

110TH CONGRESS
1ST SESSION

S. 1073

To amend the Clean Air Act to promote the use of fuels with low lifecycle greenhouse gas emissions, to establish a greenhouse gas performance standard for motor vehicle fuels, to require a significant decrease in greenhouse gas emissions from motor vehicles, and for other purposes.

IN THE SENATE OF THE UNITED STATES

MARCH 29, 2007

Mrs. FEINSTEIN (for herself, Ms. COLLINS, and Ms. SNOWE) introduced the following bill; which was read twice and referred to the Committee on Environment and Public Works

A BILL

To amend the Clean Air Act to promote the use of fuels with low lifecycle greenhouse gas emissions, to establish a greenhouse gas performance standard for motor vehicle fuels, to require a significant decrease in greenhouse gas emissions from motor vehicles, 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 “Clean Fuels and Vehi-
5 cles Act of 2007”.

1 **SEC. 2. FUEL WITH LOW LIFECYCLE GREENHOUSE GAS**
 2 **EMISSIONS; GREENHOUSE GAS EMISSION RE-**
 3 **DUCTIONS.**

4 Title II of the Clean Air Act (42 U.S.C. 7581 et seq.)
 5 is amended by adding at the end the following:

6 **“PART D—FUEL WITH LOW LIFECYCLE GREEN-**
 7 **HOUSE GAS EMISSIONS; GREENHOUSE GAS**
 8 **EMISSION REDUCTIONS**

9 **“SEC. 251. DEFINITIONS.**

10 “In this part:

11 “(1) GREENHOUSE GAS.—The term ‘greenhouse
 12 gas’ means—

13 “(A) carbon dioxide;

14 “(B) methane;

15 “(C) nitrous oxide;

16 “(D) hydrofluorocarbons;

17 “(E) perfluorocarbons; and

18 “(F) sulfur hexafluoride.

19 “(2) LIFECYCLE GREENHOUSE GAS EMIS-
 20 SIONS.—The term ‘lifecycle greenhouse gas emis-
 21 sions’ means the aggregate quantity of greenhouse
 22 gases emitted per unit of fuel from production to use
 23 (including feedstock production or extraction and
 24 distribution).

25 “(3) MAJOR OIL COMPANY.—The term ‘major
 26 oil company’ has the meaning given the term in sec-

1 tion 105(b) of the Energy Policy and Conservation
2 Act (42 U.S.C. 6213(b)).

3 “(4) MOTOR VEHICLE.—The term ‘motor vehi-
4 cle’ has the meaning given the term in section 216.

5 **“SEC. 252. GREENHOUSE GAS EMISSION REDUCTIONS**
6 **FROM FUELS AVAILABLE FOR MOTOR VEHI-**
7 **CLES.**

8 “(a) DETERMINATION PROCESS; FUEL EMISSIONS
9 BASELINE.—

10 “(1) IN GENERAL.—Not later than January 1,
11 2010, the Administrator shall, by regulation—

12 “(A) establish a determination process for
13 use in determining the lifecycle greenhouse gas
14 emissions of a fuel; and

15 “(B) based on the aggregate quantity and
16 variety of fuels available for motor vehicles used
17 in the United States during calendar year 2007,
18 determine the average quantity of lifecycle
19 greenhouse gas emissions per unit of energy de-
20 livered to a motor vehicle (referred to in this
21 section as the ‘fuel emissions baseline’).

22 “(2) CONSIDERATIONS.—For purposes of deter-
23 mining the lifecycle greenhouse gas emissions of a
24 fuel under paragraph (1), the Administrator shall
25 consider—

1 “(A) greenhouse gas emissions resulting
2 from—

3 “(i) production, extraction, distribu-
4 tion, transportation, and end use of the
5 fuel;

6 “(ii) issues relating to the end use ef-
7 ficiency of the fuel;

8 “(iii) changes in land use and land
9 cover resulting from an activity described
10 in clause (i) with respect to the fuel; and

11 “(iv) net climate impacts affecting the
12 energy and agricultural sectors resulting
13 from an activity described in clause (i)
14 with respect to the fuel; and

15 “(B) any other appropriate matters, as de-
16 termined by the Administrator.

17 “(3) REQUIREMENTS.—The Administrator shall
18 include in regulations promulgated to carry out
19 paragraph (1) procedures by which the Adminis-
20 trator shall—

21 “(A) determine the lifecycle greenhouse
22 gas emissions of a fuel and the fuel emissions
23 baseline;

24 “(B) make each determination described in
25 subparagraph (A), and information used in

1 making the determinations, available to con-
2 sumers;

3 “(C) label fuels with low lifecycle green-
4 house gas emissions; and

5 “(D) provide information about adverse
6 impacts of the fuel on—

7 “(i) land use and land cover;

8 “(ii) water, soil, and air quality; and

9 “(iii) public health.

