

110TH CONGRESS
1ST SESSION

H. R. 2215

To provide a reduction in the aggregate greenhouse gas emissions per unit of energy consumed by vehicles and aircraft, and for other purposes.

IN THE HOUSE OF REPRESENTATIVES

MAY 8, 2007

Mr. INSLEE (for himself, Mr. FARR, Ms. HIRONO, Mr. HONDA, Ms. LEE, Mr. MARKEY, Mr. GEORGE MILLER of California, Mr. PALLONE, and Mr. VAN HOLLEN) introduced the following bill; which was referred to the Committee on Energy and Commerce

A BILL

To provide a reduction in the aggregate greenhouse gas emissions per unit of energy consumed by vehicles and aircraft, 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. CLEAN AIR ACT AMENDMENT.**

4 The Clean Air Act (42 U.S.C. 7401 et seq.) is amend-
5 ed by adding at the end the following:

1 **“TITLE VII—GREENHOUSE GAS**
2 **EMISSIONS FROM VEHICLE**
3 **AND AIRCRAFT FUELS**

4 **“SEC. 701. PURPOSE.**

5 “The purpose of this title is to provide a reduction
6 in the aggregate greenhouse gas emissions per unit of en-
7 ergy consumed by vehicles and aircraft.

8 **“SEC. 702. FINDINGS.**

9 “The Congress finds that:

10 “(1) The United States consumes a quarter of
11 the world’s oil and the oil used in transportation ac-
12 counts for a third of the United States emissions of
13 the greenhouse gases that cause global warming.

14 “(2) To avoid catastrophic global warming, the
15 United States should take decisive action with other
16 nations to reduce greenhouse gas emissions by 60 to
17 80 percent by 2050.

18 “(3) Transitioning our transportation sector to
19 more efficient use of oil and low-carbon petroleum
20 alternatives is essential to reducing global warming
21 pollution.

22 “(4) It is necessary and feasible to reduce emis-
23 sions of greenhouse gases, enhance national security
24 by reducing dependence on oil and promote economic
25 well-being without sacrificing land, water and air

1 quality, by enacting energy policies that motivate en-
2 vironmental performance.

3 **“SEC. 703. DEFINITIONS.**

4 “For purposes of this title:

5 “(1) ADMINISTRATOR.—The term ‘Adminis-
6 trator’ means the Administrator of the Environ-
7 mental Protection Agency.

8 “(2) CARBON DIOXIDE EQUIVALENT.—With re-
9 spect to each greenhouse gas, the term ‘carbon diox-
10 ide equivalent’ means the amount of the greenhouse
11 gas resulting from that fuel that traps the same
12 amount of heat as one metric ton of carbon dioxide,
13 as determined by the Administrator.

14 “(3) GREENHOUSE GAS.—The term ‘greenhouse
15 gas’ means carbon dioxide, hydrofluorocarbons,
16 methane, nitrous oxide, perfluorocarbons, sulfur
17 hexafluoride, and any other anthropogenically-emit-
18 ted gas that is determined by the Administrator,
19 after notice and comment, to contribute to global
20 warming to a non-negligible degree.

21 “(4) LIFECYCLE GREENHOUSE GAS EMIS-
22 SIONS.—The term ‘lifecycle greenhouse gas emis-
23 sions’ means greenhouse gases emitted during the
24 entire cycle of extraction, cultivation, production,
25 manufacturing, feedstock extraction, marketing, and

1 distribution for a fuel or other sources of energy, as
2 well as those emitted during the use of such fuels
3 and sources by vehicles and aircraft. The term in-
4 cludes changes in land use and land cover associated
5 with each phase of such cycle.

6 “(5) VEHICLE.—The term ‘vehicle’ means a
7 motor vehicle as defined in section 216 and any
8 other device used for the transportation of persons
9 or goods (other than an aircraft).

