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August 27, 2007

### **House Energy Bill Material Relevant to Forests**

Bill Link: [http://frwebgate.access.gpo.gov/cgi-bin/getdoc.cgi?dbname=110\\_cong\\_bills&docid=f:h3221eh.txt.pdf](http://frwebgate.access.gpo.gov/cgi-bin/getdoc.cgi?dbname=110_cong_bills&docid=f:h3221eh.txt.pdf)

Division A: “New Direction for Energy Independence, National Security” - Titles 1-9  
Division B: “Consumer Protection Act” and the “Renewable Energy and Energy Conservation Tax Act of 2007” – Titles 10-14

## **DIVISION A—NEW DIRECTION FOR ENERGY INDEPENDENCE, NATIONAL SECURITY, AND CONSUMER PROTECTION ACT**

### **TITLE I—GREEN JOBS**

- SEC. 1001. SHORT TITLE.
  - This title may be cited as the “Green Jobs Act of 2007”.
- (Page 15-17) SEC. 1002. ENERGY EFFICIENCY AND RENEWABLE ENERGY WORKER TRAINING PROGRAM
  - Section 171 of the Workforce Investment Act of 1998 (29 U.S.C. 2916) is amended by adding at the end the following:
    - “(e) ENERGY EFFICIENCY AND RENEWABLE ENERGY WORKER TRAINING PROGRAM.—
      - (1) GRANT PROGRAM.—
        - (A) IN GENERAL.—Not later than 6 months after the date of enactment of the Green Jobs Act of 2007, the Secretary, in consultation with the Secretary of Energy, shall establish an energy efficiency and renewable energy worker training program under which the Secretary shall carry out the activities described in paragraph (2) to achieve the purposes of this subsection.
        - (B) ELIGIBILITY.—For purposes of providing assistance and services under the program established under this subsection—
          - (i) target populations of eligible individuals to be given priority for training and other services shall include—
            - (I) workers affected by national energy and environmental policy;
            - (II) individuals in need of updated training related to the energy efficiency and renewable energy industries; and

- (ii) energy efficiency and renewable energy industries eligible to participate in a program under this subsection include—
  - (II) the renewable electric power industry;
  - (IV) the biofuels industry;
  - (VII) manufacturers that produce sustainable products using environmentally sustainable processes and materials.

**TITLE II—INTERNATIONAL CLIMATE COOPERATION REENGAGEMENT ACT OF 2007**

- (Page 44) SEC. 2102. CONGRESSIONAL STATEMENT OF POLICY.
  - Congress declares the following to be the policy of the United States:
    - (5) To protect United States national and economic interests and United States competitiveness in all sectors by negotiating a new agreement under the Convention (United Nations Framework Convention on Climate Change) that is cost effective, comprehensive, flexible, and equitable. Such an agreement shall, at a minimum—
      - (F) include incentives for sustainable forestry management that reflect the value of avoided deforestation;

**TITLE IV—SCIENCE AND TECHNOLOGY**

- (Page 191) SEC. 4413. ENVIRONMENTAL RESEARCH AND DEVELOPMENT.
  - (a) AMENDMENTS.—Section 977 of the Energy Policy Act of 2005 (42 U.S.C. 16317) is amended—
    - (2) in subsection (b)—
      - (D) by inserting after paragraph (3) the following new paragraph:
        - (4) develop cellulosic and other feedstocks that are less resource and land intensive and that promote sustainable use of resources, including soil, water, energy, forests, and land, and ensure protection of air, water, and soil quality; and
  - (b) TOOLS AND EVALUATION.—The Secretary, in consultation with the Administrator of the Environmental Protection Agency and the Secretary of Agriculture, shall establish a research and development program to—
    - (1) improve and develop analytical tools to facilitate the analysis of life-cycle energy and greenhouse gas emissions, including emissions related to direct and indirect land use changes, attributable to all potential biofuel feedstocks and production processes; and
    - (2) promote the systematic evaluation of the impact of expanded biofuel production on the environment, including forestlands, and on the food supply for humans and animals.
  - (c) SMALL-SCALE PRODUCTION AND USE OF BIOFUELS.—The Secretary, in cooperation with the Secretary of Agriculture, shall establish a research and development program to facilitate small-scale production, local, and on-farm use of biofuels, including the development of small-scale gasification technologies for production of biofuel from cellulosic feedstocks.

## TITLE V—AGRICULTURE ENERGY

- (Page 264-290) “SEC.5007. BIOMASS RESEARCH AND DEVELOPMENT ACT OF 2000.
  - (a) RESTATEMENT OF ACT.—Section 9008 of the Farm Security and Rural Investment Act of 2002 (116 Stat. 486) is amended to read as follows:
- “SEC. 9008. BIOMASS RESEARCH AND DEVELOPMENT ACT OF 2000.
  - (a) SHORT TITLE.—This section may be cited as the ‘Biomass Research and Development Act of 2000’
  - (b) FINDINGS.—Congress finds that—
    - (1) conversion of biomass into biobased industrial products offers outstanding potential for benefit to the national interest through—
      - (A) improved strategic security and balance of payments;
      - (B) healthier rural economies;
      - (C) improved environmental quality;
      - (D) near-zero net greenhouse gas emissions;
      - (E) technology export; and
      - (F) sustainable resource supply;
    - (2) the key technical challenges to be overcome in order for biobased industrial products to be cost competitive are finding new technology and reducing the cost of technology for converting biomass into desired biobased industrial products;
    - (3) biobased fuels have the clear potential to be sustainable, low cost, and high performance fuels that are compatible with both current and future transportation systems and provide near-zero net greenhouse gas emissions;
    - (4) biobased chemicals have the clear potential for environmentally benign product life cycles;
    - (5) biobased power can—
      - (A) provide environmental benefits;
      - (B) promote rural economic development; and
      - (C) diversify energy resource options;
    - (6) many biomass feedstocks suitable for industrial processing show the clear potential for sustainable production, in some cases resulting in improved soil fertility and carbon sequestration;
    - (7)
      - (A) grain processing mills are biorefineries that produce a diversity of useful food, chemical, feed, and fuel products; and
      - (B) technologies that result in further diversification of the range of value-added biobased industrial products can meet a key need for the grain processing industry;
    - (8)
      - (A) cellulosic feedstocks are attractive because of their low cost and widespread availability; and

- (B) research resulting in cost-effective technology to overcome the recalcitrance of cellulosic biomass would allow biorefineries to produce fuels and bulk chemicals on a very large scale, with a commensurately large realization of the benefit described in paragraph (1);
  - (9) research into the fundamentals to understand important mechanisms of biomass conversion can be expected to accelerate the application and advancement of biomass processing technology by—
    - (A) increasing the confidence and speed with which new technologies can be scaled up; and
    - (B) giving rise to processing innovations based on new knowledge;
  - (10) the added utility of biobased industrial products developed through improvements in processing technology would encourage the design of feedstocks that would meet future needs more effectively;
  - (11) the creation of value-added biobased industrial products would create new jobs in construction, manufacturing, and distribution, as well as new higher-valued exports of products and technology;
  - (12)
    - (A) because of the relatively short-term time horizon characteristic of private sector investments, and because many benefits of biomass processing are in the national interest, it is appropriate for the Federal Government to provide precommercial investment in fundamental research and research-driven innovation in the biomass processing area; and
    - (B) such an investment would provide a valuable complement to ongoing and past governmental support in the biomass processing area; and
  - (13) several prominent studies, including studies by the President’s Committee of Advisors on Science and Technology and the National Research Council—
    - (A) support the potential for large research-driven advances in technologies for production of biobased industrial products as well as associated benefits; and
    - (B) document the need for a focused, integrated, and innovation-driven research effort to provide the appropriate progress in a timely manner.
- (c) DEFINITIONS.—In this section:
  - (1) ADVISORY COMMITTEE.—The term ‘Advisory Committee’ means the Biomass Research and Development Technical Advisory Committee established by this section.
  - (2) BIOBASED FUEL.—The term ‘biobased fuel’ means any transportation or heating 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) BIOMASS.—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.
- (5) BOARD.—The term ‘Board’ means the Biomass Research and Development Board established by this section.
- (6) DEMONSTRATION.—The term ‘demonstration’ means demonstration of technology in a pilot plant or semi-works scale facility.
- (7) INITIATIVE.—The term ‘Initiative’ means the Biomass Research and Development Initiative established under this section.
- (8) INSTITUTION OF HIGHER EDUCATION.— The term ‘institution of higher education’ has the meaning given the term in section 102(a) of the Higher Education Act of 1965 (20 U.S.C. 1002(a)).
- (9) NATIONAL LABORATORY.—The term ‘National Laboratory’ has the meaning given that term in section 2 of the Energy Policy Act of 2005.
- (10) POINT OF CONTACT.—The term ‘point of contact’ means a point of contact designated under this section.
- (d) COOPERATION AND COORDINATION IN BIOMASS RESEARCH AND DEVELOPMENT.—
  - (1) IN GENERAL.—The Secretary of Agriculture and the Secretary of Energy shall cooperate with respect to, and coordinate, policies and procedures that promote research and development leading to the production of biobased fuels and biobased products.
  - (2) POINTS OF CONTACT.—
    - (A) IN GENERAL.—To coordinate research and development programs and activities relating to biobased fuels and biobased products that are carried out by their respective Departments—
      - (i) the Secretary of Agriculture shall designate, as the point of contact for the Department of Agriculture, an officer of the Department of Agriculture appointed by the President to a position in the Department before the date of the designation, by and with the advice and consent of the Senate; and
      - (ii) the Secretary of Energy shall designate, as the point of contact for the Department of Energy, an officer of the Department of Energy appointed by the President to a position in the Department before the date of the designation, by and with the advice and consent of the Senate.
    - (B) DUTIES.—The points of contact shall jointly—

