 18 19	"(1) ELIGIBLE ENTITY.—The term 'eligible entity' means—  "(A) a State;  "(B) a unit of local government;
16 17 18 19	"(1) ELIGIBLE ENTITY.—The term 'eligible entity' means—  "(A) a State;  "(B) a unit of local government;  "(C) a territory or possession of the
16 17 18 19 20 21	"(1) ELIGIBLE ENTITY.—The term 'eligible entity' means—  "(A) a State;  "(B) a unit of local government;  "(C) a territory or possession of the United States;
16 17 18 19 20 21	"(1) ELIGIBLE ENTITY.—The term 'eligible entity' means—  "(A) a State;  "(B) a unit of local government;  "(C) a territory or possession of the United States;  "(D) a relevant State or local office, in-
16 17 18 19 20 21 22 23	"(1) ELIGIBLE ENTITY.—The term 'eligible entity' means—  "(A) a State;  "(B) a unit of local government;  "(C) a territory or possession of the United States;  "(D) a relevant State or local office, including an energy office;

1	"(F) an institution of higher education;
2	and
3	"(G) a private entity.
4	"(2) Emissions reduction.—The term 'emis-
5	sions reduction' has the meaning given the term in
6	section 454(a).
7	"(3) Institution of higher education.—
8	The term 'institution of higher education' has the
9	meaning given the term in section 101 of the Higher
10	Education Act of 1965 (20 U.S.C. 1001).
11	"(4) Program.—The term 'program' means
12	the program established under subsection (b).
13	"(b) ESTABLISHMENT.—Not later than one year
14	after the date of enactment of the CIT Act of 2019, the
15	Secretary shall establish a program to provide technical
16	assistance to eligible entities to promote the commercial
17	application of emission reduction technologies developed
18	through the program established under section 454(b).
19	"(c) Sunser.—The Secretary may not provide tech-
20	nical assistance or take any other action to carry out the
21	program under this section after September 30, 2024.
22	"(d) SPENDING LIMITATION.—No additional funds
23	are authorized to be appropriated to carry out this section,
24	and this section shall be carried out using amounts other-
25	wise available for such purpose.".

1	(b) TECHNICAL AMENDMENT.—The table of contents
2	of the Energy Independence and Security Act of 2007
3	(Public Law 110–140; 121 Stat. 1494) (as amended by
4	section 4(b)) is amended by inserting after the item relat-
5	ing to section 455 the following:
	"Sec. 456. Technical assistance program to implement industrial emissions reduction.".
6	SEC. 6. COORDINATION OF RESEARCH AND DEVELOPMENT
7	OF ENERGY EFFICIENT TECHNOLOGIES FOR
8	INDUSTRY.
9	Section 6(a) of the American Energy Manufacturing
10	Technical Corrections Act (42 U.S.C. 6351(a)) is amend-
11	$\operatorname{ed}$ —
12	(1) by striking "Industrial Technologies Pro-
13	gram" each place it appears and inserting "Ad-
14	vanced Manufacturing Office"; and
15	(2) in the matter preceding paragraph (1), by
16	striking "Office of Engage" and all that follows
	striking "Office of Energy" and all that follows
17	through "Office of Science" and inserting "Depart-
17 18	
	through "Office of Science" and inserting "Depart-
18 19	through "Office of Science" and inserting "Department of Energy".
18	through "Office of Science" and inserting "Department of Energy".  SEC. 7. SENSE OF CONGRESS.
18 19 20	through "Office of Science" and inserting "Department of Energy".  SEC. 7. SENSE OF CONGRESS.  It is the sense of Congress that power produced from

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- 1 to the prosperity and national security of the United
- 2 States.

