

# H.R.6

Energy Policy Act of 2005 (Enrolled as Agreed to or Passed by Both House and Senate)

*Selected portions of the Energy Bill that are perhaps significant to forestry.*

## RENEWABLE FUELS

SEC. 2612. In providing assistance pursuant to this title, a State, or any other person with which the State makes arrangements to carry out the purposes of this title, may purchase **renewable** fuels, including **bio**mass.'

(c) Report to Congress- The Secretary shall report to Congress on the use of **renewable** fuels in providing assistance under the Low-Income Home Energy Assistance Act of 1981 (42 U.S.C. 8621 et seq.).

## SEC. 126. LOW INCOME COMMUNITY ENERGY EFFICIENCY PILOT PROGRAM.

(a) Grants- The Secretary is authorized to make grants to units of local government, private, non-profit community development organizations, and Indian tribe economic development entities to improve energy efficiency; identify and develop **alternative, renewable**, and distributed energy supplies; and increase energy conservation in low income rural and urban communities.

(b) Purpose of Grants- The Secretary may make grants on a competitive basis for--

(1) investments that develop **alternative, renewable**, and distributed energy supplies;

(2) energy efficiency projects and energy conservation programs;

(3) studies and other activities that improve energy efficiency in low income rural and urban communities;

(4) planning and development assistance for increasing the energy efficiency of buildings and facilities; and

(5) technical and financial assistance to local government and private entities on developing new **renewable** and distributed sources of power or combined heat and power generation.

(c) Definition- For purposes of this section, the term 'Indian tribe' means any Indian tribe, band, nation, or other organized group or community, including any Alaskan Native village or regional or village corporation as defined in or established pursuant to the Alaska Native Claims Settlement Act (43 U.S.C. 1601 et seq.), that is recognized as eligible for the special programs and services provided by the United States to Indians because of their status as Indians.

(d) Authorization of Appropriations- For the purposes of this section there are authorized to be appropriated to the Secretary \$20,000,000 for each of fiscal years 2006 through 2008.

## TITLE II--RENEWABLE ENERGY

### Subtitle A--General Provisions

## SEC. 201. ASSESSMENT OF RENEWABLE ENERGY RESOURCES.

(a) Resource Assessment- Not later than 6 months after the date of enactment of this Act, and each year thereafter, the Secretary shall review the available assessments of **renewable** energy resources within the United States, including solar, wind, **bio**mass, ocean (including tidal, wave, current, and thermal), geothermal, and hydroelectric energy resources, and undertake new assessments as necessary, taking into account changes in market conditions, available technologies, and other relevant factors.

(b) Contents of Reports- Not later than 1 year after the date of enactment of this Act, and each year thereafter, the Secretary shall publish a report based on the assessment under subsection (a). The report shall contain--

(1) a detailed inventory describing the available amount and characteristics of the **renewable** energy resources; and

(2) such other information as the Secretary believes would be useful in developing such **renewable** energy resources, including descriptions of surrounding terrain, population and load centers, nearby energy infrastructure, location of energy and water resources, and available estimates of the costs needed to develop each resource, together with an identification of any barriers to providing adequate transmission for remote sources of **renewable** energy resources to current and emerging markets, recommendations for removing or addressing such barriers, and ways to provide access to the grid that do not unfairly disadvantage **renewable** or other energy producers.

(c) Authorization of Appropriations- For the purposes of this section, there are authorized to be appropriated to the Secretary \$10,000,000 for each of fiscal years 2006 through 2010.

## SEC. 202. **RENEWABLE ENERGY PRODUCTION INCENTIVE.**

(a) Incentive Payments- Section 1212(a) of the Energy Policy Act of 1992 (42 U.S.C. 13317(a)) is amended--

(1) by striking the last sentence;

(2) by designating the first, second, and third sentences as paragraphs (1), (2), and (3), respectively;

(3) in paragraph (3) (as so designated), by striking 'and which satisfies' and all that follows through 'deems necessary'; and

(4) by adding at the end the following:

(4)(A) Subject to subparagraph (B), if there are insufficient appropriations to make full payments for electric production from all qualified **renewable** energy facilities for a fiscal year, the Secretary shall assign--

(i) 60 percent of appropriated funds for the fiscal year to facilities that use solar, wind, ocean (including tidal, wave, current, and thermal), geothermal, or closed-loop (dedicated energy crops) **bio**mass technologies to generate electricity; and

(ii) 40 percent of appropriated funds for the fiscal year to other projects.

(B) After submitting to Congress an explanation of the reasons for the alteration, the Secretary may alter the percentage requirements of subparagraph (A).'

(b) Qualified **Renewable** Energy Facility- Section 1212(b) of the Energy Policy Act of 1992 (42 U.S.C. 13317(b)) is amended--

(1) by striking 'a State or any political' and all that follows through 'nonprofit electrical cooperative' and inserting 'a not-for-profit electric cooperative, a public utility described in section 115 of the Internal Revenue Code of 1986, a State, Commonwealth, territory, or possession of the United States, or the District of Columbia, or a political subdivision thereof, an Indian tribal government or

subdivision thereof, or a Native Corporation (as defined in section 3 of the Alaska Native Claims Settlement Act (43 U.S.C. 1602)),'; and

(2) by inserting 'landfill gas, livestock methane, ocean (including tidal, wave, current, and thermal),' after 'wind, **biomass**,'

(c) Eligibility Window- Section 1212(c) of the Energy Policy Act of 1992 (42 U.S.C. 13317(c)) is amended by striking 'during the 10-fiscal year period beginning with the first full fiscal year occurring after the enactment of this section' and inserting 'before October 1, 2016'.

(d) Payment Period- Section 1212(d) of the Energy Policy Act of 1992 (42 U.S.C. 13317(d)) is amended in the second sentence by inserting ', or in which the Secretary determines that all necessary Federal and State authorizations have been obtained to begin construction of the facility' after 'eligible for such payments'.

(e) Amount of Payment- Section 1212(e)(1) of the Energy Policy Act of 1992 (42 U.S.C. 13317(e)(1)) is amended in the first sentence by inserting 'landfill gas, livestock methane, ocean (including tidal, wave, current, and thermal),' after 'wind, **biomass**,'

(f) Termination of Authority- Section 1212(f) of the Energy Policy Act of 1992 (42 U.S.C. 13317(f)) is amended by striking 'the expiration of' and all that follows through 'of this section' and inserting 'September 30, 2026'.

(g) Authorization of Appropriations- Section 1212 of the Energy Policy Act of 1992 (42 U.S.C. 13317) is amended by striking subsection (g) and inserting the following:

'(g) Authorization of Appropriations- There are authorized to be appropriated such sums as are necessary to carry out this section for each of fiscal years 2006 through 2026, to remain available until expended.'

## SEC. 203. FEDERAL PURCHASE REQUIREMENT.

(a) Requirement- The President, acting through the Secretary, shall seek to ensure that, to the extent economically feasible and technically practicable, of the total amount of electric energy the Federal Government consumes during any fiscal year, the following amounts shall be **renewable** energy:

(1) Not less than 3 percent in fiscal years 2007 through 2009.

(2) Not less than 5 percent in fiscal years 2010 through 2012.

(3) Not less than 7.5 percent in fiscal year 2013 and each fiscal year thereafter.

(b) Definitions- In this section:

(1) **BIOMASS**- The term '**biomass**' means any lignin waste material that is segregated from other waste materials and is determined to be nonhazardous by the Administrator of the Environmental Protection Agency and any solid, nonhazardous, cellulosic material that is derived from--

(A) any of the following forest-related resources: mill residues, precommercial thinnings, slash, and brush, or nonmerchantable material;

(B) solid wood waste materials, including waste pallets, crates, dunnage, manufacturing and construction wood wastes (other than pressure-treated, chemically-treated, or painted wood wastes), and landscape or right-of-way tree trimmings, but not including municipal solid waste (garbage), gas derived from the **biodegradation** of solid waste, or paper that is commonly recycled;

(C) agriculture wastes, including orchard tree crops, vineyard, grain, legumes, sugar, and other crop by-products or residues, and livestock waste nutrients; or

(D) a plant that is grown exclusively as a fuel for the production of electricity.

(2) **RENEWABLE ENERGY**- The term 'renewable energy' means electric energy generated from solar, wind, biomass, landfill gas, ocean (including tidal, wave, current, and thermal), geothermal, municipal solid waste, or new hydroelectric generation capacity achieved from increased efficiency or additions of new capacity at an existing hydroelectric project.

(c) Calculation- For purposes of determining compliance with the requirement of this section, the amount of renewable energy shall be doubled if--

(1) the renewable energy is produced and used on-site at a Federal facility;

(2) the renewable energy is produced on Federal lands and used at a Federal facility;  
or

(3) the renewable energy is produced on Indian land as defined in title XXVI of the Energy Policy Act of 1992 (25 U.S.C. 3501 et seq.) and used at a Federal facility.

(d) Report- Not later than April 15, 2007, and every 2 years thereafter, the Secretary shall provide a report to Congress on the progress of the Federal Government in meeting the goals established by this section.

## SEC. 205. **BIOBASED PRODUCTS.**

Section 9002(c)(1) of the Farm Security and Rural Investment Act of 2002 (7 U.S.C. 8102(c)(1)) is amended by inserting 'or such items that comply with the regulations issued under section 103 of Public Law 100-556 (42 U.S.C. 6914b-1)' after 'practicable'.

## SEC. 206. **RENEWABLE ENERGY SECURITY.**

(a) Weatherization Assistance- Section 415(c) of the Energy Conservation and Production Act (42 U.S.C. 6865(c)) is amended--

(1) in paragraph (1), by striking 'in paragraph (3)' and inserting 'in paragraphs (3) and (4)';

(2) in paragraph (3), by striking '\$2,500 per dwelling unit average provided in paragraph (1)' and inserting 'dwelling unit averages provided in paragraphs (1) and (4)'; and

(3) by adding at the end the following new paragraphs:

(4) The expenditure of financial assistance provided under this part for labor, weatherization materials, and related matters for a renewable energy system shall not exceed an average of \$3,000 per dwelling unit.

