

CRS Report for Congress

Energy Efficiency and Renewable Energy Legislation in the 110th Congress

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Fred Sissine
Specialist in Energy Policy
Resources, Science, and Industry Division

Anne Gillis
Information Research Specialist
Knowledge Services Group

Mark Gurevitz
Information Research Specialist
Knowledge Services Group



**Prepared for Members and
Committees of Congress**

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Summary

This report reviews the status of energy efficiency and renewable energy legislation introduced during the 110th Congress. Most Senate action led to the Senate version of H.R. 6, an omnibus energy bill that the Senate passed on June 21, 2007. Most House action led to the omnibus energy bill H.R. 3221, which the House passed on August 4, 2007. A second area of focus has been on the funding-related bills for energy efficiency and renewable energy, especially H.R. 2641, the Energy and Water Appropriations bill for FY2008.

The Senate-passed version of H.R. 6, the proposed *Renewable Fuels, Consumer Protection, and Energy Efficiency Act of 2007*, was derived primarily from S. 1419, which, in turn, was composed from four major bills: the *Energy Savings Act* (S. 1321), the *Public Buildings Cost Reduction Act* (S. 992), the *Ten-in-Ten Fuel Economy Act* (S. 357), and the *Energy Diplomacy and Security Act* (S. 193). The key provisions of the Senate-passed H.R. 6 are appliance efficiency standards, an increase of the renewable fuel standard (RFS) to 36 billion gallons by 2022, and an increase of the combined corporate average fuel economy (CAFE) standards to 35 miles per gallon (mpg) by 2020. Tax provisions and a renewable energy portfolio standard (RPS) were not included.

The House-passed version of H.R. 3221 includes two divisions. Division A contains the *New Direction for Energy Independence, National Security, and Consumer Protection Act*, which has nine titles that represent the integration H.R. 364, H.R. 2304, H.R. 2313, H.R. 2337, H.R. 2389, H.R. 2420, H.R. 2635, H.R. 2701, H.R. 2773, H.R. 2774, H.R. 2847, and a draft bill by the Committee on Energy and Commerce. An adopted floor amendment (H.Amdt. 748) added a 15% renewable portfolio standard (RPS). Division B, the *Renewable Energy and Energy Conservation Tax Act of 2007*, contains the House-approved version of H.R. 2776, and adds four titles to H.R. 3221. It includes a four-year extension of the renewable electricity production tax credit and other efficiency and renewables incentives.

DOE's FY2008 budget request seeks \$1,236.2 million for DOE's Energy Efficiency and Renewable Energy (EERE) programs. In H.R. 2641, the House approved \$1,873.8 million for EERE, which is \$637.6 million, or 52%, more than the DOE request. The Senate Appropriations Committee recommended \$1,715.6 million for EERE, which is \$158.3 million, or 8%, less than the House level.

More than 270 bills on energy efficiency and renewable energy have been introduced. About one-third of these bills are focused on renewable fuels and about one-third would provide a tax incentive for investment, energy production, fuel use, or fuel reduction. For each bill listed in this report, a brief description and a summary of action are given, including references to committee hearings and reports. Also, a selected list of congressional hearings, CRS reports, and Government Accountability Office (GAO) documents on energy efficiency and renewable energy are included. This report will be updated periodically.

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Energy Efficiency and Renewable Energy Legislation in the 110th Congress

Introduction

This report summarizes action on more than 270 energy efficiency and renewable energy bills introduced during the 110th Congress.¹ These bills cover a wide range of policy and issue areas that include appropriations, authorizations, budget, research and development (R&D), grants, loans, financing, regulation (including a renewable fuel standard), tax incentives, goals, plans, impacts, and the environment/climate change.² Most of these bills have focused on grants and tax incentives. The bills also cover a range of sectors and topics that include buildings, defense, education, federal lands and energy management, farms, American Indians, and international activities. Thus far, the sector of international activities has generated the greatest number of bills. **Table 2** groups the bills by topic.

The bills can also be categorized by type of renewable resource, type of energy efficiency measure, and technology. They cover a broad range of energy efficiency measures and technologies, including distributed generation, net metering, equipment and appliance standards, fuel economy standards, and transportation efficiency. Most of these bills address transportation and fuel economy. These bills also cover a broad range of renewable energy resources and technologies, including alcohol fuels, biofuels, biodiesel, biopower, biomass, geothermal, hydrogen, hydropower, solar, and wind. So far, the fuels area has generated the greatest number of bills.

For each bill listed in this report, a brief description and a summary of action are given, including references to committee hearings and reports.

¹ This report is intended to complement CRS Report RL33599, *Energy Efficiency Policy: Budget, Electricity Conservation, and Fuel Conservation Issues*, and CRS Report RL33588, *Renewable Energy Policy: Tax Credit, Budget, and Regulatory Issues*, both by Fred Sissine.

² Bills on climate change are discussed in CRS Report RL33846, *Greenhouse Gas Reduction: Cap-and-Trade Bills in the 110th Congress*, by Larry Parker and Brent Yacobucci.

House-Passed Version of H.R. 3221, Division A: “New Direction for Energy Independence, National Security, and Consumer Protection Act”

The proposed *New Direction for Energy Independence, National Security, and Consumer Protection Act* (H.R. 3221) is an omnibus energy policy bill that consists mainly of provisions for energy efficiency and renewable energy. It was composed of several bills that were reported from various committees.³ In House floor action on August 4, 2007, several amendments to H.R. 3221 were adopted, including one that would establish a renewable energy portfolio standard (RPS). The House approved the amended bill by a vote of 241-172. Minutes later, the tax provisions bill (H.R. 2776) was approved and then incorporated into H.R. 3221. A brief description of the provisions in H.R. 3221 and H.R. 2776 follows.

Key Provisions Adopted and Absent

A description of some key provisions and amendments follows:

Renewable Energy Portfolio Standard (RPS).⁴ H.Amdt. 748 proposed an RPS target that would reach 15% by 2020. Up to 4% of the target could be met with certain energy efficiency measures. The amendment was approved by a vote of 220-190.

Renewable Energy and Energy Conservation Act (H.R. 2776). This bill proposed extensions and additions of several tax incentives for renewable energy and energy efficiency, including a four-year extension of the renewable energy electricity production tax credit. The bill was approved on a separate floor vote by a tally of 221-189. It was subsequently incorporated into H.R. 3221.

Renewable Fuel Standard (RFS). Proposed Amendment 81 would have increased RFS to 36 billion gallons by 2022. It was withdrawn.

Corporate Average Fuel Economy (CAFE) Standards. Proposed amendments 62 and 95 offered different policies for increasing CAFE standards. Proposed Amendment 95 was withdrawn, and Proposed Amendment 62 was not included in the rule that prescribed floor action.

Oil Savings Provisions. Proposed Amendment 36 would have set a goal to reduce imported oil to less than 25% of vehicle petroleum use by 2015. Proposed

³ The bills included H.R. 364, H.R. 2304, H.R. 2313, H.R. 2337, H.R. 2389, H.R. 2420, H.R. 2635, H.R. 2701, H.R. 2773, H.R. 2774, H.R. 2776, H.R. 2847, and a draft bill (unnumbered) from the Committee on Energy and Commerce. More details about the bills are available in the Legislation section of this report.

⁴ Under an RPS, retail electricity suppliers (electric utilities) must provide a minimum amount of electricity from renewable energy resources or purchase tradable credits that represent an equivalent amount of renewable energy production. The minimum requirement is often set as a percentage share of a supplier's total retail electricity sales.

Amendment 72 would have called for development of a plan to cut U.S. oil use by 2.5 million barrels per day (mbd) by 2016, rising significantly by 2025. Neither Amendment 36 nor Amendment 72 was included in the rule that prescribed floor action.

Title I — Green Jobs

This title assumes the provisions of H.R. 2947. It would authorize up to \$125 million in funding to establish national and state job training programs, administered by the U.S. Department of Labor, to help address job shortages that are impairing growth in green industries, such as energy efficient buildings and construction, renewable electric power, energy efficient vehicles, and biofuels development..

Title II — The International Climate Cooperation Re-engagement Act of 2007

This title assumes the provisions of H.R. 2420. It would declare U.S. policy on international climate cooperation, authorize assistance to promote clean and efficient energy technologies in foreign countries, and establish the International Clean Energy Foundation.

Subtitle A — U.S. Policy on Global Climate Change. This subtitle would state that it is the policy of the United States to take a more active role in international climate change negotiations including future fifteenth meeting of the Conference of Parties (COP-15) to the United Nations Framework Convention on Climate Change. Also, the United States would declare its intent to seek mitigation commitments from all major greenhouse gas (GHG) emitting nations, including China, India, Brazil, and other major developing nations. An Office on Global Climate Change would be established at the Department of State. The Secretary of State would be required to report to Congress on progress made in promoting transparency in extractive industries resource payments.

Subtitle B — Assistance for Clean and Efficient Energy Technologies. The U.S. Agency for International Development (USAID) would be directed to report to Congress on efforts to support policies for clean and efficient energy technologies. The Department of Commerce would be directed to increase efforts to export such technologies and report to Congress on the results. Other U.S. agencies with export promotion responsibilities would be required to increase efforts to support these technologies. Also, increased efforts are requested from the Interagency Working Group on the Clean Energy Technology Exports Initiative, particularly to implement its 2002 strategic plan. The Secretary of State would be required to report to Congress on the impact of global climate change on developing countries.

Subtitle C — International Clean Energy Foundation. The Foundation would be established with the long-term goal of reducing GHG emissions. It would be directed to use the funds authorized by this subtitle to make grants to promote projects outside of the United States that serve as models of how to reduce emissions. An annual report to Congress would be required.

Title III — Small Energy-Efficient Businesses

This title assumes the provisions of H.R. 2389. Loans, grants, and debentures that would be established to help small businesses develop, invest in, and purchase energy efficient buildings, fixtures, equipment, and technology. On May 23, 2007, the House Committee on Small Business ordered reported H.R. 2389 by voice vote.

Title IV — Science and Technology

This title has eight subtitles, most of which correspond to a bill ordered reported by the House Committee on Science and Technology.

Subtitle A — Advanced Research Projects Agency — Energy. This subtitle assumes the provisions of H.R. 364. ARPA-E would be established at the Department of Energy (DOE). The new agency's goal would be to reduce the energy imports from foreign sources by 20% over the next 10 years. On May 23, 2007, the House Science and Technology Committee ordered reported H.R. 364. On August 9, 2007, the President signed the America Competes Act (P.L. 110-69). In that law, Section 5012 (Title V) directs that an ARPA-E be established at DOE.

Subtitle B — Marine Renewable Energy. This subtitle assumes the provisions of H.R. 2313. DOE would be directed to support wave, tidal, current, and ocean thermal energy technology R&D and commercial applications to help expand energy production. Further, DOE would be instructed to award grants to institutions of higher education (or consortia thereof) to establish National Marine Renewable Energy Research, Development, and Demonstration Centers. On June 21, 2007, the House Committee on Science and Technology reported H.R. 2313.

Subtitle C — Geothermal Energy. This subtitle assumes the provisions of H.R. 2304. DOE's program for geothermal energy R&D, demonstration, and commercial application would be expanded to cover certain advanced concepts. On June 21, 2007, the Committee reported H.R. 2304.

Subtitle D — Solar Energy. Part 1 assumes the provisions of H.R. 2774. It aims to improve the cost and effectiveness of thermal energy storage technologies that could improve the operation of concentrating solar power electric generating plants. Also, it calls for improved integration of concentrating solar power into regional electricity transmission systems. On June 22, 2007, the House Committee on Science and Technology ordered reported H.R. 2774 by voice vote.

Part 2 would require DOE to create a Solar Energy Industries Research and Promotion Board and a Solar Energy Research and Promotion Operating Committee. The Board and Committee would work with manufacturers and importers of solar energy products to improve consumer awareness of solar energy options and appropriate certifications. The solar program would be funded by a small portion of industry revenues. No appropriations are authorized.

Subtitle E — Biofuels. This subtitle assumes the provisions of H.R. 2773. It aims to improve information about federal biofuels research programs, focus

research on infrastructure and biorefineries, study potential impacts of increased biofuels use, and increase authorized funding for DOE biofuels research. An authorization of \$25 million would be created to provide grants for biofuels RD&D and commercial applications in states that have low rates of ethanol production. A university-based program would provide grants up to \$2 million for R&D on renewable energy technologies. Priority would be given to universities in low income and rural communities with proximity to trees dying of disease or insect infestation.

Subtitle F — Carbon Capture and Storage. This Subtitle assumes the provisions of H.R. 1933. A program would be established at DOE for carbon capture and storage R&D and demonstration. DOE would be directed to engage the National Academy of Sciences (NAS) to conduct a review of the program. EPA would be directed to assess potential impacts of such storage on public health and safety and the environment. DOE would be directed to work with NAS to establish graduate degree programs on geological sequestration at universities. Further, a university-based grant program would be created.

Subtitle G — Global Change Research. Part 1 would direct the President to establish an interagency committee to coordinate research on global change. The committee would be responsible for developing a national global change research and assessment plan. Further, a U.S. global change research program would be established, with the Office of Science and Technology Policy (OSTP) serving as the lead agency. A report to Congress would be required to accompany each annual budget request.

Part 2 would establish an interagency working group charged with recommending ways to coordinate federal data management and archiving activities for climate data and other global change data.

Subtitle H — H-Prize. DOE would be directed to conduct a competitive program to award cash prizes to advance R&D, demonstration, and commercial application of hydrogen energy technologies. The provisions of this Subtitle are identical to those of H.R. 632, which passed the House on June 6, 2007.

Title V — Agriculture Energy

This title assumes the provisions of H.R. 2419. Agricultural-based energy programs established by the Farm Security Act of 2002 would be expanded and continued through FY2012. A total of about \$3.2 billion in new funding is proposed including \$1.4 billion for biofuels production incentives, \$800 million to underwrite up to \$2 billion in loan guarantees for biorefineries, \$420 million for research on biomass feedstocks and production, and new mandatory funding for a cellulosic biomass feedstock reserve. Most new funding would be directed away from corn-based ethanol and toward cellulosic-based biofuels and other new technologies. USDA would be directed improve feedstock flexibility for bioenergy producers by purchasing eligible commodities and selling them to bioenergy producers in a way that ensures no cost to the federal government and avoids forfeitures to the Commodity Credit Corporation. Except for sections 5011 and 5012, all other

provisions of Title V are included in H.R. 2419, the *Farm, Nutrition, and Bioenergy Act of 2007*, which passed the House on July 27, 2007.

Title VI — Carbon-Neutral Government Act

This title assumes the provisions of H.R. 2635. It would set a goal to make the federal government carbon-neutral by 2050. Several energy and fuel efficiency policies would be undertaken to meet this goal, including standards for federal fleet emissions, green buildings, and agency purchases of renewable energy.

Subtitle A — Federal Government Inventory and Management of Greenhouse Gas (GHG) Emissions. Each federal agency would be required to inventory and report on its GHG emissions annually. EPA would be required to review the each agency's inventory to see that it complied with guidance for data collection. EPA would be directed to set a collective annual emission reduction target for each year in the period from 2010 through 2050. The goal would be to achieve zero net annual emissions (carbon-neutrality) by 2050. The Government Accountability Office (GAO) would be required to issue a report on markets for GHG offsets. Federal agencies would be allowed to purchase offsets and renewable energy certificates in open market transactions. This subtitle would not preempt or limit any state actions to reduce emissions.

Subtitle B — Federal Government Energy Efficiency. Federal agencies would be required to purchase "low GHG" vehicles and to procure energy-efficient (Energy Star) products or products designated by the federal energy management program (FEMP-designated). DOE would be directed to establish, by rule, revised federal building energy efficiency performance standards for new federal buildings and major federal building renovations. Relative to a comparable building's fuel use in 2003, buildings covered by the rule would be directed to reduce the share of fossil fuel use by 55% in 2010, reducing steadily to 100% (zero emissions) by 2030. Each federal agency would be required to ensure that a large capital investment in an existing building that is not a major renovation employs the most energy efficient designs, systems, equipment, and controls that are life-cycle cost effective. Federal agencies would be directed to avoid leasing buildings that are not Energy Star rated. Alternative fuels could not be procured if they have GHG emissions greater than those produced by conventional petroleum. Federal contracts for renewable energy could not exceed 30 years and could not include energy generated from municipal solid waste. The Office of Management and Budget (OMB) would be required to report annually on progress under Title VI.

Subtitle C — Telework Enhancement. Federal executive branch agencies would be directed to develop and implement a telework (work from home or close to home) policy for eligible employees. It would exclude those employees who handle secure materials or special equipment, are assigned to national security functions, or voluntarily decline the telework option.

Title VII — Natural Resources Committee Provisions

This title assumes the provisions of H.R. 2337. It includes provisions that would regulate wind impacts on wildlife, require a study of transmission capacity to help foster ocean wave, tidal, and current energy projects, create grants for studies of alternative energy development on the outer continental shelf, and establish pilot programs to use federal lands to harvest woody biomass and install concentrating solar power facilities.

Subtitle A — Energy Policy Act of 2005 Reforms. Subtitle A would repeal subsections 365(g) and 365(i) of EAct 2005 regarding recovery of permit processing costs. It would require the Secretary of the Interior to impose fees on the oil and gas industry to recover costs associated with the streamlining of permits during the pilot project established by EAct to improve federal permit coordination. A new 45-day deadline would be imposed for the consideration of applications for permits under section 366 of EAct 2005. Section 369 of EAct would be amended by removing two deadlines related to oil shale research and development and the preparation of a final environmental impact statement for commercial oil shale and tar sands leasing on public lands. H.R. 3221 would limit section 390 of EAct, which allows for a rebuttable presumption regarding the application of categorical exclusion under the National Environmental Policy Act (NEPA) for oil and gas exploration and development activities, and adhere to the regulations issued by the Council on Environmental Quality. And a Best Management Practices (BMP) provision would require BLM to allow for public comment and review before lease stipulation waivers are granted.

