

## Calendar No. 361

116TH CONGRESS  
1ST SESSION

# S. 2714

To amend the America COMPETES Act to reauthorize the ARPA–E program, and for other purposes.

---

### IN THE SENATE OF THE UNITED STATES

OCTOBER 28, 2019

Mr. VAN HOLLEN (for himself, Mr. ALEXANDER, Mr. GARDNER, and Mr. HEINRICH) introduced the following bill; which was read twice and referred to the Committee on Energy and Natural Resources

DECEMBER 17, 2019

Reported by Ms. MURKOWSKI, with amendments

[Omit the part struck through and insert the part printed in *italic*]

---

## A BILL

To amend the America COMPETES Act to reauthorize the ARPA–E program, 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 Act of 2019”.

1 **SEC. 2. ARPA-E AMENDMENTS.**

2 (a) GOALS.—Section 5012(c) of the America COM-  
3 PETES Act (42 U.S.C. 16538(c)) is amended—

4 (1) in paragraph (1), by striking subparagraph  
5 (A) and inserting the following:

6 “(A) to enhance the economic and energy  
7 security of the United States through the devel-  
8 opment of energy technologies that—

9 “(i) reduce imports of energy from  
10 foreign sources;

11 “(ii) reduce energy-related emissions,  
12 including greenhouse gases;

13 “(iii) improve the energy efficiency of  
14 all economic sectors; and

15 “(iv) improve the resilience, reliability,  
16 and security of infrastructure to produce,  
17 deliver, and store energy; and”;

18 (2) in paragraph (2), in the matter preceding  
19 subparagraph (A), by striking “energy” and insert-  
20 ing “advanced”.

21 (b) RESPONSIBILITIES.—Section 5012(e)(3)(A) of  
22 the America COMPETES Act (42 U.S.C.  
23 16538(e)(3)(A)) is amended by striking “energy”.

24 (c) AWARDS.—Section 5012(f) of the America COM-  
25 PETES Act (42 U.S.C. 16538(f)) is amended—

1           (1) *by striking “In carrying” and inserting the*  
 2           *following:*

3           “(1) *IN GENERAL.—In carrying*”; and

4           (2) *by adding at the end the following:*

5           “(2) *CONSIDERATION OF PRIOR GRANTS.—In*  
 6           *awarding a grant under paragraph (1), the Director*  
 7           *shall take into account the success or failure of any*  
 8           *project carried out by the entity applying for the*  
 9           *grant using any prior grant funds awarded to that*  
 10          *entity by the Director.”.*

11          ~~(e)~~(d) *REPORTS AND ROADMAPS.—Section 5012(h)*  
 12          *of the America COMPETES Act (42 U.S.C. 16538(h))*  
 13          *is amended—*

14                 (1) *in paragraph (1)—*

15                         (A) *by striking “describing projects” and*  
 16                         *inserting the following: “describing—*

17                                 “(A) *projects*”;

18                         (B) *in subparagraph (A) (as so des-*  
 19                         *ignated), by striking the period at the end and*  
 20                         *inserting “, including projects that examine top-*  
 21                         *ics and technologies closely relating to other ac-*  
 22                         *tivities funded by the Department;” and*

23                         (C) *by adding at the end the following:*

24                                 “(B) *an analysis of whether the Director is*  
 25                                 *in compliance with subsection (i)(1)(A) in sup-*

porting projects that examine the topics and technologies described in subparagraph (A); and

“(C) current, proposed, and planned projects to be carried out pursuant to subsection (e)(3)(D).”; and

(2) in paragraph (2)—

(A) by striking “October 1, 2010, and October 1, 2013” and inserting “October 1, 2021, and every 4 years thereafter”; and

(B) by striking “3” and inserting “4”.

~~(d)~~(e) COORDINATION AND NONDUPLICATION.—Section 5012(i)(1) of the America COMPETES Act (42 U.S.C. 16538(i)(1)) is amended—

(1) by striking “that the activities” and inserting the following: “that—

“(A) the activities”;

(2) in subparagraph (A) (as so designated), by striking the period at the end and inserting “; and”; and

(3) by adding at the end the following:

“(B) an award is not provided for a project unless the prospective award recipient demonstrates that—

“(i) the prospective award recipient has made a sufficient attempt to secure

1 private financing, as determined by the Di-  
 2 rector; or

3 “(ii) the project is not independently  
 4 commercially viable.”.

5 ~~(e)~~(f) EVALUATION.—Section 5012(l) of the America  
 6 COMPETES Act (42 U.S.C. 16538(l)) is amended—

7 (1) in paragraph (1), by striking “After” and  
 8 all that follows through “years” and inserting “Not  
 9 later than 3 years after the date of enactment of the  
 10 ARPA–E Reauthorization Act of 2019”; and

11 (2) in paragraph (2)—

12 (A) in the matter preceding subparagraph  
 13 (A), by striking “shall” and inserting “may”;  
 14 and

15 (B) in subparagraph (A), by striking “the  
 16 recommendation of the National Academy of  
 17 Sciences” and inserting “a recommendation”.

18 ~~(f)~~(g) AUTHORIZATION OF APPROPRIATIONS.—Sec-  
 19 tion 5012(o)(2) of the America COMPETES Act (42  
 20 U.S.C. 16538(o)(2)) is amended—

21 (1) in the matter preceding subparagraph (A),  
 22 by striking “paragraphs (4) and (5)” and inserting  
 23 “paragraph (4)”; and

24 (2) by striking subparagraphs (A) through (E)  
 25 and inserting the following:

1 “(A) \$428,000,000 for fiscal year 2020;  
2 “(B) \$497,000,000 for fiscal year 2021;  
3 “(C) \$567,000,000 for fiscal year 2022;  
4 “(D) \$651,000,000 for fiscal year 2023;  
5 and  
6 “(E) \$750,000,000 for fiscal year 2024.”.

7 ~~(g)~~(h) TECHNICAL AMENDMENTS.—Section 5012 of  
8 the America COMPETES Act (42 U.S.C. 16538) is  
9 amended—

10 (1) in subsection (g)(3)(A)(iii), by striking  
11 “subpart” each place it appears and inserting “sub-  
12 paragraph”; and

13 (2) in subsection (o)(4)(B), by striking  
14 “(c)(2)(D)” and inserting “(c)(2)(C)”.



**Calendar No. 361**

116TH CONGRESS  
1ST Session

**S. 2714**

**A BILL**

To amend the America COMPETES Act to reauthorize the ARPA-E program, and for other purposes.

DECEMBER 17, 2019

Reported with amendments