(5)(A) The Secretary shall by regulations--

(i) establish the criteria which are to be used in prescribing performance and quality standards under paragraph (6)(A)(ii) or in specifying any form of renewable energy under paragraph (6)(A)(i)(I); and

(ii) establish a procedure under which a manufacturer of an item may request the Secretary to certify that the item will be treated, for purposes of this paragraph, as a renewable energy system.

(B) The Secretary shall make a final determination with respect to any request filed under subparagraph (A)(ii) within 1 year after the filing of the request, together with any information required to be filed with such request under subparagraph (A)(ii).

(C) Each month the Secretary shall publish a report of any request under subparagraph (A)(ii) which has been denied during the preceding month and the reasons for the denial.

- (D) The Secretary shall not specify any form of **renewable** energy under paragraph (6)(A)(i)(I) unless the Secretary determines that--
- (i) there will be a reduction in oil or natural gas consumption as a result of such specification;
  - (ii) such specification will not result in an increased use of any item which is known to be, or reasonably suspected to be, environmentally hazardous or a threat to public health or safety; and
  - (iii) available Federal subsidies do not make such specification unnecessary or inappropriate (in the light of the most advantageous allocation of economic resources).
- (6) In this subsection--
- (A) the term '**renewable** energy system' means a system which--
    - (i) when installed in connection with a dwelling, transmits or uses--
      - (I) solar energy, energy derived from the geothermal deposits, energy derived from **biomass**, or any other form of **renewable** energy which the Secretary specifies by regulations, for the purpose of heating or cooling such dwelling or providing hot water or electricity for use within such dwelling; or
      - (II) wind energy for nonbusiness residential purposes;
    - (ii) meets the performance and quality standards (if any) which have been prescribed by the Secretary by regulations;
    - (iii) in the case of a combustion rated system, has a thermal efficiency rating of at least 75 percent; and
    - (iv) in the case of a solar system, has a thermal efficiency rating of at least 15 percent; and
  - (B) the term '**biomass**' means any organic matter that is available on a **renewable** or recurring basis, including agricultural crops and trees, wood and wood wastes and residues, plants (including aquatic plants), grasses, residues, fibers, and animal wastes, municipal wastes, and other waste materials.'
- (b) District Heating and Cooling Programs- Section 172 of the Energy Policy Act of 1992 (42 U.S.C. 13451 note) is amended--
- (1) in subsection (a)--
    - (A) by striking 'and' at the end of paragraph (3);
    - (B) by striking the period at the end of paragraph (4) and inserting '; and'; and
    - (C) by adding at the end the following new paragraph:
  - (5) evaluate the use of **renewable** energy systems (as such term is defined in section 415(c) of the Energy Conservation and Production Act (42 U.S.C. 6865(c))) in residential buildings.'; and
  - (2) in subsection (b), by striking 'this Act' and inserting 'the Energy Policy Act of 2005'.
- (c) Rebate Program-
- (1) ESTABLISHMENT- The Secretary shall establish a program providing rebates for consumers for expenditures made for the installation of a **renewable** energy system in connection with a dwelling unit or small business.
  - (2) AMOUNT OF REBATE- Rebates provided under the program established under paragraph (1) shall be in an amount not to exceed the lesser of--
    - (A) 25 percent of the expenditures described in paragraph (1) made by the consumer; or
    - (B) \$3,000.

(3) DEFINITION- For purposes of this subsection, the term `renewable energy system' has the meaning given that term in section 415(c)(6)(A) of the Energy Conservation and Production Act (42 U.S.C. 6865(c)(6)(A)), as added by subsection (a)(3) of this section.

(4) AUTHORIZATION OF APPROPRIATIONS- There are authorized to be appropriated to the Secretary for carrying out this subsection, to remain available until expended--

- (A) \$150,000,000 for fiscal year 2006;
- (B) \$150,000,000 for fiscal year 2007;
- (C) \$200,000,000 for fiscal year 2008;
- (D) \$250,000,000 for fiscal year 2009; and
- (E) \$250,000,000 for fiscal year 2010.

(d) **Renewable** Fuel Inventory- Not later than 180 days after the date of enactment of this Act, the Secretary shall transmit to Congress a report containing--

- (1) an inventory of **renewable** fuels available for consumers; and
- (2) a projection of future inventories of **renewable** fuels based on the incentives provided in this section.

### **SEC. 367. FAIR MARKET VALUE DETERMINATIONS FOR LINEAR RIGHTS-OF-WAY ACROSS PUBLIC LANDS AND NATIONAL FORESTS.**

(a) Update of Fee Schedule- Not later than 1 year after the date of enactment of this section--

- (1) the Secretary of the Interior shall update section 2806.20 of title 43, Code of Federal Regulations, as in effect on the date of enactment of this section, to revise the per acre rental fee zone value schedule by State, county, and type of linear right-of-way use to reflect current values of land in each zone; and
- (2) the Secretary of Agriculture shall make the same revision for linear rights-of-way granted, issued, or renewed under title V of the Federal Lands Policy and Management Act of 1976 (43 U.S.C. 1761 et seq.) on National Forest System land.

(b) Fair Market Value Rental Determination for Linear Rights-of-way- The fair market value rent of a linear right-of-way across public lands or National Forest System lands issued under section 504 of the Federal Land Policy and Management Act of 1976 (43 U.S.C. 1764) or section 28 of the Mineral Leasing Act (30 U.S.C. 185) shall be determined in accordance with subpart 2806 of title 43, Code of Federal Regulations, as in effect on the date of enactment of this section (including the annual or periodic updates specified in the regulations) and as updated in accordance with subsection (a).

### **SEC. 390. NEPA REVIEW.**

(a) NEPA Review- Action by the Secretary of the Interior in managing the public lands, or the Secretary of Agriculture in managing National Forest System Lands, with respect to any of the activities described in subsection (b) shall be subject to a rebuttable presumption that the use of a categorical exclusion under the National Environmental Policy Act of 1969 (NEPA) would apply if the activity is conducted pursuant to the Mineral Leasing Act for the purpose of exploration or development of oil or gas.

(b) Activities Described- The activities referred to in subsection (a) are the following:

- (1) Individual surface disturbances of less than 5 acres so long as the total surface disturbance on the lease is not greater than 150 acres and site-specific analysis in a document prepared pursuant to NEPA has been previously completed.
- (2) Drilling an oil or gas well at a location or well pad site at which drilling has occurred previously within 5 years prior to the date of spudding the well.
- (3) Drilling an oil or gas well within a developed field for which an approved land use plan or any environmental document prepared pursuant to NEPA analyzed such drilling as a reasonably foreseeable activity, so long as such plan or document was approved within 5 years prior to the date of spudding the well.
- (4) Placement of a pipeline in an approved right-of-way corridor, so long as the corridor was approved within 5 years prior to the date of placement of the pipeline.
- (5) Maintenance of a minor activity, other than any construction or major renovation or a building or facility.

## **SEC. 757. BIODIESEL ENGINE TESTING PROGRAM.**

- (a) In General- Not later than 180 days after the date of enactment of this Act, the Secretary shall initiate a partnership with diesel engine, diesel fuel injection system, and diesel vehicle manufacturers and diesel and **bio**diesel fuel providers, to include **bio**diesel testing in advanced diesel engine and fuel system technology.
- (b) Scope- The program shall provide for testing to determine the impact of **bio**diesel from different sources on current and future emission control technologies, with emphasis on--
  - (1) the impact of **bio**diesel on emissions warranty, in-use liability, and antitampering provisions;
  - (2) the impact of long-term use of **bio**diesel on engine operations;
  - (3) the options for optimizing these technologies for both emissions and performance when switching between **bio**diesel and diesel fuel; and
  - (4) the impact of using **bio**diesel in these fueling systems and engines when used as a blend with 2006 Environmental Protection Agency-mandated diesel fuel containing a maximum of 15-parts-per-million sulfur content.
- (c) Report- Not later than 2 years after the date of enactment of this Act, the Secretary shall provide an interim report to Congress on the findings of the program, including a comprehensive analysis of impacts from **bio**diesel on engine operation for both existing and expected future diesel technologies, and recommendations for ensuring optimal emissions reductions and engine performance with **bio**diesel.
- (d) Authorization of Appropriations- There are authorized to be appropriated \$5,000,000 for each of fiscal years 2006 through 2010 to carry out this section.
- (e) Definition- For purposes of this section, the term '**bio**diesel' means a diesel fuel substitute produced from nonpetroleum **renewable** resources that meets the registration requirements for fuels and fuel additives established by the Environmental Protection Agency under section 211 of the Clean Air Act (42 U.S.C. 7545) and that meets the American Society for Testing and Materials D6751-02a Standard Specification for **Bio**diesel Fuel (B100) Blend Stock for Distillate Fuels.

## **TITLE IX--RESEARCH AND DEVELOPMENT**

### **SEC. 901. SHORT TITLE.**

This title may be cited as the 'Energy Research, Development, Demonstration, and Commercial Application Act of 2005'.

## **SEC. 902. GOALS.**

(a) In General- In order to achieve the purposes of this title, the Secretary shall conduct a balanced set of programs of energy research, development, demonstration, and commercial application with the general goals of--

- (1) increasing the efficiency of all energy intensive sectors through conservation and improved technologies;
- (2) promoting diversity of energy supply;
- (3) decreasing the dependence of the United States on foreign energy supplies;
- (4) improving the energy security of the United States; and
- (5) decreasing the environmental impact of energy-related activities.

