110TH CONGRESS
1ST SESSION

S. 1297

To amend the Clean Air Act to promote the use of advanced clean fuels that help reduce air and water pollution and protect the environment.

IN THE SENATE OF THE UNITED STATES

MAY 3, 2007

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

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A BILL

To amend the Clean Air Act to promote the use of advanced clean fuels that help reduce air and water pollution and protect the environment.

Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled,

SECTION 1. SHORT TITLE.

This Act may be cited as the ''Advanced Clean Fuels Act of 2007''.

SEC. 2. FINDINGS.

Congress finds that—

(1) oil used for transportation contributes significantly to air pollution, including global warming

pollution, water pollution, and other adverse impacts on the environment;

(2) to reduce dangerous air and water pollution and other adverse environmental impacts, the United States should increasingly rely on advanced clean fuels for transportation;

(3) fuels vary considerably with respect to—

(A) the potential impact of the fuels on air and water pollution based on the type and quantity of pollutants that result from the production, distribution, and use of the fuel; and

(B) the potential impact of the fuels on other aspects of the environment, including soil quality, land conservation, wildlife habitat, and water scarcity; and

(4) it is urgent, necessary, and feasible to increase the proportion of clean renewable fuels in the United States transportation fuel supply in a manner that—

(A) promotes environmental protection;

(B) avoids environmental harm; and

(C) is economically efficient.

SEC. 3. DEFINITIONS.

Section 211(o)(1) of the Clean Air Act (42 U.S.C. 7545(o)(1)) is amended—

(1) by redesignating subparagraphs (A) through (D) as subparagraphs (C), (P), (L), and (M), respectively;

(2) by inserting before subparagraph (C) (as redesignated by paragraph (1)) the following:

"(A) ACADEMY.—The term 'Academy' means the National Academy of Sciences.

"(B) ADVERSE LIFECYCLE IMPACT.—The term 'adverse lifecycle impact' means, with respect to increases in the volume of renewable fuel sold or dispensed to consumers in the United States for a calendar year, that the increases, as determined by the Administrator, would reasonably be anticipated—

"(i) to result in an inconsistency or material interference with the implementation of or compliance with any Federal environmental law (including a regulation);

"(ii) to result in a material increase in—

"(I) air pollution, including global warming pollution;

"(II) water pollution; or

"(III) human exposure to pesticides;

''(iii) to result in a substantial increase in deforestation on a global or national scale;

''(iv) to result in a substantial adverse effect on land conservation and wildlife habitat;

''(v) to result in any other substantial adverse effect on the environment;

''(vi) to result in a substantial adverse effect on food or feed production or prices, as determined in consultation with the Secretary of Agriculture;

''(vii) to result in a substantial adverse effect on long-term agricultural productivity, including effects on soils and water resources, as determined in consultation with the Secretary of Agriculture; or

''(viii) not to increase the supply of clean, domestic energy;'';

(3) in subparagraph (C) (as redesignated by paragraph (1)), by striking clause (viii) and inserting the following:

''(viii) separated food waste, yard waste, and lawn debris recovered from municipal solid waste.'';

(4) by inserting after subparagraph (C) (as redesignated by paragraph (1)) the following:

"(D) CONVENTIONAL TRANSPORTATION FUEL.—The term 'conventional transportation fuel' means any fossil-fuel-based transportation fuel used in the United States as of the date of enactment of the Advanced Clean Fuels Act of 2007.

"(E) ECOSYSTEM CONVERSION.—The term 'ecosystem conversion' means an alteration of an ecologically significant native habitat (including modification of hydrology and dominant vegetative and other species) to an extent at which the native habitat no longer supports most dominant native species or ecological processes.

"(F) FIREWISE ZONE.—The term 'firewise zone' means the immediate vicinity of a building or other area regularly occupied by individuals, or any public infrastructure, that is at risk of wildfire.