10 **“SEC. 704. LOW CARBON FUEL PERFORMANCE STANDARDS.**

11 “(a) VEHICLE FUEL STANDARD.—Not later than
12 January 1, 2010, the Administrator shall promulgate low
13 carbon fuel performance standards for fuels and other
14 sources of energy used to propel vehicles. Such standards
15 shall begin to apply in the year 2015.

16 “(b) GRADUATED REDUCTIONS FOR VEHICLE
17 FUEL.—The Administrator shall promulgate, by rule, a
18 declining standard for each 5 calendar year period begin-
19 ning in 2015. Each such standard shall represent a grad-
20 uated percentage reduction in aggregate emissions of
21 greenhouse gases per Btu in each 5-year period after 2014
22 through 2050 as provided in the following table. The re-
23 duction for each such period shall be measured from the
24 baseline for vehicle fuel, as determined by the Adminis-
25 trator under subsection (f).

“5-year period	Percent reduction
2015 through 2019	3 percent
2020 through 2024	6 percent
2025 through 2029	9 percent
2030 through 2034	12 percent
2035 through 2039	15 percent
2040 through 2044	18 percent
2045 through 2049	21 percent.

1 “(c) **ADDITIONAL REDUCTIONS.**—Each 5 years dur-
2 ing the period 2015 through 2050 the Administrator shall
3 review available control technology, safety considerations,
4 and land and other resources available for production of
5 fuels and other sources of energy used to propel vehicles.
6 Following such review, the Administrator may, by rule,
7 promulgate a more stringent standard than the standard
8 otherwise applicable under subsection (b) which more
9 stringent standard, based on such review, the Adminis-
10 trator determines to be requisite to protect the public
11 health and welfare from any known or anticipated adverse
12 effects associated with greenhouse gas emissions.

13 “(d) **STANDARD FOR AIRCRAFT FUEL.**—Not later
14 than January 1, 2010, the Administrator shall promulgate
15 a low carbon fuel performance standard for fuels and
16 other sources of energy used by aircraft. The performance
17 standard for such fuels and other sources of energy for
18 aircraft for each year after 2015 shall be the baseline for
19 that fuel, as determined by the Administrator under sub-
20 section (f). Such standard shall begin to apply in the year
21 2015 and continue to apply through the calendar year

1 2019. The standard shall remain in effect thereafter un-
2 less, for each 5 year period thereafter, beginning in 2020,
3 the Administrator and the Secretary of Transportation de-
4 termine that a more stringent standard is necessary to
5 carry out the purposes of this Act. Such determination
6 may be made only after a thorough review of available
7 technology and safety considerations. Following such de-
8 termination, the Administrator shall promulgate a rule es-
9 tablishing a more stringent standard.

10 “(e) TERMS OF STANDARDS.—Each standard under
11 this section shall be expressed in carbon dioxide, or carbon
12 dioxide equivalent, emissions per Btu of energy from the
13 aggregate of all fuels and other sources of energy used
14 by vehicles or by aircraft.

15 “(f) BASELINE.—

16 “(1) VEHICLE FUEL.—The baseline for vehicle
17 fuel for purposes of the standards under this section
18 shall be the aggregate greenhouse gas emissions per
19 Btu from all such fuel and other sources of energy
20 used by vehicles in calendar year 2007, as deter-
21 mined by the Administrator.

22 “(2) AIRCRAFT FUEL.—For fuel used by air-
23 craft, the baseline for purposes of the standard
24 under this section shall be the aggregate greenhouse
25 gas emissions per Btu from all such fuel and other

1 sources of energy used by aircraft in calendar year
2 2007, as determined by the Administrator.

3 **“SEC. 705. EPA REGULATIONS; CALCULATION OF EMIS-**
4 **SIONS PER BTU.**

5 “(a) REGULATIONS.—After consultation with the
6 Secretary of Energy and the Secretary of Commerce, and
7 a review of all compliance methods, the Administrator,
8 after notice and opportunity for comment, shall promul-
9 gate, not later than January 1, 2010, and may periodically
10 revise thereafter, regulations requiring compliance with
11 the annual performance standards established under sec-
12 tion 703.