- (i) assist in arranging interlaboratory and site-specific supplemental agreements for research and development projects relating to biobased fuels and biobased products;
  - (ii) serve as cochairpersons of the Board;
  - (iii) administer the Initiative; and
  - (iv) respond in writing to each recommendation of the Advisory Committee made under subsection (f).
- (e) BIOMASS RESEARCH AND DEVELOPMENT BOARD.—
  - (1) ESTABLISHMENT.—There is established the Biomass Research and Development Board, which shall supersede the Interagency Council on Biobased Products and Bioenergy established by Executive Order No. 13134, to coordinate programs within and among departments and agencies of the Federal Government for the purpose of promoting the use of biobased fuels and biobased products by—
    - (A) maximizing the benefits deriving from Federal grants and assistance; and
    - (B) bringing coherence to Federal strategic planning.
  - (2) MEMBERSHIP.—The Board shall consist of—
    - (A) the point of contact of the Department of Energy designated under subsection (d), who shall serve as cochairperson of the Board;
    - (B) the point of contact of the Department of Agriculture designated under subsection (d), who shall serve as cochairperson of the Board;
    - (C) a senior officer of each of the Department of the Interior, the Environmental Protection Agency, the National Science Foundation, and the Office of Science and Technology Policy, each of whom shall—
      - (i) be appointed by the head of the respective agency; and
      - (ii) have a rank that is equivalent to the rank of the points of contact; and
    - (D) at the option of the Secretary of Agriculture and the Secretary of Energy, other members appointed by the Secretaries (after consultation with the members described in subparagraphs (A) through (C)).
  - (3) DUTIES.—The Board shall—
    - (A) coordinate research and development activities relating to biobased fuels and biobased products—
      - (i) between the Department of Agriculture and the Department of Energy; and
      - (ii) with other departments and agencies of the Federal Government;
    - (B) provide recommendations to the points of contact concerning administration of this title;
    - (C) ensure that—

- (i) solicitations are open and competitive with awards made annually; and
  - (ii) objectives and evaluation criteria of the solicitations are clearly stated and minimally prescriptive, with no areas of special interest; and
- (D) ensure that the panel of scientific and technical peers assembled under subsection (g) to review proposals is composed predominantly of independent experts selected from outside the Departments of Agriculture and Energy.
- (4) FUNDING.—Each agency represented on the Board is encouraged to provide funds for any purpose under this section.
- (5) MEETINGS.—The Board shall meet at least quarterly to enable the Board to carry out the duties of the Board under paragraph (3).
- (f) BIOMASS RESEARCH AND DEVELOPMENT TECHNICAL ADVISORY COMMITTEE.—
  - (1) ESTABLISHMENT.—There is established the Biomass Research and Development Technical Advisory Committee, which shall supersede the Advisory Committee on Biobased Products and Bioenergy established by Executive Order No. 13134—
    - (A) to advise the Secretary of Energy, the Secretary of Agriculture, and the points of contact concerning—
      - (i) the technical focus and direction of requests for proposals issued under the Initiative; and
      - (ii) procedures for reviewing and evaluating the proposals;
    - (B) to facilitate consultations and partnerships among Federal and State agencies, agricultural producers, industry, consumers, the research community, and other interested groups to carry out program activities relating to the Initiative; and
    - (C) to evaluate and perform strategic planning on program activities relating to the Initiative.
  - (2) MEMBERSHIP.—
    - (A) IN GENERAL.—The Advisory Committee shall consist of—
      - (i) an individual affiliated with the biofuels industry;
      - (ii) an individual affiliated with the biobased industrial and commercial products industry;
      - (iii) an individual affiliated with an institution of higher education who has expertise in biobased fuels and biobased products;
      - (iv) two prominent engineers or scientists from government or academia who have expertise in biobased fuels and biobased products;
      - (v) an individual affiliated with a commodity trade association;
      - (vi) 2 individuals affiliated with an environmental or conservation organization;

- (vii) an individual associated with State government who has expertise in biobased fuels and biobased products;
  - (viii) an individual with expertise in energy and environmental analysis;
  - (ix) an individual with expertise in the economics of biobased fuels and biobased products;
  - (x) an individual with expertise in agricultural economics; and
  - (xi) at the option of the points of contact, other members.
- (B) APPOINTMENT.—The members of the Advisory Committee shall be appointed by the points of contact.
- (3) DUTIES.—The Advisory Committee shall—
  - (A) advise the points of contact with respect to the Initiative; and
  - (B) evaluate whether, and make recommendations in writing to the Board to ensure that—
    - (i) funds authorized for the Initiative are distributed and used in a manner that is consistent with the objectives, purposes, and considerations of the Initiative;
    - (ii) 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;
    - (iii) the points of contact are funding proposals under this title that are selected on the basis of merit, as determined by an independent panel of scientific and technical peers predominantly from outside the Departments of Agriculture and Energy and
    - (iv) activities under this section are carried out in accordance with this section.
- (4) COORDINATION.—To avoid duplication of effort, the Advisory Committee shall coordinate its activities with those of other Federal advisory committees working in related areas.
- (5) MEETINGS.—The Advisory Committee shall meet at least quarterly to enable the Advisory Committee to carry out the duties of the Advisory Committee.
- (6) TERMS.—Members of the Advisory Committee shall be appointed for a term of 3 years, except that—
  - (A) one-third of the members initially appointed shall be appointed for a term of 1 year; and
  - (B) one-third of the members initially appointed shall be appointed for a term of 2 years.
- (g) BIOMASS RESEARCH AND DEVELOPMENT INITIATIVE.—
  - (1) IN GENERAL.—The Secretary of Agriculture and the Secretary of Energy, acting through their respective points of contact and in consultation with the Board, shall establish and carry out a Biomass Research and Development Initiative under which competitively awarded

grants, contracts, and financial assistance are provided to, or entered into with, eligible entities to carry out research on, and development and demonstration of, biobased fuels and biobased products, and the methods, practices and technologies, for their production.

- (2) OBJECTIVES.—The objectives of the Initiative are to develop—
  - (A) technologies and processes necessary for abundant commercial production of biobased fuels at prices competitive with fossil fuels;
  - (B) high-value biobased products—
    - (i) to enhance the economic viability of biobased fuels and power; and
    - (ii) as substitutes for petroleum based feedstocks and products; and
  - (C) a diversity of sustainable domestic sources of biomass for conversion to biobased fuels and biobased products.
- (3) PURPOSES.—The purposes of the Initiative are
  - (A) to increase the energy security of the United States;
  - (B) to create jobs and enhance the economic development of the rural economy;
  - (C) to enhance the environment and public health; and
  - (D) to diversify markets for raw agricultural and forestry products.
- (4) 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 subsection as the ‘Secretaries;’), shall direct research and development toward
  - (A) feedstock production through the development of crops and cropping systems relevant to production of raw materials for conversion to biobased fuels and biobased products, including—
    - (i) development of advanced and dedicated crops with desired features, including enhanced productivity, broader site range, low requirements for chemical inputs, and enhanced processing;
    - (ii) advanced crop production methods to achieve the features described in clause (i);
    - (iii) feedstock harvest, handling, transport, and storage; and
    - (iv) strategies for integrating feedstock production into existing managed land;
  - (B) overcoming recalcitrance of cellulosic biomass through developing technologies for converting cellulosic biomass into intermediates that can subsequently be converted into biobased fuels and biobased products, including—
    - (i) pretreatment in combination with enzymatic or microbial hydrolysis; and
    - (ii) thermochemical approaches, including gasification and pyrolysis;

- (C) product diversification through technologies relevant to production of a range of biobased products (including chemicals, animal feeds, and cogenerated power) that eventually can increase the feasibility of fuel production in a biorefinery, including—
    - (i) catalytic processing, including thermochemical fuel production;
    - (ii) metabolic engineering, enzyme engineering, and fermentation systems for biological production of desired products or cogeneration of power;
    - (iii) product recovery;
    - (iv) power production technologies; and
    - (v) integration into existing biomass processing facilities, including starch ethanol plants, sugar processing or refining plants, paper mills, and power plants; and
  - (D) analysis that provides strategic guidance for the application of biomass technologies in accordance with realization of improved sustainability and environmental quality, cost effectiveness, security, and rural economic development, usually featuring system-wide approaches.
- (5) ADDITIONAL CONSIDERATIONS.—Within the technical areas described in paragraph (4), and in addition to advancing the purposes described in paragraph (3) and the objectives described in paragraph (2), the Secretaries shall support research and development—
    - (A) to create continuously expanding opportunities for participants in existing biofuels production by seeking synergies and continuity with current technologies and practices, such as the use of dried distillers grains as a bridge feedstock;
    - (B) to maximize the environmental, economic, and social benefits of production of biobased fuels and biobased products on a large scale through life-cycle economic and environmental analysis and other means; and
    - (C) to assess the potential of Federal land and land management programs as feedstock resources for biobased fuels and biobased products, consistent with the integrity of soil and water resources and with other environmental considerations.
  - (6) ELIGIBLE ENTITIES.—To be eligible for a grant, contract, or assistance under this subsection, an applicant shall be—
    - (A) an institution of higher education;
    - (B) a National Laboratory;
    - (C) a Federal research agency;
    - (D) a State research agency;
    - (E) a private sector entity;
    - (F) a nonprofit organization; or
    - (G) a consortium of two or more entities described in subparagraphs (A) through (F).
  - (7) ADMINISTRATION.—