(b) Goals- The Secretary shall publish measurable cost and performance-based goals, comparable over time, with each annual budget submission in at least the following areas:

- (1) Energy efficiency for buildings, energy-consuming industries, and vehicles.
- (2) Electric energy generation (including distributed generation), transmission, and storage.
- (3) **Renewable** energy technologies, including wind power, photovoltaics, solar thermal systems, geothermal energy, hydrogen-fueled systems, **bio**mass-based systems, **bio**fuels, and hydropower.
- (4) Fossil energy, including power generation, onshore and offshore oil and gas resource recovery, and transportation fuels.
- (5) Nuclear energy, including programs for existing and advanced reactors, and education of future specialists.

(c) Public Comment- The Secretary shall provide mechanisms for input on the annually published goals from industry, institutions of higher education, and other public sources.

(d) Effect of Goals- Nothing in subsection (a) or the annually published goals creates any new authority for any Federal agency, or may be used by any Federal agency, to support the establishment of regulatory standards or regulatory requirements.

### **Subtitle A--Energy Efficiency**

## **SEC. 911. ENERGY EFFICIENCY.**

(a) In General-

(1) OBJECTIVES- The Secretary shall conduct programs of energy efficiency research, development, demonstration, and commercial application, including activities described in this subtitle. Such programs shall take into consideration the following objectives:

- (A) Increasing the energy efficiency of vehicles, buildings, and industrial processes.
- (B) Reducing the demand of the United States for energy, especially energy from foreign sources.
- (C) Reducing the cost of energy and making the economy more efficient and competitive.
- (D) Improving the energy security of the United States.
- (E) Reducing the environmental impact of energy-related activities.



(2) PROGRAMS- Programs under this subtitle shall include research, development, demonstration, and commercial application of--

(A) advanced, cost-effective technologies to improve the energy efficiency and environmental performance of vehicles, including--

- (i) hybrid and electric propulsion systems;
- (ii) plug-in hybrid systems;
- (iii) advanced combustion engines;
- (iv) weight and drag reduction technologies;
- (v) whole-vehicle design optimization; and
- (vi) advanced drive trains;

(B) cost-effective technologies, for new construction and retrofit, to improve the energy efficiency and environmental performance of buildings, using a whole-buildings approach, including onsite **renewable** energy generation;

(C) advanced technologies to improve the energy efficiency, environmental performance, and process efficiency of energy-intensive and waste-intensive industries; and

(D) advanced control devices to improve the energy efficiency of electric motors, including those used in industrial processes, heating, ventilation, and cooling.

(b) Authorization of Appropriations- There are authorized to be appropriated to the Secretary to carry out energy efficiency and conservation research, development, demonstration, and commercial application activities, including activities authorized under this subtitle--

- (1) \$783,000,000 for fiscal year 2007;
- (2) \$865,000,000 for fiscal year 2008; and
- (3) \$952,000,000 for fiscal year 2009.

(c) Allocations- From amounts authorized under subsection (b), the following sums are authorized:

- (1) For activities under section 912, \$50,000,000 for each of fiscal years 2007 through 2009.
- (2) For activities under section 915, \$7,000,000 for each of fiscal years 2007 through 2009.
- (3) For activities under subsection (a)(2)(A)--
  - (A) \$200,000,000 for fiscal year 2007;
  - (B) \$270,000,000 for fiscal year 2008; and
  - (C) \$310,000,000 for fiscal year 2009.
- (4) For activities under subsection (a)(2)(D), \$2,000,000 for each of fiscal years 2007 and 2008.

(d) Extended Authorization- There are authorized to be appropriated to the Secretary to carry out section 912 \$50,000,000 for each of fiscal years 2010 through 2013.

(e) Limitations- None of the funds authorized to be appropriated under this section may be used for--

- (1) the issuance or implementation of energy efficiency regulations;
- (2) the weatherization program established under part A of title IV of the Energy Conservation and Production Act (42 U.S.C. 6861 et seq.);
- (3) a State energy conservation plan established under part D of title III of the Energy Policy and Conservation Act (42 U.S.C. 6321 et seq.); or
- (4) a Federal energy management measure carried out under part 3 of title V of the National Energy Conservation Policy Act (42 U.S.C. 8251 et seq.).

## Subtitle C--Renewable Energy

### SEC. 931. RENEWABLE ENERGY.

#### (a) In General-

(1) OBJECTIVES- The Secretary shall conduct programs of **renewable** energy research, development, demonstration, and commercial application, including activities described in this subtitle. Such programs shall take into consideration the following objectives:

- (A) Increasing the conversion efficiency of all forms of **renewable** energy through improved technologies.
- (B) Decreasing the cost of **renewable** energy generation and delivery.
- (C) Promoting the diversity of the energy supply.
- (D) Decreasing the dependence of the United States on foreign energy supplies.
- (E) Improving United States energy security.
- (F) Decreasing the environmental impact of energy-related activities.
- (G) Increasing the export of **renewable** generation equipment from the United States.

#### (2) PROGRAMS-

(A) SOLAR ENERGY- The Secretary shall conduct a program of research, development, demonstration, and commercial application for solar energy, including--

- (i) photovoltaics;
- (ii) solar hot water and solar space heating;
- (iii) concentrating solar power;
- (iv) lighting systems that integrate sunlight and electrical lighting in complement to each other in common lighting fixtures for the purpose of improving energy efficiency;
- (v) manufacturability of low cost, high quality solar systems; and
- (vi) development of products that can be easily integrated into new and existing buildings.

(B) WIND ENERGY- The Secretary shall conduct a program of research, development, demonstration, and commercial application for wind energy, including--

- (i) low speed wind energy;
- (ii) offshore wind energy;
- (iii) testing and verification (including construction and operation of a research and testing facility capable of testing wind turbines); and
- (iv) distributed wind energy generation.

(C) GEOTHERMAL- The Secretary shall conduct a program of research, development, demonstration, and commercial application for geothermal energy. The program shall focus on developing improved technologies for reducing the costs of geothermal energy installations, including technologies for--

- (i) improving detection of geothermal resources;
- (ii) decreasing drilling costs;

- (iii) decreasing maintenance costs through improved materials;
- (iv) increasing the potential for other revenue sources, such as mineral production; and
- (v) increasing the understanding of reservoir life cycle and management.

(D) HYDROPOWER- The Secretary shall conduct a program of research, development, demonstration, and commercial application for cost competitive technologies that enable the development of new and incremental hydropower capacity, adding to the diversity of the energy supply of the United States, including:

- (i) Fish-friendly large turbines.
- (ii) Advanced technologies to enhance environmental performance and yield greater energy efficiencies.

(E) MISCELLANEOUS PROJECTS- The Secretary shall conduct research, development, demonstration, and commercial application programs for--

- (i) ocean energy, including wave energy;
- (ii) the combined use of **renewable** energy technologies with one another and with other energy technologies, including the combined use of wind power and coal gasification technologies;
- (iii) **renewable** energy technologies for cogeneration of hydrogen and electricity; and
- (iv) kinetic hydro turbines.

(b) Authorization of Appropriations- There are authorized to be appropriated to the Secretary to carry out **renewable** energy research, development, demonstration, and commercial application activities, including activities authorized under this subtitle--

- (1) \$632,000,000 for fiscal year 2007;
- (2) \$743,000,000 for fiscal year 2008; and
- (3) \$852,000,000 for fiscal year 2009.

(c) **Bio**energy- From the amounts authorized under subsection (b), there are authorized to be appropriated to carry out section 932--

- (1) \$213,000,000 for fiscal year 2007, of which \$100,000,000 shall be for section 932(d);
- (2) \$251,000,000 for fiscal year 2008, of which \$125,000,000 shall be for section 932(d); and
- (3) \$274,000,000 for fiscal year 2009, of which \$150,000,000 shall be for section 932(d).

(d) Solar Power- From amounts authorized under subsection (b), there is authorized to be appropriated to carry out activities under subsection (a)(2)(A)--

- (1) \$140,000,000 for fiscal year 2007, of which \$40,000,000 shall be for activities under section 935;
- (2) \$200,000,000 for fiscal year 2008, of which \$50,000,000 shall be for activities under section 935; and
- (3) \$250,000,000 for fiscal year 2009, of which \$50,000,000 shall be for activities under section 935.

(e) Administration- Of the funds authorized under subsection (c), not less than \$5,000,000 for each fiscal year shall be made available for grants to--

- (1) part B institutions;
- (2) Tribal Colleges or Universities (as defined in section 316(b) of the Higher Education Act of 1965 (20 U.S.C. 1059c(b))); and

- (3) Hispanic-serving institutions.
- (f) Rural Demonstration Projects- In carrying out this section, the Secretary, in consultation with the Secretary of Agriculture, shall demonstrate the use of **renewable** energy technologies to assist in delivering electricity to rural and remote locations including --
  - (1) advanced wind power technology, including combined use with coal gasification;
  - (2) **biomass**; and
  - (3) geothermal energy systems.
- (g) Analysis and Evaluation-
  - (1) IN GENERAL- The Secretary shall conduct analysis and evaluation in support of the **renewable** energy programs under this subtitle. These activities shall be used to guide budget and program decisions, and shall include--
    - (A) economic and technical analysis of **renewable** energy potential, including resource assessment;
    - (B) analysis of past program performance, both in terms of technical advances and in market introduction of **renewable** energy; and
    - (C) any other analysis or evaluation that the Secretary considers appropriate.
  - (2) FUNDING- The Secretary may designate up to 1 percent of the funds appropriated for carrying out this subtitle for analysis and evaluation activities under this subsection.