"(G) FUEL EMISSION BASELINE.—The term 'fuel emission baseline' means the average lifecycle greenhouse gas emissions per unit of energy of the fossil fuel component of conven-

tional transportation fuels in commerce in the United States in calendar year 2008, as determined by the Administrator under paragraph (11).

''(H) FUEL PROVIDER.—

''(i) IN GENERAL.—The term 'fuel provider' means an obligated party (as described in section 80.1106 of title 40, Code of Federal Regulations (or a successor regulation)).

''(ii) INCLUSIONS.—The term 'fuel provider' includes, as the Administrator determines to be appropriate, an individual or entity that produces, blends, or imports gasoline or any other transportation fuel in commerce in, or into, the United States.

''(I) GREENHOUSE GAS.—The term 'greenhouse gas' means any of—

''(i) carbon dioxide;

''(ii) methane;

''(iii) nitrous oxide;

''(iv) hydrofluorocarbons;

''(v) perfluorocarbons; and

''(vi) sulfur hexafluoride.

"(J) LIFECYCLE GREENHOUSE GAS EMISSIONS.—The term 'lifecycle greenhouse gas emissions' means, with respect to a transportation fuel, the aggregate quantity of greenhouse gases emitted, directly or indirectly, during production, feedstock production or extraction, distribution, marketing, and use of the transportation fuel, or waste disposal relating to the transportation fuel, as determined by the Administrator under paragraph (11)(B).

"(K) NATIVE HABITAT.—

"(i) IN GENERAL.—The term 'native habitat' means dynamic groupings of native plant and animal communities that—

"(I) occur together on a landscape or in water; and

"(II) are connected through—

"(aa) similar ecological processes;

"(bb) underlying environmental features, such as geology; or

"(cc) environmental gradients, such as elevation.

''(ii) EXCLUSION.—The term 'native habitat' does not include land that is or has been under agricultural production.'';

(5) in clause (i) of subparagraph (L) (as redesignated by paragraph (1)), by striking ''The term'' and inserting ''Except as otherwise provided in this subsection, the term'';

(6) by inserting after subparagraph (M) (as redesignated by paragraph (1)) the following:

''(N) TECHNICALLY INFEASIBLE.—The term 'technically infeasible', with respect to compliance with a standard or requirement under this subsection, means that adequate technology or infrastructure is not reasonably anticipated to exist within a sufficient time to permit compliance with the standard or requirement.

''(O) TRANSPORTATION FUEL.—The term 'transportation fuel' means fuel used to power motor vehicles, nonroad engines, or aircraft.''.

SEC. 4. ADVANCED CLEAN FUEL PROGRAM.

(a) ADVANCED CLEAN FUEL PERFORMANCE STANDARD.—Section 211(o) of the Clean Air Act (42 U.S.C. 7545(o)) is amended by adding at the end the following:

"(11) ADVANCED CLEAN FUEL PERFORMANCE STANDARD.—

"(A) DEFINITIONS.—In this paragraph:

"(i) NATIONAL INTEREST LAND.—The term 'national interest land' includes land that is within the National Wildlife Refuge System, the National Park System, a National Monument, the National Wilderness Preservation System, the National Landscape Conservation System, or the National Forest System, that is Bureau of Land Management land protected by statute, proclamation, or regulation from commercial timber activities, or that is endangered or threatened species habitat, an old-growth forest, or an inventoried roadless area.

"(ii) PHASE II RENEWABLE FUEL.—The term 'phase II renewable fuel' means renewable fuel the lifecycle greenhouse gas emissions of which are 50 percent to 74 percent lower than the fuel emission baseline.

"(iii) PHASE III RENEWABLE FUEL.—The term 'phase III renewable fuel' means

renewable fuel the lifecycle greenhouse gas emissions of which are at least 75 percent lower than the fuel emission baseline.

"(iv) RENEWABLE BIOMASS.—

"(I) IN GENERAL.—The term 'renewable biomass' means any organic matter that is available on a renewable or recurring basis.

