

112TH CONGRESS  
1ST SESSION

# H. R. 2820

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

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## IN THE HOUSE OF REPRESENTATIVES

AUGUST 12, 2011

Mr. MICHAUD introduced the following bill

SEPTEMBER 6, 2011

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

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## 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 2011”.

6 **SEC. 2. ADVANCED COMPOSITES DEVELOPMENT CENTERS.**

7 (a) ESTABLISHMENT OF PROGRAM.—

1           (1) IN GENERAL.—The Secretary of Transpor-  
2           tation, the Secretary of Energy, the Secretary of De-  
3           fense, and the Secretary of Homeland Security shall  
4           carry out a program to improve our Nation’s trans-  
5           portation infrastructure, advance the technologies  
6           used to produce alternative energy, enhance our  
7           military security, and develop new disaster mitiga-  
8           tion systems by making grants to consortia to estab-  
9           lish and operate Advanced Composites Development  
10          Centers. In doing so, they shall work with stake-  
11          holders to identify problems that can be solved over  
12          a period of 5 years through the development of an  
13          advanced composite material. By working with the  
14          private sector and focusing on solutions to problems  
15          that can be researched, developed, and demonstrated  
16          over a short period of time, each Center will strive  
17          to produce new composite materials that are lighter,  
18          stronger, and more durable than existing materials  
19          and have an immediate practical application.

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

22           (A) The Secretary of Transportation shall  
23          designate 1 Center for the development of ad-  
24          vanced composites in civil infrastructure and  
25          transportation.

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

4           (C) The Secretary of Defense shall des-  
5           ignate 1 Center for the development of ad-  
6           vanced composites in military operations.

7           (D) The Secretary of Homeland Security  
8           shall designate 1 Center for the development of  
9           advanced composites in disaster prevention and  
10          response.

11          (E) Any 2 or more of the Secretaries de-  
12          scribed in subparagraphs (A) through (D) may  
13          work together to explore opportunities to des-  
14          ignate a single Center that addresses issues of  
15          importance to the Departments of each such  
16          Secretary.

17          (3) ADDITIONAL COLLABORATION.—Each Sec-  
18          retary designating a Center under paragraph (2)  
19          may include reviewers from the Director of the Na-  
20          tional Institute of Standards and Technology and  
21          the Director of the National Science Foundation to  
22          leverage work that has been done at facilities sup-  
23          ported by each of those agencies.

24          (b) CONSORTIA.—

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

4                   (A) be composed of qualifying entities, in-  
5 cluding at least 1 prime applicant and 1 private  
6 company;

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

9                           (i) the proposed partnership agree-  
10 ment, including the governance and man-  
11 agement structure of the Center;

12                           (ii) measures to enable cost-effective  
13 implementation of the program under this  
14 section;

15                           (iii) a proposed budget, including fi-  
16 nancial contributions from non-Federal  
17 sources;

18                           (iv) conflict of interest procedures  
19 consistent with subsection (d)(2), all  
20 known material conflicts of interest, and  
21 corresponding mitigation plans; and

22                           (v) an accounting structure that en-  
23 ables the Secretary to ensure that the con-  
24 sortium has complied with the require-  
25 ments of this section; and

1 (C) operate as a nonprofit organization.

2 (2) APPLICATION.—A consortium seeking to es-  
3 tablish and operate a Center under this section, act-  
4 ing through a prime applicant, shall transmit to the  
5 Secretary an application at such time, in such form,  
6 and accompanied by such information as the Sec-  
7 retary shall require, including a detailed description  
8 of the elements of the consortium agreement re-  
9 quired under paragraph (1)(B). If the consortium  
10 members will not be located at one centralized loca-  
11 tion, such application shall include a communica-  
12 tions plan that ensures close coordination and inte-  
13 gration of the Center’s activities.

