

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).

<b>“5-year period</b>	<b>Percent reduction</b>
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 during the period 2015 through 2050 the Administrator shall review available control technology, safety considerations, and land and other resources available for production of fuels and other sources of energy used to propel vehicles. Following such review, the Administrator may, by rule, promulgate a more stringent standard than the standard otherwise applicable under subsection (b) which more stringent standard, based on such review, the Administrator determines to be requisite to protect the public health and welfare from any known or anticipated adverse effects associated with greenhouse gas emissions.

13       “(d) **STANDARD FOR AIRCRAFT FUEL.**—Not later than January 1, 2010, the Administrator shall promulgate a low carbon fuel performance standard for fuels and other sources of energy used by aircraft. The performance standard for such fuels and other sources of energy for aircraft for each year after 2015 shall be the baseline for that fuel, as determined by the Administrator under subsection (f). Such standard shall begin to apply in the year 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.”.

○