(More details on Subtitle A can be found in CRS Report RL34111, at [<http://www.congress.gov/erp/rl/html/RL34111.html>])

Subtitle B — Federal Energy Public Accountability, Integrity, and Public Interest. Chapters 1 through 3 would require a minimum of 550 audits annually, and increase fines for royalty payment violations under the Federal Oil and Gas Royalty Management Act of 1982 (FOGRMA). Surface owner protection would be enhanced under split estates where the federal government owned and leased minerals. Onshore oil and gas reclamation and bonding requirements would become more stringent. Additional requirements for the protection of water resources are included and new fees would be assessed to lessees of federal lands as a disincentive to hold and not develop those lands. (More details on Chapters 1 through 3 of Subtitle B can be found in CRS Report RL34111, at [<http://www.congress.gov/erp/rl/html/RL34111.html>])

Chapter 4 on *Wind Energy* would require the Department of the Interior to form a wind turbines guidelines advisory committee to study and recommend guidance for wind energy developers to mitigate the impact of turbines on birds and wildlife. State laws and regulations would not be preempted.

Chapter 5 on *Enhancing Energy Transmission* would direct DOE to study transmission capacity in California, Oregon, and Washington to determine whether it could support new electricity generation from ocean wave, tidal, and current energy projects that could contribute up to 10% of total electricity use in those states.

Subtitle C — Alternative Energy and Efficiency. A grant program would be created for studies of alternative energy development on the outer continental shelf. The Department of the Interior would be directed to assess and report to Congress on the potential for using leasing of federal lands and other means to help develop rights-of-way and infrastructure along Bureau of Reclamation canals to support solar and wind energy production. A program would be established to research methods for improving the energy efficiency of reverse osmosis technology that is used for water desalination, water recycling, and clean up of water contamination. A pilot program would be created to develop a strategic solar reserve, and would identify and assess potential sites on federal lands for concentrating solar power systems. The National Oceanic and Atmospheric Administration would be directed to issue regulations necessary to implement its authority to license offshore thermal energy conversion facilities. A program would be established to use biomass from federal forest lands.

Subtitle D — Carbon Capture and Climate Change Mitigation. Chapter 1 would direct the Department of the Interior to develop a methodology for an assessment of the national potential for geological storage of carbon dioxide. Chapter 2 would direct the U.S. Geological Survey to estimate the potential for increasing carbon sequestration in natural systems through management measures or restoration activities in each ecosystem. A report to Congress would be required. Chapter 3 would direct the Bureau of Land Management to maintain records on, and an inventory of, the amount of carbon dioxide stored in geological structures on federal lands. A report to Congress would be required that estimates the potential capacity for such storage on federal lands.

Chapter 4 would direct the Department of the Interior to establish an interagency 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 would prepare a national plan that would be presented to Congress. Also, a national policy would be established that directs the federal government to cooperate with state, tribal, and affected local governments, other concerned public and private organizations, landowners, and citizens to use all practicable means and measures to assist wildlife populations and their habitats in adapting to and surviving the effects of global warming. A national strategy would be developed, an advisory board would be formed, and a state and tribal grants program would be established.

Chapter 5 would direct the Department of Commerce to develop a national strategy to support coastal state and federal agency efforts to predict, plan for, and mitigate the impacts on ocean and coastal ecosystems from global warming, relative sea level rise, and ocean acidification. Further, it would be directed to develop a coastal climate change resiliency planning and response program to prepare for and reduce the negative consequences that may result from climate change in the coastal zone, and provide financial and technical assistance and training. Also, a National Integrated Coastal and Ocean Observation System would be established to improve the Nation's capability to measure, track, explain, and predict events related directly and indirectly to weather and climate change.

Subtitle E — Royalties Under Offshore Oil and Gas Leases. This Subtitle would require that the Secretary of the Interior accept a lessee's request to modify certain leases established in 1998 and 1999 without price thresholds ("covered leases") to include price thresholds. Lessees holding "covered leases" would not be eligible for new oil and gas leases in the Gulf of Mexico unless the covered leases are modified to include price thresholds or the lessee would agree to pay a newly established "conservation of resources fee." The Subtitle would repeal royalty relief provisions established by sections 344 and 345 of the Energy Policy Act of 2005 (P.L. 109-58). It would also "reaffirm" the Secretary's authority to impose a price threshold in certain leases. This Subtitle is nearly identical to Title II of the House-passed version of H.R. 6.

(More details on Subtitle E can be found in CRS Report RS22567, at [<http://www.congress.gov/erp/rs/html/RS22567.html>].)

Subtitle F — Additional Provisions. Subtitle F would establish an Oil Shale Community Impact Assistance Fund. Also, for certain existing federal leases, it would prohibit surface occupancy for oil and gas drilling on Colorado's Roan Plateau, which is federal land formerly designated as Naval Oil Shale Reserves. (More details on oil and natural gas provisions in Subtitle F can be found in CRS Report RL34111, at [<http://www.congress.gov/erp/rl/html/RL34111.html>].)

Also, the Minerals Management Service would be directed to report to Congress on the status of regulations required by the Outer Continental Shelf Lands Act with respect to wind energy production on the outer continental shelf.

Title VIII — Transportation and Infrastructure

This title assumes the provisions of H.R. 2701. It would promote energy efficient transportation and public buildings and create incentives for the use of alternative fuel vehicles and renewable energy. On June 20, 2007, the House Committee on Transportation and Infrastructure ordered reported H.R. 2701 by voice vote.

Subtitle A — Department of Transportation (DOT). A Center for Climate Change and Environment would be established to plan, coordinate, and implement strategies to reduce transportation-related energy use, mitigate the effects of climate change, and address the impacts of climate change on transportation systems and infrastructure.

Subtitle B — Highways and Transit. Part 1 provides support for public transportation systems. Federal grants up to 100% of costs would be made available to improve public transportation services that involve fare reductions. For projects that involve acquiring clean fuel or alternative fuel vehicle-related equipment or facilities for the purposes of complying with the Clean Air Act, federal grants would be made available that cover up to 100% of net costs. The Surface Transportation Board's mediation capacity would be expanded to assist public transportation agencies seeking track rights of way with rail carriers. DOT would be directed to create a pilot program to conduct vanpool demonstration projects in three urbanized

areas and two non-urbanized areas to increase vanpool use and the number of vanpools in service.

Part 2 provides support for federal-aid highways. The federal share for congestion mitigation and air quality (CMAQ) projects would be increased up to 100% of project or program cost. A sense of Congress would be established that in constructing new roadways or rehabilitating existing facilities, state and local governments should employ policies designed to accommodate all users, including motorists, pedestrians, cyclists, transit riders, and people of all ages and abilities.

Subtitle C — Railroad and Pipeline Transportation. Part 1 would direct DOT, in coordination with EPA, to establish and conduct a pilot grant program to assist railroad carriers in purchasing hybrid locomotives, including hybrid switch locomotives, in order to demonstrate the extent to which such locomotives increase fuel economy, reduce emissions, and lower costs of operation. Also, DOT would be directed to create a program of capital grants for the rehabilitation, preservation, or improvement of railroad track (including roadbed, bridges, and related track structures) of class II and class III railroads.

Part 2 would direct DOT to conduct feasibility studies for the construction of pipelines dedicated to ethanol transportation. A report to Congress would be required.

Subtitle D — Maritime Transportation. Part 1 would direct DOT to establish a short sea transportation program and designate short sea transportation projects to be conducted under the program to mitigate landside congestion. Short sea shipping activities would be made eligible for support from DOT's capital construction fund. A report to Congress on the short sea transportation program would be required. Part 2 would strengthen certain provisions that aim to prevent pollution from ships.

Subtitle E — Aviation. DOT, in coordination with EPA, would be directed to establish a pilot demonstration grant program to reduce noise, airport emissions, greenhouse gas emissions, or water quality impacts. Each project grant would be limited to a maximum of \$2.5 million.

Subtitle F — Public Buildings. Under Part 1, for each prospective project to construct, alter, acquire, or lease a building, the General Services Administration (GSA) would be directed to prepare estimates of the future energy performance of the building and a description of the use of energy efficient and renewable energy systems, including photovoltaic systems, in carrying out the project. The period for calculating life-cycle cost effectiveness in federal buildings would be extended from 25 years to 40 years. GSA would be directed to use up to \$30 million authorized from unobligated balances of the Federal Buildings Fund to support the installation of a solar photovoltaic system for the DOE headquarters building in Washington, D.C.

Part 2 would prohibit, except under certain circumstances, the purchase of incandescent light bulbs for use in Coast Guard office buildings.

Part 3 would allow the Architect of the Capitol (AOC) to perform a feasibility study regarding construction of a photovoltaic roof for the Rayburn House Office Building. The AOC may construct a fuel tank and pumping system for E-85 fuel at or within close proximity to the Capitol Grounds Fuel Station. To the maximum extent practicable, the AOC would be required to include energy efficiency measures, climate change mitigation measures, and other appropriate environmental measures in the Capitol Complex Master Plan. For the purpose of reducing carbon dioxide emissions, the Architect of the Capitol would be directed to install technologies for the capture and storage or use of carbon dioxide emitted from coal combustion in the Capitol Power Plant. AOC would be directed to operate the steam boilers and chiller plant at the Capitol Power Plant in the most energy efficient manner possible to minimize carbon emissions and operating costs.

Subtitle G — Water Resources and Emergency Management Preparedness. Part 1 would declare a federal policy that all federal water resources projects reflect national priorities for flood damage reduction, navigation, ecosystem restoration, and hazard mitigation and consider the future impacts of increased hurricanes, droughts, and other climate change-related weather events. A 21st Century Water Commission would be established to project future water supply and demand, impacts of climate change to the nation's flood risk and water availability; and associated impacts of climate change on water quality. EPA would be directed to arrange with NAS for a study that will identify the potential impacts of climate change on the nation's watersheds and water resources, including hydrological and ecological impacts, including the potential impacts of climate change on water quality. The Secretary of the Army would be directed to ensure that water resources projects and studies carried out by the Corps of Engineers take into account the potential short and long term effects of climate change.

Part 2 would direct the Federal Emergency Management Agency (FEMA) to conduct a comprehensive study of the increase in demand for FEMA's emergency preparedness, response, recovery, and mitigation programs and services that may be reasonably anticipated as a result of an increased number and intensity of natural disasters affected by climate change, including hurricanes, floods, tornadoes, fires, droughts, and severe storms.

Title IX — Energy and Commerce

This title assumes the provisions of a draft bill adopted by the House Committee on Energy and Commerce on June 28, 2007..

Subtitle A — Promoting Energy Efficiency. This subtitle has nine parts.

Part 1 on appliance efficiency would set new efficiency standards for residential clothes washers, dishwashers, dehumidifiers, refrigerators, refrigerator-freezers, freezers, electric motors, and residential boilers. DOE would be allowed to establish regional variations in standards for heating and air conditioning equipment. DOE would be required to complete a rulemaking process for furnace fans by 2013. Federal agencies would be directed to purchase devices that limit standby power use. DOE would be directed to issue a final rule that sets energy conservation standards for battery chargers. Certain energy efficiency measures for walk-in coolers and

walk-in freezers would be set by legislation. Also, several procedural changes would be made to expedite the DOE rulemaking process.

Part 2 would set a mandatory target for lighting efficiency, set a standard for incandescent reflector lamps, and require federal agencies to replace incandescent lights with more efficient ones. Energy efficiency standards would be set by legislation for metal halide lamp fixtures designed to be operated with lamps rated between 150 watts and 500 watts.

Part 3 on residential buildings would encourage stronger state building codes, require improved codes for manufactured housing, and reauthorize the DOE Weatherization program. DOE would be directed to conduct a study of the renewable energy system rebate program described in §206(c) of the Energy Policy Act of 2005. The study would determine the minimum funding the program would need to be viable and require a proposed implementation plan.

Part 4 on commercial and federal buildings would create an Office of High Performance Green Buildings at DOE. The office would be required to use life-cycle costing and allow agencies to retain cost savings. Federal procurement of green building materials would be increased. Federal agencies would be required to identify energy- and water-saving measures. Demonstration projects would be required at federal facilities and universities. A national goal would be set to achieve zero-net-energy use for new buildings constructed after 2025. Public outreach would be established, including green building technical assistance and information. An EPA program would be established to improve energy efficiency in data centers. Certain green building renovation projects would be eligible for loan guarantees under §1703 of EPCRA. GSA would be directed to use available appropriations to support a program to accelerate the use of geothermal (ground source) heat pump equipment in federal facilities. In each purchase of meeting and conference services, federal agencies would be required to consider the environmentally preferable (green) features and practices of a vendor in a manner similar to that already implemented by EPA. A grant program would be established to provide up to \$1 million in support of energy efficiency projects at universities.

Part 5 on industrial energy efficiency would direct EPA to identify the potential for economically feasible waste energy recovery, create a grant program to support waste energy recovery, and strengthen “clean energy centers” that analyze waste energy recovery.

Part 6 on energy efficiency of public institutions would promote combined heat and power systems in public institutions through federal revolving fund loans. EPA would be directed to conduct a study of how sustainable building features, such as energy efficiency, affect perceived indoor environmental quality for students in K-12 schools.

Part 7 on energy savings performance contracting (ESPC) would allow use of appropriated funds for ESPCs, eliminate the ESPC program sunset, require training for federal agency contract officers, direct that energy savings be measured, and create a DOE advisory committee to assist with deployment strategies.

Part 8 would create an advisory committee on energy efficiency financing.

Part 9 would establish an energy efficiency block grant program.

Subtitle B — Smart Grid Facilitation. This subtitle would create an electric grid modernization commission to study and propose policies on “Smart Grid” technology implementation. A federal 25% matching grant program would be created to support implementation. DOE would be directed to help deploy technologies and perform cooperative demonstration projects with electric utilities. States would be required to consider regulatory standards that would allow utilities to recover smart grid investments through rates and “decouple” utility profits from electricity sales volume.

Subtitle C — Loan Guarantees. This subtitle would amend EPACT Section 1702(c) on loan guarantees to clarify that DOE should approve project amounts likely to attract other investment, may not establish a loan guarantee limit below 80% of total project cost, and should require assurances that construction workers will be paid prevailing wage rates. Also, categories of projects deemed eligible in EPACT Section 1703 could not be excluded by language in appropriations bills.

Subtitle D — Renewable Fuel Infrastructure and International Cooperation. Part 1 of this subtitle would direct DOE to create a grant program to help establish or convert infrastructure to use renewable fuels, including E85 (85% ethanol). The EPACT authorization for grants to support cellulosic ethanol production would be increased. A grant program would be created to support production of flexible-fueled vehicles. Studies would also be required on the market penetration of flexible-fueled vehicles, the feasibility of constructing dedicated ethanol pipelines, the feasibility of using greater percentages of ethanol in fuel blends, and the adequacy of railroad transportation for delivery of ethanol fuel. Part 2 of this subtitle would establish a grant program and advisory board for U.S.-Israel energy cooperation. The provisions of this Subtitle are identical to those of H.R. 3238.

Subtitle E — Advanced Plug-In Hybrid Vehicles and Components. This subtitle would establish a loan guarantee program for advanced battery development, grant programs for plug-in hybrid vehicles, incentives for purchasing heavy duty hybrids for fleets, and credits for various electric vehicles.

Subtitle F — Availability of Critical Energy Information. This Subtitle would improve data collection needed by the DOE’s Energy Information Administration to support efficient energy markets.

Subtitle G — Natural Gas Utilities. Each natural gas utility would be required to make energy efficiency a priority resource and integrate energy efficiency into its plans and planning processes. Further, state regulators would be directed to consider crafting rate policies that align utility revenue recovery measures with incentives for energy efficiency measures. This Subtitle was added by floor amendment (H.Amdt.), which was approved by voice vote.

Subtitle H — Federal Renewable Portfolio Standard (RPS). This Subtitle would modify Title VI of the Public Utility Regulatory Policies Act of 1978 to establish an RPS for retail electric utilities that would be administered by DOE. For each retail supplier that sells more than one billion kilowatt-hours (kwh) per year, the RPS would set a minimum electricity production requirement from renewable resources. The standard would start at 2.75% in 2010 and then rise annually until reaching a peak of 15% in 2020. Electricity savings from energy efficiency measures would be allowed to compose a maximum of 25% of the standard in any given year, rising to a peak of 4% of the 15% total in 2020. Many provisions in this Subtitle are similar to those of H.R. 969. This Subtitle was added by floor amendment (H.Amdt. 748), which was approved by a vote of 220 to 190.

(More details on Subtitle H can be found in CRS Report RL34116, at [<http://www.congress.gov/erp/rl/html/RL34116.html>].)

Subtitle I — Large and Small Scale Hydropower. Congress expresses its recognition and support for renewable energy. In particular, this recognition and support is conferred on clean, consistent, pollution-free large and small scale conventional hydropower energy. This Subtitle was added by floor amendment (H.Amdt.), which was approved by vote of 402 to 9.

H.R. 3221, Division B: “Renewable Energy and Energy Conservation Act of 2007” (formerly H.R. 2776)

Title XI — Production Incentives

The bill would extend the renewable electricity production tax credit (PTC) for four years, extend the PTC to ocean thermal and hydrokinetic (wave, tide, and current) energy, extend the 30% business energy tax credit for solar and fuel cell equipment for eight years, authorize \$2 billion of clean renewable energy bonds, and remove the cap on the tax credit for residential solar and fuel cell equipment. (For more discussion of these tax provisions see CRS Report RL33578, *Energy Tax Policy*, pages 15 to 17, at [<http://www.congress.gov/erp/rl/pdf/RL33578.pdf>].)