- (A) IN GENERAL.—After consultation with the Board, the points of contact shall—
  - (i) publish annually one or more joint requests for proposals for grants, contracts, and assistance under this subsection;
  - (ii) 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
  - (iii) 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.
- (B) DISTRIBUTION OF FUNDING BY TECHNICAL AREA.—Of the funds authorized to be appropriated for activities described in this subsection, funds shall be distributed for each of fiscal years 2007 through 2012 so as to achieve an approximate distribution of—
  - (i) 20 percent of the funds to carry out activities for feedstock production under paragraph (4)(A);
  - (ii) 45 percent of the funds to carry out activities for overcoming recalcitrance of cellulosic biomass under paragraph (4)(B);
  - (iii) 30 percent of the funds to carry out activities for product diversification under paragraph (4)(C); and
  - (iv) 5 percent of the funds to carry out activities for strategic guidance under paragraph (4)(D).
- (C) DISTRIBUTION OF FUNDING WITHIN EACH TECHNICAL AREA.—Within each technical area described in subparagraphs (A) through (C) of paragraph (4), funds shall be distributed for each of fiscal years 2007 through 2012 so as to achieve an approximate distribution of—
  - (i) 15 percent of the funds for applied fundamentals;
  - (ii) 35 percent of the funds for innovation; and
  - (iii) 50 percent of the funds for demonstration.
- (D) MATCHING FUNDS.—
  - (i) IN GENERAL.—A minimum 20 percent funding match shall be required for demonstration projects under this section.
  - (ii) COMMERCIAL APPLICATIONS.—A minimum of 50 percent funding match shall be required for commercial application projects under this section.



- (C) the plans of the Secretary of Energy and the Secretary of Agriculture for addressing concerns raised in the report, including concerns raised by the Advisory Committee.
    - (2) UPDATES.—The Secretary and the Secretary of Energy shall update the Vision and Roadmap documents prepared for Federal biomass research and development activities.
  - (j) FUNDING.—
    - (1) IN GENERAL.—Of the funds of the Commodity Credit Corporation, the Secretary of Agriculture shall make available to carry out this section—
      - (A) \$18,000,000 for fiscal year 2008;
      - (B) \$28,000,000 for fiscal year 2009;
      - (C) \$40,000,000 for fiscal year 2010;
      - (D) \$50,000,000 for fiscal year 2011; and
      - (E) \$100,000,000 for fiscal year 2012.
    - (2) CONTINUATION OF OPERATIONS.—
      - (A) FUNDING.—The Secretary shall continue to carry out this section at the rate of operation in effect on September 30, 2012, from sums in the Treasury not otherwise appropriated, through September 30, 2017.
      - (B) AUTHORITY.—The program and authorities provided under this section shall continue in force and effect through September 30, 2017.
  - (b) REPEAL.—Title III of the Agricultural Risk Protection Act of 2000 (Public Law 106–224) is hereby repealed.
- (Page 290) SEC. 5008. ADJUSTMENTS TO THE BIOENERGY PROGRAM.
  - Section 9010 of the Farm Security and Rural Investment Act of 2002 (7 U.S.C. 8108) is amended—
    - (1) in subsection (a)—
      - (B) by striking paragraph (3) and inserting the following:
        - (3) ELIGIBLE FEEDSTOCK.—
          - (i) any plant material grown or collected for the purpose of being converted to energy (including aquatic plants);
          - (ii) any organic byproduct or residue from agriculture and forestry, including mill residues and pulping residues that can be converted into energy;
          - (iii) any waste material that can be converted to energy and is derived from plant material, including—
            - (I) wood waste and residue;
- (Page 296-297) SEC. 511 FOREST BIOENERGY RESEARCH PROGRAM

- (a) IN GENERAL.—The Secretary of Agriculture, working through the Forest Service, in cooperation with other Federal agencies, land grant colleges and universities, and private entities, shall conduct a competitive research and development program to encourage new forest-to-energy technologies. The Secretary may use grants, cooperative agreements, and other methods to partner with cooperating entities on projects that the Secretary determines shall best promote new forest-to-energy technologies.
- (b) PRIORITY FOR PROJECT SELECTION.—The Secretary shall give priority to projects that—
  - (1) develop technology and techniques to use low value forest materials, such as byproducts of forest health treatments and hazardous fuel reduction, for the production of energy;
  - (2) develop processes for the conversion of cellulosic forest materials that integrate production of energy into existing manufacturing streams or in integrated forest biorefineries;
  - (3) develop new transportation fuels that use forest materials as a feedstock for the production of such fuels; or
  - (4) improve the of growth and yield of trees for the purpose of renewable energy and other forest product use.
- (c) FUNDING.—Of the funds of the Commodity Credit Corporation, the Secretary of Agriculture shall make available to carry out this section—
  - (1) \$4,000,000 for fiscal year 2008;
  - (2) \$6,000,000 for fiscal year 2009;
  - (3) \$7,000,000 for fiscal year 2010;
  - (4) \$9,000,000 for fiscal year 2011; and
  - (5) \$10,000,000 for fiscal year 2012

## **TITLE VI—CARBON-NEUTRAL GOVERNMENT**

(Page 307-310) Subtitle A—Federal Government Inventory and Management of Greenhouse Gas Emissions

- SEC. 6101. INVENTORY OF FEDERAL GOVERNMENT GREENHOUSE GAS EMISSIONS.
  - (a) IN GENERAL.—Each agency shall, in accordance with the guidance issued under subsection (b), annually inventory and report its greenhouse gas emissions for the preceding fiscal year. Each such inventory and report shall indicate as discrete categories—
    - (1) any direct emission of greenhouse gas as a result of an activity of the agency;
    - (2) the quantity of indirect emissions of greenhouse gases attributable to the generation of electricity used by the agency and commercial air travel by agency personnel; and
    - (3) the quantity of emissions of greenhouse gases associated with the work performed for the agency by Federal contractors, comprising direct emissions and indirect emissions associated with electricity used by, and commercial air travel by, such contractors.

- (b) GUIDANCE; ASSISTANCE.—Not later than 3 months after the date of the enactment of this Act, the Administrator shall issue guidance for agencies for conducting inventories under this section and reporting under section 6102. Such guidance shall establish inventory and reporting procedures that are at least as rigorous as the inventory procedures established under the Environmental Protection Agency’s Climate Leaders program and shall define the scope of the inventories of direct emissions described in subsection (a)(1) to be complete and consistent with the national obligation for reporting inventories under the United Nations Framework Convention on Climate Change. The Administrator shall provide assistance to agencies in preparing their inventories.
- (c) INITIAL INVENTORY BY AGENCIES.—
  - (1) SUBMISSION.—Not later than 1 year after the date of the enactment of this Act, each agency shall submit to the Administrator and make publicly available on the agency’s website an initial inventory of the agency’s greenhouse gas emissions for the preceding fiscal year.
  - (2) CERTIFICATION.—Not later than 6 months after an agency submits an initial inventory under paragraph (1), the Administrator shall review the inventory for compliance with the guidance issued under subsection (b) and—
    - (A) certify that the inventory is technically valid; or
    - (B) decline to certify the inventory and provide an explanation of the actions or revisions that are necessary for the inventory to be certified under subparagraph (A).
  - (3) REVISION.—If the Administrator declines to certify the inventory of an agency under paragraph (2)(B), the agency shall submit to the Administrator and make publicly available on the agency’s website a revised inventory not later than 6 months after the date on which the Administrator provides the agency with the explanation required by such paragraph.
- (d) NET GREENHOUSE GASES FROM FEDERAL LANDS.—Beginning not later than 2 years after the date of enactment of this Act, the Secretary of the Interior and the Secretary of Agriculture shall include as a discrete category in any inventory under this section the net biological sequestration or emission of greenhouse gases related to human activities and associated with land managed by the Bureau of Land Management or the Forest Service. In developing such estimates of the net biological sequestration or emission of greenhouse gases, the Secretary of the Interior and the Secretary of Agriculture shall take into consideration the results of any available related assessments performed by the Secretary of the Interior. Such net biological sequestration or emissions of greenhouse gases shall not be considered for the purposes of setting or measuring progress toward targets under section 6102. For the purposes of this subsection, the net biological sequestration or emission of greenhouse gases refers to the net sequestration or emissions associated with uptake and release of greenhouse gases from soil, vegetation, and dead organic matter.