"(II) INCLUSIONS.—The term 'renewable biomass' includes—

"(aa) renewable plant material, including—

"(AA) feed grains;

"(BB) other agricultural commodities;

"(CC) other plants and trees grown for energy production; and

"(DD) algae; and

"(bb) waste material, including—

"(AA) crop residue;

"(BB) other vegetative waste material (including

wood waste and wood residues);

"(CC) animal waste and byproducts (including fats, oils, greases, and manure); and

"(DD) separated food waste, yard waste, and lawn debris recovered from municipal solid waste.

"(III) EXCLUSIONS.—The term 'renewable biomass' does not include biomass derived from—

"(aa) land on which ecosystem conversion has occurred after the date of enactment of the Advanced Clean Fuels Act of 2007, as determined by the Administrator;

"(bb) land enrolled in the conservation reserve program established under subchapter B of chapter 1 of subtitle D of title XII of the Food Security Act of 1985 (16 U.S.C. 3831 et seq.) or

the wetlands reserve program established under subchapter C of chapter 1 of subtitle D of title XII of the Food Security Act of 1985 (16 U.S.C. 3837 et seq.), unless the biomass is produced in a manner consistent with all applicable guidelines, and terms and conditions of any applicable contract, under the program;

''(cc) any national interest land (other than land in a firewise zone), except for harvest residue, mill waste, or pre-commercial thinnings derived from national interest land assigned to timber production;

''(dd) recyclable postconsumer waste paper;

''(ee) painted, treated, or pressurized wood;

''(ff) wood contaminated with plastic or metals; or

''(gg) any material produced, harvested, acquired, trans-

ported, or processed pursuant to an exemption from otherwise applicable Federal environmental laws (including regulations).

''(v) RENEWABLE FUEL.—

''(I) IN GENERAL.—The term 'renewable fuel' means transportation fuel that is not an ether and that—

''(aa)(AA) is produced from renewable biomass; or

''(BB) is natural gas produced from a biogas source, including a landfill, sewage waste treatment plant, feedlot, or other place where decaying organic material is found;

''(bb) is used to replace or reduce the quantity of fossil fuel present in a fuel mixture used for transportation; and

''(cc) has lifecycle greenhouse gas emissions that are at least 20 percent lower than the fuel emission baseline.

"(II) INCLUSION.—The term 'renewable fuel' includes fuel meeting the criteria in subclause (I) that is—

"(aa) cellulosic biomass ethanol and waste derived ethanol;

"(bb) biodiesel (as defined in section 312(f) of the Energy Policy Act of 1992 (42 U.S.C. 13220(f))) and any blending components derived from renewable fuel (provided that only the renewable fuel portion of any such blending component shall be considered part of the applicable volume under the renewable fuel program established by this subsection); or

"(cc) fuel produced from pyrolysis or thermal conversion of renewable biomass.

"(B) STANDARD.—

"(i) IN GENERAL.—Not later than January 1, 2010, the Administrator shall, by regulation—

"(I) establish a methodology for use in determining the lifecycle greenhouse gas emissions of transportation fuel in commerce, including—

"(aa) conventional transportation fuel; and

"(bb) renewable fuel;

"(II) determine the fuel emission baseline;

"(III) establish a transportation fuel certification and marketing process—

"(aa) to certify fuels that qualify as renewable fuel under this paragraph;

"(bb) to determine the lifecycle greenhouse gas emissions of conventional transportation fuels and renewable fuels being sold or introduced into commerce in the United States; and

"(cc) to label and market conventional transportation fuel

and renewable fuel in a manner that indicates—

"(AA) the status of the fuel as conventional transportation fuel or renewable fuel; and

"(BB) the lifecycle greenhouse gas emissions of the fuel; and

"(IV) in accordance with clause (ii), establish a requirement applicable to each fuel provider to reduce the average lifecycle greenhouse gas emissions per unit of energy of the aggregate quantity of transportation fuel produced, blended, or imported by the fuel provider to a level that is, to the maximum extent practicable—

"(aa) by not later than calendar year 2011, at least equal to or less than the fuel emission baseline;

"(bb) by not later than calendar year 2015, 5 percent less

than the fuel emission baseline; and

"(cc) by not later than calendar year 2020, 10 percent less than the fuel emission baseline.

