

114TH CONGRESS
1ST SESSION

S. 1432

To require the Secretary of Energy to conduct a study on the technology, potential lifecycle energy savings, and economic impact of recycled carbon fiber, and for other purposes.

IN THE SENATE OF THE UNITED STATES

MAY 21, 2015

Ms. CANTWELL introduced the following bill; which was read twice and referred to the Committee on Energy and Natural Resources

A BILL

To require the Secretary of Energy to conduct a study on the technology, potential lifecycle energy savings, and economic impact of recycled carbon fiber, 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 “Carbon Fiber Recy-
5 cling Act of 2015”.

6 **SEC. 2. RECYCLED CARBON FIBER STUDY.**

7 (a) FINDINGS.—Congress finds that—

1 (1) current methods for manufacturing carbon
2 fiber are energy intensive, making carbon fiber cost-
3 ly for use in mass-produced applications;

4 (2) it takes approximately one-tenth the energy
5 to produce recycled carbon fiber as it does to
6 produce virgin carbon fiber;

7 (3) using recycled carbon fiber in the manufac-
8 turing process could result in as great as 40 percent
9 in cost savings compared to the manufacture of vir-
10 gin fiber; and

11 (4) up to 30 percent of carbon fiber manufac-
12 tured becomes part of the waste stream.

13 (b) STUDY.—The Secretary of Energy (referred to in
14 this Act as the “Secretary”) shall conduct a study on—

15 (1) the technology of recycled carbon fiber and
16 production waste carbon fiber; and

17 (2) the potential lifecycle energy savings and
18 economic impact of recycled carbon fiber.

19 (c) FACTORS FOR CONSIDERATION.—In conducting
20 the study under subsection (b), the Secretary shall con-
21 sider—

22 (1) the quantity of recycled carbon fiber or pro-
23 duction waste carbon fiber that would make the use
24 of recycled carbon fiber or production waste carbon
25 fiber economically viable;

1 (2) any existing or potential barriers to recy-
2 cling carbon fiber or using recycled carbon fiber;

3 (3) any financial incentives that may be nec-
4 essary for the development of recycled carbon fiber
5 or production waste carbon fiber;

6 (4) the potential lifecycle savings in energy
7 from producing recycled carbon fiber, as compared
8 to producing new carbon fiber;

9 (5) the best and highest use for recycled carbon
10 fiber;

11 (6) the potential reduction in carbon dioxide
12 emissions from producing recycled carbon fiber, as
13 compared to producing new carbon fiber;

14 (7) any economic benefits gained from using re-
15 cycled carbon fiber or production waste carbon fiber;

16 (8) workforce training and skills needed to ad-
17 dress labor demands in the development of recycled
18 carbon fiber or production waste carbon fiber; and

19 (9) how the Department of Energy can leverage
20 existing efforts in the industry on the use of produc-
21 tion waste carbon fiber.

22 (d) REPORT.—Not later than 1 year after the date
23 of enactment of this Act, the Secretary shall submit to
24 Congress a report describing the results of the study con-
25 ducted under subsection (b).

1 **SEC. 3. RECYCLED CARBON FIBER DEMONSTRATION**
2 **PROJECT.**

3 The Secretary shall consult with the aviation and
4 automotive industries and existing programs of the Ad-
5 vanced Manufacturing Office of the Department of En-
6 ergy to develop a carbon fiber recycling demonstration
7 project.

8 **SEC. 4. AUTHORIZATION OF APPROPRIATIONS.**

9 There is authorized to be appropriated to the Sec-
10 retary to carry out this Act \$10,000,000, to remain avail-
11 able until expended.

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