Title XII — Conservation

Subtitle A — Transportation. Transportation fuel incentives would set a \$4,000 credit for plug-in hybrid vehicles, establish a 50 cent per gallon production tax credit for cellulosic ethanol fuel, extend the biodiesel production tax credit for two years, increase the alternative refueling stations tax credit, create a fringe benefit for bicycle commuters, and modify depreciation and expensing rules to close a loophole for gas guzzlers by making the incentives available for fuel efficient vehicles. (For more discussion of these tax provisions see CRS Report RL33578, *Energy Tax Policy*, pages 15 to 17, at [<http://www.congress.gov/erp/rl/pdf/RL33578.pdf>].)

Subtitle B — Other Conservation Provisions. Other energy efficiency provisions include a tax credit bond for community programs to reduce greenhouse gases, a tax credit bond for states to provide loans and grants for home improvements and residential equipment, an extension of the tax deduction for commercial buildings, an extension and modification of the appliance credit, and the establishment of a five-year depreciation period for smart electric meters. Also, the bill would clarify that the \$1 per gallon production credit for renewable diesel would be available only for fuel produced from biomass. A study of biofuels' future production potential and possible domestic impacts would be required. (For more discussion of these tax provisions see CRS Report RL33578, *Energy Tax Policy*, pages 15 to 17, at [<http://www.congress.gov/erp/rl/pdf/RL33578.pdf>].)

Title XIII — Revenue Provisions

Subtitle A — Denial of Oil and Gas Tax Benefits. (For discussion of these tax provisions see CRS Report RL33578, *Energy Tax Policy*, pages 15 to 17, at [<http://www.congress.gov/erp/rl/pdf/RL33578.pdf>].)

Subtitle B — Clarification of Eligibility for Certain Fuel Credits. (For discussion of these tax provisions see CRS Report RL33578, *Energy Tax Policy*, pages 15 to 17, at [<http://www.congress.gov/erp/rl/pdf/RL33578.pdf>].)

Title XIV — Other Provisions

Subtitle A — Studies. (For discussion of these tax provisions see CRS Report RL33578, *Energy Tax Policy*, pages 15 to 17, at [<http://www.congress.gov/erp/rl/pdf/RL33578.pdf>].)

Subtitle B — Application of Certain Labor Standards on Projects Financed Under Tax Credit Bonds. (For discussion of these tax provisions see CRS Report RL33578, *Energy Tax Policy*, pages 15 to 17, at [<http://www.congress.gov/erp/rl/pdf/RL33578.pdf>].)

Senate-Passed Version of H.R. 6: “Renewable Fuels, Consumer Protection, and Energy Efficiency Act”

The proposed *Renewable Fuels, Consumer Protection, and Energy Efficiency Act of 2007* (H.R. 6) is an omnibus energy policy bill that consists mainly of provisions for energy efficiency and renewable energy. The House version of H.R. 6 was amended on the Senate floor. S.Amdt. 2105, an amendment in the nature of a substitute, replaced the House version with the text of S. 1419.⁵ Several second

⁵ S.Amdt. 2105 was based primarily on S. 1419, which, in turn, was composed of four bills. These four bills, and the corresponding titles of S. 1419, are: *Energy Savings Act* (S. 1321), Titles I, II, and III; *Public Buildings Cost Reduction Act* (S. 992), Title IV; *Ten-in-Ten Fuel* (continued...)

degree amendments to S.Amdt. 2105 were adopted. The Senate approved the amended bill by a vote of 65-27 on June 21, 2007.

Key Provisions Adopted and Rejected

A description of some key provisions and amendments follow:

Renewable Fuel Standard (RFS). Section 111 would increase RFS to 8.5 billion gallons per year by 2008, rising to 36 billion gallons by 2022.

Corporate Average Fuel Economy (CAFE) Standards. The CAFE standard in Section 502 was modified by S.Amdt. 1792. The adopted provision proposes increases to the combined average fuel economy standard for cars and light trucks that would reach 35 miles per gallon (mpg) by 2020. This would be an increase of about 10 mpg over current standards. The amendment (as modified by S.Amdt. 1843) was adopted by voice vote.

Oil Savings Provision. S.Amdt. 1505 established this provision as Section 251. The provision calls for development of a plan to cut U.S. oil use by 2.5 million barrels per day (mbd) by 2016, rising to 10 mbd by 2031, about 35% of projected demand for that year. The amendment was adopted by a vote of 63-30.

Renewable Portfolio Standard (RPS) Rejected.⁶ S.Amdt. 1537 would have added a new title to create an RPS that would reach 15% by 2020. Certain energy efficiency measures would have also been allowed to fulfill the RPS. The amendment was ruled non-germane. Also, S.Amdt. 1538 would have amended S.Amdt. 1537 to create a 20% “clean portfolio standard” that included renewables, efficiency, coal, and nuclear energy. The amendment was tabled by a vote of 56-39.

Tax Provisions Rejected. S.Amdt. 1704 would have added a new tax title that included some of the provisions for renewables and energy efficiency in S. 1531. The proposed amendment included a five-year extension of the renewable electricity production tax credit. It also included many provisions for biofuels and some provisions for oil, coal, and vehicles. The amendment failed to achieve cloture by a vote of 57-36, and was subsequently ruled non-germane. A brief summary of each of these eight titles in the Senate-passed version of H.R. 6 follows.

⁵ (...continued)

Economy Act (S. 357), Titles V and VI; and the *Energy Diplomacy and Security Act* (S. 193), Title VII.

⁶ Under an RPS, retail electricity suppliers (electric utilities) must provide a minimum amount of electricity from renewable energy resources or purchase tradable credits that represent an equivalent amount of renewable energy production. The minimum requirement is often set as a percentage share of a supplier’s total retail electricity sales.

Title I — Biofuels for Energy Security and Transportation

Title I would increase the renewable fuel standard, set some standards for greenhouse gas emissions reductions, and provide support for fuel infrastructure, feedstocks, and biorefineries.

Subtitle A — Renewable Fuel Standard. Subtitle A would extend and increase the renewable fuel standard (RFS), which establishes minimum annual levels of renewable fuel in gasoline. The modified standard would start at 8.5 billion gallons in 2008 and rise to 36 billion gallons in 2022. Starting in 2016, an increasing portion of the requirement would have to be met with advanced biofuels, including cellulosic ethanol, biobutanol, and other fuels derived from unconventional biomass feedstocks. Renewable fuels produced from new biorefineries would be required to achieve at least a 20% reduction in life cycle greenhouse gas emissions relative to life cycle emissions from gasoline (§ 111[a][1][i][II]). A voluntary labeling program would be established for renewable fuels, based on life cycle greenhouse gas emissions (§ 111[i]). Fuel produced from biorefineries that displaces more than 90% of the fossil fuels used in a biofuel production facility would qualify for additional credits under the RFS (§ 112).

Subtitle B — Renewable Fuels Infrastructure. Subtitle B would provide grants for renewable fueling infrastructure (§ 121), increase the Department of Energy (DOE) bioenergy R&D funding authorization (§ 122), establish 11 bioenergy research centers (§ 123), provide loan guarantees for renewable fuel facilities (§ 124), provide research grants for states with low rates of ethanol production (§ 125), provide grants for infrastructure for transportation of biomass to local refineries (§ 126), establish a biorefinery information center (§ 127), create an alternative fuels database (§ 128), set a labeling requirement for alternative fuels (§ 129), and set a national biodiesel fuel quality standard (§ 130).

Subtitle C — Studies. Subtitle C would require that several studies be conducted, covering specialized topics on biofuels, ethanol, electric vehicles, and biodiesel.

Subtitle D — Environmental Safeguards. DOE would be directed to create a grant program to encourage production of advanced biofuels (§161). Grant awards would be made to projects that would have the greatest reduction in lifecycle greenhouse gas (GHG) emissions. The projects must also reduce GHG emissions by at least 50%. Studies, and subsequent reports to Congress, would be required on environmental impacts of increased use of renewable fuels attributable to the provisions of this bill (§162). Specific aspects would include air and water quality, land use patterns, deforestation rates, GHG emissions, and the long-term capacity to produce biomass feedstocks. Also, EPA would be directed to study whether the volumes of renewable fuel required under Subtitle A would adversely impact air quality.

Title II — Energy Efficiency Promotion

Title II would set some new standards for energy efficient equipment, establish goals for fuel savings, strengthen federal energy efficiency requirements, and authorize several new programs for vehicles and grants.

Subtitle A — Promoting Advanced Lighting Technologies. Subtitle A would promote advanced lighting technology by requiring all federal lighting to be Energy Star rated by 2010 (§ 211), expanding efficiency standards for incandescent reflector lamps (§ 212), creating the “Bright Tomorrow” lighting prizes for solid state (LED) lighting developments (§ 213), and establishing a “Sense of the Senate” to pass mandatory energy efficiency performance targets for lighting products (§ 214). Also, the Committee markup added a notable provision that did not appear in S. 1115. That provision would authorize grants to support construction of solar, wind, geothermal, ocean, biomass, landfill gas, and Alaska small hydropower projects (§ 215).

Subtitle B — Expediting New Energy Efficiency Standards. Subtitle B would establish, by statute, new energy efficiency standards for residential boilers (§ 227), electric motors (§ 229), and some home appliances (§ 230).⁷ DOE would be directed to set standards by rulemaking for furnace fans (§ 223). Also, DOE would be allowed to set standards for multiple components (§ 221) and regional standards for heating and cooling equipment (§ 222). Further, this subtitle would authorize R&D on improved efficiency for appliances and buildings in cold climates (§ 231) and provide incentives for the manufacture of high-efficiency consumer products (§ 232). Other provisions would guide expedited rulemakings (§ 224), clarify limits to federal preemption of state standards (§ 225), and require Energy Guide labels for several types of consumer electronic products (§ 226). Also, the Committee markup added a provision that would direct DOE to establish a program that supports, develops, and promotes the use of new technologies to improve energy efficiency in materials manufacturing and energy-intensive industries (§ 233).

Subtitle C — Promoting High Efficiency Vehicles, Advanced Batteries, and Energy Storage. Subtitle C would promote high-efficiency vehicles, advanced batteries, and energy storage. DOE would be authorized to fund an R&D program on light-weight materials (§ 241). A loan guarantees program would be created for facilities that manufacture fuel-efficient vehicles (§ 242). Funding awards for qualified investments would be authorized to refurbish manufacturing facilities that produce advanced technology vehicles (§ 243). A 10-year R&D program would be authorized to support U.S. competitiveness in global energy storage markets, and a five-year R&D program would be authorized for electric drive technologies (§ 244). Also, the Committee markup added a provision that would direct DOE to establish a competitive grant program for state, regional, and local government entities to demonstrate electric drive vehicles. DOE would also be required to establish a program to deploy technologies that would achieve near-term oil savings in the transportation sector (§ 245).

⁷ Identical provisions for boilers, motors, and home appliances appear in S. 1101 and H.R. 2083.

Subtitle D — Setting Energy Efficiency Goals. Subtitle D would set several energy efficiency goals that include reducing gasoline use 45% by 2030 (§ 251) and improving energy productivity by 2.5% in 2012 and each year thereafter through 2030 (§ 252).⁸ Also, DOE would be authorized to conduct a four-year national media campaign to educate consumers to save energy and reduce oil use (§ 253), and federal agencies would be authorized to carry out programs for demonstration and use of advanced electricity transmission and distribution technologies (§ 254).

Subtitle E — Promoting Federal Leadership in Energy Efficiency and Renewable Energy. Subtitle E would promote federal leadership in energy efficiency and renewable energy. Federal and state fleets would be required to reduce petroleum use 30% by 2016 (§ 261). The renewable energy share of federal energy purchases would increase to 15% by 2015 (§262). The authorization for federal agencies to use Energy-Saving Performance Contracts (ESPCs) would be extended permanently (§ 263). Federal buildings would be required to reduce energy use 30% by 2015 (§ 264). DOE would be directed to identify federal sites for installing combined heat and power (§ 265). Federal buildings would be required to reduce fossil energy use by 50%, compared with similar buildings from the past that were not subject to the standard (§ 266). The Department of Housing and Urban Development (HUD) would be required to update efficiency standards for all public and assisted housing (§ 267). DOE would be authorized to conduct R&D and deployment activities that help increase the energy-efficiency of commercial buildings (§ 268).

Subtitle F — Assisting State and Local Governments in Energy Efficiency. Subtitle F would improve energy efficiency assistance to state and local governments by increasing the authorization for the DOE Weatherization program (§ 271), reauthorizing the State Energy program (§ 272), requiring state utility regulatory commissions to consider federal standards to promote energy efficiency (§ 273), authorizing the National Renewable Energy Laboratory (NREL) to provide technical assistance (§ 274), authorizing grants to local governments (§ 275), authorizing grants to universities for demonstration projects (§ 276), authorizing workforce training programs (§ 277), and authorizing funds for education programs to reduce school bus idling (§ 278).

Subtitle G — Marine and Hydrokinetic Renewable Energy Promotion. DOE would be directed to create an R&D program focused on technology that produces electricity from waves, tides, currents, and ocean thermal differences (§291-292). A report to Congress would be required. Also, DOE would be directed to establish national ocean energy research centers at one to six universities (§293).

⁸ The description of Section 252 on page 14 of the Committee’s report (S.Rept. 110-65) says that “national energy productivity” would be measured as “gross domestic product (GDP) per unit of energy input.”

Title III — Carbon Capture and Storage R&D and Demonstration

Title III would call for large-scale testing of carbon dioxide (CO₂) storage in geological formations, establish competitive funding awards, direct that a national storage capacity assessment be conducted, and require that the Department of Energy (DOE) demonstrate the use of large-scale capture technologies at industrial facilities.

Title IV — Cost-Effective and Environmentally Sustainable Public Buildings

Subtitle A — Public Buildings Cost Reduction. Subtitle A would direct the General Services Administration (GSA) to establish a program to speed the use of cost-effective energy-efficient lighting equipment and other technologies and practices (§402). Further, GSA would be required to prepare a five-year plan to replace inefficient lighting in GSA buildings using available funds. Also, an EPA matching grant program would be created to help local governments renovate buildings to improve energy efficiency (§403). For this program, \$20 million would be authorized.

Subtitle B — Photovoltaic System for DOE Headquarters. GSA would be directed to use up to \$30 million would be authorized from unobligated balances of the Federal Buildings Fund to support the installation of a solar photovoltaic system for the DOE headquarters building in Washington, D.C.

Subtitle C — High Performance Green Buildings.

Part 1 would direct GSA to establish an *Office of High-Performance Green Buildings* and a Green Building Advisory Committee to support R&D and outreach to spur the federal government toward the construction of high performance green buildings. A green building information clearinghouse would be established. The Office would be directed to establish a standard for certification of green buildings. A report to Congress would be required.

Part 2 would create a program for *Healthy High-Performance Schools* that aims to involve states, local governments, and school systems building green schools. EPA, in consultation with the Department of Education, would be allowed to provide grants to state agencies to provide technical assistance and help with the development of state plans for school building design. Also, EPA would be directed to develop model voluntary guidelines for school site selection. In addition to other environmental aspects, the grants and guidelines would have a focus on energy efficiency, natural daylighting, and other energy-related features.

Part 3 on *Strengthening Federal Leadership* would direct the Office of Green Buildings to identify incentives that would encourage the use of green buildings in federal operations. Incentives could include recognition awards and agency retention of cost savings (§451). The Office of Federal Procurement Policy would be directed to revise acquisition regulations to require that acquisition, construction, and major renovations employ green design and to give preference in leasing to buildings that

are energy-efficient (§452). The Comptroller General would be directed to conduct an audit of the implementation of this Subtitle and submit a report to Congress that describes the findings (§453). Strategies for addressing storm water runoff would be required for federal facility development projects (§454).

Part 4 would call for a *Demonstration Project*. The Office of Green Buildings would be directed to prepare guidelines for the implementation of a federal demonstration project that would contribute to the research goals of the Office. Funding would be authorized at \$10 million per year over five years.

Title V — Corporate Average Fuel Economy Standards

Title V, the *Ten-in-Ten Fuel Economy Act of 2007*, would require that the corporate average fuel economy standard (CAFE) for new cars and light trucks be increased to 35 miles per gallon (mpg) by 2020 and require a 4% annual increase for 10 years thereafter. Starting in 2011, a 4% annual increase would also be required for medium- and heavy-duty trucks.

Title VI — Price Gouging

Title VI would criminalize price gouging in fuel markets during an energy emergency.

Title VII — Energy Diplomacy and Security

Title VII would express the sense of Congress on several aspects of international energy cooperation, with a special emphasis on increasing the use of sustainable energy sources. The Department of State would be encouraged to establish four new types of administrative mechanisms. One type of mechanism would be strategic energy partnerships with the governments of major energy producers and consumers, and with governments of other countries. A second type would be petroleum crisis response mechanisms with the governments of China and India. A third would be a Western Hemisphere energy crisis response mechanism. A fourth would be a regionally-based ministerial Hemisphere Energy Cooperation Forum. Also, the Department of State would be encouraged to approach other governments in the Western Hemisphere to cooperate in establishing a “Hemisphere Energy Industry Group” of industry and government representatives, which would be coordinated by the U.S. government.

The President would be encouraged to introduce the topic of “the merits of establishing an international energy program application procedure” for discussion at the Governing Board of the International Energy Agency. Also, the bill would establish a “Hemisphere Energy Cooperation Forum,” that would be encouraged to implement an Energy Crisis Initiative, an Energy Sustainability Initiative, and an Energy for Development Initiative.

Title VIII — Miscellaneous

Title VIII, *Miscellaneous*, would require that DOE study and report on the laws and regulations that affect the siting of privately owned electric distribution wires on and across public rights-of-way.

