109TH CONGRESS
1ST SESSION

S. 1609

To increase the production and use of biofuels and diversify biofuel feedstock as key elements to achieving energy independence for the United States.

IN THE SENATE OF THE UNITED STATES

JULY 29, 2005

Ms. CANTWELL introduced the following bill; which was read twice and referred to the Committee on Finance

---

A BILL

To increase the production and use of biofuels and diversify biofuel feedstock as key elements to achieving energy independence for the United States.

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 ''20/20 Biofuels Challenge Act of 2005''.

SEC. 2. DEFINITIONS.

In this Act:

(1) ADMINISTRATOR.—The term ''Administrator'' means the Administrator of the Environmental Protection Agency.

(2) ALTERNATIVE FUEL.—The term ''alternative fuel'' has the meaning given the term in section 301 of the Energy Policy Act of 1992 (42 U.S.C. 13211).

(3) CELLULOSIC BIOMASS ETHANOL.—

(A) IN GENERAL.—Subject to subparagraph (B), the term ''cellulosic biomass ethanol'' means alternative fuels and blending components for alternative fuels that are derived from cellulosic biomass feedstocks and remain substantially in the liquid phase at room temperature and atmospheric pressure.

(B) EXCEPTION.—If a liquid alternative fuel contains components that are not derived from cellulosic biomass feedstocks, only the portion of any such fuels or fuel blending components that is derived from cellulosic biomass feedstocks shall be considered applicable.

(4) CELLULOSIC BIOMASS FEEDSTOCK.—The term ''cellulosic biomass feedstock'' means fuel derived from—

(A) any lignocellulosic or hemicellulosic matter that is derived from organic material of a plant that is planted for the purpose of producing energy (except a plant produced on 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.), if harvesting the plant would be inconsistent with the purposes of the program); or

(B) nonhazardous lignocellulosic or hemicellulosic matter that is segregated from other waste materials and is derived from—

(i) trees and other plant matter removed from the immediate vicinity of homes, other occupied structures, or essential community infrastructure;

(ii) precommercial thinning, slash, or brush (except thinning, slash, or brush from old growth forests or publicly-owned roadless areas);

(iii) an agricultural crop, a crop by-product, or a residue resource (except a plant produced on land enrolled in the conservation reserve program, if harvesting the plant would be inconsistent with the purposes of the program); or

(iv) miscellaneous waste (such as landscape or right-of-way tree trimmings), not including—

(I) recyclable postconsumer waste paper, including such paper in municipal solid waste;

(II) painted, treated, or pressurized wood; or

(III) wood that is contaminated by plastic or metal.

(5) RENEWABLE FUEL.—

(A) IN GENERAL.—The term ''renewable fuel'' means motor vehicle fuel that—

(i)(I) is produced from grain, starch, oilseeds, or other biomass; or

(II) 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; and

(ii) is used to replace or reduce the quantity of fossil fuel present in a fuel mixture used to operate a motor vehicle.

(B) INCLUSION.—The term ''renewable fuel'' includes—

(i) biodiesel, as defined in section 312(f) of the Energy Policy Act of 1992 (42 U.S.C. 13220(f));

(ii) cellulosic biomass ethanol;

(iii) waste derived ethanol; and

(iv) any blending components derived from renewable fuel, except 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 Act.

(6) WASTE DERIVED ETHANOL.—The term ''waste derived ethanol'' means ethanol derived from—

(A) animal wastes, including poultry fats and poultry wastes, and other waste materials; or

(B) municipal solid waste.

SEC. 3. RENEWABLE FUEL STANDARD.

(a) RENEWABLE FUEL PROGRAM.—

(1) IN GENERAL.—

(A) REGULATIONS.—Not later than 1 year after the date of enactment of this Act, the Administrator shall promulgate regulations ensuring that motor vehicle fuel sold or dispensed to

consumers in the contiguous United States, on an annual average basis, contains the applicable volume of renewable fuel specified in subsection (b).

(B) COMPLIANCE.—Regardless of the date of promulgation, the regulations shall contain compliance provisions for refiners, blenders, and importers, as appropriate, to ensure that the requirements of this subsection are met, unless the Administrator determines compliance will violate the Clean Air Act (42 U.S.C. 7401 et seq.).