14 (c) SELECTION AND SCHEDULE.—

15 (1) SELECTION.—The Secretary shall select  
16 consortia for grants for the establishment and oper-  
17 ation of Centers through competitive selection proc-  
18 esses. In selecting consortia, the Secretary shall con-  
19 sider—

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

22 (B) any existing facilities a consortium will  
23 provide for Center activities;

24 (C) experience in design, prototyping, and  
25 testing advanced composites;

1 (D) existing ISO 17025 certification;

2 (E) experience and achievements working  
3 with the private sector and commercializing  
4 composite materials technologies; and

5 (F) opportunities to leverage previous sup-  
6 port that a member of the consortium has re-  
7 ceived from the Department or Departments  
8 awarding the grant, the National Institute of  
9 Standards and Technology, or the National  
10 Science Foundation to research, develop, dem-  
11 onstrate, or commercialize an advanced com-  
12 posite.

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

18 (d) CENTER OPERATIONS.—

19 (1) IN GENERAL.—Centers shall conduct or  
20 provide for multidisciplinary, collaborative research,  
21 development, demonstration, and commercial appli-  
22 cation of advanced composites technologies within  
23 the technology development focus area or areas des-  
24 ignated for the Center by the Secretary under sub-  
25 section (a)(2). Each Center shall—

1 (A) encourage collaboration and commu-  
2 nication among the member qualifying entities  
3 of the consortium and awardees by conducting  
4 activities whenever practicable at one central-  
5 ized location;

6 (B) develop and publish on the website of  
7 the Department or Departments of the desig-  
8 nating Secretary proposed plans and programs;

9 (C) submit an annual report to the Sec-  
10 retary summarizing the Center's activities, in-  
11 cluding detailing organizational expenditures  
12 and describing each project undertaken by the  
13 Center; and

14 (D) monitor project implementation and  
15 coordination.

16 (2) CONFLICTS OF INTEREST.—

17 (A) PROCEDURES.—Centers shall establish  
18 conflict of interest procedures, consistent with  
19 those of the Department or Departments of the  
20 designating Secretary, to ensure that employees  
21 and consortia designees for Center activities  
22 who are in decisionmaking capacities disclose all  
23 material conflicts of interest, including finan-  
24 cial, organizational, and personal conflicts of in-  
25 terest.

1 (B) DISQUALIFICATION AND REVOCA-  
2 TION.—The Secretary may disqualify an appli-  
3 cation or revoke funds distributed to a Center  
4 if the Secretary discovers a failure to comply  
5 with conflict of interest procedures established  
6 under subparagraph (A).

7 (e) OVERSIGHT BOARD.—Each Secretary described  
8 in subsection (a)(1) shall establish and maintain within  
9 its Department an Oversight Board to oversee the  
10 progress of Centers.

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

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

24 (1) ADVANCED COMPOSITES.—The term “ad-  
25 vanced composites” means polymer matrix composite



1 materials, including synthetic and natural fibers, as  
2 well as synthetic and bio-based resins, used in struc-  
3 tural, load-bearing applications. These materials  
4 may be enhanced with nano-additives, and may be  
5 used in combination with traditional and other ad-  
6 vanced materials.

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

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

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

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

20 (A) an appropriate State or Federal entity;

21 (B) a nonprofit nongovernmental organiza-  
22 tion with expertise in advanced composites tech-  
23 nology research, development, demonstration, or  
24 commercial application;

1 (C) any other relevant entity the Secretary  
2 considers appropriate; or

3 (D) a United States private company with  
4 expertise in advanced composites technology re-  
5 search, development, demonstration, or com-  
6 mercial application.

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

10 (h) AUTHORIZATION OF APPROPRIATIONS.—There  
11 are authorized to be appropriated to each of the Secre-  
12 taries described in subsection (a)(1) to carry out this sec-  
13 tion—

14 (1) \$15,000,000 for fiscal year 2012;

15 (2) \$16,000,000 for fiscal year 2013;

16 (3) \$17,500,000 for fiscal year 2014;

17 (4) \$19,000,000 for fiscal year 2015; and

18 (5) \$20,000,000 for fiscal year 2016.

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