- (Page 310) SEC. 6101 INVENTORY OF FEDERAL GOVERNMENT GREENHOUSE GAS EMISSIONS.
  - (d) NET GREENHOUSE GASES FROM FEDERAL LANDS.—Beginning not later than 2 years after the date of enactment of this Act, the Secretary of the Interior and the Secretary of Agriculture shall include as a discrete category in any inventory under this section the net biological sequestration or emission of greenhouse gases related to human activities and associated with land managed by the Bureau of Land Management or the Forest Service. In developing such estimates of the net biological sequestration or emission of greenhouse gases, the Secretary of the Interior and the Secretary of Agriculture shall take into consideration the results of any available related assessments performed by the Secretary of the Interior. Such net biological sequestration or emissions of greenhouse gases shall not be considered for the purposes of setting or measuring progress toward targets under section 6102. For the purposes of this subsection, the net biological sequestration or emission of greenhouse gases refers to the net sequestration or emissions associated with uptake and release of greenhouse gases from soil, vegetation, and dead organic matter.
  - (f) STUDIES ON FEDERAL LANDS.—The Forest Service, the Bureau of Land Management, the National Park Service, and the United States Fish and Wildlife Service shall—
    - (1) within 3 years after the date of the enactment of this Act, conduct studies of the opportunities for management strategies, and identify those management strategies with the greatest potential, to—
      - (A) enhance net biological sequestration of greenhouse gases on Federal lands they manage while avoiding harmful effects on other environmental values; and
      - (B) reduce negative impacts of global warming on biodiversity, water supplies, forest health, biological sequestration and storage, and related values;
    - (2) within 4 years after the date of the enactment of this Act, study the results that could be achieved through applying management strategies identified as having the greatest potential to achieve the benefits described in paragraph (1) by implementing field experiments on discrete portions of selected land management units in different parts of the Nation to test such strategies; and
    - (3) report to the Congress on the results of the studies.
  - (g) STUDY ON URBAN AND WILDLAND-URBAN FORESTRY PROGRAMS.—Within 2 years of the date of enactment of this Act, the Forest Service, in consultation with appropriate State and local agencies, shall conduct a study of the opportunities of urban and wildland-urban interface forestry programs to enhance net biological sequestration of greenhouse gases and achieve other benefits.

## **TITLE VII—NATURAL RESOURCES COMMITTEE PROVISIONS**

### Subtitle A—Energy Policy Act of 2005 Reforms

- (Page 353) SEC. 7104. LIMITATION OF REBUTTABLE PRESUMPTION REGARDING APPLICATION OF CATEGORICAL EXCLUSION UNDER NEPA FOR OIL AND GAS EXPLORATION AND DEVELOPMENT ACTIVITIES.
  - Section 390 of the Energy Policy Act of 2005 (Public Law 109–58; 42 U.S.C. 15942) is amended by adding at the end the following:
    - (c) ADHERENCE TO CEQ REGULATIONS.—In administering this section, the Secretary of the Interior in managing the public lands, and the Secretary of Agriculture in managing National Forest System lands, shall adhere to the regulations issued by the Council on Environmental Quality relating to categorical exclusions (40 CFR 1507.3 and 1508.4), as in effect on the date of enactment of this Act.
  
- (Page 354) SEC. 7105. BEST MANAGEMENT PRACTICES.
  - Not later than 180 days after the date of enactment of this Act, the Secretary of the Interior, through the Bureau of Land Management, shall amend the best management practices guidelines for oil and gas development on Federal lands, to—
    - (1) require public review and comment prior to waiving any stipulation of an oil and gas lease for such lands, except in the case of an emergency; and
    - (2) create an incentive for oil and gas operators to adopt best management practices that minimize adverse impacts to wildlife habitat, by providing expedited permit review for any operator that commits to adhering to those practices without seeking waiver of such stipulations.

Subtitle C—Alternative Energy and Efficiency

- (Page 398-405) SEC. 7306. BIOMASS UTILIZATION PILOT PROGRAM.
  - (a) REPLACEMENT OF CURRENT GRANT PROGRAM.—Section 210 of the Energy Policy Act of 2005 (42 U.S.C. 15855) is amended to read as follows:
- “SEC. 210. BIOMASS UTILIZATION PILOT PROGRAM.
  - (a) FINDINGS.—Congress finds the following:
    - (1) The supply of woody biomass for energy production is directly linked to forest management planning to a degree far greater than in the case of other types of energy development.
    - (2) As a consequence of this linkage, the process of developing and evaluating appropriate technologies and facilities for woody biomass energy and utilization must be integrated with long-term forest management planning processes, particularly in situations where Federal lands dominate the forested landscape.
  - (b) BIOMASS DEFINITION FOR FEDERAL FOREST LANDS.—In this section, with respect to organic material removed from National Forest System lands or from public lands administered by the Secretary of the Interior, the term ‘biomass’ covers only organic material from—
    - (1) ecological forest restoration;
    - (2) small-diameter byproducts of hazardous fuels treatments;
    - (3) pre-commercial thinnings;

- (4) brush;
  - (5) mill residues; and
  - (6) slash.
- (c) PILOT PROGRAM.—The Secretary of Agriculture and the Secretary of the Interior shall establish a pilot program, to be known as the ‘Biomass Utilization Pilot Program’, involving 10 different forest types on Federal lands, under which the Secretary concerned will provide technical assistance and grants to persons to support the following biomass-related activities:
- (1) The development of biomass utilization infrastructure to support hazardous fuel reduction and ecological forest restoration.
  - (2) The research and implementation of integrated facilities that seek to utilize woody biomass for its highest and best uses, with particular emphasis on projects that are linked to implementing community wildfire protection plans, ecological forest restoration, and economic development in rural communities.
  - (3) The testing of multiple technologies and approaches to biomass utilization for energy, with emphasis on improving energy efficiency, developing thermal applications and distributed heat, biofuels, and achieving cleaner emissions including through combustion with other fuels, as well as other valueadded uses.
- (d) BIOMASS SUPPLY STUDY.—Prior to the development of any biomass utilization pilot projects, the Secretary concerned shall develop a study to determine the long-term, ecologically sustainable, biomass supply available in the pilot program area. The study shall incorporate results from coordinated resource offering protocol (CROP) studies. The study shall also analyze the long term availability of biomass materials within a reasonable transportation distance. The biomass supply studies shall be developed through a collaborative approach, as evidenced by the broad involvement, analysis, and agreement of interested persons, including local governments, energy developers, conservationists, and land management agencies. The Secretary concerned may direct a resource advisory committee established under section 205 of the Secure Rural Schools and Community Self-Determination Act of 2000 (16 U.S.C. 500 note; Public Law 106–393), and reauthorized by the amendments made by Public Law 110–28, to carry out the requirements of this subsection. The results of the biomass supply study shall be a basis for determining the project scale, as outlined in subsection (g).
- (e) EXCLUSION OF CERTAIN FEDERAL LAND.—The following Federal lands may not be included within a pilot project site:
- (1) Federal land containing old-growth forest or late-successional forest, unless the Secretary concerned determines that the pilot project on such land is appropriate for the applicable forest type and maximizes and enhances the retention of late-successional and large- and old-growth trees, late-successional and old-growth forest structure, and late-successional and old-growth forest composition.
  - (2) Federal land on which the removal of vegetation is prohibited, including components of the National Wilderness Preservation System.

- (3) Wilderness Study Areas.
  - (4) Inventoried roadless areas.
  - (5) Components of the National Landscape Conservation System.
  - (6) National Monuments.
- (f) MULTIPLE PROJECTS.—In conducting the pilot program, the Secretary concerned shall include a variety of projects involving—
  - (1) innovations in facilities of various sizes and processing techniques; and
  - (2) the full spectrum of woody biomass producing regions of the United States.
- (g) SELECTION CRITERIA AND PROJECT SCALE.— In selecting the projects to be conducted under the pilot program, and the appropriate scale of projects, the Secretary concerned shall consider criteria that evaluate existing economic, ecological, and social conditions, focusing on opportunities such as workforce training, job creation, ecosystem health, reducing energy costs, and facilitating the production of alternative energy fuels. The agreement on the scale of a project shall be reached through a collaborative approach, as evidenced by the broad involvement, analysis, and agreement of interested persons, including local governments, energy developers, conservationists, and land management agencies. In selecting the appropriate scale of projects to be conducted under the pilot program, the Secretary concerned shall also consider the results of the supply study as outlined in subsection (d).
- (h) MONITORING AND REPORTING REQUIREMENTS.—As part of the pilot program, the Secretary concerned shall impose monitoring and reporting requirements to ensure that the ecological, social, and economic effects of the projects conducted under the pilot program are being monitored and that the accomplishments, challenges, and lessons of each project are recorded and reported.
- (i) OTHER DEFINITIONS.—In this section:
  - (1) HIGHEST AND BEST USE.—The term ‘highest and best use’, with regard to biomass, means—
    - (A) creating from raw materials those products and those biomass uses that will achieve the highest market value; and
    - (B) yielding a wide range of existing and innovative products and biomass uses that create new markets, stimulate existing ones, and improve rural economies, maintains or improves ecosystem integrity, while also supporting traditional biomass energy generation.
  - (2) PILOT PROGRAM.—The term ‘pilot program’ means the Biomass Utilization Pilot Program established pursuant to this section.
  - (3) SECRETARY CONCERNED.—The term ‘Secretary concerned’ means the Secretary of Agriculture, with respect to National Forest System lands, and the Secretary of the Interior, with respect to public lands administered by the Secretary of the Interior.
  - (4) COMMUNITY WILDFIRE PROTECTION PLAN.—The term ‘community wildfire protection plan’ has the meaning given that term in section 101(3) of the Healthy Forest Restoration Act of 2003 (16 U.S.C.

