

110TH CONGRESS  
1ST SESSION

# H. R. 3775

To support research and development of new industrial processes and technologies that optimize energy efficiency and environmental performance, utilize diverse sources of energy, and increase economic competitiveness.

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## IN THE HOUSE OF REPRESENTATIVES

OCTOBER 9, 2007

Mr. LAMPSON introduced the following bill; which was referred to the  
Committee on Science and Technology

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## A BILL

To support research and development of new industrial processes and technologies that optimize energy efficiency and environmental performance, utilize diverse sources of energy, and increase economic competitiveness.

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 “Industrial Energy Effi-  
5       ciency Research and Development Act of 2007”.

6       **SEC. 2. FINDINGS.**

7       The Congress finds the following:

1           (1) According to the Energy Information Ad-  
2           ministration's 2006 Annual Energy Review, the in-  
3           dustrial sector in 2006 accounted for more energy  
4           use (32 percent) than the residential (21 percent),  
5           commercial (18 percent), or transportation sector  
6           (29 percent).

7           (2) The Department of Energy has dem-  
8           onstrated the success of public-private partnerships  
9           to research, develop, and deploy new energy efficient  
10          technologies which reduce emissions and improve  
11          manufacturing competitiveness.

12          (3) Innovations in manufacturing processes  
13          may be translated into efficiency improvements in  
14          buildings, transportation, and other economic sec-  
15          tors.

16          (4) While past public-private partnerships have  
17          resulted in significant energy efficiency improve-  
18          ments in manufacturing processes, there is a need  
19          for new technologies to achieve continual energy effi-  
20          ciency improvements.

21          (5) Innovations made in the last few decades  
22          assisted the United States in remaining competitive  
23          in the global market. Continued innovation in the  
24          areas of energy efficiency and feedstock diversifica-

1       tion are necessary to enable the United States to  
2       maintain a competitive edge.

3           (6) The Department of Energy should continue  
4       collaborative efforts with industry, particularly the  
5       manufacturing sector, to broaden and accelerate the  
6       high-risk research and development of new manufac-  
7       turing processes that optimize energy efficiency and  
8       utilize diverse sources of energy.

9           (7) These partnerships support critical research  
10      and development capabilities at universities and  
11      other research institutions while training engineers  
12      in critical areas of energy systems and efficient in-  
13      dustrial process technologies.

14   **SEC. 3. INDUSTRIAL TECHNOLOGIES PROGRAM.**

15      (a) IN GENERAL.—The Secretary of Energy (in this  
16   Act referred to as the “Secretary”) shall establish a pro-  
17   gram, in cooperation with energy-intensive industries, in-  
18   dustry trade associations representing such industries,  
19   and institutions of higher education, to conduct research,  
20   development, demonstration, and commercial application  
21   activities with respect to new industrial and commercial  
22   processes, technologies, and methods to—

23           (1) achieve—

24                   (A) substantial improvements in energy ef-  
25                   ficiency; and

1 (B) environmental performance improve-  
2 ments such as waste reduction, emissions reduc-  
3 tions, and more efficient water use; and

4 (2) enhance the economic competitiveness of the  
5 United States industrial sector.

6 (b) PROGRAM ACTIVITIES.—Research, development,  
7 demonstration, and commercial application activities  
8 under this section may include—

9 (1) activities to support the development and  
10 use of technologies and processes that improve the  
11 quality and quantity of feedstocks recovered or recy-  
12 cled from process and waste streams;

13 (2) research to meet manufacturing feedstock  
14 requirements with alternative resources;

15 (3) research to develop and demonstrate tech-  
16 nologies and processes that utilize alternative energy  
17 sources to supply heat, power, and new feedstocks  
18 for energy-intensive industries;

19 (4) research to achieve energy efficiency in  
20 steam, power, control system, and process heat tech-  
21 nologies, and in other manufacturing processes; and

22 (5) a program to fund research, development,  
23 and demonstration relating to inventors' and small  
24 companies' technology proposals, based on energy

1 savings potential, commercial viability, and technical  
2 merit.

3 (c) FINANCIAL ASSISTANCE.—Financial assistance  
4 under this section may be in the form of grants, contracts,  
5 and cooperative agreements, which shall be subject to cost  
6 sharing as required under applicable Federal law.

7 (d) COMPETITIVE AWARDS.—All awards under this  
8 section shall be made on a competitive, merit-reviewed  
9 basis.

10 (e) COORDINATION AND NONDUPLICATION.—The  
11 Secretary shall, coordinate efforts under this section with  
12 other programs of the Department and other Federal  
13 agencies, to avoid duplication of effort.

14 **SEC. 4. UNIVERSITY-BASED INDUSTRIAL RESEARCH AND**  
15 **ASSESSMENT CENTERS.**

16 To strengthen the program under section 3, the Sec-  
17 retary shall provide funding to university-based industrial  
18 research and assessment centers, whose purpose shall  
19 be—

20 (1) to identify opportunities for optimizing en-  
21 ergy efficiency and environmental performance;

22 (2) to promote application of emerging concepts  
23 and technologies in small and medium-sized manu-  
24 facturers;

1           (3) to promote the research and development  
2           for usage of alternative energy sources to supply  
3           heat, power, and new feedstocks for energy intensive  
4           industries;

5           (4) to coordinate with appropriate State re-  
6           search offices, and provide a clearinghouse for indus-  
7           trial process and energy efficiency technical assist-  
8           ance resources; and

9           (5) to coordinate with State-accredited technical  
10          training centers and community colleges, while en-  
11          suring appropriate services to all regions of the  
12          United States.

13 **SEC. 5. AUTHORIZATION OF APPROPRIATIONS.**

14          There are authorized to be appropriated to the Sec-  
15          retary to carry out this Act \$150,000,000 for each of the  
16          fiscal years 2009 through 2013.

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