13 “(b) CALCULATIONS OF GREENHOUSE EMISSION
14 RATE PER BTU.—

15 “(1) INDIVIDUAL CALCULATIONS UNDER
16 STANDARD METHODOLOGY.—The regulations under
17 this section shall provide standard, transparent and
18 public methods for each producer, importer, or
19 blender of a fuel or other source of energy used, di-
20 rectly or indirectly, as a fuel for vehicles or aircraft
21 to calculate the greenhouse gases emitted per Btu of
22 such fuel or other source of energy when so used.

23 “(2) LIFECYCLE GREENHOUSE GAS EMISSION
24 CALCULATION.—The regulations under this section
25 shall include appropriate methods for estimating the

1 lifecycle greenhouse gas emissions of each fuel and
2 other energy source. For purposes of such regula-
3 tions, the Administrator shall develop methods to
4 quantify the direct and indirect emissions resulting
5 from biofuel production.

6 “(3) SPECIAL ADJUSTMENT FOR ELECTRICITY
7 AND HYDROGEN.—In making the calculation under
8 this subsection, the Administrator shall adjust the
9 Btus of energy delivered from the use of electricity
10 and hydrogen used as a fuel or source of energy for
11 vehicles and aircraft. Such adjustment shall reflect
12 the greenhouse gas reductions on a per mile basis in
13 order to reflect the inherent energy efficiency of an
14 average battery electric, plug in hybrid electric vehi-
15 cle, or hydrogen fuel cell vehicle.

16 “(4) NAS REPORT.—The Administrator shall,
17 not less than 90 days after the enactment of this
18 Act, enter into a contract with the National Acad-
19 emy of Sciences to assess and recommend methods
20 to calculate the lifecycle greenhouse gas emissions
21 associated with the production and use of fuels and
22 other sources of energy used as a fuel for vehicles
23 and aircraft.

24 “(5) CONSULTATION.—In developing regula-
25 tions under this section, the Administrator shall con-

1 sult with State agencies and other government enti-
2 ties within and outside the United States having
3 programs for control of greenhouse gas emissions
4 from vehicle fuels and shall promulgate such regula-
5 tions after consideration of the report under para-
6 graph (4).

7 **“SEC. 706. COMPLIANCE WITH STANDARD.**

8 “(a) REQUIREMENT TO MEET STANDARD.—The reg-
9 ulations under this title shall provide that each producer,
10 importer or blender of a fuel or other source of energy
11 used for transportation by vehicles or aircraft shall be re-
12 quired to generate or obtain in each calendar year after
13 2009 credits equal to the excess, if any, of paragraph (1)
14 over paragraph (2) multiplied by paragraph (3). No pro-
15 ducer, importer, or blender shall be required to obtain
16 credits if the fuel or other source of energy meets the ag-
17 gregate performance standard under section 703 for the
18 calendar year concerned.

19 “(1) The greenhouse gases (expressed as carbon
20 dioxide or carbon dioxide equivalent) emitted per
21 Btu of fuel or other energy produced, imported, or
22 blended by such producer, importer, or blender in
23 the calendar year concerned.

1 “(2) The aggregate performance standard for
2 all such producers, importer, or blenders established
3 under section 703 for the calendar year concerned.

4 “(3) The total number of Btus used in vehicles
5 and aircraft that is provided by the fuel or other en-
6 ergy produced, imported, or blended by such pro-
7 ducer, importer or blender in the year concerned.

8 “(b) GENERATION, TRADING, AND BANKING OF
9 CREDITS.—

10 “(1) CREDIT GENERATION.—For each calendar
11 year after the calendar year 2014, each producer,
12 importer or blender of each fuel or other source of
13 energy used, for transportation by vehicles or air-
14 craft shall be credited with greenhouse gas emission
15 credits equal to the excess, if any, of paragraph (2)
16 of subsection (a) over paragraph (1) of subsection
17 (a) multiplied by paragraph (3) of subsection (a).