10 “(b) SUBSEQUENT AVERAGE LIFECYCLE GREEN-
11 HOUSE GAS EMISSIONS.—Not later than June 1, 2013,
12 and annually thereafter, based on the aggregate quantity
13 and variety of fuel available for motor vehicles used in the
14 United States during the preceding calendar year, the Ad-
15 ministrator shall determine, in accordance with the regula-
16 tions promulgated under subsection (a), the average quan-
17 tity of lifecycle greenhouse gas emissions per unit of en-
18 ergy delivered to a motor vehicle through the use of a unit
19 of fuel for motor vehicles for the preceding calendar year.

20 “(c) REQUIRED REDUCTIONS IN LIFECYCLE GREEN-
21 HOUSE GAS EMISSIONS.—

22 “(1) REGULATIONS.—The Administrator shall
23 promulgate regulations to establish a credit trading
24 program to address the lifecycle greenhouse gas

1 emissions from fuels available for use in motor vehi-
2 cles.

3 “(2) REQUIRED EMISSION REDUCTIONS.—The
4 Administrator shall, by regulation, require each
5 major oil company, refiner, or fuel importer that
6 produces, sells, or introduces gasoline or other fuels
7 available for use in motor vehicles into commerce in
8 the United States to reduce the average lifecycle
9 greenhouse gas emissions per unit of energy deliv-
10 ered to a motor vehicle through fuel to a level that
11 is—

12 “(A) for calendar year 2015, 3 percent
13 below the fuel emissions baseline; and

14 “(B) not later than every fifth calendar
15 year thereafter, 3 percent below the average
16 quantity of lifecycle greenhouse gas emissions
17 per unit of energy delivered to a vehicle allowed
18 pursuant to this section during the required
19 fuel emissions level for the preceding calendar
20 year, as determined by the Administrator under
21 subsection (b).

22 “(3) USE OF CREDITS.—

23 “(A) IN GENERAL.—For the purpose of
24 complying with the required reductions in
25 lifecycle greenhouse gas emissions under this

1 section, each major oil company, fuel refiner, or
2 fuel importer shall demonstrate, on an annual
3 basis, that the fuel mix provided to the market
4 by the company, refiner, or importer meets the
5 lifecycle greenhouse gas emission level specified
6 in subparagraphs (A) and (B) of paragraph (2),
7 including if necessary, by using credits pre-
8 viously banked or purchased.

9 “(B) CREDITS FOR ADDITIONAL REDUC-
10 TIONS.—The regulations promulgated to carry
11 out this section shall permit a provider of a fuel
12 that achieves a greater reduction in lifecycle
13 greenhouse gas emissions than is required
14 under subparagraph (A) or (B) of paragraph
15 (2) for a particular compliance period to gen-
16 erate credits, based on—

17 “(i) the quantity of fuel provided; and

18 “(ii) the difference between—

19 “(I) the greater reduction in
20 lifecycle greenhouse gas emissions of
21 the fuel under subparagraph (A) or
22 (B) of paragraph (2); and

23 “(II) the minimum required re-
24 duction in lifecycle greenhouse gas

1 emissions of the fuel under that sub-
2 paragraph.

3 “(d) STATEMENT OF CONGRESSIONAL INTENT.—It
4 is the intent of Congress that, through implementation of
5 this section—

6 “(1) an incentive will be created for the use, in
7 lieu of gasoline, of fuels having lower lifecycle green-
8 house gas emissions; and

9 “(2) fuels with the lowest lifecycle greenhouse
10 gas emissions will continue over time—

11 “(A) to be improved;

12 “(B) to become widely-available and com-
13 petitive in the marketplace; and

14 “(C) to contribute to an overall reduction
15 in greenhouse gas emissions.

16 **“SEC. 253. GREENHOUSE GAS EMISSION REDUCTIONS**
17 **FROM AUTOMOBILES.**

18 “(a) VEHICLE EMISSIONS BASELINE.—Not later
19 than January 1, 2009, based on the aggregate quantity
20 and variety of new automobiles sold in the United States
21 during model year 2002 and the average greenhouse gas
22 emissions from those new automobiles, the Administrator
23 shall determine the average quantity of greenhouse gas
24 emissions per vehicle mile (referred to in this section as
25 the ‘new vehicle emissions baseline’).

1 “(b) SUBSEQUENT AVERAGE EMISSIONS FROM NEW
2 AUTOMOBILES.—Not later than June 1, 2015, and annu-
3 ally thereafter, based on the aggregate quantity and vari-
4 ety of new automobiles sold in the United States during
5 the preceding model year and the average greenhouse gas
6 emissions from those new automobiles during the pre-
7 ceding model year, the Administrator shall determine the
8 average quantity of greenhouse gas emissions per vehicle
9 mile for the model year.

10 “(c) REQUIRED REDUCTIONS IN GREENHOUSE GAS
11 EMISSIONS FROM AUTOMOBILES.—

12 “(1) IN GENERAL.—The Administrator shall,
13 by regulation, require each manufacturer of auto-
14 mobiles for sale in the United States to reduce the
15 average quantity of greenhouse gas emissions per ve-
16 hicle mile of the aggregate quantity and variety of
17 automobiles manufactured by the manufacturer to a
18 level that is—

19 “(A) for automobiles manufactured in
20 model year 2016, 30 percent less than the new
21 vehicle emissions baseline; and

22 “(B) not later than every fifth model year
23 thereafter, such percent as shall be specified by
24 the Administrator that is less than the average
25 quantity of greenhouse gas emissions per vehi-

1 ele mile required for the model year preceding
 2 that fifth model year, as determined by the Ad-
 3 ministrators under subsection (b).”.

