116TH CONGRESS 1ST SESSION

H. R. 3915

To amend the America COMPETES Act to reauthorize the Advanced Research Projects Agency-Energy, and for other purposes.

IN THE HOUSE OF REPRESENTATIVES

July 23, 2019

Mr. Lucas (for himself, Mr. Marshall, Mr. Baird, Miss González-Colón of Puerto Rico, Mr. Gonzalez of Ohio, Mr. Bacon, and Mr. Woodall) introduced the following bill; which was referred to the Committee on Science, Space, and Technology

A BILL

- To amend the America COMPETES Act to reauthorize the Advanced Research Projects Agency-Energy, 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 "ARPA-E Reauthoriza-
 - 5 tion and Reform Act of 2019".
 - 6 SEC. 2. ADVANCED RESEARCH PROJECTS AGENCY-EN-
 - 7 ERGY.
 - 8 (a) Establishment.—Section 5012(b) of the Amer-
 - 9 ica COMPETES Act (42 U.S.C. 16538(b)) is amended

1	by striking "development of energy technologies" and in-
2	serting "development of transformative science and tech-
3	nology solutions to address energy, environmental, eco-
4	nomic, and national security challenges".
5	(b) Goals.—Section 5012(c) of the America COM-
6	PETES Act (42 U.S.C. 16538(c)) is amended—
7	(1) by striking paragraph (1)(A) and inserting
8	the following:
9	"(A) to enhance the economic and energy
10	security of the United States through the devel-
11	opment of energy technologies that—
12	"(i) reduce imports of energy from
13	foreign sources;
14	"(ii) reduce energy-related emissions,
15	including greenhouse gases;
16	"(iii) improve the energy efficiency of
17	all economic sectors;
18	"(iv) provide transformative solutions
19	to improve the management, clean-up, and
20	disposal of—
21	"(I) low-level radioactive waste;
22	"(II) spent nuclear fuel; and
23	"(III) high-level radioactive
24	waste;

1	"(v) improve efficiency and reduce the
2	environmental impact of all forms of en-
3	ergy production;
4	"(vi) improve the resiliency, reliability,
5	and security of the electric grid; and
6	"(vii) address other challenges within
7	the mission of the Department as deter-
8	mined by the Secretary; and"; and
9	(2) in paragraph (2), in the matter preceding
10	subparagraph (A), by striking "energy technology
11	projects" and inserting "advanced technology
12	projects".
13	(c) Responsibilities.—Section 5012(e)(3)(A) of
14	the America COMPETES Act (42 U.S.C.
15	16538(e)(3)(A)) is amended by striking "energy".
16	(d) Reports and Roadmaps.—Section 5012(h) of
17	the America COMPETES Act (42 U.S.C. 16538(h)) is
18	amended to read as follows:
19	"(h) Annual Report.—
20	"(1) In general.—As part of the annual
21	budget request submitted for each fiscal year, the
22	Director shall provide to the relevant authorizing
23	and appropriations committees of Congress a report
24	that—

1	"(A) describes projects supported by
2	ARPA-E during the previous fiscal year;
3	"(B) identifies and includes an analysis of
4	projects supported by ARPA-E during the pre-
5	vious fiscal year that demonstrate duplication of
6	other activities funded by the Department; and
7	"(C) describes current, proposed, and
8	planned projects to be carried out pursuant to
9	subsection $(e)(3)(D)$.
10	"(2) Strategic vision roadmap.—Beginning
11	with the report submitted with respect to fiscal year
12	2020, and every 4 fiscal years thereafter, the report
13	required under paragraph (1) shall include a road-
14	map describing the strategic vision that ARPA-E
15	will use to guide the choices of ARPA-E for future
16	technology investments over the following 4 fiscal
17	years.".
18	(e) Coordination and Nonduplication.—Section
19	5012(i)(1) of the America COMPETES Act (42 U.S.C.
20	16538(i)(1)) is amended to read as follows:
21	"(1) In general.—To the maximum extent
22	practicable, the Director shall ensure that—
23	"(A) the activities of ARPA-E are coordi-
24	nated with, and do not duplicate the efforts of.

1	programs and laboratories within the Depart-
2	ment and other relevant research agencies; and
3	"(B) ARPA-E does not provide funding
4	for a project unless the prospective grantee
5	demonstrates sufficient attempts to secure pri-
6	vate financing or indicates that the project is
7	not independently commercially viable.".
8	(f) Evaluation.—Section 5012(l) of the America
9	COMPETES Act (42 U.S.C. 16538(l)) is amended—
10	(1) by striking paragraph (1) and inserting the
11	following:
12	"(1) IN GENERAL.—Not later than 3 years
13	after the date of enactment of the ARPA-E Reau-
14	thorization and Reform Act of 2019, the Secretary
15	is authorized to enter into a contract with a third
16	party entity to conduct an evaluation of how well
17	ARPA-E is achieving the goals and mission of
18	ARPA–E.''; and
19	(2) in paragraph (2)—
20	(A) by striking "shall" and inserting
21	"may"; and
22	(B) by striking "the recommendation of
23	the National Academy of Sciences" and insert-
24	ing "a recommendation".

1	(g) Authorization of Appropriations.—Para-
2	graph (2) of section 5012(o) of the America COMPETES
3	Act (42 U.S.C. 16538(o)) is amended to read as follows:
4	"(2) Authorization of appropriations.—
5	Subject to paragraph (4), there are authorized to be
6	appropriated to the Director of ARPA-E—
7	"(A) \$392,800,000 for fiscal year 2020;
8	"(B) \$419,600,000 for fiscal year 2021;
9	"(C) \$446,400,000 for fiscal year 2022;
10	"(D) $$473,200,000$ for fiscal year 2023;
11	and
12	"(E) $$500,000,000$ for fiscal year 2024.".
13	(h) Technical Amendments.—Section
14	5012(g)(3)(A)(iii) of the America COMPETES Act (42
15	U.S.C. 16538(g)(3)(A)(iii)) is amended by striking "sub-
16	part" each place it appears and inserting "subparagraph".