Clean Renewable Energy Incentives Act (S. 1531)

The proposed *Clean Renewable Energy and Economic Development Incentives Act of 2007* (S. 1531) is an omnibus energy tax policy bill that consists mainly of provisions for renewable energy. It has two titles. Title I proposes *Tax Incentives for Energy Conservation and Exploration*. Title II proposes *Investment Tax Credits with Respect to Solar Energy Property and Manufacturing*.

On the Senate floor, S.Amdt. 1704 would have added a new tax title that included some of the provisions for renewables and energy efficiency in S. 1531. The amendment failed to achieve cloture by a vote of 57-36, and was subsequently ruled non-germane.

Title I — Tax Incentives for Energy Conservation and Exploration

Title I of S. 1531 would extend three existing tax incentives and establish six new ones.⁹ Section 101 would extend the renewable energy electricity production tax credit (PTC) for 10 years, to the end of 2018.¹⁰ For certain large facilities, such as geothermal and biomass power plants, credit eligibility could be extended for up to two years after the placed-in-service deadline.¹¹ Section 102 would extend the clean renewable energy bonds (CREBs) for 10 years.¹² The national total bond limit would be \$1.2 billion per year for 2007 through 2008 and \$1.0 billion per year for 2009 through 2018. Section 103 would establish a tax credit bond for water conservation. Section 104 would create a 10% investment tax credit for geothermal exploration. For residential installations of small wind equipment, Section 105 would establish a 30% investment tax credit, with a limit of \$1,000 per kilowatt (kw). Section 106 would extend for five years the investment tax credit for the construction of new

⁹ The extensions are in §101, §102, and §106. The new incentives are in §103, §104, §105, §107, §108, and §109.

¹⁰ The PTC provision of the Tax Relief Act of 2006 (P.L. 109-432, §201) will expire at the end of 2008. The PTC was previously set by the Energy Policy Act (EPACT, §1301)

¹¹ To qualify under this provision, such plants would have to fulfill two conditions. First, the plant would have to be under construction at the time that the placed-in-service deadline occurs. Second, the plant would have to be operational, producing and selling electricity, within two years after the deadline.

¹² The CREBs provision of the Tax Relief Act (§202) will expire at the end of 2008. CREBs were created by EPACT (§1303).

energy efficient homes.¹³ Section 107 would create a 20% investment tax credit for manufacturing equipment used to produce advanced batteries. Section 108 would establish renewable school energy bonds, with a national bond limit of \$50 million in 2008, \$100 million in 2009, and \$150 million in 2010. Under Section 109, bonds would be issued to finance new renewable energy facilities, including equipment that uses tidal, wave, current, and ocean thermal energy.

Title II — Investment Tax Credit with Respect to Solar Energy Property and Manufacturing

Title II of S. 1531 would permanently extend two tax incentives for solar energy equipment and establish three new incentives for solar equipment.¹⁴

Subtitle A — Solar Energy Property. Section 201 would extend permanently the 30% value of the investment tax credit for business installations of solar equipment.¹⁵ In Section 202, the investment tax credit for solar (30%) and geothermal (10%) equipment would be made available to public utilities. Under Section 203, the 30% residential energy efficiency investment tax credit would be extended permanently.¹⁶ Further, the cap would be raised to \$3,000/kw for solar electric equipment, \$2,000 for solar heating and cooling equipment, and \$500 for fuel cells. Section 204 would make certain solar equipment eligible for a three-year accelerated depreciation period.

Subtitle B — Promotion of Solar Manufacturing in the United States. Section 211 would establish a 30% investment tax credit for facilities that manufacture solar energy equipment.

(For more discussion of the provisions in this bill see CRS Report RL33578, *Energy Tax Policy*, pages 17 to 18, at [<http://www.congress.gov/erp/rl/pdf/RL33578.pdf>].)

Major Funding-Related Bills

FY2008 DOE Appropriations (H.R. 2641/S. 1751)

DOE Budget Request. The Administration's Advanced Energy Initiative (AEI, part of the American Competitiveness Initiative) "aims to reduce America's

¹³ The new energy efficient new homes credit in the Tax Relief Act (§205) will expire at the end of 2008. The new homes credit was created by EPACT (§1332).

¹⁴ The credit extensions are in §201 and §203. The new incentives are in §202, §204, and §211.

¹⁵ The 30% value of the business solar investment tax credit in the Tax Relief Act (§207) will revert back to 10% at the end of 2008. The 30% value of this credit was established by EPACT (§1337).

¹⁶ The residential energy efficiency credit in the Tax Relief Act (§206) will expire at the end of 2008. This credit was created by EPACT (§1335).

dependence on imported energy sources.” The AEI includes hydrogen, biofuels, and solar energy initiatives that would be supported by programs in DOE’s Office of Energy Efficiency and Renewable Energy (EERE). The Hydrogen Initiative aims to “facilitate a decision by industry to commercialize hydrogen infrastructure and fuel cell vehicles by 2015.”¹⁷ The Biofuels Initiative seeks to develop transportation fuels, such as cellulosic ethanol. The Solar America Initiative’s goals are to cut the cost of photovoltaics (PV) technology, increase its commercial use, and displace natural gas use for electric power generation. The President’s 2007 State of the Union address set out a goal to reduce gasoline use by 20% and to increase the production of “alternative” fuels, including cellulosic ethanol, to 35 billion gallons by 2017. To support the AEI and those fuels goals, the FY2008 EERE budget request proposed significant increases for the Biofuels, Hydrogen, and Solar programs. DOE’s FY2008 request seeks \$1,236.2 million for the EERE programs. At hearings on the FY2008 DOE budget request, concerns were raised about DOE’s proposed termination of the Geothermal and Hydropower programs.¹⁸

House Action. The House Appropriations Committee report (H.Rept. 110-185) includes funding for DOE’s Energy Efficiency and Renewable Energy (EERE) Program. For FY2008, the Committee recommended \$1,873.8 million for EERE, which is \$637.6 million, or 52%, more than the DOE request.¹⁹ The Hydrogen R&D Program would be cut by \$18.4 million. Key increases for renewable energy R&D include Biomass/Biofuels (\$70.7 million), Solar Energy (\$51.7 million), Geothermal Energy (\$44.3 million), and Hydro/Ocean Energy (\$22.0 million). Major increases for energy efficiency R&D include Buildings (\$60.0 million) and Vehicles (\$59.3 million). The Committee also recommended large increases for Facilities Construction (\$188.7 million) and Weatherization grants (\$97.0 million).²⁰

Senate Action. The Senate Appropriations Committee recommended \$1,715.6 million for EERE, which is \$158.3 million, or 8%, less than the House Appropriations Committee recommended. Compared with the House Appropriations Committee recommendations, the main difference is a decrease of \$195.7 million (zero funding) for Facilities Construction. Additional decreases for renewable energy R&D include Hydro/Ocean (-\$12.0 million), Solar Energy (-\$20.0 million), and Geothermal Energy (-\$19.3 million). Also, International Renewables would be

¹⁷ U.S. Executive Office of the President, *Budget of the United States Government, Fiscal Year 2007*, Appendix, p. 390. Also see DOE, *FY2007 Congressional Budget Request: Budget Highlights*, p. 41.

¹⁸ Secretary Bodman’s Senate testimony is available at [http://energy.senate.gov/public/_files/BodmanTestimony.pdf].

¹⁹ The DOE FY2008 budget document is available at [http://www.mbe.doe.gov/budget/08budget/Content/Volumes/Vol_3_ES_New.pdf].

²⁰ The National Renewable Energy Laboratory (NREL) is the premier national lab for solar energy R&D and has major programs in hydrogen, biomass/biofuels, wind energy, and vehicles. The large increase recommended for the Facilities Construction program includes \$8 million for solar R&D equipment, \$13 million for infrastructure to test plug-in hybrid vehicles, \$77 million for NREL’s distributed energy systems integration facility, and \$91 million to design and build a facility for biological and chemical research.

terminated (-\$10.0 million). Under energy efficiency R&D programs, Hydrogen would get an increase of \$33.4 million.

(For more details see CRS Report RL34009, *Energy and Water Development: FY2008 Appropriations*.)

Other FY2008 Appropriations Bills

The Department of State, Foreign Operations and Related Programs Appropriations Act (H.R. 2764) has significant provisions for energy efficiency and renewable energy. The House version would direct the Export-Import Bank to direct 10% of its resources to renewable energy and other environmental activities. Also, it would direct that \$501 million be available to promote “clean energy” and protect biodiversity. The Senate version would direct that \$195 million be made available to support energy efficiency and renewable energy policies and programs in developing countries.

The Agriculture, Rural Development, Food and Drug Administration, and Related Agencies Appropriations Act (H.R. 3161/S. 1859) has significant provisions for renewable energy. The House bill would nearly double the FY2007 renewables funding to \$46 million and recommends \$350 million for loan guarantees. The Senate bill recommends a modest increase of about \$6 million for renewables.

Many appropriations bills include a provision that would require all new light bulbs purchased by federal agencies to have either EPA “Energy Star” or Federal Energy Management Program (FEMP) energy efficiency designation.

Energy Reserve Fund in the Budget Resolution

House Action. On January 18, 2007, the House passed the CLEAN Energy Act (H.R. 6) by a vote of 264-163. The bill proposes to use revenue from certain oil and natural gas policy revisions to create an Energy Efficiency and Renewables Reserve aimed at reducing foreign oil dependence and serving other purposes.²¹ The actual uses of the reserve would be determined at a later date by legislation that would establish uses for the financial resources of the reserve.

In House floor debate on H.R. 6, opponents argued that the reduction in oil and natural gas incentives would dampen production, cause job losses, and lead to higher prices for gasoline and other fuels. Opponents also complained that the proposal for the reserve does not identify specific policies and programs that would receive funding. Proponents of the bill counter-argued that record profits show that the oil and natural gas incentives were not needed. They also contended that the reserve could be used to support a variety of R&D, deployment, and tax incentives for

²¹ For more details about the reserve, see CRS Report RS22571, *The Strategic Energy Efficiency and Renewables Reserve in the CLEAN Energy Act of 2007 (H.R. 6)*, by Fred Sissine.

renewable fuels, and that the specifics would evolve as legislative proposals come forth for using resources from the reserve.²²

On March 28, the House passed the concurrent resolution on the budget for FY2007 and FY2008 (H.Con.Res. 99) by a vote of 216-210. The resolution provides additional funding for energy (Function 270) above the President's request that "could be used for research, development, and deployment of renewable and alternative energy." Section 207 would create a deficit-neutral reserve fund that fulfills the purposes of H.R. 6 to "facilitate the development of conservation and energy efficiency technologies, clean domestic renewable energy resources, and alternative fuels that will reduce our reliance on foreign oil."

Senate Action. On March 23, the Senate passed S.Con.Res. 21, its version of the concurrent resolution on the budget for FY2007. In parallel to the House resolution, Section 307 of S.Con.Res. 21 would create a deficit-neutral reserve fund that could be used for renewable energy, energy efficiency, and "responsible development" of oil and natural gas. Additionally, Section 332 would create a deficit-neutral reserve fund for extension through 2015 of certain energy tax incentives, including the renewable energy electricity production tax credit (PTC), Clean Renewable Energy Bonds, and provisions for energy efficient buildings, products, and power plants. Further, Section 338 would create a deficit-neutral reserve fund for manufacturing initiatives that could include tax and R&D measures that support alternative fuels, automotive technologies, energy technologies, and the infrastructure to support the technologies. The House passed its version of S.Con.Res. 21 on May 8, 2007.

Conference Report. Section 308 of the adopted report establishes a deficit-neutral reserve fund for energy legislation. Section 308(a) applies only to the Senate, with provisions similar to those in sections 307 and 332 of the Senate version. Reserve fund uses will be allowed that "reduce our Nation's dependence on foreign sources of energy, expand production and use of clean alternative fuels and alternative fuel vehicles, promote renewable energy development, improve electricity transmission, encourage responsible development of domestic oil and natural gas resources, or reward conservation and efficiency ..." Further, such legislation may include "tax legislation such as a proposal to extend energy tax incentives like the production tax credit for electricity produced from renewable resources, the Clean Renewable Energy Bond program, or provisions to encourage energy efficient buildings, products, and power plants."

Section 308(b) applies only to the House, with language similar to Section 207 of the House version. Reserve fund uses would be permitted for legislative actions that "fulfill the purposes of section 301(a) of H.R. 6, the Clean Energy Act of 2007"

²² *Congressional Record*, January 18, 2007, pp. H688 through H729.

FY2007 Appropriations (P.L. 110-5)

The Department of Energy (DOE), Environmental Protection Agency (EPA), and Department of Agriculture (USDA) receive annual appropriations for energy efficiency and renewable energy programs.²³ In the 109th Congress, the appropriations process for FY2007 was not completed. A continuing resolution (P.L. 109-383, H.J.Res. 102) provided funding through February 15, 2007.

In the 110th Congress, H.J.Res. 20 was introduced to continue FY2007 appropriations through the end of the fiscal year. It was enacted on February 15 as P.L. 110-5. The law sets funding for DOE's Energy Efficiency and Renewable Energy (EERE) Programs at \$1.47 billion, about \$308 million above the FY2006 appropriation. Also, the law eliminates earmarks and sets conditions on the EPACT Title 17 loan guarantee program, fixing a cap at \$4 billion, prohibiting awards until final regulations are issued, and requiring annual program evaluations by an independent auditor.

DOE's FY2007 operating plan was transmitted to the House and Senate appropriation committees on March 16, 2007. It provides the detailed breakdown of funding for EERE programs in FY2007.

H.R. 1591, the Emergency Supplemental Appropriations Bill, would have amended the FY2007 appropriations provided in P.L. 110-5 and DOE's FY2007 Operating Plan. The total amount appropriated by P.L. 110-5 would have remained unchanged. However, the bill would have provided \$22.8 million for EERE's Geothermal Energy Program, an increase of \$17.8 million over the \$5.0 million provided in DOE's Operating Plan. Also, the bill would have provided \$229.5 million for the Weatherization Grants Program, an increase of \$25.0 million over the \$204.5 million provided in DOE's Operating Plan. However, the President vetoed the bill.

²³ Several other agencies receive less regular appropriations for energy efficiency or renewable energy projects and activities. These agencies have included Department of State, Department of Defense (DOD), Department of Housing and Urban Development (HUD), Department of Transportation, and Architect of the Capitol.

**Table 1. Action on Energy Efficiency and
Renewable Energy Legislation, 110th Congress**

Conference Action			
Bill	Category	Action	Date
H.R. 2272	R&D/Competition (ARPA-E)	President Signed	8/9/2007
S.Con.Res. 21	Budget Resolution	House and Senate Agreed to Conference Report	5/17/2007
H.R. 1591	Supplemental Appropriations	President Vetoed	5/1/2007
House Action			
Bill	Category	Action	Date
H.R. 3221	Omnibus Energy Bill (+ H.R. 2776)	Passed House	8/4/2007
H.R. 2776	Renewable Energy Tax Incentives	House Approved	8/4/2007
H.R. 3238	Renewable Fuels/Carbon Storage	Reported	8/3/2007
H.R. 3161	Agriculture Appropriations	Passed House	8/2/2007
H.R. 2419	Farm/Bioenergy Act	Passed House	7/27/2007
H.R. 1126	Steel/Metals Industry	Ordered Reported	7/25/2007
H.R. 85	Technology Transfer	Ordered Reported	7/25/2007
H.R. 2798	Clean Energy Exports	Passed House	7/23/2007
H.R. 2641/ S. 1751	Energy Appropriations Bill, FY2008	Passed House	7/17/2007
		Senate Reported	7/9/2007
H.R. 2764	State - Foreign Ops. Appropriations	Passed House	6/22/2007
H.R. 632	Hydrogen Energy Prize	Passed House	6/6/2007
H.R. 1716	Buildings	Passed House	6/6/2007
H.R. 798	Solar Power in DOE Hdqtrs. Bldg.	Ordered Reported	6/6/2007
H.R. 1332	Small Business Lending	Passed House	4/25/2007
H.Con.Res. 25	Renewable Energy Policy	Ordered Reported	5/17/2007
H.R. 1585	Defense Authorization	Passed House	5/17/2007
H.Res. 202	New Climate Committee Established	Passed House	3/8/2007
H.J.Res. 20	FY2007 Appropriations	P.L. 110-5	2/15/2007
H.R. 798	DOE Solar Project	Passed House	2/12/2007
H.R. 547	Biofuels/Hydrogen	Passed House	2/8/2007
H.R. 6 (House)	CLEAN Energy Act	Passed House	1/18/2007

Senate Action			
Bill	Category	Action	Date
S. 1617	Plug-in Electric Drive Vehicles	Ordered Reported	8/1/2007
S. 838	U.S.-Israel Energy Cooperation	Ordered Reported	7/25/2007
S. 280	Climate Change	Hearing Held	7/24/2007
H.R. 6 (Senate)	Omnibus Energy Bill	Passed Senate	6/21/2007
S. 506	Green Bldgs. in the Federal Gov't.	Ordered Reported	6/6/2007
S. 357	Fuel Economy	Ordered Reported	5/8/2007
S. 875	Fuel Efficiency, Biofuels	Hearing Held	5/8/2007
S. 1321	Efficiency, Biofuels, CO ₂	Reported	5/7/2007
S. 992	Energy Efficiency in Public Bldgs.	Reported	5/3/2007
S. 193	International Cooperation	Reported	4/12/2007
S.Res. 30	Climate Change	Reported	3/29/2007