6511(3)), which is further described by the Western Governors Association in the document entitled ‘Preparing a Community Wildfire Protection Plan: A Handbook for Wildland-Interface Communities’ and dated March 2004.

- (5) FEDERAL LAND.—The term ‘Federal land’ means—
  - (A) land of the National Forest System (as defined in section 11(a) of the Forest and Rangeland Renewable Resources Planning Act of 1974 (16 U.S.C. 1609(a)) administered by the Secretary of Agriculture, acting through the Chief of the Forest Service; and
  - (B) public lands (as defined in section 103 of the Federal Land Policy and Management Act of 1976 (43 U.S.C. 1702)), the surface of which is administered by the Secretary of the Interior, acting through the Director of the Bureau of Land Management.
- (6) INVENTORIED ROADLESS AREA.—The term ‘Inventoried roadless area’ means one of the areas identified in the set of inventoried roadless areas maps contained in the Forest Service Roadless Areas Conservation, Final Environmental Impact Statement, Volume 2, dated November 2000.
- (j) AUTHORIZATION OF APPROPRIATIONS.—There is authorized to be appropriated such sums as may be necessary to carry out the pilot program.
- (b) CLERICAL AMENDMENT.—The table of contents in section 1(b) of such Act is amended by striking the item relating to section 210 and inserting the following new item:
  - “Sec. 210. Biomass utilization pilot program.”.

#### Subtitle D—Carbon Capture and Climate Change Mitigation

- (Page 412-414) CHAPTER 2—TERRESTRIAL SEQUESTRATION ASSESSMENT
  - SEC. 7421. REQUIREMENT TO CONDUCT AN ASSESSMENT.
    - (a) IN GENERAL.—The Secretary of the Interior, acting through the United States Geological Survey, shall—
      - (1) conduct an assessment of the amount of carbon stored in terrestrial, aquatic, and coastal ecosystems (including estuaries);
      - (2) determine the processes that control the flux of carbon in and out of each ecosystem;
      - (3) estimate the potential for increasing carbon sequestration in natural systems through management measures or restoration activities in each ecosystem; and
      - (4) develop near-term and long-term adaptation strategies that can be employed to enhance the sequestration of carbon in each ecosystem.
    - (b) USE OF NATIVE PLANT SPECIES.—In developing management measures, restoration activities, or adaptation strategies, the Secretary shall emphasize the use of native plant species for each ecosystem.
    - (c) CONSULTATION.—The Secretary shall develop the methodology and conduct the assessment in consultation with the Secretary of Energy,

the Administrator of the National Oceanic and Atmospheric Administration, and the heads of other relevant agencies.

- SEC. 7422. METHODOLOGY.
    - (a) IN GENERAL.—Within one year after the date of enactment of this Act, the Secretary shall develop a methodology for conducting the assessment.
    - (b) PUBLICATION OF PROPOSED METHODOLOGY; COMMENT.—Upon completion of a proposed methodology, the Secretary shall publish the proposed methodology and solicit comments from the public and heads of affected Federal and State agencies for 60 days before publishing a final methodology.
  - SEC. 7423. COMPLETION OF ASSESSMENT AND REPORT. The Secretary shall—
    - (1) complete the national assessment within 3 years after publication of the final methodology under section 7422; and (2) submit a report describing the results of the assessment to the House Committee on Natural Resources and the Senate Committee on Energy and Natural Resources within 180 days after the assessment is completed.
  - SEC. 7424. AUTHORIZATION OF APPROPRIATIONS. There is authorized to be appropriated to carry out this chapter \$15,000,000 for the period of fiscal years 2008 through 2012.
- (Page 415) CHAPTER 4—NATURAL RESOURCES AND WILDLIFE PROGRAMS
  - Subchapter A—Natural Resources Management and Climate Change
    - SEC. 7441. NATURAL RESOURCES MANAGEMENT COUNCIL ON CLIMATE CHANGE.
      - (a) ESTABLISHMENT.—The Secretary of the Interior shall establish a National Resources Management Council on Climate Change to address the impacts of climate change on Federal lands, the ocean environment, and the Federal water infrastructure. The Council shall include the head of each of the following agencies:
        - (1) The Bureau of Land Management.
        - (2) The National Park Service.
        - (3) United States Geological Survey.
        - (4) The United States Fish and Wildlife Service.
        - (5) The Forest Service.
        - (6) The Bureau of Reclamation.
        - (7) The Council on Environmental Quality.
        - (8) The Minerals Management Service.
        - (9) The Office of Surface Mining Reclamation and Enforcement.
      - (b) PLAN.—Not later than one year after the date of the enactment of this Act, the Secretary of the Interior shall submit a plan to Congress describing what the agencies listed in subsection (a) shall do both individually and cooperatively to accomplish the following:
        - (1) Working in cooperation with the United States Geological Survey, develop an interagency inventory and Geographic

Information System database of United States ecosystems, water supplies, and water infrastructure vulnerable to climate change.

- (2) Manage land, water, and ocean resources in a manner that takes into account projected climate change impacts, including but not limited to, prolonged periods of drought and changing hydrology.
  - (3) Develop consistent protocols to incorporate climate change impacts in land and water management decisions across land and water resources under the jurisdiction of those agencies listed in subsection (a).
  - (4) Incorporate the most current, peer-reviewed science on climate change and the economic, social, and ecological impacts of climate change into the decision making process of those agencies listed in subsection (a).
  - (c) COORDINATION.—The activities of the Natural Resources Management Council on Climate Change shall be coordinated with the activities of the United States Global Change Research Program.
- (page 417- 430) Subchapter B—National Policy and Strategy for Wildlife
    - SEC. 7451. SHORT TITLE. This subchapter may be cited as the “Global Warming Wildlife Survival Act”.
    - SEC. 7452. NATIONAL POLICY ON WILDLIFE AND GLOBAL WARMING. It is the policy of the Federal Government, in cooperation with State, tribal, and affected local governments, other concerned public and private organizations, landowners, and citizens to use all practicable means and measures—
      - (1) to assist wildlife populations and their habitats in adapting to and surviving the effects of global warming; and
      - (2) to ensure the persistence and resilience of the wildlife of the United States, together with its habitat, as an essential part of our Nation’s culture, landscape, and natural resources.
    - SEC. 7453. DEFINITIONS. In this chapter:
      - (1) ECOLOGICAL PROCESSES.—The term “ecological processes” means the biological, chemical, and physical interactions between the biotic and abiotic components of ecosystems, including nutrient cycling, pollination, predator-prey relationships, soil formation, gene flow, hydrologic cycling, decomposition, and disturbance regimes such as fire and flooding.
      - (2) HABITAT LINKAGES.—The term “habitat linkages” means areas that connect wildlife habitat or potential wildlife habitat, and that facilitate the ability of wildlife to move within a landscape in response to the effects of global warming.
      - (3) SECRETARY.—The term “Secretary” means the Secretary of the Interior.
      - (4) WILDLIFE.—The term “wildlife” means—
        - (A) any species of wild, free-ranging fauna, including fish and other aquatic species; and

- (B) any fauna in a captive breeding program the object of which is to reintroduce individuals of a depleted indigenous species into previously occupied range.
  - (5) HABITAT.—The term “habitat” means the physical, chemical, and biological properties that are used by wildlife for growth, reproduction, and survival, including aquatic and terrestrial plant communities, food, water, cover, and space, on a tract of land, in a body of water, or in an area or region.
- SEC. 7454. NATIONAL STRATEGY.
  - (a) REQUIREMENT.—
    - (1) IN GENERAL.—The Secretary shall, within two years after the date of the enactment of this Act, on the basis of the best available science as provided by the science advisory board under section 7455, and in cooperation with State fish and wildlife agencies and Indian tribes, promulgate a national strategy for assisting wildlife populations and their habitats in adapting to the impacts of global warming.
    - (2) CONSULTATION AND COMMENT.—In developing the national strategy, the Secretary shall—
      - (A) consult with the Secretary of Agriculture, the Secretary of Commerce, the Administrator of the Environmental Protection Agency, local governments, conservation organizations, scientists, and other interested stakeholders; and
      - (B) provide opportunity for public comment.
  - (b) CONTENTS.—
    - (1) IN GENERAL.—The Secretary shall include in the national strategy prioritized goals and measures to—
      - (A) identify and monitor wildlife populations, including game species, likely to be adversely affected by global warming, with particular emphasis on wildlife populations at greatest need for conservation;
      - (B) identify and monitor coastal, marine, terrestrial, and freshwater habitat at greatest risk of being damaged by global warming;
      - (C) assist species in adapting to the impacts of global warming;
      - (D) protect, acquire, and restore wildlife habitat to build resilience to global warming;
      - (E) provide habitat linkages and corridors to facilitate wildlife movements in response to global warming;
      - (F) restore and protect ecological processes that sustain wildlife populations vulnerable to global warming; and
      - (G) incorporate consideration of climate change in, and integrate climate change adaptation strategies for wildlife and its habitat into, the planning and management of

Federal lands administered by the Department of the Interior and lands administered by the Forest Service.

