

113TH CONGRESS
1ST SESSION

H. R. 2034

To provide for the establishment and operation of Advanced Composites
Development Centers.

IN THE HOUSE OF REPRESENTATIVES

MAY 16, 2013

Mr. MICHAUD (for himself, Ms. TSONGAS, Mr. PALAZZO, Mr. LIPINSKI, and Mr. CONYERS) introduced the following bill; which was referred to the Committee on Science, Space, and Technology, and in addition to the Committees on Homeland Security, Armed Services, and Transportation and Infrastructure, for a period to be subsequently determined by the Speaker, in each case for consideration of such provisions as fall within the jurisdiction of the committee concerned

A BILL

To provide for the establishment and operation of Advanced
Composites Development Centers.

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 “Advanced Composites
5 Development Act of 2013”.

6 **SEC. 2. FINDINGS.**

7 The Congress makes the following findings:

1 (1) Compared to traditional metals and woods,
2 reinforced composite materials are lightweight, cor-
3 rosion resistant, high strength, and durable.

4 (2) Because of their intrinsic physical qualities,
5 composites have the ability to address national prior-
6 ities in infrastructure, energy, defense, and natural
7 disaster mitigation with innovative solutions.

8 (3) To this end, research on advancement in
9 composite material development, new applications
10 for composites, or advanced manufacturing processes
11 serves a critical national interest.

12 **SEC. 3. ADVANCED COMPOSITES DEVELOPMENT CENTERS.**

13 (a) ESTABLISHMENT OF PROGRAM.—

14 (1) IN GENERAL.—The Secretary of Transpor-
15 tation, the Secretary of Energy, the Secretary of De-
16 fense, and the Secretary of Homeland Security shall
17 carry out a program to improve our Nation’s trans-
18 portation infrastructure, advance the technologies
19 used to produce alternative energy, enhance our
20 military security, and develop new disaster mitiga-
21 tion systems by making grants to consortia to estab-
22 lish and operate Advanced Composites Development
23 Centers. In doing so, they shall work with stake-
24 holders to identify problems that can be solved over
25 a period of 5 years through the development of an

1 advanced composite material. By working with the
2 private sector and focusing on solutions to problems
3 that can be researched, developed, and demonstrated
4 over a short period of time, each Center will strive
5 to produce new composite materials, including re-
6 lated manufacturing processes or applications, that
7 are lighter, stronger, and more durable than existing
8 materials, have lower life-cycle costs or lower overall
9 environmental impacts, and have an immediate prac-
10 tical application.

11 (2) DESIGNATION OF CENTERS.—The Centers
12 shall be designated as follows:

13 (A) The Secretary of Transportation shall
14 designate 1 Center for the development of ad-
15 vanced composites in civil infrastructure and
16 transportation.

17 (B) The Secretary of Energy shall des-
18 ignate 1 Center for the development of ad-
19 vanced composites in energy technology.

20 (C) The Secretary of Defense shall des-
21 ignate 1 Center for the development of ad-
22 vanced composites in military operations.

23 (D) The Secretary of Homeland Security
24 shall designate 1 Center for the development of

1 advanced composites in disaster prevention and
2 response.

3 (E) Any 2 or more of the Secretaries de-
4 scribed in subparagraphs (A) through (D) may
5 work together to explore opportunities to des-
6 ignate a single Center that addresses issues of
7 importance to the Departments of each such
8 Secretary.

9 (3) ADDITIONAL COLLABORATION.—Each Sec-
10 retary designating a Center under paragraph (2)
11 may include reviewers from the Director of the Na-
12 tional Institute of Standards and Technology and
13 the Director of the National Science Foundation to
14 leverage work that has been done at facilities sup-
15 ported by each of those agencies.

16 (b) CONSORTIA.—

17 (1) ELIGIBILITY.—To be eligible to receive a
18 grant under this section for the establishment and
19 operation of a Center, a consortium shall—

20 (A) be composed of qualifying entities, in-
21 cluding at least 1 prime applicant and 1 private
22 company;

23 (B) operate subject to a binding agreement
24 entered into by its members that documents—

1 (i) the proposed partnership agree-
2 ment, including the governance and man-
3 agement structure of the Center;

4 (ii) measures to enable cost-effective
5 implementation of the program under this
6 section;

7 (iii) a proposed budget, including fi-
8 nancial contributions from non-Federal
9 sources;

10 (iv) conflict of interest procedures
11 consistent with subsection (d)(2), all
12 known material conflicts of interest, and
13 corresponding mitigation plans; and

14 (v) an accounting structure that en-
15 ables the Secretary to ensure that the con-
16 sortium has complied with the require-
17 ments of this section; and

18 (C) operate as a nonprofit organization.

19 (2) APPLICATION.—A consortium seeking to es-
20 tablish and operate a Center under this section, act-
21 ing through a prime applicant, shall transmit to the
22 Secretary an application at such time, in such form,
23 and accompanied by such information as the Sec-
24 retary shall require, including a detailed description
25 of the elements of the consortium agreement re-

1 quired under paragraph (1)(B). If the consortium
2 members will not be located at one centralized loca-
3 tion, such application shall include a communica-
4 tions plan that ensures close coordination and inte-
5 gration of the Center's activities.