18 “(2) TRADING.—The regulations under this
19 section shall allow purchase, sale, and trading of
20 such allowance producers, importers and blenders,
21 and other persons. Credits generated this section
22 may be held and traded by any person. Credits
23 under this section do not constitute a property right,
24 and nothing in any provision of law shall be con-

1 strued to limit the authority of the United States to
2 terminate or limit any such credit.

3 “(3) BANKING.—Credits generated under this
4 section may be used in the year in which they are
5 generated and in the following calendar year.

6 “(c) MONITORING.—The Administrator shall promul-
7 gate rules to ensure that greenhouse gas emissions and
8 the use of credits generated under this section are accu-
9 rately tracked, reported, and verified.

10 “(d) ENFORCEMENT.—

11 “(1) IN GENERAL.—If any fuel or other source
12 of energy used, directly or indirectly, by vehicles ex-
13 ceeds in any calendar year the standard established
14 under this section and the producer, importer or
15 blender thereof has not acquired credits to offset
16 such excess, the producer, importer or blender shall
17 pay a civil penalty in an amount determined under
18 paragraph (2).

19 “(2) AMOUNT OF CIVIL PENALTY.—The amount
20 of the civil penalty under this subsection shall be
21 twice the market price for the credits that would be
22 necessary for such producer, blender, or importer to
23 meet the standard for the fuel or energy source con-
24 cerned. The Administrator shall establish the meth-
25 od of determining such market price.

1 “(3) NO DEMAND REQUIRED.—A civil penalty
2 under this subsection shall be due and payable to
3 the Administrator without demand.

4 “(4) CIVIL ACTION.—The Administrator may
5 bring a civil action in the appropriate United States
6 district court to recover the amount of any civil pen-
7 alty due and payable under this subsection.

8 **“SEC. 707. CERTIFICATION AND LABELING OF LOW-CARBON**
9 **TRANSPORTATION FUELS.**

10 “(a) IDENTIFICATION.—Not later than January 1,
11 2009, the Administrator shall identify and label low-car-
12 bon transportation fuels based on the following criteria.

13 “(1) The fuel is responsible for at least 20 per-
14 cent lower lifecycle greenhouse gas emissions per
15 Btu delivered compared to the 2007 baseline.

16 “(2) The fuel is likely to have fewer adverse im-
17 pacts on wildlife habitat, biodiversity, water quality
18 or air quality over the lifecycle of the fuel, than con-
19 ventional transportation fuels.

20 “(3) The fuel achieves reduction in petroleum
21 content over its lifecycle.

22 In the case of electric energy and hydrogen used, directly
23 or indirectly, as a fuel or source of energy for vehicles,
24 the Administrator shall apply the special adjustment fac-

1 tor referred to in section 705(b)(3) in identifying low-car-
2 bon transportation fuels.

3 “(b) CERTIFICATION.—Not later than January 1,
4 2009, the Administrator shall establish a low-carbon fuel
5 certification process to certify fuels that the Administrator
6 has identified as low-carbon fuels, make that certification
7 information available to consumers. Under regulations
8 promulgated by the Administrator any person manufac-
9 turing, importing, or distributing low-carbon fuels may
10 provide labeling for such fuels in accordance with regula-
11 tions promulgated by the Administrator and promote pub-
12 lic awareness of those fuels.

13 **“SEC. 708. FUEL SAFEGUARDS.**

14 “(a) DEFINITIONS.—As used in this section:

15 “(1) The term ‘Community Fire Safety Zone’
16 means the immediate vicinity of buildings and other
17 areas regularly occupied by people, or of infrastruc-
18 ture, at risk of wildfire.

19 “(2) The term ‘Ecosystem conversion’ means
20 altering the native habitat to such an extent that it
21 no longer supports most characteristic native species
22 and ecological processes.