- (2) COORDINATION WITH OTHER PLANS.—In developing the national strategy, the Secretary shall to the maximum extent practicable—
  - (A) take into consideration research and information in State comprehensive wildlife conservation plans, the North American Waterfowl Management Plan, the National Fish Habitat Action Plan, and other relevant plans; and
  - (B) coordinate and integrate, to the extent consistent with the policy set forth in section 7452, the goals and measures identified in the national strategy with goals and measures identified in such plans.
- (c) REVISION.—The Secretary shall revise the national strategy not later than five years after its initial promulgation, and not later than every ten years thereafter, to reflect new information on the impacts of global warming on wildlife and its habitat and advances in the development of strategies for adapting to or mitigating for such impacts.
- (d) IMPLEMENTATION.—
  - (1) IMPLEMENTATION ON FEDERAL LAND SYSTEMS.—To achieve the goals of the national strategy and to implement measures for the conservation of wildlife and its habitat identified in the national strategy—
    - (A) the Secretary of the Interior shall exercise the authority of such Secretary under this title and other laws within the Secretary's jurisdiction pertaining to the administration of lands; and
    - (B) the Secretary of Agriculture shall exercise the authority of such Secretary under this title and other laws within the Secretary's jurisdiction pertaining to the administration of lands.
  - (2) WILDLIFE CONSERVATION PROGRAMS.—To the maximum extent practicable, the Secretary, the Secretary of Agriculture, and the Secretary of Commerce shall utilize their authorities under other laws to achieve the goals of the national strategy.
- (e) LIMITATION ON EFFECT.—Nothing in this section creates new authority or expands existing authority for the Secretary to regulate the uses of private property.
- SEC. 7455. ADVISORY BOARD.
  - (a) SCIENCE ADVISORY BOARD.—
    - (1) IN GENERAL.—The Secretary shall establish and appoint the members of a science advisory board comprised of not less than 10 and not more than 20 members recommended by the President of the National Academy of Sciences with expertise in wildlife biology, ecology, climate change and other relevant disciplines.

The director of the National Global Warming and Wildlife Science Center established under subsection (b) shall be an ex officio member of the science advisory board.

- (2) FUNCTIONS.—The science advisory board shall—
  - (A) provide scientific and technical advice and recommendations to the Secretary on the impacts of global warming on wildlife and its habitat, areas of habitat of particular importance for the conservation of wildlife populations affected by global warming, and strategies and mechanisms to assist wildlife populations and their habitats in adapting to the impacts of global warming in the management of Federal lands and in other Federal programs for wildlife conservation;
  - (B) advise the National Global Warming and Wildlife Science Center established under subsection (b) and review the quality of the research programs of the Center; and
  - (C) advise the Secretary regarding the best science available for purposes of developing and revising the national strategy under section 7454.
- (3) PUBLIC AVAILABILITY.—The advice and recommendations of the science advisory board shall be available to the public.
- (b) NATIONAL GLOBAL WARMING AND WILDLIFE SCIENCE CENTER.—
  - (1) IN GENERAL.—The Secretary shall establish the National Global Warming and Wildlife Science Center within the United States Geological Survey.
  - (2) FUNCTIONS.—The National Global Warming and Wildlife Science Center shall—
    - (A) conduct scientific research on national issues related to the impacts of global warming on wildlife and its habitat and mechanisms for adaptation to, mitigation of, or prevention of such impacts;
    - (B) consult with and advise Federal land management agencies and Federal wildlife agencies regarding the impacts of global warming on wildlife and its habitat and mechanisms for adaptation to or mitigation of such impacts, and the incorporation of information regarding such impacts and the adoption of mechanisms for adaptation or mitigation of such impacts in the management and planning for Federal lands and in the administration of Federal wildlife programs; and
    - (C) consult, and to the maximum extent practicable, collaborate with State and local agencies, universities, and other public and private entities regarding their research,

monitoring, and other efforts to address the impacts of global warming on wildlife and its habitat.

- (3) INTEGRATION WITH OTHER FEDERAL ACTIVITIES.—The Secretary, the Secretary of Agriculture, and the Secretary of Commerce shall ensure that research and other activities carried out pursuant to this section are integrated with climate change program research and activities carried out pursuant to other Federal law.
- (c) DETECTION OF CHANGES.—The Secretary, the Secretary of Agriculture, and the Secretary of Commerce shall each exercise authorities under other laws to carry out programs to detect changes in wildlife abundance, distribution, and behavior related to global warming, including—
  - (1) conducting species inventories on Federal lands and in marine areas within the exclusive economic zone of the United States; and
  - (2) establishing and implementing robust, coordinated monitoring programs.
- SEC. 7456. AUTHORIZATION OF APPROPRIATIONS.
  - (a) IMPLEMENTATION OF NATIONAL STRATEGY.—Of the amounts appropriated to carry out this subchapter for each fiscal year—
    - (1) 45 percent are authorized to be made available to Federal agencies to develop and implement the national strategy promulgated under section 7454 in the administration of the Federal land systems, of which—
      - (A) 35 percent shall be allocated to the Department of the Interior to—
        - (i) operate the National Global Warming and Wildlife Science Center established under section 7455; and
        - (ii) carry out the policy set forth in section 7452 and implement the national strategy in the administration of the National Park System the National Wildlife Refuge System, and on the Bureau of Land Management’s public lands; and
      - (B) 10 percent shall be allocated to the Department of Agriculture to carry out the policy set forth in section 7452 and implement the national strategy in the administration of the National Forest System;
    - (2) 25 percent are authorized to be made available to Federal agencies to carry out the policy set forth in section 7452 and to implement the national strategy through fish and wildlife programs, other than for the operation and maintenance of Federal lands, of which—
      - (A) 10 percent shall be allocated to the Department of the Interior to fund endangered species, migratory bird, and other fish and wildlife programs administered by the United

- States Fish and Wildlife Service, other than operations and maintenance of the national wildlife refuges; and
- (B) 15 percent shall be allocated to the Department of the Interior for implementation of cooperative grant programs benefitting wildlife including the Cooperative Endangered Species Fund, Private Stewardship Grants, the North American Wetlands Conservation Act, the Multinational Species Conservation Fund, the Neotropical Migratory Bird Conservation Fund, and the National Fish Habitat Action Plan, and used for activities that assist wildlife and its habitat in adapting to the impacts of global warming; and
- (3) 30 percent are authorized to be made available for grants to States and Indian tribes through the State and tribal wildlife grants program authorized under section 7461, to—
  - (A) carry out activities that assist wildlife and its habitat in adapting to the impacts of global warming in accordance with State comprehensive wildlife conservation plans developed and approved under that program; and
  - (B) revise or supplement existing State comprehensive wildlife conservation plans as necessary to include specific strategies for assisting wildlife and its habitat in adapting to the impacts of global warming.
- (b) AVAILABILITY.—
  - (1) IN GENERAL.—Funding is authorized to be made available to States and Indian tribes pursuant to this section subject to paragraphs (2) and (3).
  - (2) INITIAL 5-YEAR PERIOD.—During the 5-year period beginning on the effective date of this title, a State shall not be eligible to receive such funding unless the head of the State’s wildlife agency has—
    - (A) approved, and provided to the Secretary, an explicit strategy to assist wildlife populations in adapting to the impacts of global warming; and
    - (B) incorporated such strategy as a supplement to the State’s comprehensive wildlife conservation plan.
  - (3) SUBSEQUENT PERIOD.—After such 5-year period, a State shall not be eligible to receive such funding unless the State has submitted to the Secretary, and the Secretary has approved, a revision to its comprehensive wildlife conservation plan that—
    - (A) describes the impacts of global warming on the diversity and health of the State’s wildlife populations and their habitat;
    - (B) describes and prioritizes proposed conservation actions to assist wildlife populations in adapting to such impacts;

- (C) establishes programs for monitoring the impacts of global warming on wildlife populations and their habitats; and
    - (D) establishes methods for assessing the effectiveness of conservation actions taken to assist wildlife populations in adapting to such impacts and for adapting such actions to respond appropriately to new information or changing conditions.
  - (c) INTENT OF CONGRESS.—It is the intent of Congress that funding provided to Federal agencies and States pursuant to this subchapter supplement, and not replace, existing sources of funding for wildlife conservation.
- (Page 430-436) Subchapter C—State and Tribal Wildlife Grants Program
  - SEC. 7461. STATE AND TRIBAL WILDLIFE GRANTS PROGRAM.
    - (a) AUTHORIZATION OF PROGRAM.—There is authorized to be established a State and Tribal Wildlife Grants Program to be administered by the Secretary of the Interior and to provide wildlife conservation grants to States and to the District of Columbia, Puerto Rico, Guam, the United States Virgin Islands, the Northern Mariana Islands, American Samoa, and federally recognized Indian tribes for the planning, development, and implementation of programs for the benefit of wildlife and their habitat, including species that are not hunted or fished.
    - (b) ALLOCATION OF FUNDS.—
      - (1) IN GENERAL.—Of the amounts made available to carry out this section for each fiscal year-
        - (A) 10 percent shall be for a competitive grant program for Indian tribes that are not subject to the remaining provisions of this section;
        - (B) of the amounts remaining after the application of subparagraph (A), and after the deduction of the Secretary’s administrative expenses to carry out this section—
          - (i) not more than one-half of 1 percent shall be allocated to each of the District of Columbia and to the Commonwealth of Puerto Rico; and
          - (ii) not more than one-fourth of 1 percent shall be allocated to each of Guam, American Samoa, the United States Virgin Islands, and the Commonwealth of the Northern Mariana Islands; and
        - (C) of the amount remaining after the application of subparagraphs (B) and (C), the secretary shall apportion among the States—