**Table 2. Energy Efficiency and Renewable Energy Bills
by Topic, 110th Congress**

I. Policy and Issue Areas
Appropriations. H.J.Res. 20, H.R. 6, H.R. 1591, H.R. 2641/S. 1751, H.R. 2642/S. 1645, H.R. 2643/S. 1696, H.R. 2764, H.R. 2771/S. 1686, H.R. 3043/S. 1710, H.R. 3074/S. 1789, H.R. 3161/S. 1859, S. 818
Authorizations. H.R. 121/S. 506, H.R. 1126, H.R. 1551/S. 919, H.R. 1585, H.R. 2036, H.R. 2154, H.R. 2420, S. 298, S. 696, S. 761, S. 987, S. 1115, S. 1321, S. 1419, S. 1547, S. 1548
Budget. H.Res. 6, H.R. 6, H.Con.Res. 99/S.Con.Res. 21
Research and Development. H.R. 80, H.R. 364, H.R. 547, H.R. 931, H.R. 1133, H.R. 1259, H.R. 1920/S. 1151, H.R. 2036, H.R. 2079, H.R. 2339, H.R. 2428, H.R. 2641, H.R. 3274, S. 167/H.R. 395, S. 309, S. 339/H.R. 670, S. 426, S. 696, S. 701, S. 761, S. 987, S. 1020, S. 1115, S. 1238, S. 1321, S. 1419
Grants. H.R. 84, H.R. 85, H.R. 182, H.R. 570/S. 331, H.R. 589, H.R. 1133, H.R. 1259, H.R. 1920/S. 1151, H.R. 1300, H.R. 1451, H.R. 1591, H.R. 1600, H.R. 2079, H.R. 2154, H.R. 2428, H.R. 2447, H.R. 2890, H.R. 2984, H.R. 3031, H.R. 3044, H.R. 3197, H.R. 3274, S. 167/H.R. 395, S. 280/H.R. 620, S. 298, S. 317, S. 838/H.R. 1838, S. 859, S. 1115, S. 1242, S. 1321, S. 1419, S. 1562
Loans/Loan Guarantees/Financing. H.J.Res. 20, H.R. 80, H.R. 1215, H.R. 1300, H.R. 1332, H.R. 2036, H.R. 2054/S. 1154, H.R. 2154, H.R. 2218, H.R. 2441, H.R. 2776, H.R. 2838, H.R. 3031, H.R. 3044, S. 317, S. 672, S. 701, S. 1115, S. 1242, S. 1321, S. 1419, S. 1491, S. 1508, S. 1656, S. 1657
Energy Efficiency Performance Standard. S. 309, S. 1554
Low Carbon Fuel Standard. H.R. 2215, S. 1324
Renewable Fuel Standard. H.R. 349, H.R. 635, H.R. 517, H.R. 791, H.R. 2037, H.R. 2178, S. 23, S. 309, S. 386, S. 987, S. 1158, S. 1297, S. 1321, S. 1358, S. 1616
Renewable Portfolio Standard/Tradable Credits. H.R. 823, H.R. 969, H.R. 1133, H.R. 1590, H.R. 1945, H.R. 2950, S. 1567, S. 309, S. 1554, S. 1602
Tax Incentive for Investment. H.R. 76, H.R. 86, H.R. 345, H.R. 550/S. 590, H.R. 589, H.R. 604, H.R. 765, H.R. 778, H.R. 1133, H.R. 1331, H.R. 1451, H.R. 1500, H.R. 1618, H.R. 1821, H.R. 1888, H.R. 1965, H.R. 1977, H.R. 2039, H.R. 2137, H.R. 2261, H.R. 2372, H.R. 2652, H.R. 2776, S. 23, S. 339, S. 539, S. 673/H.R. 1772, S. 701, S. 1207, S. 1291, S. 1370, S. 1407, S. 1601, S. 1617
Tax Incentive for Energy Production. H.R. 197, H.R. 517, H.R. 683, H.R. 793, H.R. 794, H.R. 1133, H.R. 1945, H.R. 1954, H.R. 2038/S. 1154, H.R. 2261, H.R. 2361, H.R. 2776, S. 411/H.R. 1924, S. 425, S. 701, S. 1291, S. 1370, S. 1508, S. 1554, S. 1601
Tax Incentive for Fuel Use. H.R. 604, H.R. 805, H.R. 825, H.R. 927, S. 23, S. 162, S. 167/H.R. 395, H.R. 2256, H.R. 2505, H.R. 2741, S. 701, S. 872, S. 1370
Tax Incentive for Fuel Reduction. H.R. 139/S. 894, H.R. 1385/S. 822, H.R. 1500, H.R. 2459, S. 1619
Goals/Plans/Studies/Impact Information. H.R. 121/S. 506, H.R. 157, H.R. 589, H.R. 817, H.R. 1300, H.R. 1590, H.R. 2036, H.R. 2261, S. 129, S. 280/H.R. 620, S. 339/H.R. 670, H.R. 2171/H.R. 2196, H.R. 2426, S. 992, S. 1115, S. 1419, S. 1600, S. 1828
Environment/Climate Change. H.Con.Res. 96, H.Res. 202, H.R. 620, H.R. 823, H.R. 1126, H.R. 1590, H.R. 1728/S. 1389, H.R. 2144, H.R. 2215, H.R. 2337, H.R. 2420, H.R. 2701, H.R. 2764, H.R. 3238, H.R. 3274, S.Res. 30/H.Con.Res. 104, S. 6, S. 280/H.R. 620, S. 309, S. 317, S. 357, S. 485, S. 1073, S. 1324, S. 1411, S. 1766
II. Sectors
Buildings. H.R. 84, H.R. 121/S. 506, H.R. 345, H.R. 1133, H.R. 1385/S. 822, H.R. 1259, H.R. 1451, H.R. 1591, H.R. 1716, H.R. 1768, H.R. 1888, H.R. 1945, H.R. 2154, H.R. 2389, H.R. 2641, H.R. 2701, H.R. 2776, H.R. 2947, H.R. 2950, H.R. 3031, S. 280/H.R. 620, S. 317, S. 539, S. 701, S. 1115, S. 1165, S. 1207, S. 1321, S. 1407, S. 1419, H.R. 2528/S. 1434, S. 1657

Defense/Security. H.R. 559, H.R. 1300, H.R. 1585, H.R. 1591, H.R. 2354/S. 133, S. 6, S. 23, S. 339/H.R. 670, S. 1547, S. 1548, S. 1602
Education/Job Training. H.R. 1716, H.R. 1728/S. 1389, H.R. 2428, H.R. 2441, H.R. 2496, H.R. 2847, H.R. 3031
Federal Lands/Energy Management. H.R. 277, H.R. 589, H.R. 792, H.R. 798, H.R. 823, H.R. 1133, H.R. 1300, H.R. 1500, H.R. 1705, H.R. 2337, H.R. 2947, S. 146, S. 309, S. 992, S. 1000, S. 1059, S. 1072, S. 1115, S. 1165, S. 1419, S. 1637
Farms/American Indians. H.Con.Res. 25/ S.Con.Res. 3, H.R. 80, H.R. 872, H.R. 1551/S. 919, H.R. 1596, S. 541, S. 673/H.R. 1772, H.R. 1766, H.R. 1954, H.R. 2038/S. 1154, H.R. 2144, H.R. 2154, H.R. 2218, H.R. 2261, H.R. 2419, H.R. 3044, S. 36, S. 828, S. 1403, S. 1424
Industry. H.R. 1126, H.R. 1920/S. 1151, S. 317, S. 1115, S. 1419
International/Trade. H.Res. 12, H.R. 196, H.R. 1186, H.R. 1838, H.R. 2229, H.R. 2420, H.R. 2764, H.R. 2798, H.R. 3274, S.Res. 30/H.Con.Res. 104, S. 193, S. 309, S. 426, S. 838/H.R. 1838, S. 1007, S. 1106
III. Energy Efficiency Measures and Technologies
Distributed Generation/Net Metering/Electric Power. H.R. 550/S. 590, H.R. 589, H.R. 729, H.R. 805, H.R. 1133, H.R. 1451, H.R. 1590, H.R. 1705, H.R. 1945, H.R. 2144, H.R. 2171/H.R. 2196, H.R. 2305, H.R. 2555, H.R. 2774, S. 309, S. 317, S. 992, S. 1016/H.R. 2848, S. 1321, S. 1370, S. 1508
Energy Audits. H.R. 1551/S. 919, S. 280/H.R. 620, H.R. 2528/S. 1434
Equipment/Lighting/Appliances. H.Con.Res. 153, H.R. 872, H.R. 1547, H.R. 1585, H.R. 1705, H.R. 2751, S. 129, S. 992, S. 1101/H.R. 2083, H.R. 2137, H.R. 2389, S. 1115, S. 1321, S. 1419, S. 1562
Fuel Economy. H.Con.Res. 153, H.R. 570/S. 331, H.R. 656, H.R. 1133, H.R. 1500, H.R. 1945, H.R. 2296, H.R. 2454, H.R. 2496, H.R. 2513, H.R. 2641, H.R. 2927, H.R. 2950, H.R. 3059, S. 183, S. 298, S. 309, S. 339/H.R. 670, S. 357, S. 767/H.R. 1506, S. 875, S. 1118, S. 1076/H.R. 1356, S. 1554, S. 1602, S. 1619
Electric/Hybrid Vehicles. H.Con.Res. 153, H.R. 765, H.R. 2079, H.R. 2112, H.R. 2557, H.R. 2776, H.R. 3226, S. 1055/H.R. 1915, S. 1617
Transportation. H.Con.Res. 153, H.R. 139/S. 894, H.R. 157, H.R. 498, H.R. 589, H.R. 1215, H.R. 1300, H.R. 1331, H.R. 1590, H.R. 1618, H.R. 1945, H.R. 2079, H.R. 2296, H.R. 2426, H.R. 2513, H.R. 2594, H.R. 2701, H.R. 2767, S. 146, S. 298, S. 701, S. 818, S. 875, S. 894, S. 1000, S. 1073, S. 1115, S. 1321, S. 1324, S. 1419
IV. Renewable Energy Resources and Technologies
Alcohol Fuels/Biofuels/Biodiesel. H.Con.Res. 153, H.Con.Res. 157, S.Con.Res. 3, H.R. 76, H.R. 86, H.R. 182, H.R. 196, H.R. 277, H.R. 349, H.R. 517, H.R. 547, H.R. 559, H.R. 570/S. 331, H.R. 604, H.R. 635, H.R. 682, H.R. 765, H.R. 791, H.R. 792, H.R. 825, H.R. 872, H.R. 927, H.R. 931, H.R. 1186, H.R. 1300, H.R. 1551/S. 919, H.R. 1766, H.R. 1987, H.R. 2037, H.R. 2039, H.R. 2144, H.R. 2154, H.R. 2178, H.R. 2218, H.R. 2256, H.R. 2261, H.R. 2354/S. 133, H.R. 2419, H.R. 2426, H.R. 2454, H.R. 2641, H.R. 2776, H.R. 2867, H.R. 3101, H.R. 3238, S. 23, S. 36, S. 162, S. 167/H.R. 395, S. 280/H.R. 620, S. 339/H.R. 670, S. 386, S. 426, S. 541, S. 701, S. 828, S. 859, S. 872, S. 875, S. 987, S. 1007, S. 1106, S. 1238, S. 1242, S. 1297, S. 1321, S. 1324, S. 1403, S. 1424, S. 1491, S. 1601, S. 1602, S. 1616, S. 1618, S. 1791, S. 1813, S. 1828
Biopower/Biomass. H.Con.Res. 153, H.R. 197, H.R. 517, H.R. 683, H.R. 1133, H.R. 1186, H.R. 1551/S. 919, H.R. 1600, H.R. 2038/S. 1154, H.R. 2144, H.R. 2337, H.R. 2428, H.R. 2641, H.R. 2742, H.R. 2810, H.R. 3101, H.R. 3107, S. 280/H.R. 620, S. 36, S. 541
Geothermal. H.R. 197, H.R. 1133, H.R. 1591, H.R. 1977, H.R. 2298, H.R. 2304, H.R. 2641, H.R. 2990, S. 298, S. 1020, S. 1543, S. 1637
Hydrogen. H.Con.Res. 153, H.R. 498, H.R. 805, H.R. 2641, S. 280/H.R. 620
Hydropower/Tidal/Wave/Ocean. H.Con.Res. 153, H.R. 197, H.R. 490/S. 306, H.R. 632, H.R. 1133, H.R. 2036, H.R. 2313, H.R. 2776, H.R. 2838, H.R. 3105, S. 298, S. 425, S. 1020
Solar. H.Con.Res. 153, H.R. 197, H.R. 550/S. 590, H.R. 798, H.R. 1133, H.R. 1451, H.R. 1977, H.R. 2337, H.R. 2641, H.R. 2774, H.R. 2776, H.R. 2848, H.R. 2890, S. 828, S. 1016/H.R. 2848, S. 1508, S. 2337

Wind. H.Con.Res. 153, H.R. 197, H.R. 517, H.R. 794, H.R. 1133, H.R. 2261, H.R. 2337, H.R. 2691, H.R. 2776, H.R. 3089, S. 673/H.R. 1772, S. 828, S. 1291
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Electricity Transmission Lines. H.R. 809, H.R. 810, H.R. 829

Legislation

Public Laws

P.L. 110-69 (H.R. 2272)

America COMPETES Act of 2007. Section 2005 (Division B) establishes an Advanced Research Projects Authority-Energy (ARPA-E) at DOE. The new Authority is directed to focus on overcoming the “long-term and high-risk technological barriers” in the development of renewable energy, energy efficiency, and other technologies. “Such sums” as necessary are authorized for each fiscal year from 2008 through 2011. Signed into law August 9, 2007.

P.L. 110-5 (H.J.Res. 20)

Revised Continuing Appropriations Resolution, 2007. Provides continuing FY2007 appropriations through September 30, 2007. Funding for DOE’s Energy Efficiency and Renewable Energy Programs is set at \$1.47 billion, about \$280 million above the FY2006 appropriation. Also, the resolution eliminates earmarks and sets conditions on the EPACT Title 17 loan guarantee program, fixing a cap at \$4 billion, prohibiting awards until final regulations are issued, and requiring annual program evaluations by an independent auditor. Signed into law February 15, 2007.

House Bills (with Senate Companions)

H.Con.Res. 25 (Peterson)/S.Con.Res. 3 (Salazar)

The sense of the Congress would be expressed that it is the goal of the United States that, not later than January 1, 2025, the agricultural, forestry, and working land of the United States should provide from renewable resources not less than 25% of the total energy consumed in the United States and continue to produce safe, abundant, and affordable food, feed, and fiber. House bill introduced January 10, 2007; referred to Committees on Agriculture, Energy and Commerce, and Natural Resources. Senate bill introduced January 17, 2007; referred to Committee on Agriculture, Nutrition, and Forestry. House bill ordered to be reported May 17, 2007.

H.Con.Res. 96 (Dicks)

The sense of the Congress would be expressed that there should be enacted a mandatory national program to slow, stop and reverse emissions of greenhouse gases. The program would include mandatory, market-based limits and incentives on emissions of greenhouse gases that slow, stop, and reverse the growth of such emissions at a rate and in a manner that would not significantly harm the U.S. economy; and would encourage comparable action by other nations that are major trading partners and key contributors to global emissions. Introduced March 21, 2007; referred to Committee on Energy and Commerce.

H.Con.Res. 99 (Spratt)/S.Con.Res. 21 (Conrad)

This resolution would revise the congressional budget for FY2007, establish the budget for FY2008, and set forth appropriate budgetary levels for FY2009 through FY2012. The House resolution provides funding for energy (Function 270) above the President's request that "could be used for research, development, and deployment of renewable and alternative energy." Section 207 of the House resolution would create a deficit-neutral reserve fund that fulfills the purposes of H.R. 6 (CLEAN Energy Act, §301a), namely to "facilitate the development of conservation and energy efficiency technologies, clean domestic renewable energy resources, and alternative fuels that will reduce our reliance on foreign oil." Section 307 of the Senate resolution would create a deficit-neutral reserve fund that could be used for renewable energy, energy efficiency, and responsible development of oil and natural gas. Section 332 would create a deficit-neutral reserve fund for extension through 2015 of certain energy tax incentives, including the renewable energy electricity production tax credit (PTC), Clean Renewable Energy Bonds, and provisions for energy efficient buildings, products, and power plants. Section 338 would create a deficit-neutral reserve fund for manufacturing initiatives that could include tax and R&D measures that support alternative fuels, automotive technologies, energy technologies, and the infrastructure to support the technologies. House Committee on the Budget reported (H.Rept. 110-69) March 23, 2007. Passed House (216-210) March 29, 2007. Senate Committee on the Budget reported (without written report) March 16, 2007. Passed Senate March 23, 2007. Senate bill passed in House (212-207) May 8, 2007. Senate appointed conferees May 9, 2007.

H.Con.Res. 104 (Carnahan)/S.Res. 30 (Biden)

The sense of the Congress would be expressed that the United States should return to international negotiations on climate change and take a leadership role in those negotiations. The resolution would recognize that there are security and economic benefits from reducing greenhouse gas emissions and from markets for new, climate-friendly technologies. House bill introduced April 23, 2007. Referred to the Committee on Foreign Affairs April 29, 2007. Senate bill introduced January 16, 2007; referred to Committee on Foreign Relations. Reported (without a written report) March 29, 2007.

H.Con.Res. 153 (Gilchrist)

The sense of the Congress would be expressed regarding the need for a nationwide diversified energy portfolio. The resolution states that Congress and the Executive Branch should pursue the development and commercial deployment of a diverse portfolio of energy technologies, including biofuels, wind, solar, ocean energy, and hydrogen fuel cells. The resolution states that Congress should pursue development of policies to promote major energy efficiency initiatives, including fuel economy standards, energy efficient light bulbs, energy efficient appliances, hybrid vehicles, and public transportation. Introduced May 22, 2007; referred to Committee on Energy and Commerce.

H.Con.Res. 157 (Radanovich)

The Congress would reaffirm its commitment to developing alternative and renewable energy, in particular biodiesel and other biofuels. To support efforts to combat air pollution in California, the resolution would support R&D in California

on biodiesel and biofuels obtained from agricultural products and byproducts. Introduced May 23, 2007; referred to Committee on Science and Technology.