"(ii) MAXIMUM REDUCTIONS.—

"(I) IN GENERAL.—In determining the maximum practicable level of reduction under clause (i)(IV), the Administrator shall—

"(aa) take into consideration the results of the applicable study carried out under paragraph (12); and

"(bb) determine whether a level of reduction—

"(AA) is technically infeasible; or

"(BB) would result in 1 or more adverse lifecycle impacts that cannot be adequately mitigated through regulatory or nonregulatory measures under subclause (II).

"(II) MITIGATION.—

"(aa) IN GENERAL.—For the purpose of making a determination under subclause (I)(bb)(BB), the Administrator, in consultation with the heads of other appropriate Federal agencies, shall use the existing authorities of the Administrator to mitigate, to the maximum extent practicable, using regulatory or nonregulatory approaches as the Administrator determines to be appropriate, adverse lifecycle impacts in accordance with a schedule that ensures that mitigation measures are in place by a date sufficient to avoid adverse lifecycle impacts.

"(bb) AIR QUALITY IMPACTS.—For the purpose of this subclause, in the case of any air quality-related adverse lifecycle impact resulting from emissions from motor vehicles using renew-

able fuel, the Administrator shall ensure, by regulation promulgated under this title, that gasoline containing renewable fuel does not result in—

"(AA) average per-gallon motor vehicle emissions (measured on a mass basis) of air pollutants in excess of those emissions attributable to gasoline sold or introduced into commerce in the United States in calendar year 2007; or

"(BB) a violation of any motor vehicle emission or fuel content limitation under any other provision of this Act.

"(iii) CALENDAR YEAR 2025 AND THEREAFTER.—For calendar year 2025, and each fifth calendar year thereafter, the Administrator, in consultation with the Secretary of Agriculture and the Secretary of Energy, shall revise the applicable per-

formance standard to require that each fuel provider shall additionally reduce, to the maximum extent practicable, the average lifecycle greenhouse gas emissions per unit of energy of the aggregate quantity of transportation fuel introduced by the fuel provider into commerce in the United States.

''(iv) REVISION OF REGULATIONS.—In accordance with the purposes of the Advanced Clean Fuels Act of 2007, the Administrator may, as appropriate, revise the regulations promulgated under clause (i) as necessary to reflect or respond to changes in the transportation fuel market or other relevant circumstances.

''(v) METHOD OF CALCULATION.—In calculating the lifecycle greenhouse gas emissions of hydrogen or electricity (when used as a transportation fuel) pursuant to clause (i)(I), the Administrator shall—

''(I) include emissions resulting from the production of the hydrogen or electricity; and

"(II) consider to be equivalent to the energy delivered by 1 gallon of ethanol the energy delivered by—

"(aa) 6.4 kilowatt-hours of electricity;

"(bb) 132 standard cubic feet of hydrogen; or

"(cc) 1.25 gallons of liquid hydrogen.

"(C) ELECTION TO PARTICIPATE.—An electricity provider may elect to participate in the program under this section if the electricity provider—

"(i) provides and separately tracks electricity for transportation through a meter that—

"(I) measures the electricity used for transportation separately from electricity used for other purposes; and

"(II) allows for load management and time-of-use rates; and

"(ii) generates more than 15 percent of the electricity sold by the electricity provider from renewable energy sources.

''(D) CREDITS.—

''(i) IN GENERAL.—The regulations promulgated to carry out this paragraph shall permit fuel providers to receive credits for achieving, during a calendar year, greater reductions in lifecycle greenhouse gas emissions of the fuel produced, blended, or imported by the fuel provider than are required under subparagraph (B)(i)(IV).