## SEC. 932. **BIOENERGY PROGRAM.**

- (a) Definitions- In this section:
  - (1) **BIOMASS**- The term '**biomass**' means--
    - (A) any organic material grown for the purpose of being converted to energy;
    - (B) any organic byproduct of agriculture (including wastes from food production and processing) that can be converted into energy; or
    - (C) any waste material that can be converted to energy, is segregated from other waste materials, and is derived from--
      - (i) any of the following forest-related resources: mill residues, precommercial thinnings, slash, brush, or otherwise nonmerchantable material; or
      - (ii) wood waste materials, including waste pallets, crates, dunnage, manufacturing and construction wood wastes (other than pressure-treated, chemically-treated, or painted wood wastes), and landscape or right-of-way tree trimmings, but not including municipal solid waste, gas derived from the **biodegradation** of municipal solid waste, or paper that is commonly recycled.
  - (2) **LIGNOCELLULOSIC FEEDSTOCK**- The term '**lignocellulosic feedstock**' means any portion of a plant or coproduct from conversion, including crops, trees, forest residues, and agricultural residues not specifically grown for food, including from barley grain, rapeseed, rice bran, rice hulls, rice straw, soybean matter, and sugarcane bagasse.
- (b) Program- The Secretary shall conduct a program of research, development, demonstration, and commercial application for **bioenergy**, including--
  - (1) **biopower** energy systems;
  - (2) **biofuels**;
  - (3) **bioproducts**;
  - (4) integrated **biorefineries** that may produce **biopower**, **biofuels**, and **bioproducts**;

- (5) cross-cutting research and development in feedstocks; and
  - (6) economic analysis.
- (c) **Bio**fuels and **Bio**products- The goals of the **bio**fuels and **bio**products programs shall be to develop, in partnership with industry and institutions of higher education--
- (1) advanced **bio**chemical and thermochemical conversion technologies capable of making fuels from lignocellulosic feedstocks that are price-competitive with gasoline or diesel in either internal combustion engines or fuel cell-powered vehicles;
  - (2) advanced **bio**technology processes capable of making **bio**fuels and **bio**products with emphasis on development of **bio**refinery technologies using enzyme-based processing systems;
  - (3) advanced **bio**technology processes capable of increasing energy production from lignocellulosic feedstocks, with emphasis on reducing the dependence of industry on fossil fuels in manufacturing facilities; and
  - (4) other advanced processes that will enable the development of cost-effective **bio**products, including **bio**fuels.
- (d) Integrated **Bio**refinery Demonstration Projects-
- (1) IN GENERAL- The Secretary shall carry out a program to demonstrate the commercial application of integrated **bio**refineries. The Secretary shall ensure geographical distribution of **bio**refinery demonstrations under this subsection. The Secretary shall not provide more than \$100,000,000 under this subsection for any single **bio**refinery demonstration. In making awards under this subsection, the Secretary shall encourage--
    - (A) the demonstration of a wide variety of lignocellulosic feedstocks;
    - (B) the commercial application of **bio**mass technologies for a variety of uses, including--
      - (i) liquid transportation fuels;
      - (ii) high-value **bio**based chemicals;
      - (iii) substitutes for petroleum-based feedstocks and products; and
      - (iv) energy in the form of electricity or useful heat; and
    - (C) the demonstration of the collection and treatment of a variety of **bio**mass feedstocks.
  - (2) PROPOSALS- Not later than 6 months after the date of enactment of this Act, the Secretary shall solicit proposals for demonstration of advanced **bio**refineries. The Secretary shall select only proposals that--
    - (A) demonstrate that the project will be able to operate profitably without direct Federal subsidy after initial construction costs are paid; and
    - (B) enable the **bio**refinery to be easily replicated.
- (e) University **Bio**diesel Program- The Secretary shall establish a demonstration program to determine the feasibility of the operation of diesel electric power generators, using **bio**diesel fuels with ratings as high as B100, at electric generation facilities owned by institutions of higher education. The program shall examine--
- (1) heat rates of diesel fuels with large quantities of cellulosic content;
  - (2) the reliability of operation of various fuel blends;
  - (3) performance in cold or freezing weather;
  - (4) stability of fuel after extended storage; and
  - (5) other criteria, as determined by the Secretary.

**SEC. 935. RENEWABLE ENERGY IN PUBLIC BUILDINGS.**

(a) Demonstration and Technology Transfer Program- The Secretary shall establish a program for the demonstration of innovative technologies for solar and other **renewable** energy sources in buildings owned or operated by a State or local government, and for the dissemination of information resulting from such demonstration to interested parties.

(b) Limit on Federal Funding- Notwithstanding section 988, the Secretary shall provide under this section no more than 40 percent of the incremental costs of the solar or other **renewable** energy source project funded.

(c) Requirements- As part of the application for awards under this section, the Secretary shall require all applicants---

(1) to demonstrate a continuing commitment to the use of solar and other **renewable** energy sources in buildings they own or operate; and

**(2) to state how they expect any award to further their transition to the significant use of renewable energy. SEC. 941. AMENDMENTS TO THE BIOMASS RESEARCH AND DEVELOPMENT ACT OF 2000.**

(a) Definitions- Section 303 of the **Bio**mass Research and Development Act of 2000 (Public Law 106-224; 7 U.S.C. 8101 note) is amended--

(1) by striking paragraphs (2), (9), and (10);

(2) by redesignating paragraphs (3), (4), (5), (6), (7), and (8) as paragraphs (4), (5), (7), (8), (9), and (10), respectively;

(3) by inserting after paragraph (1) the following:

`(2) **BIOBASED FUEL**- The term `biobased fuel' means any transportation fuel produced from **biomass**.

`(3) **BIOBASED PRODUCT**- The term `biobased product' means an industrial product (including chemicals, materials, and polymers) produced from **biomass**, or a commercial or industrial product (including animal feed and electric power) derived in connection with the conversion of **biomass** to fuel.';

(4) by inserting after paragraph (5) (as redesignated by paragraph (2)) the following:

`(6) **DEMONSTRATION**- The term `demonstration' means demonstration of technology in a pilot plant or semi-works scale facility.'; and

(5) by striking paragraph (9) (as redesignated by paragraph (2)) and inserting the following:

`(9) **NATIONAL LABORATORY**- The term `National Laboratory' has the meaning given that term in section 2 of the Energy Policy Act of 2005.'

(b) Cooperation and Coordination in **Bio**mass Research and Development- Section 304 of the **Bio**mass Research and Development Act of 2000 (Public Law 106-224; 7 U.S.C. 8101 note) is amended--

(1) in subsections (a) and (d), by striking `industrial products' each place it appears and inserting `fuels and **bio**based products';

(2) by striking subsections (b) and (c); and

(3) by redesignating subsection (d) as subsection (b).

(c) **Bio**mass Research and Development Board- Section 305 of the **Bio**mass Research and Development Act of 2000 (Public Law 106-224; 7 U.S.C. 8101 note) is amended--

(1) in subsections (a) and (c), by striking `industrial products' each place it appears and inserting `fuels and **bio**based products';

(2) in subsection (b)--

(A) in paragraph (1), by striking `304(d)(1)(B)' and inserting `304(b)(1)(B)'; and

- (B) in paragraph (2), by striking `304(d)(1)(A)' and inserting `304(b)(1)(A)'; and
- (3) in subsection (c)--
- (A) in paragraph (1)(B), by striking `and' at the end;
  - (B) in paragraph (2), by striking the period at the end and inserting a semicolon; and
  - (C) by adding at the end the following:
- `(3) ensure that--
- `(A) solicitations are open and competitive with awards made annually; and
  - `(B) objectives and evaluation criteria of the solicitations are clearly stated and minimally prescriptive, with no areas of special interest; and
- `(4) ensure that the panel of scientific and technical peers assembled under section 307(g)(1)(C) to review proposals is composed predominantly of independent experts selected from outside the Departments of Agriculture and Energy.'
- (d) **Biomass** Research and Development Technical Advisory Committee- Section 306 of the **Biomass** Research and Development Act of 2000 (Public Law 106-224; 7 U.S.C. 8101 note) is amended--
- (1) in subsection (b)(1)--
- (A) in subparagraph (A), by striking `biobased industrial products' and inserting `biofuels';
  - (B) by redesignating subparagraphs (B) through (J) as subparagraphs (C) through (K), respectively;
  - (C) by inserting after subparagraph (A) the following:
    - `(B) an individual affiliated with the biobased industrial and commercial products industry;';
  - (D) in subparagraph (F) (as redesignated by subparagraph (B)) by striking `an individual has' and inserting `2 individuals have';
  - (E) in subparagraphs (C), (D), (G), and (I) (as redesignated by subparagraph (B)) by striking `industrial products' each place it appears and inserting `fuels and biobased products'; and
  - (F) in subparagraph (H) (as redesignated by subparagraph (B)), by inserting `and environmental' before `analysis';
- (2) in subsection (c)(2)--
- (A) in subparagraph (A), by striking `goals' and inserting `objectives, purposes, and considerations';
  - (B) by redesignating subparagraphs (B) and (C) as subparagraphs (C) and (D), respectively;
  - (C) by inserting after subparagraph (A) the following:
    - `(B) solicitations are open and competitive with awards made annually and that objectives and evaluation criteria of the solicitations are clearly stated and minimally prescriptive, with no areas of special interest;'; and
    - (D) in subparagraph (C) (as redesignated by subparagraph (B)) by inserting `predominantly from outside the Departments of Agriculture and Energy' after `technical peers'.
- (e) **Biomass** Research and Development Initiative- Section 307 of the **Biomass** Research and Development Act of 2000 (Public Law 106-224; 7 U.S.C. 8101 note) is amended--
- (1) in subsection (a), by striking `research on biobased industrial products' and inserting `research on, and development and demonstration of, biobased fuels and

**bio**based products, and the methods, practices and technologies, for their production';  
and

(2) by striking subsections (b) through (e) and inserting the following:

`(b) Objectives- The objectives of the Initiative are to develop--

`(1) technologies and processes necessary for abundant commercial production of **bio**based fuels at prices competitive with fossil fuels;

`(2) high-value **bio**based products--

`(A) to enhance the economic viability of **bio**based fuels and power; and

`(B) as substitutes for petroleum-based feedstocks and products; and

`(3) a diversity of sustainable domestic sources of **bio**mass for conversion to **bio**based fuels and **bio**based products.

`(c) Purposes- The purposes of the Initiative are--

`(1) to increase the energy security of the United States;

`(2) to create jobs and enhance the economic development of the rural economy;

`(3) to enhance the environment and public health; and

`(4) to diversify markets for raw agricultural and forestry products.

