

110TH CONGRESS
1ST SESSION

H. R. 2763

To enhance research, development, demonstration, and commercial application of biofuels related technologies, and for other purposes.

IN THE HOUSE OF REPRESENTATIVES

JUNE 18, 2007

Mr. LAMPSON introduced the following bill; which was referred to the Committee on Science and Technology, and in addition to the Committee on Energy and Commerce, 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 enhance research, development, demonstration, and commercial application of biofuels related technologies, and for other purposes.

- 1 *Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled,*
- 2 **SECTION 1. SHORT TITLE.**
- 3 This Act may be cited as the “Biofuels Research and
- 4 Development Enhancement Act”.

1 **SEC. 2. BIOFUELS AND BIOREFINERY INFORMATION CEN-**
2 **TER.**

3 (a) IN GENERAL.—The Secretary of Energy (in this
4 Act referred to as the “Secretary”), in cooperation with
5 the Secretary of Agriculture, shall establish an informa-
6 tion center to make available to interested parties informa-
7 tion on research, development, and commercial application
8 of technologies related to biofuels and biorefineries, includ-
9 ing—

10 (1) biochemical and thermochemical conversion
11 technologies capable of making fuels from
12 lignocellulosic feedstocks;

13 (2) biotechnology processes capable of making
14 biofuels with an emphasis on development of bio-
15 refinery technologies using enzyme-based processing
16 systems; and

17 (3) other advanced processes and technologies
18 that will enable the development of biofuels.

19 (b) ADMINISTRATION.—In administering the biofuels
20 and biorefinery information center, the Secretary shall—

21 (1) continually update information provided by
22 the center;

23 (2) make information available to interested
24 parties on the process for establishing a biorefinery;
25 and

4 SEC. 3. BIOFUELS AND ADVANCED BIOFUELS INFRASTRUC- 5 TURE.

6 Section 932 of the Energy Policy Act of 2005 (42
7 U.S.C. 16232) is amended by adding at the end the fol-
8 lowing new subsection:

9 "(f) BIOFUELS AND ADVANCED BIOFUELS INFRA-
10 STRUCTURE.—

11 “(1) IN GENERAL.—The Secretary shall carry
12 out a program of research, development, and dem-
13 onstration as it relates existing transportation fuel
14 distribution infrastructure and new alternative dis-
15 tribution infrastructure. The program shall focus on
16 the physical and chemical properties of biofuels and
17 efforts to prevent or mitigate against adverse im-
18 pacts of those properties in the following areas:

19 “(A) Corrosion of metal, plastic, rubber,
20 cork, fiberglass, glues, or any other material
21 used in pipes and storage tanks.

22 “(B) Dissolving of storage tank sediments.

23 “(C) Clogging of filters.

24 “(D) Contamination from water or other
25 adulterants or pollutants.

1 “(E) Poor flow properties related to low
2 temperatures.

3 “(F) Oxidative and thermal instability in
4 long-term storage and use.

5 “(G) Increased volatile emissions.

6 “(H) Microbial contamination.

7 “(I) Problems associated with electrical
8 conductivity.

9 “(J) Increased nitrogen oxide emissions.”.

10 **SEC. 4. BIODIESEL.**

11 Not later than 180 days after the date of enactment
12 of this Act, the Secretary shall submit to Congress a re-
13 port on any research and development challenges inherent
14 in increasing to 5 percent the proportion of diesel fuel sold
15 in the United States that is biodiesel (as defined in section
16 757 of the Energy Policy Act of 2005 (42 U.S.C. 16105)).

17 **SEC. 5. BIORESEARCH CENTERS FOR SYSTEMS BIOLOGY
18 PROGRAM.**

19 Section 977(a)(1) of the Energy Policy Act of 2005
20 (42 U.S.C. 16317(a)(1)) is amended by inserting before
21 the period at the end the following: “, including the estab-
22 lishment of at least 11 bioresearch centers of varying
23 sizes, as appropriate, that focus on biofuels, of which at
24 least 2 centers shall be located in each of the 4 Petroleum
25 Administration for Defense Districts with no subdistricts

1 and at least 1 center shall be located in each of the subdis-
2 tricts of the Petroleum Administration for Defense Dis-
3 trict with subdistricts".

4 **SEC. 6. GRANTS FOR BIOFUEL PRODUCTION RESEARCH**

5 **AND DEVELOPMENT IN CERTAIN STATES.**

6 (a) IN GENERAL.—The Secretary shall provide
7 grants to eligible entities for research, development, dem-
8 onstration, and commercial application of biofuel produc-
9 tion technologies in States with low rates of ethanol pro-
10 duction, including low rates of production of cellulosic bio-
11 mass ethanol, as determined by the Secretary.

12 (b) ELIGIBILITY.—To be eligible to receive a grant
13 under this section, an entity shall—

14 (1)(A) be an institution of higher education (as
15 defined in section 2 of the Energy Policy Act of
16 2005 (42 U.S.C. 15801)) located in a State de-
17 scribed in subsection (a); or

18 (B) be a consortium including at least 1 such
19 institution of higher education, and industry, State
20 agencies, Indian tribal agencies, or local government
21 agencies located in the State; and

22 (2) have proven experience and capabilities with
23 relevant technologies.

24 (c) AUTHORIZATION OF APPROPRIATIONS.—There
25 are authorized to be appropriated to the Secretary to carry

1 out this section \$25,000,000 for each of fiscal years 2008
2 through 2010.