''(ii) METHOD OF CALCULATION.—The number of credits received by a fuel provider as described clause (i) for a calendar year shall be calculated by multiplying—

''(I) the aggregate quantity of fuel produced, distributed, or imported by the fuel provider in the calendar year; and

''(II) the difference between—

''(aa) the lifecycle greenhouse gas emissions of that quantity of fuel; and

''(bb) the maximum lifecycle greenhouse gas emissions of that

quantity of fuel permitted for the calendar year under subparagraph (B)(i)(VI).

"(E) COMPLIANCE.—Each fuel provider subject to this paragraph shall demonstrate compliance with this paragraph, including, as necessary, through the use of credits banked or purchased.

"(F) NO EFFECT ON STATE AUTHORITY OR MORE STRINGENT REQUIREMENTS.—Nothing in this subsection—

"(i) affects the authority of a State to establish, or to maintain in effect, any transportation fuel performance standard or other similar standard that is more stringent than a standard established under this paragraph; or

"(ii) supercedes or otherwise affects any more stringent requirement under any other provision of this Act.".

(b) ADVANCED CLEAN FUEL VOLUME STANDARD.—Section 211(o)(2) of the Clean Air Act (42 U.S.C. 7545(o)(2)) is amended—

(1) in subparagraph (B)—

(A) by striking the subparagraph designation and heading and all that follows through ''For the purpose'' and inserting the following:

''(B) APPLICABLE VOLUME.—For the purpose''; and

(B) by striking clauses (ii) through (iv); and

(2) by adding at the end the following:

''(C) ADVANCED CLEAN FUEL VOLUME STANDARD.—

''(i) DEFINITION OF RENEWABLE FUEL.—In this subparagraph, the term 'renewable fuel' has the meaning given the term in paragraph (11).

''(ii) INCREASE IN RENEWABLE FUEL VOLUME.—

''(I) IN GENERAL.—Unless, based on the results of the study carried out under paragraph (12), the Administrator determines that the total applicable volume of renewable fuel specified in clause (iii) for a calendar year would be technically infeasible, or would result in 1 or more adverse lifecycle impacts that cannot be

adequately mitigated under subclause (V), the Administrator shall promulgate regulations that require the aggregate quantity of transportation fuel sold or introduced into commerce in the United States to contain such volume of renewable fuel as the Administrator determines will result in the total minimum volume for the calendar year specified in clause (iii).

''(II) INCREASE.—If the Administrator makes a determination under subclause (I), the Administrator may promulgate regulations that require such increase in the aggregate quantity of transportation fuel sold or introduced into commerce in the United States as the Administrator determines to be appropriate, with respect to the determination under subclause (I).

''(III) SCHEDULE OF REGULATIONS.—In implementing subclauses (I) and (II), the Administrator shall—

"(aa) not later than January 1, 2010, promulgate regulations establishing any total applicable volume requirements for calendar years 2011 through 2013; and

"(bb) not later than January 1, 2013, and every 3 years thereafter, promulgate regulations establishing any total applicable volume requirements for the 3-calendar-year period beginning with the calendar year after the calendar year in which the regulations are promulgated.

"(IV) EFFECTIVE DATE.—The regulations promulgated under subclauses (I) and (II) shall take effect not sooner than 1 year after the date of promulgation of the regulations.

"(V) MITIGATION.—

"(aa) IN GENERAL.—For purposes of this clause, the Administrator, in consultation with the heads of other appropriate

Federal agencies, shall use the existing authorities of the Administrator to mitigate, to the maximum extent practicable, using regulatory or nonregulatory approaches as the Administrator determines to be appropriate, adverse lifecycle impacts in accordance with a schedule that ensures that mitigation measures are in place by a date sufficient to avoid adverse lifecycle impacts.

''(bb) AIR QUALITY IMPACTS.—For the purpose of this subclause, in the case of any air quality-related adverse lifecycle impact resulting from emissions from motor vehicles using renewable fuel, the Administrator shall ensure, by regulation, that gasoline containing renewable fuel does not result in—

''(AA) average per gallon motor vehicle emissions (measured on a mass basis)

of air pollutants in excess of the quantity of those emissions attributable to gasoline sold or introduced into commerce in the United States during calendar year 2007; or

''(BB) a violation of any motor vehicle emission or fuel content limitation under any other provision of this Act.