`(d) Technical Areas- To advance the objectives and purposes of the Initiative, the Secretary of Agriculture and the Secretary of Energy, in consultation with the Administrator of the Environmental Protection Agency and heads of other appropriate departments and agencies (referred to in this section as the 'Secretaries'), shall direct research and development toward--

`(1) feedstock production through the development of crops and cropping systems relevant to production of raw materials for conversion to **bio**based fuels and **bio**based products, including--

`(A) development of advanced and dedicated crops with desired features, including enhanced productivity, broader site range, low requirements for chemical inputs, and enhanced processing;

`(B) advanced crop production methods to achieve the features described in subparagraph (A);

`(C) feedstock harvest, handling, transport, and storage; and

`(D) strategies for integrating feedstock production into existing managed land;

`(2) overcoming recalcitrance of cellulosic **bio**mass through developing technologies for converting cellulosic **bio**mass into intermediates that can subsequently be converted into **bio**based fuels and **bio**based products, including--

`(A) pretreatment in combination with enzymatic or microbial hydrolysis;  
and

`(B) thermochemical approaches, including gasification and pyrolysis;

`(3) product diversification through technologies relevant to production of a range of **bio**based products (including chemicals, animal feeds, and cogenerated power) that eventually can increase the feasibility of fuel production in a **bio**refinery, including--

`(A) catalytic processing, including thermochemical fuel production;

`(B) metabolic engineering, enzyme engineering, and fermentation systems for **bio**logical production of desired products or cogeneration of power;

`(C) product recovery;

`(D) power production technologies; and

`(E) integration into existing **bio**mass processing facilities, including starch ethanol plants, paper mills, and power plants; and



- `(4) analysis that provides strategic guidance for the application of **bio**mass technologies in accordance with realization of improved sustainability and environmental quality, cost effectiveness, security, and rural economic development, usually featuring system-wide approaches.
- `(e) Additional Considerations- Within the technical areas described in subsection (d), and in addition to advancing the purposes described in subsection (c) and the objectives described in subsection (b), the Secretaries shall support research and development--
  - `(1) to create continuously expanding opportunities for participants in existing **bio**fuels production by seeking synergies and continuity with current technologies and practices, such as the use of dried distillers grains as a bridge feedstock;
  - `(2) to maximize the environmental, economic, and social benefits of production of **bio**based fuels and **bio**based products on a large scale through life-cycle economic and environmental analysis and other means; and
  - `(3) to assess the potential of Federal land and land management programs as feedstock resources for **bio**based fuels and **bio**based products, consistent with the integrity of soil and water resources and with other environmental considerations.
- `(f) Eligible Entities- To be eligible for a grant, contract, or assistance under this section, an applicant shall be--
  - `(1) an institution of higher education;
  - `(2) a National Laboratory;
  - `(3) a Federal research agency;
  - `(4) a State research agency;
  - `(5) a private sector entity;
  - `(6) a nonprofit organization; or
  - `(7) a consortium of two or more entities described in paragraphs (1) through (6).
- `(g) Administration-
  - `(1) IN GENERAL- After consultation with the Board, the points of contact shall--
    - `(A) publish annually one or more joint requests for proposals for grants, contracts, and assistance under this section;
    - `(B) require that grants, contracts, and assistance under this section be awarded competitively, on the basis of merit, after the establishment of procedures that provide for scientific peer review by an independent panel of scientific and technical peers; and
    - `(C) give some preference to applications that--
      - `(i) involve a consortia of experts from multiple institutions;
      - `(ii) encourage the integration of disciplines and application of the best technical resources; and
      - `(iii) increase the geographic diversity of demonstration projects.
  - `(2) DISTRIBUTION OF FUNDING BY TECHNICAL AREA- Of the funds authorized to be appropriated for activities described in this section, funds shall be distributed for each of fiscal years 2007 through 2010 so as to achieve an approximate distribution of--
    - `(A) 20 percent of the funds to carry out activities for feedstock production under subsection (d)(1);
    - `(B) 45 percent of the funds to carry out activities for overcoming recalcitrance of cellulosic **bio**mass under subsection (d)(2);
    - `(C) 30 percent of the funds to carry out activities for product diversification under subsection (d)(3); and

(D) 5 percent of the funds to carry out activities for strategic guidance under subsection (d)(4).

(3) DISTRIBUTION OF FUNDING WITHIN EACH TECHNICAL AREA- Within each technical area described in paragraphs (1) through (3) of subsection (d), funds shall be distributed for each of fiscal years 2007 through 2010 so as to achieve an approximate distribution of--

(A) 15 percent of the funds for applied fundamentals;

(B) 35 percent of the funds for innovation; and

(C) 50 percent of the funds for demonstration.

(4) MATCHING FUNDS-

(A) IN GENERAL- A minimum 20 percent funding match shall be required for demonstration projects under this title.

(B) COMMERCIAL APPLICATIONS- A minimum of 50 percent funding match shall be required for commercial application projects under this title.

(5) TECHNOLOGY AND INFORMATION TRANSFER TO AGRICULTURAL USERS- The Administrator of the Cooperative State Research, Education, and Extension Service and the Chief of the Natural Resources Conservation Service shall ensure that applicable research results and technologies from the Initiative are adapted, made available, and disseminated through those services, as appropriate.'

(f) Annual Reports- Section 309 of the Biomass Research and Development Act of 2000 (Public Law 106-224; 7 U.S.C. 8101 note) is amended--

(1) in subsection (b)--

(A) in paragraph (1)--

(i) in subparagraph (A), by striking 'purposes described in section 307(b)' and inserting 'objectives, purposes, and additional considerations described in subsections (b) through (e) of section 307';

(ii) in subparagraph (B), by striking 'and' at the end;

(iii) by redesignating subparagraph (C) as subparagraph (D); and

(iv) by inserting after subparagraph (B) the following:

(C) achieves the distribution of funds described in paragraphs (2) and (3) of section 307(g); and'; and

(B) in paragraph (2), by striking 'industrial products' and inserting 'fuels and biobased products'; and

(2) by adding at the end the following:

(c) Updates- The Secretary and the Secretary of Energy shall update the Vision and Roadmap documents prepared for Federal biomass research and development activities.'

(g) Authorization of Appropriations- Section 310(b) of the Biomass Research and Development Act of 2000 (Public Law 106-224; 7 U.S.C. 8101 note) is amended by striking 'title \$54,000,000 for each of fiscal years 2002 through 2007' and inserting 'title \$200,000,000 for each of fiscal years 2006 through 2015'.

(h) Repeal of Sunset Provision- Section 311 of the Biomass Research and Development Act of 2000 (Public Law 106-224; 7 U.S.C. 8101 note) is repealed.

## SEC. 942. PRODUCTION INCENTIVES FOR CELLULOSIC BIOFUELS.

(a) Purpose- The purpose of this section is to--

(1) accelerate deployment and commercialization of biofuels;

- (2) deliver the first 1,000,000,000 gallons in annual cellulosic **bio**fuels production by 2015;
  - (3) ensure **bio**fuels produced after 2015 are cost competitive with gasoline and diesel; and
  - (4) ensure that small feedstock producers and rural small businesses are full participants in the development of the cellulosic **bio**fuels industry.
- (b) Definitions- In this section:
- (1) CELLULOSIC **BIO**FUELS- The term `cellulosic **bio**fuels' means any fuel that is produced from cellulosic feedstocks.
  - (2) ELIGIBLE ENTITY- The term `eligible entity' means a producer of fuel from cellulosic **bio**fuels the production facility of which--
    - (A) is located in the United States;
    - (B) meets all applicable Federal and State permitting requirements; and
    - (C) meets any financial criteria established by the Secretary.
- (c) Program-
- (1) ESTABLISHMENT- The Secretary, in consultation with the Secretary of Agriculture, the Secretary of Defense, and the Administrator of the Environmental Protection Agency, shall establish an incentive program for the production of cellulosic **bio**fuels.
  - (2) BASIS OF INCENTIVES- Under the program, the Secretary shall award production incentives on a per gallon basis of cellulosic **bio**fuels from eligible entities, through--
    - (A) set payments per gallon of cellulosic **bio**fuels produced in an amount determined by the Secretary, until initiation of the first reverse auction; and
    - (B) reverse auction thereafter.
  - (3) FIRST REVERSE AUCTION- The first reverse auction shall be held on the earlier of--
    - (A) not later than 1 year after the first year of annual production in the United States of 100,000,000 gallons of cellulosic **bio**fuels, as determined by the Secretary; or
    - (B) not later than 3 years after the date of enactment of this Act.
  - (4) REVERSE AUCTION PROCEDURE-
    - (A) IN GENERAL- On initiation of the first reverse auction, and each year thereafter until the earlier of the first year of annual production in the United States of 1,000,000,000 gallons of cellulosic **bio**fuels, as determined by the Secretary, or 10 years after the date of enactment of this Act, the Secretary shall conduct a reverse auction at which--
      - (i) the Secretary shall solicit bids from eligible entities;
      - (ii) eligible entities shall submit--
        - (I) a desired level of production incentive on a per gallon basis; and
        - (II) an estimated annual production amount in gallons; and
      - (iii) the Secretary shall issue awards for the production amount submitted, beginning with the eligible entity submitting the bid for the lowest level of production incentive on a per gallon basis and meeting such other criteria as are established by the Secretary, until the amount of funds available for the reverse auction is committed.