- (i) one-third based on the ratio that the land area of each State bears to the total land area of all States; and
    - (ii) two-thirds based on the ratio that the population of each State bears to the total population of all States.
  - (2) ADJUSTMENTS.—The amounts apportioned under subparagraph (C) of paragraph (1) for a fiscal year shall be adjusted equitably so that no State is apportioned under such subparagraph a sum that is—
    - (A) less than 1 percent of the amount available for apportionment under that subparagraph that fiscal year; or
    - (B) more than 5 percent of such amount.
- (c) COST SHARING.—
  - (1) PLAN DEVELOPMENT GRANTS.—The Federal share of the costs of developing or revising a comprehensive wildlife conservation plan shall not exceed 75 percent of the total costs of developing or revising such plan.
  - (2) PLAN IMPLEMENTATION GRANTS.—The Federal share of the costs of implementing an activity in an approved comprehensive wildlife conservation plan carried out with a grant under this section shall not exceed 50 percent of the total costs of such activities.
  - (3) PROHIBITION ON USE OF FEDERAL FUNDS.—The non-Federal share of costs of an activity carried out under this section shall not be paid with amounts derived from any Federal grant program.
- (d) REQUIREMENT FOR PLAN.—
  - (1) IN GENERAL.—No State, territory, or other jurisdiction shall be eligible for a grant under this section unless it submits to the Secretary a comprehensive wildlife conservation plan that—
    - (A) complies with paragraph (2); and
    - (B) considers the broad range of the State, territory, or other jurisdiction’s wildlife and associated habitats, with appropriate priority placed on those species with the greatest conservation need and taking into consideration the relative level of funding available for the conservation of those species.
  - (2) CONTENTS.—The comprehensive wildlife conservation plan must contain—
    - (A) information on the distribution and abundance of species of wildlife, including low and declining populations as the State, territory, or other jurisdiction’s fish and wildlife agency considers appropriate, that are indicative of the diversity and health of the jurisdiction’s wildlife;

- (B) the location and relative condition of key habitats and community types essential to conservation of species identified in subparagraph (A);
- (C) descriptions of problems which may adversely affect species identified in subparagraph (A) or their habitats, and priority research and survey efforts needed to identify factors that may assist in restoration and improved conservation of these species and habitats;
- (D) descriptions of conservation actions proposed to conserve the identified species and habitats and priorities for implementing such actions;
- (E) proposed plans for monitoring species identified in subparagraph (A) and their habitats, for monitoring the effectiveness of the conservation actions proposed in subparagraph (D), and for adapting these conservation actions to respond appropriately to new information or changing conditions;
- (F) descriptions of procedures to review the comprehensive wildlife conservation plan at intervals not to exceed ten years;
- (G) plans for coordinating the development, implementation, review, and revision of the comprehensive wildlife conservation plan with Federal, State, and local agencies and Indian tribes that manage significant land and water areas within the jurisdiction or administer programs that significantly affect the conservation of identified species and habitats; and
- (H) provisions for broad public participation as an essential element of the development, revision, and implementation of the comprehensive wildlife conservation plan.
- (e) SAVINGS CLAUSE.—State comprehensive wildlife strategies approved by the Secretary pursuant to previous congressional authorizations and appropriations Acts shall remain in effect until such strategies expire or are revised in accordance with their terms. Except as specified in section 7456(b) with respect to funds made available under such section, conservation and education activities conducted or proposed to be conducted pursuant to such previously approved strategies shall remain authorized.
- (f) AUTHORIZATION OF APPROPRIATIONS.—There are authorized to be appropriated such sums as are necessary to carry out this section.

## **TITLE IX—ENERGY AND COMMERCE**

- Subtitle D—Renewable Fuel Infrastructure and International Cooperation
- PART 1—RENEWABLE FUEL INFRASTRUCTURE

- (Page 833-834) SEC. 9308. GRANTS FOR CELLULOSIC ETHANOL PRODUCTION.
  - Subsection (s) of section 211 of the Clean Air Act (as added by section 1512 of the Energy Policy Act of 2005) (and as redesignated by section 9307 of this Act), relating to conversion assistance for cellulosic biomass, waste-derived ethanol, and approved renewable fuels, is amended as follows:
    - (1) By adding the following new subparagraphs at the end of paragraph (3):
      - (D) \$500,000,000 for fiscal year 2009.
      - (E) \$500,000,000 for fiscal year 2010.
    - (2) By adding the following new paragraph at the end thereof:
      - “(5) CRITERIA.—In awarding grants under this section, the Secretary shall give priority to applications that promote feedstock diversity and the geographic dispersion of production facilities.”.
  
- (Page 836) SEC. 9312. CELLULOSIC ETHANOL AND BIOFUELS RESEARCH.
  - There are authorized to be appropriated to the Secretary of Energy \$50,000,000 for fiscal year 2008, to remain available until expended, for cellulosic ethanol and biofuels research and development grants to 10 entities from among 1890 land grant colleges, Historically Black Colleges or Universities, Tribal serving institutions, or Hispanic serving institutions, selected by the Secretary of Energy to receive a grant under this section through a peer-reviewed competitive process. The selected entities shall then collaborate with one of the Department of Energy’s Office of Science Bioenergy Research Centers.
  
- (Page 877- )Subtitle H—Federal Renewable Portfolio Standard
  - SEC. 9611. FEDERAL RENEWABLE PORTFOLIO STANDARD.
    - (a) IN GENERAL.—Title VI of the Public Utility Regulatory Policies Act of 1978 is amended by adding at the end the following:
  - (Page 877-879) SEC. 610. FEDERAL RENEWABLE PORTFOLIO STANDARD.
    - (a) DEFINITIONS.—For purposes of this section:
      - (1) BIOMASS.—
        - (A) IN GENERAL.—The term ‘biomass’ means—
          - (i) cellulosic (plant fiber) organic materials from a plant that is planted for the purpose of being used to produce energy; or
          - (ii) nonhazardous, plant or algal matter that is derived from any of the following:
            - (I) An agricultural crop, crop byproduct or residue resource.

- (II) Waste such as landscape or right-of-way trimmings (but not including municipal solid waste, recyclable postconsumer waste paper, painted, treated, or pressurized wood, wood contaminated with plastic or metals).
  - (III) Gasified animal waste.
  - (IV) Landfill methane.
- (B) NATIONAL FOREST LANDS AND CERTAIN OTHER PUBLIC LANDS.—With respect to organic material removed from National Forest System lands or from public lands administered by the Secretary of the Interior, the term ‘biomass’ covers only organic material from
  - (i) ecological forest restoration;
  - (ii) pre-commercial thinnings;
  - (iii) brush;
  - (iv) mill residues; and
  - (v) slash.
- (C) EXCLUSION OF CERTAIN FEDERAL LANDS.—Notwithstanding subparagraph (B), material or matter that would otherwise qualify as biomass are not included in the term biomass if they are located on the following Federal lands:
  - (i) Federal land containing old growth forest or late successional forest unless the Secretary of the Interior or the Secretary of Agriculture determines that the removal of organic material from such land is appropriate for the applicable forest type and maximizes the retention of late successional and large and old growth trees, late-successional and old growth forest structure, and late-successional and old growth forest composition.
  - (ii) Federal land on which the removal of vegetation is prohibited, including components of the National Wilderness Preservation System.
  - (iii) Wilderness Study Areas.
  - (iv) Inventoried roadless areas.
  - (v) Components of the National Landscape Conservation System.
  - (vi) National Monuments.
- (Page 884) (c) REQUIRED ANNUAL PERCENTAGE.—For calendar years 2010 through 2039, the required annual percentage of the retail electric supplier’s base amount that shall be generated from renewable energy resources, or otherwise credited towards such percentage

requirement pursuant to subsection (d), shall be the percentage specified in the following table:

Calendar Years	Required Annual Percentage
2010 .....	2.75
2011 .....	2.75
2012 .....	3.75
2013 .....	4.5
2014 .....	5.5
2015 .....	6.5
2016 .....	7.5
2017 .....	8.25
2018 .....	10.25
2019 .....	12.25
2020       thereafter through 2039 .....	15

- (d) RENEWABLE ENERGY AND ENERGY EFFICIENCY CREDITS.—(1) A retail electric supplier may satisfy the requirements of subsection (b)(1) through the submission of Federal renewable energy credits—
  - (C) The Secretary shall issue 2 renewable energy credits for each kilowatt hour of electric energy generated and supplied to the grid in that calendar year through the use of a renewable energy resource at an eligible facility located on Indian land. For purposes of this paragraph, renewable energy generated by biomass cofired with other fuels is eligible for two credits only if the biomass was grown on such land.