H.J.Res. 20 (Obey)

Revised Continuing Appropriations Resolution, 2007. P.L. 109-383 would be superseded to extend FY2007 appropriations through September 30, 2007. Funding in FY2007 for DOE's Energy Efficiency and Renewable Energy Programs would be increased by \$300 million above the FY2006 level of \$1.17 billion. The resolution would otherwise eliminate earmarks. Also, the resolution would set conditions on the loan guarantee program established in Title 17 of EPACT. It would set the program cap at \$4 billion, prohibit awards until final regulations are issued, and require annual evaluations of the program by an independent auditor. Introduced January 29, 2007; referred to Committee on Appropriations. Passed House (286-140) January 31, 2007. Cloture motion filed on Senate floor February 8. Passed Senate (81-15) February 14, 2007. Signed into law February 15, 2007 (P.L. 110-5).

H.Res. 12 (Bartlett)

The sense of the House of Representatives would be expressed that the United States (1) must move rapidly to increase the productivity with which it uses fossil fuel, and to accelerate the transition to renewable fuels and a sustainable, clean energy economy; and (2) should establish, in collaboration with other international allies, an energy project with the magnitude, creativity, and sense of urgency of the "Man on the Moon" project to develop a comprehensive plan to address the challenges presented by Peak Oil (the peak in the world's oil production believed by some petroleum experts likely to occur in the next decade). Introduced January 4, 2007; referred to Committee on Energy and Commerce.

H.Res. 202 (Millender-McDonald)

Funding would be provided for the operating costs of certain committees of the House of Representatives during the 110th Congress. Section 4 would establish a Select Committee on Energy Independence and Global Warming in the House of Representatives. The select committee would not have legislative jurisdiction and would have no authority to take legislative action on any bill or resolution. Its sole authority would be to investigate, study, make findings, and develop recommendations on policies, strategies, technologies, and other innovations intended to reduce the dependence of the United States on foreign sources of energy and achieve substantial and permanent reductions in emissions and other activities that contribute to climate change and global warming. Introduced February 28, 2007; referred to Committee on House Administration. Reported (H.Rept. 110-29) March 5, 2007. Passed House (269-150) March 8, 2007.

H.R. 6, House Version (Rahall)

CLEAN Energy Act of 2007. Certain tax and royalty policies for oil and natural gas would be revised, and the resulting revenue would be used to support a reserve for new energy efficiency and renewable energy initiatives. The bill is one part of the "100 hours" initiatives put forward by the Democratic Leadership of the House. Introduced January 12, 2007; referred to Committees on Ways and Means, Natural Resources, Budget, and Rules. Brought to the House Floor and passed House (264-163) January 18, 2007.

H.R. 6, Senate Version (Reid)

Renewable Fuels, Consumer Protection, and Energy Efficiency Act of 2007. The Senate version of H.R. 6 is an omnibus energy policy bill that consists mainly of provisions for energy efficiency and renewable energy. Title I, the *Biofuels for Energy Security and Transportation Act*, would increase the renewable fuel standard, set some standards for greenhouse gas emissions reductions, and provide support for fuel infrastructure, feedstocks, and biorefineries. Title II, the *Energy Efficiency Promotion Act*, would set some new standards for energy efficient equipment, establish goals for fuel savings, strengthen federal energy efficiency requirements, and authorize several new programs for vehicles and grants. Title III, the Carbon Capture and Storage Research, Development, and Demonstration Act, would call for large-scale testing of carbon dioxide (CO₂) storage in geological formations, establish competitive funding awards, direct that a national storage capacity assessment be conducted, and require that the Department of Energy (DOE) demonstrate the use of large-scale capture technologies at industrial facilities. Title IV, *Cost-Effective and Environmentally Sustainable Public Buildings*, would direct the General Services Administration (GSA) to establish a program to speed the use of cost-effective energy-efficient lighting equipment and other technologies and practices. Further, GSA would be required to prepare a five-year plan to replace inefficient lighting in GSA buildings using available funds. Also, an EPA matching grant program would be created to help local governments renovate buildings to improve energy efficiency. For this program, \$20 million would be authorized. Title V, the *Ten-in-Ten Fuel Economy Act of 2007*, would require that the corporate average fuel economy standard (CAFE) for new cars and light trucks be increased to 35 miles per gallon (mpg) by 2020 and require a 4% annual increase for 10 years thereafter. Starting in 2011, a 4% annual increase would also be required for medium- and heavy-duty trucks. On May 8, 2007, the Senate Committee on Commerce, Science, and Transportation marked up an amendment in the nature of a substitute. With little debate, the amended bill was ordered reported by voice vote. Title VI, *Price Gouging*, would criminalize price gouging in fuel markets during an energy emergency. Title VII, the *Energy Diplomacy and Security Act of 2007* would express the sense of Congress on several aspects of international energy cooperation, with a special emphasis on increasing the use of sustainable energy sources. The Department of State would be encouraged to establish four new types of administrative mechanisms. One type of mechanism would be strategic energy partnerships with the governments of major energy producers and consumers, and with governments of other countries. A second type would be petroleum crisis response mechanisms with the governments of China and India. A third would be a Western Hemisphere energy crisis response mechanism. A fourth would be a regionally-based ministerial Hemisphere Energy Cooperation Forum. Also, the Department of State would be encouraged to approach other governments in the Western Hemisphere to cooperate in establishing a “Hemisphere Energy Industry Group” of industry and government representatives, which would be coordinated by the U.S. government. The President would be encouraged to introduce the topic of “the merits of establishing an international energy program application procedure” for discussion at the Governing Board of the International Energy Agency. Also, the bill would establish a “Hemisphere Energy Cooperation Forum,” that would be encouraged to implement an Energy Crisis Initiative, an Energy Sustainability Initiative, and an Energy for Development Initiative. Title VIII, *Miscellaneous*, would require that DOE study and report on the laws and regulations that affect the

siting of privately owned electric distribution wires on and across public rights-of-way. The House version of H.R. 6 was amended on the Senate floor. S.Amdt. 2105, an amendment in the nature of a substitute, replaced the House version with the text of S. 1419. Several second degree amendments to S.Amdt. 2105 were adopted. The Senate approved the amended bill by a vote of 65-27 on June 21, 2007.

H.R. 76 (Bartlett)

For the alternative motor vehicle tax credit available to consumers, the number of eligible vehicles sold for use in the United States that would trigger the credit phase-out period would increase from 60,000 to 250,000. Introduced January 4, 2007; referred to Committee on Ways and Means.

H.R. 80 (Bartlett)

R&D, demonstration, and commercial application activities would be required to enable the development of farms that are net producers of both food and energy. DOE would be directed to enter into an arrangement with the National Academy of Sciences to (1) develop recommendations for evaluation measures and criteria for programs under this act; and (2) evaluate the feasibility of prize and best practices award programs as tools to promote self-powered farms. Further, it would direct DOE to (1) establish an award program for up to 30 state agricultural research programs for self-powered farm demonstrations; (2) provide low-cost revolving loans and loan guarantees to eligible entities for the commercial application of energy or other technologies that will contribute to establishing self-powered farms, with highest preference given to applicants who propose to meet their energy needs from biobased feedstocks or other renewable energy sources produced on that farm; and (3) enter into an arrangement with the National Academy of Sciences for a review of the programs under this act. Introduced January 4, 2007; referred to Committees on Science and Technology and on Agriculture.

H.R. 84 (Biggert)

Energy Efficient Buildings Act of 2007. Directs DOE to (1) establish a pilot program to award grants to businesses and organizations for new construction or major renovations of energy efficient buildings that will result in innovative energy efficiency technologies, especially those sponsored by DOE; and (2) give due consideration to proposals for buildings that are likely to serve low and moderate income populations. Defines “energy efficient building” as one that, after construction or renovation, (1) uses heating, ventilating, and air conditioning systems that perform at no less than Energy Star standards; or (2) if Energy Star standards are not applicable, uses Federal Energy Management Program recommended heating, ventilating, and air conditioning products. Introduced January 4, 2007; referred to Committee on Science and Technology.

H.R. 85 (Biggert)

Energy Technology Transfer Act. Directs DOE to award grants for a five-year period to nonprofit institutions, state and local governments, cooperative extension services, or universities (or consortia thereof) to establish a geographically dispersed network of Advanced Energy Technology Transfer Centers, located in areas DOE determines have the greatest need of their services. Requires DOE to give priority to applicants already operating or partnered with an outreach program capable of

transferring such knowledge and information about advanced energy efficiency methods and technologies. Introduced January 4, 2007; referred to Committee on Science and Technology. Reported (H.Rept. 110-38) March 8, 2007. Passed House, March 12, 2007. In Senate, referred to Committee on Energy and Natural Resources. Ordered Reported without amendment July 25, 2007.

H.R. 86 (Biggert)

Oil and Gas-to-Alternatives Swap (OGAS) Act of 2007. Certain fossil energy tax incentives would be repealed and the limitation on the number of new qualified hybrid and advanced lean-burn technology vehicles eligible for the tax credit for alternative motor vehicles would be repealed. Also, the bill would extend through 2012 the alternative motor vehicles tax credit for (1) advanced lean burn technology motor vehicles; (2) qualified hybrid motor vehicles; and (3) qualified alternative fuel vehicles. Introduced January 4, 2007; referred to Committee on Ways and Means.

H.R. 121 (Doyle)/S. 506 (Lautenberg)

High-Performance Green Buildings Act of 2007. Title I would establish a federal office of green buildings in the General Services Administration (GSA) to coordinate efforts in federal agencies. This activities of this office would include outreach to federal agencies, review related R&D findings, and develop guidance for life-cycle costing and contracting. Section 107 would authorize \$4 million for Title I activities. Title II would identify incentives and procurement practices to promote federal use of green building activities. Section 203 directs GAO to audit the performance of this act's provisions and report to Congress. Title III directs GSA to conduct an annual demonstration project from 2009 through 2014 and authorizes a total of \$10 million for those projects, and it calls for annual demonstration projects at universities with an additional \$10 million authorization. House bill introduced January 4, 2007; referred to Committees on Energy and Commerce, Oversight and Government Reform, Science and Technology, and Transportation and Infrastructure. Senate bill introduced February 6, 2007; referred to Committee on Environment and Public Works.

H.R. 139 (Granger)/S. 894 (Lincoln)

Idling Reduction Tax Credit Act of 2007. A business tax credit of 25% of the cost of a qualifying idling reduction device, up to \$1,000, would be created. Defines "qualifying idling reduction device" as any device that is (1) installed on a heavy-duty diesel-powered on-highway vehicle to provide services that would otherwise require the operation of the main drive engine while the vehicle is temporarily parked or stationary; and (2) certified by DOE to reduce long-duration idling. DOE would be directed to publish standards for certifying such devices. House bill introduced January 4, 2007; referred to Committee on Ways and Means. Senate bill introduced March 15, 2007; referred to Committee on Finance.

H.R. 157 (Holt)

Fuel Savings, Smarter Travel, and Efficient Roadways Act. Directs DOE to study and report to Congress on the potential fuel savings from intelligent transportation systems that help businesses and consumers plan travel and avoid delays. Introduced January 4, 2007; referred to Committee on Energy and Commerce.

H.R. 182 (Lofgren)

To Encourage Alternatively-fueled vehicle Manufacturing up for Energy Independence Act of 2007; also referred to as the “TEAM up for Energy Independence Act.” An excise tax on non-alternative-fueled vehicles and gas-guzzler vehicles would be established. The revenue would be used to establish a trust fund at the Department of the Treasury. DOE would be directed to use the trust fund to make grants to fueling stations owned by entities which own or control 10 or fewer such businesses for alternative fuel refueling infrastructure projects, including new dispensing facilities and additional equipment or upgrades and improvements to existing refueling sites for alternative fuel vehicles. Introduced January 4, 2007; referred to Committees on Ways and Means and on Energy and Commerce.

H.R. 196 (Pomeroy)

Renewable Fuels and Energy Independence Promotion Act of 2007. Section 2 would make permanent certain tax incentives for biodiesel and alcohol fuels. Section 3 would modify the ethanol import duty. Introduced January 4, 2007; referred to Committee on Ways and Means.

H.R. 197 (Pomeroy)

Extends the renewable energy production tax credit (PTC) for five years, from the end of 2008 through the end of 2013. Introduced January 4, 2007; referred to Committee on Ways and Means.

H.R. 277 (Cleaver)

Congress Leads by Example through Alt-fuel Resources (CLEAR) Act. Would prohibit Members of the House from using any portion of their representational allowance to provide any individual with a vehicle, including providing an individual with a vehicle under a long-term lease, which is not an alternative fuel vehicle. Introduced January 5, 2007; referred to Committee on House Administration.

H.R. 345 (Hoekstra)

Cool and Efficient Buildings Investment Act. A 20-year depreciation recovery period, calculated on a straight line basis, would be created for heating, ventilation, air conditioning, or commercial refrigeration systems installed in nonresidential buildings and placed in service during calendar years 2007 and 2008. Introduced January 9, 2007; referred to Committee on Ways and Means.

H.R. 349 (Kline)

10-by-10 Act. Would require that motor fuels have a minimum renewable fuels content of 10% by the beginning of 2010. Introduced January 9, 2007; referred to Committee on Energy and Commerce.

H.R. 364 (Gordon)

An Advanced Research Projects Agency-Energy (ARPA-E) would be established at DOE. Its goal would be to reduce the energy imports from foreign sources by 20% over a 10-year period. The ARPA-E Director would manage an Energy Independence Acceleration Fund to award competitive grants, cooperative agreements, or contracts to institutions of higher education, companies, or consortia, including federally funded research and development centers, to achieve specified goals through targeted acceleration of: (1) energy-related research; (2) development

of resultant techniques, processes, and technologies, and related testing and evaluation; and (3) demonstration and commercial application of the most promising technologies and research applications. DOE would be directed to establish procedures and criteria for recoupment of the federal share of each project supported under this act. The President's Committee on Science and Technology would be required to evaluate for Congress and the public how well ARPA-E achieves its goals and mission. Introduced January 10, 2007; referred to Committee on Science and Technology. Hearing held April 25, 2007. Ordered to be reported May 23, 2007. Incorporated into H.R. 3221 as Subtitle A of Title IV on Science and Technology.

H.R. 395 (Salazar)/S. 167 (Boxer)

Cellulosic Ethanol Development and Implementation Act of 2007. DOE would be required to provide grants to eligible entities to carry out R&D and demonstration projects on cellulosic ethanol and construct infrastructure that enables retail gas stations to dispense cellulosic ethanol for vehicle fuel to reduce the consumption of petroleum fuels. House bill introduced January 10, 2007; referred to Committees on Energy and Commerce and on Science and Technology. Senate bill introduced January 4, 2007; referred to Committee on Environment and Public Works.

H.R. 490 (McNulty)/S. 306 (Schumer)

Mohawk River Hydroelectric Projects Licensing Act of 2007. The Federal Energy Regulatory Commission (FERC) would be prohibited from issuing a new license for a hydroelectric project on the Mohawk River in New York state if the project has been operating under annual licenses for 10 or more years, unless FERC (1) issues a public notice that it will accept other valid license applications to develop or dispose of the project works or water resource (including certain nonpower license applications) and (2) approves a license application, according to the requirements of this act, if other valid license applications are submitted, or if FERC has issued a new license that is not yet final. Also, processing and approval procedures would be established. Any new power license issued for such a project would be required to include the same license conditions relating to the use of affected waters, as provided in the license for a specified Potomac Light & Power Company Project. Further, this act would be declared as applicable to specified hydroelectric projects for which (1) a new license has been issued at the time of this act but which has not yet become final under law, (2) there are pending judicial appeals, (3) the time has not yet lapsed for filing such appeals, or (4) there is a pending appeal of the Clean Water Act section 401 Water Quality Certificate. House bill introduced January 16, 2007; referred to Committee on Energy and Commerce. Senate bill introduced January 16, 2007; referred to Committee on Energy and Natural Resources.

H.R. 498 (Wynn)

Energy Policy Reinvestment Act of 2007. Section 2 would repeal certain oil and natural gas tax subsidies and Section 3 would direct that the resulting revenue be used to support certain DOE hydrogen and fuel cell technology programs. Introduced January 16, 2007; referred to Committees on Ways and Means, Science and Technology, Oversight and Government Reform, and Energy and Commerce.

H.R. 517 (J. Davis)

Independence from Oil with Agriculture Act of 2007. Section 2 would extend certain tax credits for alcohol and biodiesel fuels and fuel mixtures. Section 3 would

make permanent the renewable energy electricity production tax credit (PTC) for wind, open-loop biomass, and closed-loop biomass. Section 4 would make permanent the tax credit for clean fuel vehicle refueling property. Section 5 would increase the renewable fuel standard (RFS) set by EPACT from 7.5 billion gallons to 12.0 billion gallons in 2012. Introduced January 17, 2007; referred to Committees on Ways and Means and on Energy and Commerce.

H.R. 539 (Schwartz)

Buildings for the 21st Century Act. The tax deduction for energy efficient commercial building costs (P.L. 109-432, §204) would be increased, and the period of eligibility would be extended five years, through 2013. Introduced January 17, 2007; referred to Committee on Ways and Means.

H.R. 547 (Gordon)

Advanced Fuels Infrastructure Research and Development Act. Section 3 would direct DOE, in consultation with the National Institute of Standards and Technology, to conduct a program of research, development, demonstration, and commercial application of materials to be added to alternative biobased fuels to make them more compatible with existing infrastructure used to store and deliver petroleum-based fuels to the point of final sale. Introduced January 18, 2007; referred to Committee on Science and Technology. Reported (H.Rept. 110-7) February 5, 2007. Passed House, amended, February 8, 2007. H.Amdt. 6 was approved, which would allow fuel distributors and retailers to transform their businesses by dispensing hydrogen, reformed on site from various feedstocks, or delivered by pipeline or tube trucks. H.Amdt. 9 was approved, which would establish an energy security fund and an alternative fuel grant program.