(b) APPLICABLE VOLUME.—

(1) CALENDAR YEARS 2006 THROUGH 2020.—For the purpose of subsection (a), the applicable volume for each of calendar years 2006 through 2020 shall be determined in accordance with the following table:

Calendar year:	**(In billions of gallons):**
2006	4
2008	5
2010	7
2010	9
2014	12
2016	15
2018	18
2020	20.

(2) CALENDAR YEARS 2020 AND THEREAFTER.—For the purpose of subsection (a), the applicable volume for calendar year 2020 and each calendar year thereafter shall be no less than 20,000,000,000 gallons annually.

(3) EQUIVALENCY.—For the purpose of paragraph (2), 1 gallon of either cellulosic biomass ethanol shall be considered to be the equivalent of 3.5 gallons of renewable fuel.

SEC. 4. STIMULATION OF BIODIESEL PRODUCTION.

Sections 40A(e), 6426(c)(6), and 6427(e)(4)(B) of the Internal Revenue Code of 1986 (as amended by section 1344 of the Energy Policy Act of 2005(a)) are each amended by striking ''2008'' and inserting ''2010''.

SEC. 5. FULL FUEL FLEXIBILITY REQUIREMENT.

(a) IN GENERAL.—Chapter 329 of title 49, United States Code, is amended by inserting after section 32902 the following:

''SEC. 32902A. REQUIREMENT TO EQUIP GASOLINE AND DIESEL POWERED VEHICLES TO USE ALTERNATIVE BIOFUELS.

''(a) DEFINITIONS.—In this section:

''(1) FLEXIBLE FUEL MIXTURE.—The term 'flexible fuel mixture' means—

''(A) any mixture of ethanol with gasoline for a gasoline powered vehicle; or

''(B) any mixture of biodiesel by volume with fossil-based diesel fuel for a diesel powered vehicle.

''(2) VEHICLE.—The term 'vehicle' includes—

''(A) a passenger automobile;

''(B) an automobile capable of off-highway operation as defined in section 523.5 of title 49, Code of Federal Regulations (or any successor regulation);

''(C) a light truck, as defined in section 523.5 of title 49, Code of Federal Regulations (or any successor regulation);

''(D) a heavy vehicle, including trucks used for shipping; and

''(E) a large farm implement that operates on either gasoline or diesel fuels.

''(3) WATER TRANSPORTATION.—

''(A) IN GENERAL.—The term 'water transportation' includes those vehicles used primarily in the transportation of people, goods, and services over significant distances and includes—

''(i) public and commercial waterborne ferrys; and

''(ii) barges whose primary use is the transport of goods and services related to interstate and international commerce.

''(B) EXCLUSION.—The term 'water transportation' does not include watercraft the primary use of which is for personal recreational benefit.

''(b) REQUIREMENT.—Personal and commercial land and water transportation and shipping vehicles and vessels and large farm equipment manufactured after model year 2010 and capable of operating on either gasoline or diesel fuel shall also be capable of operating on a flexible fuel mixture.

''(c) CONSUMER INFORMATION.—The Secretary of Transportation shall prescribe regulations that require the vehicle or vessel manufacturer—

''(1) to prominently display a permanent badge or emblem on the vehicle indicating the vehicle is capable of operating on a flexible fuel mixture; and

''(2) to include in the owner's manual of each vehicle information describing—

''(A) the capability of the engine to operate using a flexible fuel mixture; and

''(B) the benefits of using a flexible fuel mixture, including the renewable nature, the increased fuel efficiency, and the environmental benefits of using flexible fuels.''.

(b) CONFORMING AMENDMENT.—The chapter analysis for chapter 329 of title 49, United States Code, is amended by inserting after the item relating to section 32902 the following:

''32902A. Requirement to equip gasoline and diesel powered vehicles to use alternative biofuels.''.

SEC. 6. FEEDSTOCK DIVERSIFICATION.