''(iii) TOTAL ADVANCED CLEAN FUEL VOLUME.—

''(I) CALENDAR YEARS 2011 THROUGH 2025.—For the purpose of clause (ii), the total applicable volumes for any of calendar years 2011 through 2025 (including the minimum additional volumes required under subparagraph (B)) shall be determined in accordance with the following table:

Calendar year	Total applicable volume of renewable fuel (in billions of gallons)	Total volume of phase II renewable fuel (in billions of gallons)	Total volume of phase III renewable fuel (in billions of gallons)
2011	12.0	0	0
2012	14.0	0.5	0.25
2013	16.0	0.5	0.25
2014	18.0	1.5	0.75
2015	20.0	1.5	0.75
2016	22.0	3.0	1.5
2017	24.0	3.0	1.5
2018	26.0	5.0	2.5
2019	28.0	5.0	2.5
2020	30.0	8.0	4.0
2021	31.0	8.0	4.0
2022	32.0	11.0	6.0
2023	33.0	11.0	6.0
2024	34.0	11.0	6.0
2025	35.0	13.0	8.0.

"(II) CALENDAR YEAR 2026 AND THEREAFTER.—Subject to clause (iv), for the purposes of clause (ii), the total applicable volume for calendar year 2026 and each calendar year thereafter shall be determined by the Administrator, in consultation with the Secretary of Agriculture and the Secretary of Energy, based on a review of the implementation of this subparagraph and subparagraph (B) during calendar years 2011 through 2025, including a review of—

"(aa) the impact of renewable fuel, phase II renewable fuel, and phase III renewable fuel on the environment of the United States and the world; and

"(bb) the impact of the use of renewable fuel, phase II renewable fuel, and phase III renewable fuel on other factors, including job creation, rural economic development, domestic energy production, and the energy security of the United States.

"(III) REVISION OF REGULATIONS.—In accordance with the purposes of the Advanced Clean Fuels Act of 2007, the Administrator may, as appropriate, revise the regulations promulgated pursuant to clause (i) as the Administrator determines to be necessary to reflect or respond to—

"(aa) changes in the transportation fuel market; or

"(bb) other relevant circumstances.

"(iv) CALCULATION OF TOTAL ADVANCED CLEAN FUEL VOLUME.—For the purpose of clause (iii)(II), the total applicable volume for calendar year 2026 and each calendar year thereafter shall be equal to the product obtained by multiplying—

"(I) the number of gallons of gasoline that the Administrator estimates will be sold or introduced into commerce in the calendar year; and

"(II) the ratio that, as applicable—

"(aa) 35,000,000,000 gallons of renewable fuel (including up to 13,000,000,000 gallons of phase II renewable fuel and up to 8,000,000,000 gallons of phase III renewable fuel); bears to

"(bb) the number of gallons of conventional transportation fuel sold or introduced into commerce in calendar year 2025.

"(v) NO EFFECT ON MORE STRINGENT REQUIREMENTS.—Nothing in this

subparagraph supercedes or otherwise affects any more stringent requirement under any other provision of this Act.''.

(c) STUDY.—Section 211(o) of the Clean Air Act (42 U.S.C. 7545(o)) (as amended by subsection (a)) is amended by adding at the end the following:

''(12) STUDY ON EFFECTS OF INCREASE IN RENEWABLE FUEL VOLUME.—

''(A) IN GENERAL.—The Administrator shall offer to enter into an agreement with the Academy under which the Academy shall periodically carry out, and submit to Congress and the Administrator a report on the results of, a study to determine whether the total applicable volume of renewable fuel specified in paragraph (2)(C)(iii) or the advanced clean fuel performance standards specified in paragraph (11)(B) for any calendar year would reasonably be anticipated—

''(i) to result in 1 or more adverse lifecycle impacts; or

''(ii) to be technically infeasible.