## **SEC. 1003. SMALL BUSINESS ADVOCACY AND ASSISTANCE.**

(a) Small Business Advocate- The Secretary shall require the Director of each National Laboratory, and may require the Director of a single-purpose research facility, to designate a small business advocate to--

- (1) increase the participation of small business concerns, including socially and economically disadvantaged small business concerns (as defined in section 8(a)(4) of the Small Business Act (15 U.S.C. 637(a)(4))), in procurement, collaborative research, technology licensing, and technology transfer activities conducted by the National Laboratory or single-purpose research facility;
- (2) report to the Director of the National Laboratory or single-purpose research facility on the actual participation of small business concerns in procurement and collaborative research along with recommendations, if appropriate, on how to improve participation;
- (3) make available to small business concerns training, mentoring, and information on how to participate in procurement and collaborative research activities;
- (4) increase the awareness inside the National Laboratory or single-purpose research facility of the capabilities and opportunities presented by small business concerns; and
- (5) establish guidelines for the program under subsection (b) and report on the effectiveness of the program to the Director of the National Laboratory or single-purpose research facility.

(b) Establishment of Small Business Assistance Program- The Secretary shall require the Director of each National Laboratory, and may require the Director of a single-purpose research facility, to establish a program to provide small business concerns with--

- (1) assistance directed at making the small business concerns more effective and efficient subcontractors or suppliers to the National Laboratory or single-purpose research facilities; or
- (2) general technical assistance, the cost of which shall not exceed \$10,000 per instance of assistance, to improve the products or services of the small business concern.

(c) Use of Funds- None of the funds expended under subsection (b) may be used for direct grants to small business concerns.

(d) Authorization of Appropriations- There is authorized to be appropriated to the Secretary for activities under this section \$5,000,000 for each of fiscal years 2006 through 2008.

## **SEC. 1004. OUTREACH.**

The Secretary shall ensure that each program authorized by this Act or an amendment made by this Act includes an outreach component to provide information, as appropriate, to manufacturers, consumers, engineers, architects, builders, energy service companies, institutions of higher education, facility planners and managers, State and local governments, and other entities.

## **SEC. 1011. SENSE OF CONGRESS.**

It is the sense of Congress that--

- (1) the Secretary should develop and implement more stringent procurement and inventory controls, including controls on the purchase card program, to prevent

waste, fraud, and abuse of taxpayer funds by employees and contractors of the Department; and

(2) the Department's Inspector General should continue to closely review purchase card purchases and other procurement and inventory practices at the Department.

#### **SEC. 54. CREDIT TO HOLDERS OF CLEAN **RENEWABLE** ENERGY BONDS.**

(a) Allowance of Credit- If a taxpayer holds a clean **renewable** energy bond on one or more credit allowance dates of the bond occurring during any taxable year, there shall be allowed as a credit against the tax imposed by this chapter for the taxable year an amount equal to the sum of the credits determined under subsection (b) with respect to such dates.

(b) Amount of Credit-

(1) IN GENERAL- The amount of the credit determined under this subsection with respect to any credit allowance date for a clean **renewable** energy bond is 25 percent of the annual credit determined with respect to such bond.

(2) ANNUAL CREDIT- The annual credit determined with respect to any clean **renewable** energy bond is the product of--

(A) the credit rate determined by the Secretary under paragraph (3) for the day on which such bond was sold, multiplied by

(B) the outstanding face amount of the bond.

(3) DETERMINATION- For purposes of paragraph (2), with respect to any clean **renewable** energy bond, the Secretary shall determine daily or cause to be determined daily a credit rate which shall apply to the first day on which there is a binding, written contract for the sale or exchange of the bond. The credit rate for any day is the credit rate which the Secretary or the Secretary's designee estimates will permit the issuance of clean **renewable** energy bonds with a specified maturity or redemption date without discount and without interest cost to the qualified issuer.

(4) CREDIT ALLOWANCE DATE- For purposes of this section, the term 'credit allowance date' means--

(A) March 15,

(B) June 15,

(C) September 15, and

(D) December 15.

Such term also includes the last day on which the bond is outstanding.

(5) SPECIAL RULE FOR ISSUANCE AND REDEMPTION- In the case of a bond which is issued during the 3-month period ending on a credit allowance date, the amount of the credit determined under this subsection with respect to such credit allowance date shall be a ratable portion of the credit otherwise determined based on the portion of the 3-month period during which the bond is outstanding. A similar rule shall apply when the bond is redeemed or matures.

(c) Limitation Based on Amount of Tax- The credit allowed under subsection (a) for any taxable year shall not exceed the excess of--

(1) the sum of the regular tax liability (as defined in section 26(b)) plus the tax imposed by section 55, over

(2) the sum of the credits allowable under this part (other than subpart C and this section).

(d) Clean **Renewable** Energy Bond- For purposes of this section--

`(1) IN GENERAL- The term `clean **renewable** energy bond' means any bond issued as part of an issue if--

`(A) the bond is issued by a qualified issuer pursuant to an allocation by the Secretary to such issuer of a portion of the national clean **renewable** energy bond limitation under subsection (f)(2),

`(B) 95 percent or more of the proceeds of such issue are to be used for capital expenditures incurred by qualified borrowers for one or more qualified projects,

`(C) the qualified issuer designates such bond for purposes of this section and the bond is in registered form, and

`(D) the issue meets the requirements of subsection (h).

`(2) QUALIFIED PROJECT; SPECIAL USE RULES-

`(A) IN GENERAL- The term `qualified project' means any qualified facility (as determined under section 45(d) without regard to paragraph (10) and to any placed in service date) owned by a qualified borrower.

`(B) REFINANCING RULES- For purposes of paragraph (1)(B), a qualified project may be refinanced with proceeds of a clean **renewable** energy bond only if the indebtedness being refinanced (including any obligation directly or indirectly refinanced by such indebtedness) was originally incurred by a qualified borrower after the date of the enactment of this section.

`(C) REIMBURSEMENT- For purposes of paragraph (1)(B), a clean **renewable** energy bond may be issued to reimburse a qualified borrower for amounts paid after the date of the enactment of this section with respect to a qualified project, but only if--

`(i) prior to the payment of the original expenditure, the qualified borrower declared its intent to reimburse such expenditure with the proceeds of a clean **renewable** energy bond,

`(ii) not later than 60 days after payment of the original expenditure, the qualified issuer adopts an official intent to reimburse the original expenditure with such proceeds, and

`(iii) the reimbursement is made not later than 18 months after the date the original expenditure is paid.

`(D) TREATMENT OF CHANGES IN USE- For purposes of paragraph (1)(B), the proceeds of an issue shall not be treated as used for a qualified project to the extent that a qualified borrower or qualified issuer takes any action within its control which causes such proceeds not to be used for a qualified project. The Secretary shall prescribe regulations specifying remedial actions that may be taken (including conditions to taking such remedial actions) to prevent an action described in the preceding sentence from causing a bond to fail to be a clean **renewable** energy bond.

`(e) Maturity Limitations-

`(1) DURATION OF TERM- A bond shall not be treated as a clean **renewable** energy bond if the maturity of such bond exceeds the maximum term determined by the Secretary under paragraph (2) with respect to such bond.

`(2) MAXIMUM TERM- During each calendar month, the Secretary shall determine the maximum term permitted under this paragraph for bonds issued during the following calendar month. Such maximum term shall be the term which the Secretary estimates will result in the present value of the obligation to repay the principal on the bond being equal to 50 percent of the face amount of such bond.

Such present value shall be determined without regard to the requirements of subsection (1)(6) and using as a discount rate the average annual interest rate of tax-exempt obligations having a term of 10 years or more which are issued during the month. If the term as so determined is not a multiple of a whole year, such term shall be rounded to the next highest whole year.

`(f) Limitation on Amount of Bonds Designated-

`(1) NATIONAL LIMITATION- There is a national clean **renewable** energy bond limitation of \$800,000,000.

`(2) ALLOCATION BY SECRETARY- The Secretary shall allocate the amount described in paragraph (1) among qualified projects in such manner as the Secretary determines appropriate, except that the Secretary may not allocate more than \$500,000,000 of the national clean **renewable** energy bond limitation to finance qualified projects of qualified borrowers which are governmental bodies.

`(g) Credit Included in Gross Income- Gross income includes the amount of the credit allowed to the taxpayer under this section (determined without regard to subsection (c)) and the amount so included shall be treated as interest income.

`(h) Special Rules Relating to Expenditures-

`(1) IN GENERAL- An issue shall be treated as meeting the requirements of this subsection if, as of the date of issuance, the qualified issuer reasonably expects--

`(A) at least 95 percent of the proceeds of such issue are to be spent for one or more qualified projects within the 5-year period beginning on the date of issuance of the clean energy bond,

`(B) a binding commitment with a third party to spend at least 10 percent of the proceeds of such issue will be incurred within the 6-month period beginning on the date of issuance of the clean energy bond or, in the case of a clean energy bond the proceeds of which are to be loaned to two or more qualified borrowers, such binding commitment will be incurred within the 6-month period beginning on the date of the loan of such proceeds to a qualified borrower, and

`(C) such projects will be completed with due diligence and the proceeds of such issue will be spent with due diligence.

`(2) EXTENSION OF PERIOD- Upon submission of a request prior to the expiration of the period described in paragraph (1)(A), the Secretary may extend such period if the qualified issuer establishes that the failure to satisfy the 5-year requirement is due to reasonable cause and the related projects will continue to proceed with due diligence.

`(3) FAILURE TO SPEND REQUIRED AMOUNT OF BOND PROCEEDS

WITHIN 5 YEARS- To the extent that less than 95 percent of the proceeds of such issue are expended by the close of the 5-year period beginning on the date of issuance (or if an extension has been obtained under paragraph (2), by the close of the extended period), the qualified issuer shall redeem all of the nonqualified bonds within 90 days after the end of such period. For purposes of this paragraph, the amount of the nonqualified bonds required to be redeemed shall be determined in the same manner as under section 142.

`(i) Special Rules Relating to Arbitrage- A bond which is part of an issue shall not be treated as a clean **renewable** energy bond unless, with respect to the issue of which the bond is a part, the qualified issuer satisfies the arbitrage requirements of section 148 with respect to proceeds of the issue.