(a) CROP DIVERSIFICATION.—

(1) IN GENERAL.—The Secretary of Agriculture shall support development of cellulosic feedstock by directing that erosion preventing, renewable fuel producing crops (including switchgrass and short rotation woody crops) be grown, where possible, on the 35,000,000 acres of arable land 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.).

(2) STUDY.—The Secretary of Agriculture shall conduct a study to determine the impact of producing crops necessary for annual biofuel production levels of 20,000,000,000 gallons on land and on the

cost and production of food, forest products, and livestock feed.

(b) RESEARCH AND DEVELOPMENT.—

(1) DEPARTMENT OF AGRICULTURE.—

(A) CELLULOSIC-BASED ETHANOL FEEDSTOCK.—

(i) IN GENERAL.—The Secretary of Agriculture (referred to in this paragraph as the ''Secretary'') shall carry out an integrated 10-year research program to improve crop productivity and cost for cellulosic-based ethanol feedstock.

(ii) PLAN.—Not later than September 30, 2006, the Secretary shall submit to Congress a 10-year technology roadmap and comprehensive 5-year research and development plan that includes—

(I) a description of ongoing work within the Department of Agriculture and other Federal agencies;

(II) recommendations for acceleration of current work considered to support the plan; and

(III) a description of new work necessary to accomplish plan goals and objectives.

(iii) ANNUAL REPORT.—Beginning on September 30, 2008, and not later than September 30 of each subsequent year, the Secretary shall submit to Congress a report that—

(I) summarizes accomplishments and progress made in the 5-year plan; and

(II) describes any revisions to the plan or the technology roadmap.

(B) BIODIESEL FEEDSTOCK.—

(i) IN GENERAL.—The Secretary shall carry out an integrated 10-year research program to improve crop diversity, productivity, and cost for biodiesel feedstock.

(ii) PLAN.—Not later than September 30, 2006, the Secretary shall submit to Congress a 10-year technology roadmap and comprehensive 5-year research and development plan that includes—

(I) a description of regional feedstocks enabling near market production of biodiesel;

(II) a description of ongoing work within the Department of Agriculture and other Federal agencies;

(III) recommendations for acceleration of current work considered to support the plan; and

(IV) a description of new work necessary to accomplish plan goals and objectives.

(iii) ANNUAL REPORT.—Beginning on September 30, 2008, and not later than September 30 of each subsequent year, the Secretary shall submit to Congress a report that—

(I) summarizes accomplishments and progress made in the 5-year plan; and

(II) describes any revisions to the plan or the technology roadmap.

(2) DEPARTMENT OF ENERGY.—

(A) CELLULOSIC FEEDSTOCK.—

(i) IN GENERAL.—The Secretary of Energy (referred to in this paragraph as the ''Secretary'') shall carry out an 8-year research and development plan to significantly improve processes for converting cellulosic feedstock into ethanol production.

(ii) PLAN.—Not later than September 30, 2006, the Secretary shall submit to Congress a report describing the plan.

(iii) ANNUAL REPORT.—Beginning on September 30, 2008, and not later than September 30 of each subsequent year, the Secretary shall submit to Congress a report that—

(I) summarizes accomplishments and progress made in the 8-year plan; and

(II) describes any revisions to the plan or the technology roadmap.

(B) BIODIESEL FEEDSTOCK.—

(i) IN GENERAL.—The Secretary shall carry out an 8-year research and development plan to significantly improve processes for converting biodiesel feedstock into biodiesel fuel.

(ii) PLAN.—Not later than September 30, 2006, the Secretary shall submit to Congress a report describing the plan.

(iii) ANNUAL REPORT.—Beginning on September 30, 2008, and not later than September 30 of each subsequent year, the Secretary shall submit to Congress a report that—

(I) summarizes accomplishments and progress made in the 8-year plan; and

(II) describes any revisions to the plan or the technology roadmap.

(3) AUTHORIZATION OF APPROPRIATIONS.—There are authorized to be appropriated to carry out each of subparagraphs (A) and (B) of paragraph (1) and each of subparagraphs (A) and (B) of paragraph (2) $50,000,000 for each of fiscal years 2006 through 2010.

○