4 **SEC. 3. OPTIMIZED DUAL FUELED VEHICLES.**

5 (a) OPTIMIZED DUAL FUELED AUTOMOBILES.—Sec-
 6 tion 32901(a) of title 49, United States Code, is amend-
 7 ed—

8 (1) by striking paragraph (2) and inserting the
 9 following:

10 “(2) ‘alternative fueled automobile’ means an
 11 automobile that is—

12 “(A) a dedicated automobile;

13 “(B) a dual fueled automobile; or

14 “(C) an optimized dual fueled auto-
 15 mobile.”; and

16 (2) by adding at the end the following:

17 “(17) ‘optimized dual fueled automobile’ means
 18 an automobile that—

19 “(A) is capable of operating on alternative
 20 fuel and on gasoline or diesel fuel;

21 “(B) can satisfactorily operate throughout
 22 a Federal testing procedure exclusively on alter-
 23 native fuel, when fueled with the maximum al-
 24 ternative fuel capacity, as determined by the

1 Administrator of the Environmental Protection
2 Agency; and

3 “(C) when operated on alternative fuel,
4 achieves an average fuel economy that is not
5 less than 20 percent greater, on a gallon of gas-
6 oline-equivalent energy basis, than the fuel
7 economy of the same automobile operated on
8 gasoline or diesel fuel.”.

9 (b) FUEL ECONOMY CALCULATION FOR OPTIMIZED
10 DUAL FUEL AUTOMOBILES.—Section 32905 of title 49,
11 United States Code, is amended—

12 (1) in subsection (b)—

13 (A) by redesignating paragraphs (1) and
14 (2) as subparagraphs (A) and (B), respectively,
15 and indenting the subparagraphs appropriately;

16 (B) by striking “title, for any” and insert-
17 ing “title—

18 “(1) for any”;

19 (C) in paragraph (1)(B) (as designated
20 and redesignated by subparagraphs (A) and
21 (B)), by striking “fuel.” and inserting “fuel;
22 and”; and

23 (D) by adding at the end the following:

24 “(2) for any model of dual fueled automobile
25 manufactured by a manufacturer in any of model

1 years 2011 through 2015, the Administrator of the
2 Environmental Protection Agency shall measure the
3 fuel economy for that model by dividing 1.0 by the
4 sum obtained by adding—

5 “(A) for optimized dual fueled automobiles,
6 the sum obtained by adding—

7 “(i) .5 divided by the fuel economy
8 measured under section 32904(c), when
9 operating the model on gasoline and diesel
10 fuel; and

11 “(ii) .5 divided by the fuel economy
12 measured under subsection (a), when oper-
13 ating the model on alternative fuel; and

14 “(B) for dual fueled automobiles other
15 than optimized dual fueled automobiles, values
16 that reflect the actual use of gasoline and diesel
17 fuel relative to alternative fuel in the models
18 based on a determination made by the Adminis-
19 trator, taking into account alternative fuel sales
20 and total number of models of dual fueled vehi-
21 cles other than optimized dual fueled auto-
22 mobiles.”; and

23 (2) by striking subsection (f).

24 (c) YEAR MODIFICATION.—Section 32906(a) of title
25 49, United States Code, is amended—

1 (1) in paragraph (1)—

2 (A) by striking “(1)(A) For” and inserting

3 “(1) For”;

4 (B) by striking “2010” and inserting

5 “2015”; and

6 (C) by striking subparagraph (B); and

7 (2) in paragraph (2), by striking

8 “described—” and all that follows through subpara-

9 graph (B) and inserting “described in paragraph (1)

10 is more than 1.2 miles per gallon, the limitation in

11 that paragraph shall apply.”.

12 (d) INCREASING CONSUMER AWARENESS OF ALTER-

13 NATIVE FUEL VEHICLES.—Section 32908 of title 49,

14 United States Code, is amended by adding at the end the

15 following:

16 “(g) INCREASING CONSUMER AWARENESS OF FLEXI-

17 BLE FUEL VEHICLES.—The Secretary of Transportation

18 shall promulgate regulations that—

19 “(1) require each manufacturer that manufac-

20 tures alternative fuel vehicles that run on fuels with

21 low lifecycle greenhouse gas emissions to install a

22 green-colored fuel cap on each alternative fuel vehi-

23 cle to distinguish the vehicle from vehicles that do

24 not use low lifecycle greenhouse gas-emitting alter-

25 native fuels; and

1 “(2) prohibit a manufacturer from installing a
2 green-colored fuel cap on an automobile manufac-
3 tured by the manufacturer that does not run on a
4 low lifecycle greenhouse gas-emitting alternative
5 fuel.”.

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