**DIVISION B—RENEWABLE ENERGY AND ENERGY CONSERVATION TAX ACT OF 2007**

**TITLE XII—CONSERVATION**

- (Page 937) Subtitle A—Transportation
  - (Page 948-951) SEC. 12004. CREDIT FOR PRODUCTION OF CELLULOSIC ALCOHOL.
    - (a) IN GENERAL.—Subsection (b) of section 40 is amended by redesignating paragraph (5) as paragraph (6) and by inserting after paragraph (4) the following new paragraph:
      - “(5) CELLULOSIC ALCOHOL FUEL PRODUCER CREDIT.—
        - (A) IN GENERAL.—The cellulosic alcohol fuel producer credit of any cellulosic alcohol fuel producer for any taxable year is 50 cents for each gallon of qualified cellulosic fuel production of such producer.
        - (B) QUALIFIED CELLULOSIC FUEL PRODUCTION.—For purposes of this paragraph, the term ‘qualified cellulosic fuel production’ means any cellulosic alcohol which is produced by a cellulosic alcohol fuel producer, and which during the taxable year—



- Subtitle B—Other Conservation Provisions
  - (Page 963-970) SEC. 12011. QUALIFIED ENERGY CONSERVATION BONDS.
    - (a) IN GENERAL.—Subpart I of part IV of subchapter A of chapter 1, as added by section 104, is amended by adding at the end the following new section:
    - “SEC. 54C. QUALIFIED ENERGY CONSERVATION BONDS.
      - (a) QUALIFIED ENERGY CONSERVATION BOND.— For purposes of this subchapter, the term ‘qualified energy conservation bond’ means any bond issued as part of an issue if—
        - (1) 100 percent of the available project proceeds of such issue are to be used for one or more qualified conservation purposes,
        - (2) the bond is issued by a State or local government, and
        - (3) the issuer designates such bond for purposes of this section.
      - (b) LIMITATION ON AMOUNT OF BONDS DESIGNATED.— The maximum aggregate face amount of bonds which may be designated under subsection (a) by any issuer shall not exceed the limitation amount allocated to such issuer under subsection (d).
      - (c) NATIONAL LIMITATION ON AMOUNT OF BONDS DESIGNATED.—There is a national qualified energy conservation bond limitation of \$3,600,000,000.
      - (d) ALLOCATIONS.—
        - (1) IN GENERAL.—The limitation applicable under subsection (c) shall be allocated by the Secretary among the States in proportion to the population of the States.
        - (2) ALLOCATIONS TO LARGEST LOCAL GOVERNMENTS.—
          - (A) IN GENERAL.—In the case of any State in which there is a large local government, each such local government shall be allocated a portion of such State’s allocation which bears the same ratio to the State’s allocation (determined without regard to this subparagraph) as the population of such large local government bears to the population of such State.
          - (B) ALLOCATION OF UNUSED LIMITATION TO STATE.—The amount allocated under this subsection to a large local government may be reallocated by such local government to the State in which such local government is located.
          - (C) LARGE LOCAL GOVERNMENT.—For purposes of this section, the term ‘large local government’ means any municipality or county if

such municipality or county has a population of 100,000 or more.

- (3) ALLOCATION TO ISSUERS; RESTRICTION ON PRIVATE ACTIVITY BONDS.—Any allocation under this subsection to a State or large local government shall be allocated by such State or large local government to issuers within the State in a manner that results in not less than 70 percent of the allocation to such State or large local government being used to designate bonds which are not private activity bonds.
- (e) QUALIFIED CONSERVATION PURPOSE.—For purposes of this section—
  - (1) IN GENERAL.—The term ‘qualified conservation purpose’ means any of the following:
    - (A) Capital expenditures incurred for purposes of—
      - (i) reducing energy consumption in publicly-owned buildings by at least 20 percent,
      - (ii) implementing green community programs, or
      - (iii) rural development involving the production of electricity from renewable energy resources.
    - (B) Expenditures with respect to research facilities, and research grants, to support research in—
      - (i) development of cellulosic ethanol or other nonfossil fuels,
      - (ii) technologies for the capture and sequestration of carbon dioxide produced through the use of fossil fuels,
      - (iii) increasing the efficiency of existing technologies for producing nonfossil fuels,
      - (iv) automobile battery technologies and other technologies to reduce fossil fuel consumption in transportation, or
      - (v) technologies to reduce energy use in buildings.
    - (C) Mass commuting facilities and related facilities that reduce the consumption of energy, including expenditures to reduce pollution from vehicles used for mass commuting.
    - (D) Demonstration projects designed to promote the commercialization of—
      - (i) green building technology,
      - (ii) conversion of agricultural waste for use in the production of fuel or otherwise,

- (iii) advanced battery manufacturing technologies,
    - (iv) technologies to reduce peak use of electricity, or
    - (v) technologies for the capture and sequestration of carbon dioxide emitted from combusting fossil fuels in order to produce electricity.
  - (E) Public education campaigns to promote energy efficiency.
- (2) SPECIAL RULES FOR PRIVATE ACTIVITY BONDS.—For purposes of this section, in the case of any private activity bond, the term ‘qualified conservation purposes’ shall not include any expenditure which is not a capital expenditure.
- (f) POPULATION.—
  - (1) IN GENERAL.—The population of any State or local government shall be determined for purposes of this section as provided in section 146(j) for the calendar year which includes the date of the enactment of this section.
  - (2) SPECIAL RULE FOR COUNTIES.—In determining the population of any county for purposes of this section, any population of such county which is taken into account in determining the population of any municipality which is a large local government shall not be taken into account in determining the population of such county.
- (g) APPLICATION TO INDIAN TRIBAL GOVERNMENTS.—An Indian tribal government shall be treated for purposes of this section in the same manner as a large local government, except that—
  - (1) an Indian tribal government shall be treated for purposes of subsection (d) as located within a State to the extent of so much of the population of such government as resides within such State, and
  - (2) any bond issued by an Indian tribal government shall be treated as a qualified energy conservation bond only if issued as part of an issue the available project proceeds of which are used for purposes for which such Indian tribal government could issue bonds to which section 103(a) applies.”.
- (b) CONFORMING AMENDMENTS.—
  - (1) Paragraph (1) of section 54A(d), as added by section 104, is amended to read as follows:
    - (1) QUALIFIED TAX CREDIT BOND.—The term ‘qualified tax credit bond’ means—
      - (A) a new clean renewable energy bond, or

- (B) a qualified energy conservation bond, which is part of an issue that meets requirements of paragraphs (2), (3), (4), and (5).
  - (2) Subparagraph (C) of section 54A(d)(2), as added by section 104, is amended to read as follows:
    - (C) QUALIFIED PURPOSE.—For purposes of this paragraph, the term ‘qualified purpose’ means—
      - (i) in the case of a new clean renewable energy bond, a purpose specified in section 54B(a)(1), and
      - (ii) in the case of a qualified energy conservation bond, a purpose specified in section 54C(a)(1).
  - (3) The table of sections for subpart I of part IV of subchapter A of chapter 1 is amended by adding at the end the following new item:
    - Sec. 54C. Qualified energy conservation bonds.
- (c) EFFECTIVE DATE.—The amendments made by this section shall apply to obligations issued after the date of the enactment of this Act.

## TITLE XIV—OTHER PROVISIONS

- Subtitle A—Studies
  - (page 1001-1002) Sec. 14002. Comprehensive study of biofuels.
    - (a) STUDY.—The Secretary of the Treasury, in consultation with the Secretary of Agriculture, the Secretary of Energy, and the Administrator of the Environmental Protection Agency, shall enter into an agreement with the National Academy of Sciences to produce an analysis of current scientific findings to determine—
      - (1) current biofuels production, as well as projections for future production,
      - (2) the maximum amount of biofuels production capable on United States farmland,
      - (3) the domestic effects of a dramatic increase in biofuels production on, for example—
        - (A) the price of fuel,
        - (B) the price of land in rural and suburban communities,
        - (C) crop acreage and other land use,
        - (D) the environment, due to changes in crop acreage, fertilizer use, runoff, water use, emissions from vehicles utilizing biofuels, and other factors,
        - (E) the price of feed,
        - (F) the selling price of grain crops,
        - (G) exports and imports of grains,
        - (H) taxpayers, through cost or savings to commodity crop payments, and

- (I) the expansion of refinery capacity,
  - (4) the ability to convert corn ethanol plants for other uses, such as cellulosic ethanol or biodiesel,
  - (5) a comparative analysis of corn ethanol versus other biofuels and renewable energy sources, considering cost, energy output, and ease of implementation, and
  - (6) the need for additional scientific inquiry, and specific areas of interest for future research.
- (b) REPORT.—The National Academy of Sciences shall submit an initial report of the findings of the report required under subsection (a) to the Congress not later than 3 months after the date of the enactment of this Act, and a final report not later than 6 months after such date of enactment.