3 **SEC. 7. BIOREFINERY ENERGY EFFICIENCY.**

4 Section 932 of Energy Policy Act of 2005 (42 U.S.C.
5 16232), is amended by adding at the end the following
6 new subsection:

7 “(g) BIOREFINERY ENERGY EFFICIENCY.—The Sec-
8 retary shall establish a program of research, development,
9 demonstration, and commercial application for increasing
10 energy efficiency and reducing energy consumption in the
11 operation of biorefinery facilities.”.

12 **SEC. 8. STUDY OF INCREASED CONSUMPTION OF ETHANOL-**

13 **BLENDED GASOLINE WITH HIGHER LEVELS
14 OF ETHANOL.**

15 (a) IN GENERAL.—The Secretary, in cooperation
16 with the Secretary of Agriculture, the Administrator of the
17 Environmental Protection Agency, and the Secretary of
18 Transportation, and after providing notice and an oppor-
19 tunity for public comment, shall conduct a study of the
20 feasibility of increasing consumption in the United States
21 of ethanol-blended gasoline with levels of ethanol that are
22 not less than 10 percent and not more than 40 percent.

23 (b) STUDY.—The study under subsection (a) shall in-
24 clude—

1 (1) a review of production and infrastructure
2 constraints on increasing consumption of ethanol;

3 (2) an evaluation of the economic, market, and
4 energy-related impacts of State and regional dif-
5 ferences in ethanol blends;

6 (3) an evaluation of the economic, market, and
7 energy-related impacts on gasoline retailers and con-
8 sumers of separate and distinctly labeled fuel stor-
9 age facilities and dispensers;

10 (4) an evaluation of the environmental impacts
11 of the ethanol blends described in subsection (a) on
12 evaporative and exhaust emissions from on-road, off-
13 road, and marine vehicle engines;

14 (5) an evaluation of the impacts of the ethanol
15 blends described in subsection (a) on the operation,
16 durability, and performance of on-road, off-road, and
17 marine vehicle engines; and

18 (6) an evaluation of the safety impacts of the
19 ethanol blends described in subsection (a) on con-
20 sumers that own and operate off-road and marine
21 vehicle engines.

22 (c) 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 this section.

1 **SEC. 9. STUDY OF OPTIMIZATION OF FLEXIBLE FUELED VE-**2 **HICLES TO USE E-85 FUEL.**

3 (a) IN GENERAL.—The Secretary shall conduct a
4 study of whether optimizing flexible fueled vehicles to op-
5 erate using E-85 fuel would increase the fuel efficiency
6 of flexible fueled vehicles, and shall include recommenda-
7 tions for how manufacturers can best optimize such vehi-
8 cles to increase fuel efficiency.

9 (b) REPORT.—Not later than 180 days after the date
10 of enactment of this Act, the Secretary shall submit to
11 the Committee on Science and Technology of the House
12 of Representatives the Committee on Energy and Natural
13 Resources of the Senate a report that describes the results
14 of the study under this section, including any rec-
15 ommendations of the Secretary.

16 **SEC. 10. STUDY OF ENGINE DURABILITY ASSOCIATED WITH**17 **THE USE OF BIODIESEL.**

18 (a) IN GENERAL.—Not later than 30 days after the
19 date of enactment of this Act, the Secretary shall initiate
20 a study on the effects of the use of biodiesel on engine
21 durability.

22 (b) COMPONENTS.—The study under this section
23 shall include—

24 (1) an assessment of whether the use of bio-
25 diesel in conventional diesel engines lessens engine
26 durability; and

1 (2) an assessment of the effects referred to in
2 subsection (a) with respect to biodiesel blends at
3 varying concentrations, including the following per-
4 centage concentrations of biodiesel:

- 5 (A) 5 percent biodiesel.
- 6 (B) 10 percent biodiesel.
- 7 (C) 20 percent biodiesel.
- 8 (D) 30 percent biodiesel.
- 9 (E) 100 percent biodiesel.

10 (c) REPORT.—Not later than 1 year after the date
11 of enactment of this Act, the Secretary shall submit to
12 the Committee on Science and Technology of the House
13 of Representatives the Committee on Energy and Natural
14 Resources of the Senate a report that describes the results
15 of the study under this section, including any rec-
16 ommendations of the Secretary.

17 SEC. 11. BIOENERGY RESEARCH AND DEVELOPMENT, AU-
18 THORIZATION OF APPROPRIATION.

19 (a) Section 931 of the Energy Policy Act of 2005 (42
20 U.S.C. 16231) is amended—

21 (1) in subsection (b)—

22 (A) at the end of paragraph (2) by striking
23 “and”;

24 (B) at the end of paragraph (3) by striking
25 the period and inserting “; and”; and

1 (C) by adding at the end the following new
2 paragraph:

3 “(4) \$963,000,000 for fiscal year 2010.”; and

4 (2) in subsection (c)—

5 (A) in paragraph (2), by striking
6 “\$251,000,000” and inserting “\$377,000,000”;

7 (B) in paragraph (3), by striking
8 “\$274,000,000” and inserting “\$398,000,000”;

9 and

10 (C) by adding at the end the following new
11 paragraph:

12 “(4) \$419,000,000 for fiscal year 2010, of
13 which \$150,000,00 shall be for section 932(d).”.

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