''(B) SCHEDULE OF STUDIES.—In implementing subparagraph (A), the Administrator shall—

''(i) not later than 90 days after the date of enactment of this paragraph, offer to enter into an agreement with the Academy under which the Academy shall conduct the study described in subparagraph (A) with respect to calendar years 2011 through 2013; and

''(ii) not later than 3 years after the deadline specified in clause (i), and every 3 years thereafter, offer to enter into an agreement with the Academy under which the Academy shall conduct the study described in subparagraph (A) with respect to the 3-calendar-year period following the most recent 3-calendar-year period studied by the Academy under this paragraph.

''(C) INITIAL STUDY OF ANALYTICAL METHODS.—The first study conducted under this paragraph shall include an identification and development of analytical methods for use—

''(i) in determining the lifecycle greenhouse gas emissions of conventional transportation fuel and renewable fuel; and

''(ii) in assessing the impacts of increasing volumes of renewable fuel in the transportation fuel supply on—

''(I) the environment of the United States and the world, taking into consideration potential additional warming of the oceans and surface of Earth as a result of changes in land use and cover; and

''(II) food and feedstock supply and prices.''.

(d) OPT-IN AREAS UNDER REFORMULATED GASOLINE PROGRAM.—Section 211(k)(6)(B) of the Clean Air Act (42 U.S.C. 7545(k)(6)(B)) is amended—

(1) in the subparagraph heading, by striking ''OZONE TRANSPORT REGION'' and inserting ''ADDITIONAL OPT-IN AREAS''; and

(2) in clause (i)(I)—

(A) by striking ''in the ozone transport region established by section 184(a)''; and

(B) by striking ''(other than an area classified as a marginal, moderate, serious, or severe ozone nonattainment area under subpart 2 of part D of title I)''.

SEC. 5. VOLUNTARY RENEWABLE FUELS LABELING PROGRAM.

Section 211(o) of the Clean Air Act (42 U.S.C. 7545(o)) (as amended by section 4(c)) is amended by adding at the end the following:

''(13) VOLUNTARY RENEWABLE FUELS LABELING PROGRAM.—

''(A) DEFINITIONS.—In this paragraph:

''(i) PROGRAM.—The term 'Program' means the Voluntary Renewable Fuels Labeling Program established under subparagraph (B).

''(ii) RENEWABLE FUEL.—The term 'renewable fuel' has the meaning given the term in paragraph (11).

''(iii) VOLUNTARY MANAGEMENT PRACTICE.—The term 'voluntary management practice' means a practice that protects the ecological values (including water, soil, and biological diversity) of a landscape used to produce renewable biomass.

''(B) ESTABLISHMENT.—The Administrator shall establish a program, to be modeled on the Energy Star Program, to promote consumer awareness of renewable fuels that meet the requirements of subparagraph (C).

''(C) REQUIREMENTS.—The Program shall provide authorization to applicable entities for the use of a unique label for any renewable fuel that—

''(i) has a lifecycle greenhouse gas emission rate that is at least 50 percent lower than the fuel emission baseline; and

''(ii) complies with applicable voluntary management practices established under subparagraph (D)(i).

''(D) VOLUNTARY MANAGEMENT PRACTICES, TERMS, AND PROCEDURES.—In carrying out the Program, the Administrator shall establish—

''(i) voluntary management practices for use in determining the eligibility of a renewable fuel for a unique renewable fuel label under the Program;

''(ii) terms governing the use of a unique renewable fuel label; and

''(iii) procedures for—

''(I) designating a renewable fuel to be eligible for a unique renewable fuel label;

''(II) verifying the values reported by producers of renewable fuel; and

''(III) monitoring compliance with the voluntary management practices established under clause (i).

''(E) LABEL INFORMATION.—The label to be applied to each qualifying renewable fuel under the Program shall indicate the lifecycle greenhouse gas emission rate of the renewable fuel.