- `(j) Cooperative Electric Company; Qualified Energy Tax Credit Bond Lender; Governmental Body; Qualified Borrower- For purposes of this section--
- `(1) COOPERATIVE ELECTRIC COMPANY- The term `cooperative electric company' means a mutual or cooperative electric company described in section 501(c)(12) or section 1381(a)(2)(C), or a not-for-profit electric utility which has received a loan or loan guarantee under the Rural Electrification Act.
  - `(2) CLEAN **RENEWABLE** ENERGY BOND LENDER- The term `clean **renewable** energy bond lender' means a lender which is a cooperative which is owned by, or has outstanding loans to, 100 or more cooperative electric companies and is in existence on February 1, 2002, and shall include any affiliated entity which is controlled by such lender.
  - `(3) GOVERNMENTAL BODY- The term `governmental body' means any State, territory, possession of the United States, the District of Columbia, Indian tribal government, and any political subdivision thereof.
  - `(4) QUALIFIED ISSUER- The term `qualified issuer' means--
    - `(A) a clean **renewable** energy bond lender,
    - `(B) a cooperative electric company, or
    - `(C) a governmental body.
  - `(5) QUALIFIED BORROWER- The term `qualified borrower' means--
    - `(A) a mutual or cooperative electric company described in section 501(c)(12) or 1381(a)(2)(C), or
    - `(B) a governmental body.
- `(k) Special Rules Relating to Pool Bonds- No portion of a pooled financing bond may be allocable to any loan unless the borrower has entered into a written loan commitment for such portion prior to the issue date of such issue.
- `(l) Other Definitions and Special Rules- For purposes of this section--
- `(1) BOND- The term `bond' includes any obligation.
  - `(2) POOLED FINANCING BOND- The term `pooled financing bond' shall have the meaning given such term by section 149(f)(4)(A).
  - `(3) PARTNERSHIP; S CORPORATION; AND OTHER PASS-THRU ENTITIES-
    - `(A) IN GENERAL- Under regulations prescribed by the Secretary, in the case of a partnership, trust, S corporation, or other pass-thru entity, rules similar to the rules of section 41(g) shall apply with respect to the credit allowable under subsection (a).
    - `(B) NO BASIS ADJUSTMENT- In the case of a bond held by a partnership or an S corporation, rules similar to the rules under section 1397E(i) shall apply.
  - `(4) BONDS HELD BY REGULATED INVESTMENT COMPANIES- If any clean **renewable** energy bond is held by a regulated investment company, the credit determined under subsection (a) shall be allowed to shareholders of such company under procedures prescribed by the Secretary.
  - `(5) TREATMENT FOR ESTIMATED TAX PURPOSES- Solely for purposes of sections 6654 and 6655, the credit allowed by this section (determined without regard to subsection (c)) to a taxpayer by reason of holding a clean **renewable** energy bond on a credit allowance date shall be treated as if it were a payment of estimated tax made by the taxpayer on such date.
  - `(6) RATABLE PRINCIPAL AMORTIZATION REQUIRED- A bond shall not be treated as a clean **renewable** energy bond unless it is part of an issue which provides



for an equal amount of principal to be paid by the qualified issuer during each calendar year that the issue is outstanding.

`(7) REPORTING- Issuers of clean **renewable** energy bonds shall submit reports similar to the reports required under section 149(e).

`(m) Termination- This section shall not apply with respect to any bond issued after December 31, 2007.'

(b) Reporting- Subsection (d) of section 6049 (relating to returns regarding payments of interest) is amended by adding at the end the following new paragraph:

`(8) REPORTING OF CREDIT ON CLEAN **RENEWABLE** ENERGY BONDS-

`(A) IN GENERAL- For purposes of subsection (a), the term `interest' includes amounts includible in gross income under section 54(g) and such amounts shall be treated as paid on the credit allowance date (as defined in section 54(b)(4)).

`(B) REPORTING TO CORPORATIONS, ETC- Except as otherwise provided in regulations, in the case of any interest described in subparagraph (A), subsection (b)(4) shall be applied without regard to subparagraphs (A), (H), (I), (J), (K), and (L)(i) of such subsection.

`(C) REGULATORY AUTHORITY- The Secretary may prescribe such regulations as are necessary or appropriate to carry out the purposes of this paragraph, including regulations which require more frequent or more detailed reporting.'

(c) Conforming Amendments-

(1) The table of subparts for part IV of subchapter

## **Subtitle D--Alternative Motor Vehicles and Fuels Incentives**

### **SEC. 1402. ENERGY PRODUCTION INCENTIVES.**

(a) In General- A State may provide to any entity--

- (1) a credit against any tax or fee owed to the State under a State law, or
- (2) any other tax incentive,

determined by the State to be appropriate, in the amount calculated under and in accordance with a formula determined by the State, for production described in subsection (b) in the State by the entity that receives such credit or such incentive.

(b) Eligible Entities- Subsection (a) shall apply with respect to the production in the State of electricity from coal mined in the State and used in a facility, if such production meets all applicable Federal and State laws and if such facility uses scrubbers or other forms of clean coal technology.

(c) Effect on Interstate Commerce- Any action taken by a State in accordance with this section with respect to a tax or fee payable, or incentive applicable, for any period beginning after the date of the enactment of this Act shall--

- (1) be considered to be a reasonable regulation of commerce; and
- (2) not be considered to impose an undue burden on interstate commerce or to otherwise impair, restrain, or discriminate, against interstate commerce.

## Subtitle B--Set America Free

### SEC. 1421. SHORT TITLE.

This subtitle may be cited as the 'Set America Free Act of 2005' or the 'SAFE Act'.

### SEC. 1422. PURPOSE.

The purpose of this subtitle is to establish a United States commission to make recommendations for a coordinated and comprehensive North American energy policy that will achieve energy self-sufficiency by 2025 within the three contiguous North American nation area of Canada, Mexico, and the United States.

### SEC. 1423. UNITED STATES COMMISSION ON NORTH AMERICAN ENERGY FREEDOM.

(a) Establishment- There is hereby established the United States Commission on North American Energy Freedom (in this subtitle referred to as the 'Commission'). The Federal Advisory Committee Act (5 U.S.C. App.), except sections 3, 7, and 12, does not apply to the Commission.

(b) Membership-

(1) APPOINTMENT- The Commission shall be composed of 16 members appointed by the President from among individuals described in paragraph (2) who are knowledgeable on energy issues, including oil and gas exploration and production, crude oil refining, oil and gas pipelines, electricity production and transmission, coal, unconventional hydrocarbon resources, fuel cells, motor vehicle power systems, nuclear energy, renewable energy, biofuels, energy efficiency, and energy conservation. The membership of the Commission shall be balanced by area of expertise to the extent consistent with maintaining the highest level of expertise on the Commission. Members of the Commission may be citizens of Canada, Mexico, or the United States, and the President shall ensure that citizens of all three nations are appointed to the Commission.

(2) NOMINATIONS- The President shall appoint the members of the Commission within 60 days after the effective date of this Act, including individuals nominated as follows:

(A) Four members shall be appointed from amongst individuals independently determined by the President to be qualified for appointment.

(B) Four members shall be appointed from a list of eight individuals who shall be nominated by the majority leader of the Senate in consultation with the chairman of the Committee on Energy and Natural Resources of the Senate.

(C) Four members shall be appointed from a list of eight individuals who shall be nominated by the Speaker of the House of Representatives in consultation with the chairmen of the Committees on Energy and Commerce and Resources of the House of Representatives.

(D) Two members shall be appointed from a list of four individuals who shall be nominated by the minority leader of the Senate in consultation with the ranking Member of the Committee on Energy and Natural Resources of the Senate.

(E) Two members shall be appointed from a list of four individuals who shall be nominated by the minority leader of the House in consultation with the ranking Members of the Committees on Energy and Commerce and Resources of the House of Representatives.

(3) CHAIRMAN- The chairman of the Commission shall be selected by the President. The chairman of the Commission shall be responsible for--

(A) the assignment of duties and responsibilities among staff personnel and their continuing supervision; and

(B) the use and expenditure of funds available to the Commission.

(4) VACANCIES- Any vacancy on the Commission shall be filled in the same manner as the original incumbent was appointed.

(c) Resources- In carrying out its functions under this section, the Commission--

(1) is authorized to secure directly from any Federal agency or department any information it deems necessary to carry out its functions under this Act, and each such agency or department is authorized to cooperate with the Commission and, to the extent permitted by law, to furnish such information (other than information described in section 552(b)(1)(A) of title 5, United States Code) to the Commission, upon the request of the Commission;

(2) may enter into contracts, subject to the availability of appropriations for contracting, and employ such staff experts and consultants as may be necessary to carry out the duties of the Commission, as provided by section 3109 of title 5, United States Code; and

(3) shall establish a multidisciplinary science and technical advisory panel of experts in the field of energy to assist the Commission in preparing its report, including ensuring that the scientific and technical information considered by the Commission is based on the best scientific and technical information available.

(d) Staffing- The chairman of the Commission may, without regard to the civil service laws and regulations, appoint and terminate an executive director and such other additional personnel as may be necessary for the Commission to perform its duties. The executive director shall be compensated at a rate not to exceed the rate payable for Level IV of the Executive Schedule under chapter 5136 of title 5, United States Code. The chairman shall select staff from among qualified citizens of Canada, Mexico, and the United States of America.

(e) Meetings-

(1) ADMINISTRATION- All meetings of the Commission shall be open to the public, except that a meeting or any portion of it may be closed to the public if it concerns matters or information described in section 552b(c) of title 5, United States Code. Interested persons shall be permitted to appear at open meetings and present oral or written statements on the subject matter of the meeting. The Commission may administer oaths or affirmations to any person appearing before it.

(2) NOTICE; MINUTES; PUBLIC AVAILABILITY OF DOCUMENTS-

(A) NOTICE- All open meetings of the Commission shall be preceded by timely public notice in the Federal Register of the time, place, and subject of the meeting.