23 “(3) The term ‘native habitat’ means dynamic
24 groupings of native plant and animal communities
25 that occur together on the landscape or in the water

1 and are tied together by similar ecological processes,
2 underlying environmental features such as geology,
3 or environmental gradients such as elevation, but
4 does not include land that is currently in agricul-
5 tural production.

6 “(4) NATIONAL INTEREST LANDS.—The term
7 ‘National interest lands’ means areas designated as
8 national wildlife refuges, national forests, or national
9 grasslands, areas managed by the National Park
10 Service (including national parks and monuments),
11 and lands managed by the Bureau of Land Manage-
12 ment.

13 “(5) The term ‘Community Fire Safety Zone’
14 means the immediate vicinity of buildings and other
15 areas regularly occupied by people, or of infrastruc-
16 ture, at risk of wildfire.

17 “(6) The term ‘Sensitive Lands’ means old
18 growth forests; roadless areas on national forests,
19 wilderness study areas; native grasslands; intact,
20 rare, threatened or endangered ecosystems; and any
21 area containing significant concentrations of bio-
22 diversity values including endemism, endangered
23 species, high species richness, and refugia.

24 “(b) IN GENERAL.—Under regulations of the Admin-
25 istrator, no transportation fuel sold in interstate com-

1 merce after January 1, 2010 may be derived all or in part
2 from biomass from the following sources:

3 “(1) Lands where the Administrator determines
4 that ecosystem conversion has occurred after the
5 date of the enactment of this Act.

6 “(2) Sensitive Lands.

7 “(3) Land enrolled in the Conservation Reserve
8 Program established under subchapter B of chapter
9 1 of subtitle D of title XII of the Food Security Act
10 of 1985 (16 U.S.C. 3831 et seq.) or the wetlands re-
11 serves program established under subchapter C of
12 chapter 1 of subtitle D of title XII of the Food Se-
13 curity Act of 1985 (16 U.S.C. 3837 et seq.), unless
14 the biomass is produced in a manner consistent with
15 all applicable guidelines and terms, and conditions
16 under the program.

17 “(4) National interest lands with the exception
18 of either of the following:

19 “(A) Harvest residue, mill waste, or pre-
20 commercial thinnings, from lands assigned to
21 timber production.

22 “(B) Biomass obtained from a Community
23 Fire Safety Zone.

1 “(5) Recyclable postconsumer waste paper,
2 painted, treated, or pressurized wood, wood contami-
3 nated with plastic or metals.

4 “(6) Municipal solid waste (as defined in the
5 Solid Waste Disposal Act).

6 “(7) Materials produced, harvested, acquired,
7 transported, or processed pursuant to an exemption
8 from otherwise applicable environmental laws or
9 rules.

10 **“SEC. 709. AIR QUALITY IMPACTS.**

11 “(a) IN GENERAL.—The Administrator shall ensure,
12 under regulation, that no transportation fuel sold or intro-
13 duced in interstate commerce after January 1, 2010 shall
14 result in—

15 “(1) average per gallon vehicle emissions (meas-
16 ure on a mass basis) of air pollutants in excess of
17 the quantity of those emissions attributable to gaso-
18 line sold or introduced into commerce in the United
19 States during calendar year 2007; or

20 “(2) a violation of any motor vehicle emission
21 or fuel content limitation under any other provision
22 of this Act.

23 **“SEC. 710. RESEARCH AND DEVELOPMENT FUNDING.**

24 ““There is authorized to be appropriated to the Sec-
25 retary of Energy such sums as may be necessary carry

1 out a cooperative program of research and development
2 relating to lower carbon alternatives for aircraft jet fuel
3 and fuel for other vehicles. The program shall provide for
4 matching Federal grants to private entities carrying out
5 such research and development.

6 **“SEC. 711. STATE LAWS.**

7 “Nothing in this title shall be interpreted to preempt
8 or limit State actions to address climate change.”.

