	(Original Signature of Member)
	TH CONGRESS AST SESSION  H. R.
1	mend the America COMPETES Act to establish Department of Energy policy for Advanced Research Projects Agency–Energy, and for other purposes.
	IN THE HOUSE OF REPRESENTATIVES
M_	introduced the following bill; which was referred to the Committee on
	A BILL
	amend the America COMPETES Act to establish Department of Energy policy for 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".

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

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

1	and appropriations committees of Congress a report
2	that—
3	"(A) describes projects supported by
4	ARPA-E during the previous fiscal year;
5	"(B) identifies and includes an analysis of
6	projects supported by ARPA–E during the pre-
7	vious fiscal year that demonstrate duplication of
8	other activities funded by the Department; and
9	"(C) describes current, proposed, and
10	planned projects to be carried out pursuant to
11	subsection $(e)(3)(D)$ .
12	"(2) Strategic vision roadmap.—Beginning
13	with the report submitted with respect to fiscal year
14	2020, and every 4 fiscal years thereafter, the report
15	required under paragraph (1) shall include a road-
16	map describing the strategic vision that ARPA-E
17	will use to guide the choices of ARPA–E for future
18	technology investments over the following 4 fiscal
19	years.".
20	(e) Coordination and Nonduplication.—Section
21	5012(i)(1) of the America COMPETES Act (42 U.S.C.
22	16538(i)(1)) is amended to read as follows:
23	"(1) In general.—To the maximum extent
24	practicable, the Director shall ensure that—

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

1	(B) by striking "the recommendation of
2	the National Academy of Sciences" and insert-
3	ing "a recommendation".
4	(h) Authorization of Appropriations.—Para-
5	graph (2) of section 5012(o) of the America COMPETES
6	Act (42 U.S.C. 16538(o)) is amended to read as follows:
7	"(2) Authorization of appropriations.—
8	Subject to paragraph (4), there are authorized to be
9	appropriated to the Director of ARPA–E—
10	"(A) \$392,800,000 for fiscal year 2020;
11	"(B) \$419,600,000 for fiscal year 2021;
12	"(C) \$446,400,000 for fiscal year 2022;
13	"(D) $$473,200,000$ for fiscal year 2023;
14	and
15	"(E) $$500,000,000$ for fiscal year 2024.".
16	(i) Technical Amendments.—Section
17	5012(g)(3)(A)(iii) of the America COMPETES Act (42
18	U.S.C. $16538(g)(3)(A)(iii)$ ) is amended by striking "sub-
19	part" each place it appears and inserting "subparagraph".