''(F) ADVISORY COMMITTEE.—

''(i) ESTABLISHMENT.—The Administrator shall establish an independent advisory committee to assist the Administrator in carrying out the Program.

''(ii) DUTIES.—Not less frequently than once every 2 years, the advisory committee shall provide recommendations to the Administrator for updates and improvements to the Program, including recommendations relating to the voluntary management practices established under subparagraph (D)(i).''.

SEC. 6. RESEARCH AND DEVELOPMENT IN SUPPORT OF ADVANCED CLEAN FUELS.

Section 211(o) of the Clean Air Act (42 U.S.C. 7545(o)) (as amended by section 5) is amended by adding at the end the following:

''(14) RESEARCH AND DEVELOPMENT IN SUPPORT OF ADVANCED CLEAN FUELS.—

''(A) PURPOSE.—The purpose of this paragraph is to provide for research support to facilitate the development of sustainable markets and technologies to produce and use woody biomass and other cellulosic biomass for the production of thermal and electric energy, biofuels, and bioproducts.

''(B) GRANT PROGRAM.—The Administrator shall establish a program to provide to eligible entities (as identified by the Administrator) grants for use in—

''(i) providing financial support for not more than 4 nor less than 6 demonstration facilities that—

''(I) use woody biomass to deploy advanced technologies for production of thermal and electric energy, biofuels, and bioproducts; and

"(II) are targeted at regional feedstocks and markets;

"(ii) conducting targeted research for the development of cellulosic ethanol and other liquid fuels from woody or other cellulosic biomass that may be used in transportation or stationary applications, such as industrial processes or industrial, commercial, and residential heating;

"(iii) conducting research into the best scientifically-based and periodically-updated methods of assessing and certifying the impacts of each cellulosic biomass fuel with respect to—

"(I) the reduction in lifecycle greenhouse gas emissions of each fuel as compared to—

"(aa) the fuel emission baseline; and

"(bb) the greenhouse gas emissions of other sectors, such as the agricultural, industrial, and manufacturing sectors;

"(II) the contribution of the cellulosic biomass fuel toward enhancing

the energy security of the United States by displacing imported petroleum and petroleum products;

''(III) any impacts of the cellulosic biomass fuel on wildlife habitat, biodiversity, water quality, and air quality; and

''(IV) any effect of the cellulosic biomass fuel with respect to rural and regional economies;

''(iv) conducting research to determine to what extent the use of cellulosic biomass fuels in the transportation sector would impact greenhouse gas emissions in other sectors, such as the agricultural, industrial, and manufacturing sectors;

''(v) conducting research for the development of the supply infrastructure that may provide renewable biomass feedstocks in a consistent, predictable, and environmentally-sustainable manner;

''(vi) conducting research for the development of supply infrastructure that may provide cellulosic biomass fuels in a

consistent, predictable, and environmentally-sustainable manner; and

''(vii) conducting policy research on the global movement of cellulosic biomass fuels in a consistent, predictable, and environmentally-sustainable manner.

''(C) AUTHORIZATION OF APPROPRIATIONS.—There are authorized to be appropriated to carry out this section—

''(i) $45,000,000 for fiscal year 2009;

''(ii) $50,000,000 for fiscal year 2010;

''(iii) $55,000,000 for fiscal year 2011;

''(iv) $60,000,000 for fiscal year 2012; and

''(v) $65,000,000 for fiscal year 2013.''.

SEC. 7. WATER QUALITY PROTECTION.

Section 211(c)(1) of the Clean Air Act (42 U.S.C. 7545(c)(1)) is amended—

(1) by striking ''nonroad vehicle (A) if in the judgment of the Administrator'' and inserting the following: ''nonroad vehicle—

''(A) if, in the judgment of the Administrator, any fuel or fuel additive or'';

(2) by striking ", or (B) if" and inserting the following: "; or

"(B) if"; and

(3) in subparagraph (A), by striking "air pollution which" and inserting "air pollution or water pollution (including any degradation in the quality of groundwater) that".

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