H.R. 550 (McNulty)/S. 590 (Smith)

Securing America's Energy Independence Act of 2007. The residential investment tax credit for energy efficient property, and the commercial investment tax credit for solar energy property and qualified fuel cell property, would be extended for eight years, from the end of 2008 to the end of 2016. Also, such credits would be allowed to be applied against alternative minimum tax liability. The definition of "energy property" would be expanded to include certain equipment that uses solar energy to generate or store excess electricity. A special credit amount based on kilowatt capacity would be set for solar photovoltaic energy property and residential energy efficient property. A tax credit would be allowed for the full amount of qualified photovoltaic property expenditures. That credit is currently limited to 30%. A three-year recovery period would be allowed for accelerated depreciation for solar energy and fuel cell property. House bill introduced January 18, 2007; referred to Committee on Ways and Means. Senate bill introduced February 14, 2007; referred to Committee on Finance.

H.R. 559 (Delahunt)/S. 23 (Harkin)

Biofuels Security Act of 2007. Section 101 would modify the EPACT (§ 1501) requirement that renewable fuel content reach 7.5 billion gallons in 2012, accelerating the requirement to 10 billion gallons by 2010 and then rising to 30 billion gallons by 2020 and 60 billion gallons by 2030. Other provisions would require E85 pumps at branded gasoline stations (§102), increased use of alternative fuels in the federal fleet (§103), increased manufacturers percentage of dual-fueled

vehicles (§201), and increased manufacturers incentives for dual-fueled vehicles (§202). House bill introduced January 18, 2007; referred to Committees on Energy and Commerce, Oversight and Government Reform, and Judiciary. Senate bill introduced January 4, 2007; referred to Committee on Commerce, Science, and Transportation.

H.R. 570 (Rogers)/S. 331 (Thune)

Moneys collected from violations of the corporate average fuel economy (CAFE) program would be placed in an Energy Security Fund to provide grants that support infrastructure needed to increase the availability of alternative fuels. House bill introduced January 18, 2007; referred to Committee on Energy and Commerce. Senate bill introduced January 18, 2007; referred to Committee on Energy and Natural Resources.

H.R. 589 (Inslee)

Get Real Incentives to Drive Plug-in Act. Section 3 would authorize \$500 million for the Department of Transportation (DOT) to make grants to domestic vehicle manufacturers for R&D on plug-in hybrid vehicles (PIHVs). Section 4 would direct DOT to establish a pilot project to explore the integration of plug-in hybrid vehicles into the electric power grid. Section 5 would direct DOT to test battery technologies. Section 6 would require DOT and DOE to prepare a report on PIHVs. Section 7 would create a \$3,000 investment tax credit for taxpayer purchases of PIHVs. Section 8 would require that at least 10% of federal agency vehicle purchases are PIHVs. Introduced January 19, 2007; referred to Committees on Science and Technology, Ways and Means, and Oversight and Government Reform.

H.R. 604 (Hayes)

E-85 Investment Act of 2007. Tax incentives for E-85 fuel vehicle refueling property would be modified by: (1) increasing to 75% the rate of such credit for property using 85% ethanol fuel; (2) reducing the maximum dollar amount of such credit in 2013 and 2014 for ethanol-related refueling property; and (3) extending such credit through 2016 for ethanol-related refueling property. Introduced January 22, 2007; referred to Committee on Ways and Means.

H.R. 620 (Olver)/S. 280 (Lieberman)

Climate Stewardship and Innovation Act of 2007. A program to reduce greenhouse gas emissions would be established through a market-driven system of tradeable allowances and support for the deployment of new climate change-related technologies. House bill introduced January 22, 2007; referred to Committees on Energy and Commerce, Science and Technology, and Natural Resources. Senate bill introduced January 12, 2007; referred to Committee on Environment and Public Works.

H.R. 632 (Lipinski)/S. 365 (Graham)

H-Prize Act of 2007. DOE would be authorized to establish monetary prizes for achievements in overcoming scientific and technical barriers associated with hydrogen energy. House bill introduced January 23, 2007; referred to Committee on Science and Technology. Reported amended (H.Rept. 110-171) June 5, 2007. Passed House (408-8) June 6, 2007. Senate bill introduced January 23, 2007; referred to Committee on Energy and Natural Resources.

H.R. 635 (Upton)

After the year 2012, all gasoline sold to consumers in the United States for motor vehicles would be required to contain at least 10% renewable fuel. Introduced January 23, 2007; referred to Committee on Energy and Commerce.

H.R. 656 (Reichert)

Higher standards of automobile fuel efficiency would be required, with the goal of reducing the amount of oil used for automobile fuel by 10% starting in 2017. Introduced January 24, 2007; referred to Committee on Energy and Commerce.

H.R. 670 (Engel)/S. 339 (Bayh)

Dependence Reduction through Innovation in Vehicles and Energy (DRIVE) Act. The national security and stability of the United States economy would be promoted by reducing oil dependence through the use of alternative fuels and new technology. Title I would establish a national oil savings target and action plan. Title II would set a broad range of policies for improving the fuel efficiency of vehicles. The provisions would include tire efficiency, idling reduction, plug-in hybrids, R&D, advanced diesel vehicles, manufacturing credits, consumer incentives, federal fleet requirements, reduced incentives for gas-guzzlers, and vehicle efficiency. Title III would set a broad range of policies for renewable energy and alternative fuels. The provisions would include modifications to tax credits for refueling property, biodiesel, and small ethanol producers. A minimum requirement would be set for cellulosic biofuels and sugar ethanol. Production incentives would be established for cellulosic biofuels. Low-interest loan and grant programs would be established for E85 fuel. Also, Transit-Oriented Development Corridors would be designated in certain urban areas. House bill introduced January 24, 2007; referred to Committees on Energy and Commerce, Science and Technology, Ways and Means, Transportation and Infrastructure, and Oversight and Government Reform. Senate bill introduced January 18, 2007; referred to Committee on Finance.

H.R. 682 (Kaptur)

The Strategic Petroleum Reserve would be expanded to cover alternative fuels, including ethanol and biodiesel. Introduced January 24, 2007; referred to Committee on Energy and Commerce.

H.R. 683 (R. Lewis)

Investment in Energy Independence Act of 2007. Biomass tax incentives would be promoted as a way to support energy independence. Introduced January 24, 2007; referred to Committee on Ways and Means.

H.R. 729 (Inslee)

Home Energy Generation Act. Each state regulatory authority and non-regulated electric utility would be required to conduct a hearing, and on the basis of such hearing, adopt a net metering standard. Retail electric suppliers would be required to offer to arrange to make net metering available to retail customers on a first-come-first-served basis. Also, implementation requirements would be prescribed regarding (1) net energy measurement, (2) billing practices, (3) ownership of credits, (4) safety and performance standards, (5) interconnection and model standards, and (6) consumer friendly contracts. Introduced January 30, 2007; referred to Committee on Energy and Commerce.

H.R. 765 (Weller)/H.R. 2557 (Weller)

New flexible fuel hybrid motor vehicles would be made eligible for the alternative motor vehicle tax credit through the end of 2014. They are defined to include a hybrid motor vehicle that is capable of operating on an alternative fuel, on gasoline, and on any blend thereof, and which is certified by EPA to have achieved a certain level of city fuel economy using E-85 ethanol fuel. Introduced January 31, 2007; referred to Committee on Ways and Means.

H.R. 778 (Weller)

The residential energy efficient property credit (P.L. 109-432, § 206) would be made permanent. Introduced January 31, 2007; referred to Committee on Ways and Means.

H.R. 791 (Weller)

The renewable fuel content standard (RFS) for gasoline sold in the United States would be increased to 8.9 billion gallons in 2013 and then rise to 25 billion gallons by the year 2025. Introduced January 31, 2007; referred to Committee on Energy and Commerce.

H.R. 792 (Weller)

Growing Responsible Energy and Environment Nationally through Federal Energy Decisions Act. Each federal agency would be directed to ensure that, in areas in which ethanol-blended gasoline is reasonably available at a generally competitive price, the federal agency purchases ethanol-blended gasoline containing at least 10% ethanol rather than non-ethanol-blended gasoline, for agency vehicles that otherwise would use gasoline. Introduced January 31, 2007; referred to Committee on Oversight and Government Reform.

H.R. 793 (Weller)

The renewable energy electricity production tax credit (PTC) would be made permanent. Introduced January 31, 2007; referred to Committee on Ways and Means.

H.R. 794 (Weller)

The renewable energy electricity production tax credit (PTC) would be made permanent for wind energy. Introduced January 31, 2007; referred to Committee on Ways and Means.

H.R. 798 (Oberstar)

The General Services Administration (GSA) would be directed to install a solar photovoltaic system for the DOE headquarters building. Introduced February 5, 2007; referred to Committee on Transportation and Infrastructure. Subcommittee on Economic Development, Public Buildings, and Emergency Management held hearing February 6. Committee markup held February 7; reported (H.Rept. 110-11) February 12, 2007. Passed House February 12, 2007. In Senate, referred to Committee on Environment and Public Works. Ordered to be reported June 6, 2007.

H.R. 805 (Doyle)

For hydrogen used as a vehicle fuel or to produce electricity, a permanent 30% fuel tax credit, capped at \$1,500, would be created (§1). Also, the residential energy efficiency tax credit for fuel cells and the commercial energy credit for fuel cells and microturbines would be extended for five years, through the end of 2013 (§2). Further, secondary (backup) fuel cell power sources would be required for all new public buildings larger than 50,000 square feet (§3). In addition, DOT would be directed to study and report on regulations needed for a transition to hydrogen fuels (§4). Introduced February 5, 2007; referred to Committees on Ways and Means, Transportation and Infrastructure, and Energy and Commerce.

H.R. 809 (Hinchey)

Section 216 of the Federal Power Act (as added by P.L. 109-58) providing for the use of eminent domain authority for the construction of certain electric power lines would be repealed. Introduced February 5, 2007; referred to Committee on Energy and Commerce.

H.R. 810 (Hinchey)

Protecting Communities from Power Line Abuse Act. Certain provisions of the Federal Power Act added by P.L. 109-58 relating to the use of eminent domain authority for the construction of electric power lines would be modified. Introduced February 5, 2007; referred to Committee on Energy and Commerce.

H.R. 817 (Price)

Finding the Ultimate Energy Lifeline Act of 2007. Also referred to as the FUEL Act. A presidential working group would be created and charged with identifying for the President strategies and methods to reduce foreign oil use to less than 25% of total motor vehicle fuel use by 2015. Introduced February 5, 2007; referred to Committee on Energy and Commerce.

H.R. 823 (Welch)

Federal agencies and legislative branch offices would be authorized to purchase greenhouse gas offsets and renewable energy credits. Introduced February 5, 2007; referred to Committees on Oversight and Government Reform, House Administration, and Energy and Commerce.

H.R. 824 (Weller)

Ethanol and biodiesel refining property would be classified as seven-year property for purposes of the accelerated cost recovery system. Introduced February 5, 2007; referred to Committee on Ways and Means.

H.R. 825 (Weller)

Section 1 would extend the alternative motor vehicle tax credit through 2014, for all types of alternative vehicles. Section 2 would extend the alternative fuel vehicle refueling property tax credit through 2024 and increase the amount of the credit. Section 3 would extend the volumetric excise tax credit for alternative fuels and fuel mixtures through FY2014. Section 3d would extend the income tax credit for biodiesel and renewable diesel used as fuel through 2024. Section 3e would extend the small ethanol producer tax credit through 2024. Introduced February 5,

2007; referred to Committees on Oversight and Government Reform, House Administration, and Energy and Commerce.

H.R. 829 (Wolf)

The Federal Power Act would be amended to make certain changes in provisions relating to National Interest Transmission Corridors. Introduced February 5, 2007; referred to Committee on Energy and Commerce.

H.R. 872 (Braley)

The Department of Agriculture (USDA) would be authorized to make competitive grants to community colleges, and advanced technology education centers partnering with community colleges, to support the education and training of technicians in the fields of bioenergy and other agriculture-based, renewable energy resources. Introduced February 7, 2007; referred to Committee on Education and Labor.

H.R. 927 (Burgess)

The biodiesel income tax credit would be doubled, from 50 cents per gallon to \$1 per gallon. Also, the biodiesel excise tax credit would be increased to \$1 per gallon. Introduced February 8, 2007; referred to Committee on Ways and Means.

H.R. 969 (T. Udall)

Title VI of the Public Utility Regulatory Policies Act of 1978 would be amended to establish a Federal renewable energy portfolio standard (RPS) for retail electric utilities that would be administered by DOE. For each retail supplier, the RPS would set a minimum electricity production requirement from renewable resources, starting at 1% in 2010 and then rising annually until reaching a peak of 20% in 2020. Resources eligible to meet the RPS would include wind, solar, geothermal, biomass, landfill gas, ocean, tidal, and incremental hydropower. To supplement generation, retail suppliers would be allowed to purchase power from other organizations or to purchase tradable credits from suppliers with a surplus. Power generated on Native American lands would receive a double credit, and on-site generation used to offset the requirement would receive a triple credit. An excess of tradable credits could be carried forward (banked) for up to four years and a deficit of credits could be "borrowed" from anticipated generation up to three years into the future. A credit deficit would lead to a penalty that would be the lesser of 4.5 cents/kwh or 300% of the average market value of the credits. A credit cost cap (adjusted for inflation) would be set as the lesser of 3.0 cents/kwh or 200% of the average market value of the credits. States would be allowed to have stronger RPS requirements. DOE would be required to engage the National Academy of Sciences to evaluate the program. Introduced February 8, 2007; referred to Committee on Energy and Commerce.

H.R. 1126 (Lipinski)

Provisions of the Steel and Aluminum Energy Conservation and Technology Competitiveness Act of 1988 would be reauthorized, with \$12 million over FY2008 through FY2012. Also, technologies that reduce greenhouse gas emissions would be made eligible for this funding. Introduced February 16, 2007; referred to Committee on Science and Technology. Reported (H.Rept. 110-41) March 8, 2007. Passed

House March 12, 2007. In Senate, referred to Committee on Energy and Natural Resources. Ordered Reported without amendment July 25, 2007.

H.R. 1133 (Berkley)

Freedom Through Renewable Energy Expansion (FREE) Act. Section 8 would increase CAFE fuel economy standards for new passenger cars to a minimum of 33 mpg by 2016. Section 9 would extend the renewable electricity production tax credit for seven years, to the end of 2015. Section 10 would extend for seven years the business investment tax credits for solar energy and fuel cell equipment, and it would create a new credit for geothermal energy equipment. Section 11 would extend the investment tax credit for residential energy efficient property for seven years. Section 12 would create a new 30% investment tax credit for wind energy equipment installed in residences and businesses. Section 13 would authorize \$32.5 million for geothermal energy research at DOE. Section 14 would establish a renewable portfolio standard for retail electric suppliers, which could be met with generation from solar, wind, biomass, landfill gas, incremental hydro, incremental geothermal, current, wave, tidal, or ocean thermal energy. Section 15 would increase the amount of renewable energy that federal agencies are required to purchase, rising from 3% in 2007 to 20% in 2015. Section 16 would require DOE to establish a grant program for renewable energy in school facilities. Introduced February 16, 2007; referred to Committees on Ways and Means, Natural Resources, Energy and Commerce, and Science and Technology.

H.R. 1186 (J. Wilson)

United States-India Energy Security Cooperation Act of 2007. Section 4 would authorize the President to establish energy cooperation programs to support R&D and deployment of various energy projects, including energy efficiency, ethanol, biomass, and other renewable energy sources. Introduced February 16, 2007; referred to Committee on Foreign Affairs.

H.R. 1215 (Rogers)

DOE would be authorized \$20 billion to make certain loan guarantees for advanced conservation and fuel efficiency motor vehicle technology projects. Introduced February 27, 2007; referred to Committees on Energy and Commerce and on Science and Technology.

H.R. 1259 (Adam Smith)

High Performance Buildings Act of 2007. A grant program would be authorized to improve or carry out energy efficiency, conservation, and reuse of resources in affordable housing. A Sustainable Building Institute would be established within the National Science Foundation to undertake or support research, development, and commercial application of energy efficiency and renewable energy technologies for buildings. Introduced March 1, 2007; referred to Committees on Financial Services and on Science and Technology.

H.R. 1300 (Hoyer)

Program for Real Energy Security (PROGRESS) Act. Title I would establish a commission to study and report on options for using alternative fuels to reduce oil imports. Title II (§ 203) would create a public-private collaborative, "The New Manhattan Center for High Efficiency Vehicles," that would focus on battery,

advanced diesel and variable compression engines, plug-in hybrid vehicles with the goals of doubling vehicle efficiency and diversifying fuels, especially those derived from renewable resources. Also, Title II (§209) would establish a battery loan guarantee program to provide incentives to domestic manufacturers. Title III would establish a biofuels infrastructure grant program to support deployment of ethanol and biodiesel fuels. Title IV would set renewable fuel regulations to support investment in new cellulosic ethanol plants (§401), authorize \$1 billion for a grant program to support cellulosic ethanol production (§402), establish quality and contents standards for biodiesel fuel (§403), require greater use of alternative fuels in the federal fleet (§404), require a report on vehicles and infrastructure for alternative fuels (§406), require that the Department of Defense (DOD) set aside a minimum amount of funds for alternative fuel infrastructure (§407), support the development of alternative fuel refineries for military uses (§408), make plug-in hybrid vehicles eligible to satisfy federal agency fleet alternative fuel requirements (§409), and direct the Government Accountability Office (GAO) to study and recommend procurement of alternative-fueled vehicles for congressional use (§410). Title V would create an incentive for commuters to use transit (§501), establish a \$2 billion grant for expansion of public transit services (§502), require a report on fuel savings from intelligent transportation systems (§503), establish a mediator to reduce delays in the development of local commuter rail projects (§513), and promote the use of guaranteed loans and rail bonds to help state and local governments expand intercity rail passenger service. Introduced March 1, 2007; referred to Committees on Energy and Commerce, Armed Services, Oversight and Government Reform, Science and Technology, Ways and Means, House Administration, and Transportation and Infrastructure.