(B) MINUTES- Minutes of each meeting shall be kept and shall contain a record of the people present, a description of the discussion that occurred, and copies of all statements filed. Subject to section 552 of title 5, United States Code, the minutes and records of all meetings and other documents that were made available to or prepared for the Commission shall be

available for public inspection and copying at a single location in the offices of the Commission.

(3) INITIAL MEETING- The Commission shall hold its first meeting within 30 days after all 16 members have been appointed.

(f) Report- Within 12 months after the effective date of this Act, the Commission shall submit to Congress and the President a final report of its findings and recommendations regarding North American energy freedom.

(g) Administrative Procedure for Report and Review- Chapter 5 and chapter 7 of title 5, United States Code, do not apply to the preparation, review, or submission of the report required by subsection (f).

(h) Termination- The Commission shall cease to exist 90 days after the date on which it submits its final report.

(i) Authorization of Appropriations- There is authorized to be appropriated to carry out this chapter a total of \$10,000,000 for the 2 fiscal-year period beginning with fiscal year 2005, such sums to remain available until expended.

## SEC. 1424. NORTH AMERICAN ENERGY FREEDOM POLICY.

Within 90 days after receiving and considering the report and recommendations of the Commission under section 1423, the President shall submit to Congress a statement of proposals to implement or respond to the Commission's recommendations for a coordinated, comprehensive, and long-range national policy to achieve North American energy freedom by 2025.

## TITLE XV--ETHANOL AND MOTOR FUELS

### Subtitle A--General Provisions

## SEC. 1501. RENEWABLE CONTENT OF GASOLINE.

(a) In General- Section 211 of the Clean Air Act (42 U.S.C. 7545) is amended--

(1) by redesignating subsection (o) as subsection (r); and

(2) by inserting after subsection (n) the following:

(o) **Renewable** Fuel Program-

(1) DEFINITIONS- In this section:

(A) CELLULOSIC **BIOMASS** ETHANOL- The term 'cellulosic **biomass** ethanol' means ethanol derived from any lignocellulosic or hemicellulosic matter that is available on a **renewable** or recurring basis, including--

(i) dedicated energy crops and trees;

(ii) wood and wood residues;

(iii) plants;

(iv) grasses;

(v) agricultural residues;

(vi) fibers;

(vii) animal wastes and other waste materials; and

(viii) municipal solid waste.

The term also includes any ethanol produced in facilities where animal wastes or other waste materials are digested or otherwise used to displace 90 percent or more of the fossil fuel normally used in the production of ethanol.

`(B) WASTE DERIVED ETHANOL- The term `waste derived ethanol' means ethanol derived from--

- `(i) animal wastes, including poultry fats and poultry wastes, and other waste materials; or
- `(ii) municipal solid waste.

`(C) **RENEWABLE FUEL**-

`(i) IN GENERAL- The term `**renewable** fuel' means motor vehicle fuel that--

`(I)(aa) is produced from grain, starch, oilseeds, vegetable, animal, or fish materials including fats, greases, and oils, sugarcane, sugar beets, sugar components, tobacco, potatoes, or other **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; and

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

`(ii) INCLUSION- The term `**renewable** fuel' includes--

`(I) cellulosic **biomass** ethanol and `waste derived ethanol'; and

`(II) **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).

`(D) SMALL REFINERY- The term `small refinery' means a refinery for which the average aggregate daily crude oil throughput for a calendar year (as determined by dividing the aggregate throughput for the calendar year by the number of days in the calendar year) does not exceed 75,000 barrels.

`(2) **RENEWABLE FUEL PROGRAM**-

`(A) REGULATIONS-

`(i) IN GENERAL- Not later than 1 year after the date of enactment of this paragraph, the Administrator shall promulgate regulations to ensure that gasoline sold or introduced into commerce in the United States (except in noncontiguous States or territories), on an annual average basis, contains the applicable volume of **renewable** fuel determined in accordance with subparagraph (B).

`(ii) NONCONTIGUOUS STATE OPT-IN-

`(I) IN GENERAL- On the petition of a noncontiguous State or territory, the Administrator may allow the **renewable** fuel program established under this subsection to apply in the noncontiguous State or territory at the same time or any time after the Administrator promulgates regulations under this subparagraph.

`(II) OTHER ACTIONS- In carrying out this clause, the Administrator may--

`(aa) issue or revise regulations under this paragraph;

`(bb) establish applicable percentages under paragraph (3);

`(cc) provide for the generation of credits under paragraph (5); and

`(dd) take such other actions as are necessary to allow for the application of the **renewable** fuels program in a noncontiguous State or territory.

`(iii) PROVISIONS OF REGULATIONS- Regardless of the date of promulgation, the regulations promulgated under clause (i)--

`(I) shall contain compliance provisions applicable to refineries, blenders, distributors, and importers, as appropriate, to ensure that the requirements of this paragraph are met; but

`(II) shall not--

`(aa) restrict geographic areas in which **renewable** fuel may be used; or

`(bb) impose any per-gallon obligation for the use of **renewable** fuel.

`(iv) REQUIREMENT IN CASE OF FAILURE TO PROMULGATE REGULATIONS- If the Administrator does not promulgate regulations under clause (i), the percentage of **renewable** fuel in gasoline sold or dispensed to consumers in the United States, on a volume basis, shall be 2.78 percent for calendar year 2006.

`(B) APPLICABLE VOLUME-

`(i) CALENDAR YEARS 2006 THROUGH 2012- For the purpose of subparagraph (A), the applicable volume for any of calendar years 2006 through 2012 shall be determined in accordance with the following table:

**Applicable volume of **renewable** fuel**

**`Calendar year:**

**(in billions of gallons):**

2006

4.0

2007

4.7

2008

5.4

2009

6.1

2010

6.8

2011

7.4

2012

7.5.

`(ii) CALENDAR YEAR 2013 AND THEREAFTER- Subject to clauses (iii) and (iv), for the purposes of subparagraph (A), the applicable volume for calendar year 2013 and each calendar year thereafter shall be determined by the Administrator, in coordination with the Secretary of Agriculture and the Secretary of Energy, based on a review of the implementation of the program during calendar years 2006 through 2012, including a review of--

`(I) the impact of the use of **renewable** fuels on the environment, air quality, energy security, job creation, and rural economic development; and

`(II) the expected annual rate of future production of **renewable** fuels, including cellulosic ethanol.

`(iii) MINIMUM QUANTITY DERIVED FROM CELLULOSIC **BIO**MASS- For calendar year 2013 and each calendar year thereafter-

`(I) the applicable volume referred to in clause (ii) shall contain a minimum of 250,000,000 gallons that are derived from cellulosic **bio**mass; and

`(II) the 2.5-to-1 ratio referred to in paragraph (4) shall not apply.

`(iv) MINIMUM APPLICABLE VOLUME- For the purpose of subparagraph (A), the applicable volume for calendar year 2013 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--

`(aa) 7,500,000,000 gallons of **renewable** fuel; bears to

`(bb) the number of gallons of gasoline sold or introduced into commerce in calendar year 2012.

`(3) APPLICABLE PERCENTAGES-

`(A) PROVISION OF ESTIMATE OF VOLUMES OF GASOLINE SALES- Not later than October 31 of each of calendar years 2005 through 2011, the Administrator of the Energy Information Administration shall provide to the Administrator of the Environmental Protection Agency an estimate, with

respect to the following calendar year, of the volumes of gasoline projected to be sold or introduced into commerce in the United States.

**(B) DETERMINATION OF APPLICABLE PERCENTAGES-**

**(i) IN GENERAL-** Not later than November 30 of each of calendar years 2005 through 2012, based on the estimate provided under subparagraph (A), the Administrator of the Environmental Protection Agency shall determine and publish in the Federal Register, with respect to the following calendar year, the **renewable** fuel obligation that ensures that the requirements of paragraph (2) are met.

**(ii) REQUIRED ELEMENTS-** The **renewable** fuel obligation determined for a calendar year under clause (i) shall--

**(I)** be applicable to refineries, blenders, and importers, as appropriate;

**(II)** be expressed in terms of a volume percentage of gasoline sold or introduced into commerce in the United States; and

**(III)** subject to subparagraph (C)(i), consist of a single applicable percentage that applies to all categories of persons specified in subclause (I).

**(C) ADJUSTMENTS-** In determining the applicable percentage for a calendar year, the Administrator shall make adjustments--

**(i)** to prevent the imposition of redundant obligations on any person specified in subparagraph (B)(ii)(I); and

**(ii)** to account for the use of **renewable** fuel during the previous calendar year by small refineries that are exempt under paragraph (9).

**(4) CELLULOSIC BIOMASS ETHANOL OR WASTE DERIVED ETHANOL-**

For the purpose of paragraph (2), 1 gallon of cellulosic **biomass** ethanol or waste derived ethanol shall be considered to be the equivalent of 2.5 gallons of **renewable** fuel.

**(5) CREDIT PROGRAM-**

**(A) IN GENERAL-** The regulations promulgated under paragraph (2)(A) shall provide--

**(i)** for the generation of an appropriate amount of credits by any person that refines, blends, or imports gasoline that contains a quantity of **renewable** fuel that is greater than the quantity required under paragraph (2);

**SEC. 1833. RENEWABLE ENERGY ON FEDERAL LAND.**

**(a) National Academy of Sciences Study-** Not later than 90 days after the date of enactment of this Act, the Secretary of the Interior shall enter into a contract with the National Academy of Sciences under which the National Academy of Sciences shall--

(1) study the potential of developing wind, solar, and ocean energy resources (including tidal, wave, and thermal energy) on Federal land available for those uses under current law and the outer Continental Shelf;

(2) assess any Federal law (including regulations) relating to the development of those resources that is in existence on the date of enactment of this Act; and

(3) recommend statutory and regulatory mechanisms for developing those resources.



(b) Submission to Congress- Not later than 2 years after the date of enactment of this Act, the Secretary of the Interior shall submit to Congress the results of the study under subsection (a).