6 (c) SELECTION AND SCHEDULE.—

7 (1) SELECTION.—The Secretary shall select
8 consortia for grants for the establishment and oper-
9 ation of Centers through competitive selection proc-
10 esses. In selecting consortia, the Secretary shall con-
11 sider—

12 (A) the information a consortium must dis-
13 close according to subsection (b);

14 (B) any existing facilities a consortium will
15 provide for Center activities;

16 (C) experience in design, prototyping, and
17 testing advanced composites;

18 (D) existing ISO 17025 certification;

19 (E) experience and achievements working
20 with the private sector and commercializing
21 composite materials technologies; and

22 (F) opportunities to leverage previous sup-
23 port that a member of the consortium has re-
24 ceived from the Department or Departments
25 awarding the grant, the National Institute of

1 Standards and Technology, or the National
2 Science Foundation to research, develop, dem-
3 onstrate, or commercialize an advanced com-
4 posite.

5 (2) SCHEDULE.—Grants made for the estab-
6 lishment and operation of a Center shall be for a pe-
7 riod not to exceed 5 years, after which the grant
8 may be renewed, subject to a competitive selection
9 process.

10 (d) CENTER OPERATIONS.—

11 (1) IN GENERAL.—Centers shall conduct or
12 provide for multidisciplinary, collaborative research,
13 development, demonstration, and commercial appli-
14 cation of advanced composites technologies within
15 the technology development focus area or areas des-
16 ignated for the Center by the Secretary under sub-
17 section (a)(2). Each Center shall—

18 (A) encourage collaboration and commu-
19 nication among the member qualifying entities
20 of the consortium and awardees by conducting
21 activities whenever practicable at one central-
22 ized location;

23 (B) develop and publish on the website of
24 the Department or Departments of the desig-
25 nating Secretary proposed plans and programs;

1 (C) submit an annual report to the Sec-
2 retary summarizing the Center's activities, in-
3 cluding detailing organizational expenditures
4 and describing each project undertaken by the
5 Center; and

6 (D) monitor project implementation and
7 coordination.

8 (2) CONFLICTS OF INTEREST.—

9 (A) PROCEDURES.—Centers shall establish
10 conflict of interest procedures, consistent with
11 those of the Department or Departments of the
12 designating Secretary, to ensure that employees
13 and consortia designees for Center activities
14 who are in decisionmaking capacities disclose all
15 material conflicts of interest, including finan-
16 cial, organizational, and personal conflicts of in-
17 terest.

18 (B) DISQUALIFICATION AND REVOCATION.—The Secretary may disqualify an appli-
19 cation or revoke funds distributed to a Center
20 if the Secretary discovers a failure to comply
21 with conflict of interest procedures established
22 under subparagraph (A).
23

24 (e) OVERSIGHT BOARD.—Each Secretary described
25 in subsection (a)(1) shall establish and maintain within

1 its Department an Oversight Board to oversee the
2 progress of Centers.

3 (f) PRIORITY CONSIDERATION.—The Secretary shall
4 give priority consideration to applications in which 1 or
5 more of the institutions comprising the applicant consor-
6 tium are 1890 Land Grant Institutions (as defined in sec-
7 tion 2 of the Agricultural Research, Extension, and Edu-
8 cation Reform Act of 1998 (7 U.S.C. 7061)), Predomi-
9 nantly Black Institutions (as defined in section 318 of the
10 Higher Education Act of 1965 (20 U.S.C. 1059e)), Tribal
11 Colleges or Universities (as defined in section 316(b) of
12 the Higher Education Act of 1965 (20 U.S.C. 1059c(b)),
13 or Hispanic Serving Institutions (as defined in section 318
14 of the Higher Education Act of 1965 (20 U.S.C. 1059e)).

15 (g) DEFINITIONS.—For purposes of this section:

16 (1) ADVANCED COMPOSITES.—The term “ad-
17 vanced composites” means polymer matrix composite
18 materials, including synthetic and natural fibers, as
19 well as synthetic and bio-based resins, used in struc-
20 tural, load-bearing applications. These materials
21 may be enhanced with nano-additives, and may be
22 used in combination with traditional and other ad-
23 vanced materials.

1 (2) CENTER.—The term “Center” means an
2 Advanced Composites Development Center estab-
3 lished in accordance with this section.

4 (3) INSTITUTION OF HIGHER EDUCATION.—The
5 term “institution of higher education” has the
6 meaning given that term in section 101(a) of the
7 Higher Education Act of 1965 (20 U.S.C. 1001(a)).

8 (4) PRIME APPLICANT.—The term “prime ap-
9 plicant” means an institution of higher education
10 serving as the lead entity applying for a grant under
11 this section.

12 (5) QUALIFYING ENTITY.—The term “quali-
13 fying entity” includes—

14 (A) an appropriate State or Federal entity;

15 (B) a nonprofit nongovernmental organiza-
16 tion with expertise in advanced composites tech-
17 nology research, development, demonstration, or
18 commercial application;

19 (C) any other relevant entity the Secretary
20 considers appropriate; or

21 (D) a United States private company with
22 expertise in advanced composites technology re-
23 search, development, demonstration, or com-
24 mercial application.

1 (6) SECRETARY.—The term “Secretary” means
2 the Secretary or Secretaries designating a Center
3 under subsection (a)(2).

4 (h) AUTHORIZATION OF APPROPRIATIONS.—From
5 the funds appropriated to research budgets of their respec-
6 tive departments, each Secretary described in subsection
7 (a)(1) is authorized to expend the following amounts to
8 carry out this section:

- 9 (1) \$15,000,000 for fiscal year 2014.
10 (2) \$16,000,000 for fiscal year 2015.
11 (3) \$17,500,000 for fiscal year 2016.
12 (4) \$19,000,000 for fiscal year 2017.
13 (5) \$20,000,000 for fiscal year 2018.

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