H.R. 1331 (Doggett)

Expands the alternative motor vehicle tax credit to include certain qualified hybrid motor vehicles. Introduced March 6, 2007; referred to Committee on Ways and Means.

H.R. 1332 (Bean)

Small Business Lending Improvements Act of 2007. Sections 212 and 213 would authorize SBA loans for projects that reduce energy use by at least 10%. Introduced March 6, 2007; referred to Committee on Small Business. Committee markup held March 15, 2007; reported (H.Rept. 110-104) April 20. Passed House (380-45) April 25, 2007.

H.R. 1356 (Oberstar)/ S. 1076 (Inouye)

Next Generation Air Transportation System Financing Reform Act of 2007. Section 606 would require the Federal Aviation Administration (FAA) to establish a research consortium with goals to increase aircraft fuel efficiency 25% relative to 1997 subsonic aircraft technology and to determine the feasibility of using alternative fuels in aircraft. Senate bill introduced March 29, 2007; referred to Committee on Finance. House bill introduced March 6, 2007; referred to Committees on Transportation and Infrastructure, Science and Technology, and Ways and Means.

H.R. 1385 (McDermott)/S. 822 (Snowe)

EXTEND the Energy Efficiency Incentives Act of 2007. Section 101 would create a new performance-based investment tax credit for residential energy

efficiency improvements that produce an energy savings of 20% or more. The credit would terminate at the end of 2011. Section 102 would extend the existing (EPACT §1333) residential tax credit for energy efficiency measures in existing homes for four years, from the end of 2007 through the end of 2011. Section 201 would extend the existing (EPACT §1332) tax credit for energy efficiency measures in new homes for three years, from the end of 2008 through the end of 2011. Section 202 would extend the existing (EPACT §1331) tax deduction for energy efficiency measures in commercial buildings through the end of 2012 and increase the amount of the deduction. Section 203 would establish a new tax deduction for energy efficient low-rise buildings. Section 204 would expand the list (EPACT §1331) of energy efficiency measures in commercial buildings that qualify for a tax deduction and make them eligible through the end of 2011. Section 301 would establish a new tax credit for energy savings training and certification costs and certification equipment expenditures. House bill introduced March 7, 2007; referred to Committee on Ways and Means. Senate bill introduced March 8, 2007; referred to Committee on Finance.

H.R. 1451 (Lundgren)

New Options Petroleum Energy Conservation Act of 2007. Section 2 would create a 20% investment tax credit for “climate-neutral” combustion facilities. Section 3 would extend the residential solar energy investment tax credit (EPACT § 1333) for four years, from the end of 2008 to the end of 2012. Section 4 would extend the residential energy efficiency property (EPACT § 1335) investment tax credit for four years, from the end of 2008 to the end of 2012. Section 5 would create a \$1 billion prize for the first U.S. automobile manufacturer that produces a car that achieves 100 mpg. Section 6 would authorize \$30 million for R&D on lithium ion batteries. Section 7 would allow refiners to expense costs for property used to refine ethanol, methanol, and biodiesel fuels. Introduced March 14, 2007; referred to Committee on Ways and Means.

H.R. 1500 (DeFazio)

Gasoline Price Stabilization Act of 2007. Section 6 would set up a tax credit schedule for American-made fuel-efficient passenger vehicles. The credit would be capped at \$3,000 for light trucks (LTs) and sport utility vehicles (SUVs) that have a minimum fuel economy of 35 mpg and cars that attain a minimum of 45 mpg. The cap would rise to \$4,500 for LTs and SUVs that attain 45 to 55 mpg and cars that reach 55 to 65 mpg. The cap would rise further to \$6,000 for LTs and SUVs that attain 55 to 65 mpg and for cars that exceed 65 mpg. Section 9 would direct DOT to increase corporate average fuel economy (CAFE) standards to 37 mpg by 2017 and to 40 mpg by 2022. Section 10 would direct federal agencies to establish a baseline estimate of average fleet fuel economy in 2008. Each agency would then be directed to increase fuel economy above that baseline by 3 mpg by 2010 and 6 mpg by 2013. Introduced March 14, 2007; referred to Committees on Energy and Commerce, Ways and Means, Oversight and Government Reform, the Judiciary, Natural Resources, and Foreign Affairs.

H.R. 1506 (Markey)/S. 767 (Obama)

CAFE Fuel Economy Reform Act of 2007. DOT’s National Highway Traffic Safety Administration (NHTSA) would be directed to increase new passenger car fuel economy by 4% annually for model year (MY) 2009 through MY2011 and for MY2013 through MY2018, attaining no less than 35 mpg by MY2018. House bill

introduced March 14, 2007; referred to Committee on Energy and Commerce. Senate bill introduced March 6, 2007; referred to Committee on Commerce, Science, and Transportation. Also, identical bill S. 768 was referred to the Committee on Finance.

H.R. 1547 (Harman)

DOE would be required to regulate a steadily increasing efficiency standard for light bulbs, beginning at 60 lumens per watt in 2012, rising to 90 lumens per watt in 2016, and then to 120 lumens per watt in 2020. At each step, the sale of less-efficient light bulbs would be prohibited. Also, DOE would be required to develop a plan for incentives and other encouragement for consumers and businesses use to use more efficient light bulbs. Introduced March 15, 2007; referred to Committee on Energy and Commerce.

H.R. 1551 (Kind)/S. 919 (Menendez)

Healthy Farms, Foods, and Fuels Act of 2007. Title II would support energy programs at USDA. This would include reauthorization of energy audit and renewable energy development programs (§ 203), renewable energy systems and energy efficiency programs (§ 204), bioenergy (§ 205), and biomass R&D (§ 206). House bill introduced March 15, 2007; referred to Committees on Agriculture, Education and Labor, and Armed Services. Senate bill introduced March 20, 2007; referred to Committee on Agriculture.

H.R. 1585 (Skelton)/S. 1547 (Levin)

National Defense Authorization Act for Fiscal Year 2008. In both bills, DOD would be allowed to use up to \$70 million of its authorized appropriations for energy conservation projects (§ 2402). Under the House bill, Section 2853 would mandate that the Pentagon use high-energy efficiency light bulbs throughout its buildings. Section 2854 would require DOD to increase renewable energy purchases from 9% to 25% of total electricity use by the year 2025. House bill introduced March 20, 2007; referred to Committee on Armed Services. Reported (H.Rept. 110-146) May 11, 2007. Supplemental report (H.Rept. 110-146, pt. 2) filed May 14, 2007. Passed House (397-27) May 17, 2007. Under the Senate bill, DOD would also be authorized to enter into multi-year contracts to purchase electricity from renewable energy sources for a period not to exceed 10 years (§ 826). Senate bill introduced June 5, 2007; referred to Committee on Armed Services. Reported (S.Rept. 110-77). Referred to Committee on Intelligence, June 13, 2007. Committee reported (S.Rept. 110-125) June 29, 2007.

H.R. 1590 (Waxman)

Safe Climate Act of 2007. The level of greenhouse gas (GHG) emissions would be frozen in 2010 and then gradually reduced each year through 2050. EPA would be directed to establish a flexible, economy-wide cap-and-trade emissions reduction program. Further, EPA would be required to set standards for reducing GHG from motor vehicles that are at least as stringent as the California standards. DOE would be directed to manage a renewable portfolio standard that would increase the share of electricity generated by renewables to 20% in 2020. Further, DOE would be required to set standards requiring utilities to obtain, each year, 1% of their energy supplies through energy efficiency improvements at customer facilities. Also, the National Academy of Sciences would be required to produce a report that

recommends additional measures for reducing emissions. Introduced March 20, 2007; referred to Committees on Energy and Commerce and on Foreign Affairs.

H.R. 1591 (Obey)

Emergency Supplemental Appropriations Bill, FY2007. Section 3201 of the Senate-approved version would revise the FY2007 appropriations resolution (P.L. 110-5) to specify that the \$1.474 billion for DOE's Office of Energy Efficiency and Renewable Energy (EERE) shall include \$22.8 million for geothermal energy and \$229.5 million for the Weatherization Program. House Committee on Appropriations reported (H.Rept. 110-60) March 20, 2007. Passed House (218-212) March 23, 2007. Passed Senate with an amendment (51-47) March 29, 2007. House disagreed with Senate amendment and agreed to a conference April 19, 2007. Conference reported (H.Rept. 110-107) April 24, 2007. House agreed to conference report (218-208) April 25, 2007. Senate agreed to conference report (51-46) April 26, 2007. Vetoed by the President May 1, 2007. House failed to override veto (222-203) May 2, 2007.

H.R. 1596 (Ferguson)

Clean and Green Renewable Energy Tax Credit Act of 2007. Section 2 would extend the business investment tax credit for solar and fuel cell equipment from the end of 2008 through the end of 2030. The 30% credit percentage would be in place through the end of 2015, drop to 25% in 2022, and then drop again to 20%. Section 3 would extend the residential solar credit through the end of 2015. Also, the cap would be lifted from \$1,000/kw to \$1,500/kw. Further, the credit would be allowed to apply against the alternative minimum tax. Section 4 would establish a three-year accelerated depreciation period for business solar and fuel cell equipment. Section 5 would extend the renewable energy production tax credit (PTC) for five years, through the end of 2013. For businesses, Section 6a would establish a 30% investment tax credit for equipment smaller than 100 kw. For home owners, Section 6b would make small wind equipment eligible for the 30% tax credit that currently applies to residential energy efficiency measures. Section 7 would extend the tax credit for residential property for two years, through the end of 2009. Incentives would be established for energy efficiency and renewable energy. Introduced March 20, 2007; referred to Committees on Agriculture, Education and Labor, and Armed Services.

H.R. 1600 (Cardoza)

EAT Healthy America Act. Title VII would require an inventory of specialty crop biomass waste, reauthorize the USDA bioenergy program, and provide grants for development of specialty crop bioenergy projects. Introduced March 29, 2007; referred to Committees on Agriculture, Ways and Means, Education and Labor, Energy and Commerce, and Financial Services.

H.R. 1618 (Camp)

A 10% investment tax credit would be provided for the cost of purchasing a qualified plug-in hybrid vehicle. The credit would end after 2014. Introduced March 21, 2007; referred to Committee on Ways and Means.

H.R. 1705 (Lipinski)

The Bulb Replacement in Government with High-Efficiency Technology (BRIGHT) Act. The Administrator of General Services would be directed to install energy efficient lighting fixtures and bulbs in constructing, altering, and maintaining public buildings. Introduced March 27, 2007; referred to Committee on Transportation and Infrastructure.

H.R. 1716 (McCaul)

Higher education curriculum development and graduate training in advanced energy and green building technologies would be authorized. Introduced March 27, 2007; referred to Committee on Science and Technology. Reported (H.Rept. 110-173) June 5, 2007. Passed House (416-0) June 6, 2007.

H.R. 1728 (Honda)/S. 1389 (Obama)

Global Warming Education Act. Section 4 would establish a national education campaign to disseminate information on and promote implementation of new technologies, programs, and incentives related to energy efficiency and renewable energy. House bill introduced March 29, 2007; referred to Committee on Science and Technology. Senate bill introduced May 14, 2007; referred to Committee on Health, Education, Labor, and Pensions.

H.R. 1766 (Van Hollen)/S. 1346 (Mikulski)

Chesapeake's Healthy and Environmentally Sound Stewardship of Energy and Agriculture Act (CHESSEA) Act of 2007. Section 11 would create, under § 9003 of the Farm Security Act, a program at USDA that provides grants, loans, and loan guarantees for biofuels and biorefineries in Chesapeake Bay Watershed states. A total of \$100 million would be provided annually from the Commodity Credit Corporation (CCC) for FY2008 through FY2013. Under authority provided by § 9006 of the Farm Security Act, Section 12 would provide grants and loans for renewable energy and energy efficiency projects, capped at 25% of the project cost. Funding from the CCC would start at \$60 million in FY2008 and increase to \$250 million in FY2012. Introduced March 29, 2007; referred to Committee on Agriculture.

H.R. 1768 (Gordon)

Federal Stimulus of Commercial Application of Energy Technology Act. Innovative energy technologies derived from federally-sponsored R&D and demonstration programs would be incorporated into Federal buildings. Introduced March 29, 2007; referred to Committee on Science and Technology.

H.R. 1772 (Blumenauer)/S. 673 (Salazar)

Rural Wind Energy Development Act. Investment tax credits would be established for the installation of wind energy property by rural homeowners, farmers, ranchers, and small businesses. House bill introduced March 29, 2007; referred to Committee on Ways and Means. Senate bill introduced February 16, 2007; referred to Committee on Finance.

H.R. 1821 (McDermott)/H.R. 1965 (Pomeroy)

Clean Renewable Energy for Public Power Act. The rules for clean energy renewable bonds would be modified to remove the \$400 million cap for public

utilities, redefine “public power entity” to include larger public power systems, and extend the program for five years. Introduced March 29, 2007; referred to Committee on Ways and Means.

H.R. 1838 (Sherman)/S. 838 (Smith)

United States-Israel Energy Cooperation Act. Enhanced cooperation would be focused on renewable energy R&D. DOE’s Office of Energy Efficiency and Renewable Energy would be directed to administer a grant program that supports this cooperation and to report on its results. A revolving fund, the Energy Research and Development Activities Fund, would be created at the Department of the Treasury. Also, \$20 million per year would be authorized for FY2008 through FY2014. House bill introduced March 29, 2007; referred to Committee on Energy and Commerce. Senate bill introduced March 12, 2007; referred to Committee on Energy and Natural Resources. Incorporated into H.R. 3221 under Title IX, Subtitle D, Part 2 on United States — Israel Energy Cooperation.

H.R. 1888 (Hoekstra)

Cool and Efficient Buildings Act. A 20-year depreciation recovery period, calculated on a straight line basis, would be created for heating, ventilation, air conditioning, or commercial refrigeration systems installed in nonresidential buildings. Introduced April 17, 2007; referred to Committee on Ways and Means.

H.R. 1915 (Castle)/S. 1055 (Biden)

American Automobile Industry Promotion Act of 2007. DOE would be directed to establish a program for research, development, and demonstration (RD&D) and commercial application of innovative electric drive transportation technology (i.e. plug-in hybrid vehicles, plug-in hybrid fuel cell vehicles, engine dominant hybrid vehicles, and fuel cell vehicles). DOE would be required to arrange with the National Academy of Sciences to assess state-of-the-art battery technologies that could be applied to electric drive transportation. Also, DOE would be directed to carry out an Advanced Battery Initiative to support RD&D and commercial application of battery technologies in on-road or non-road vehicles. Requirements for the lean burn vehicle technology credit would be modified. EPA would be empowered to define biodiesel fuel and biodiesel fuel blends, and would be required set standards for each biodiesel blend. House Bill introduced April 18, 2007; referred to Committees on Science and Technology, Ways and Means, and Energy and Commerce. Senate bill introduced March 29, 2007; referred to Committee on Finance.

H.R. 1920 (Inslee)/S. 1151 (Obama)

Health Care for Hybrids Act. A program would be created to provide up to 10% of the health care costs for retired auto industry employees. In exchange, each company would agree to invest half of its reduced costs into R&D, retooling, manufacture, and/or employee retraining for the use of fuel-efficient and alternative fuel technologies in its vehicle lines. House bill introduced April 18, 2007; referred to Committees on Ways and Means and Energy and Commerce. Senate bill introduced April 18, 2007; referred to Committee on Finance.

H.R. 1924 (Meek)/S. 411 (Smith)

After 2006, the renewable energy production tax credit (PTC) would be modified to eliminate the reduction in the credit rate for power produced by open-loop biomass, small irrigation power, landfill gas, trash combustion, and hydropower facilities. Thus, the same credit rate would be allowed for all renewable resource facilities covered by the credit. House Bill introduced April 18, 2007; referred to Committee on Ways and Means. Senate bill introduced January 26, 2007; referred to Committee on Finance.

H.R. 1933 (Udall)/ S. 962 (Bingaman)

Department of Energy Carbon Capture and Storage Research, Development, and Demonstration Act of 2007. This bill does not support energy efficiency or renewable energy. However, its provisions for carbon sequestration are a key part of the omnibus energy bills, H.R. 3221 and the Senate version of H.R. 6. DOE would be directed to: (1) carry out fundamental science and engineering research to develop and document new approaches to capture and store carbon dioxide; (2) ensure that fundamental research is appropriately applied to energy technology development activities and the field testing of carbon sequestration activities; (3) promote regional carbon sequestration partnerships to conduct geologic sequestration tests involving carbon dioxide in a variety of geological settings; and (4) conduct at least seven initial large-volume sequestration tests for geological containment of carbon dioxide. Further, DOE would be directed, in making competitive awards, to give preference to proposals from partnerships among industrial, academic, and government entities. House bill introduced April 14, 2007; referred to Committee on Science and Technology. Reported amended (H.Rept. 110-301) August 3, 2007. Senate bill introduced March 22, 2007; referred to Committee on Energy and Natural Resources. Hearing (S. Hrg. 110-83) held April 16, 2007. Incorporated into S. 1321 and then into the Senate-passed version of H.R. 6.

H.R. 1945 (Shays)

Energy For Our Future Act. Section 102 would repeal the limit on the number of new hybrid and advanced lean-burn technology vehicles that would qualify for the alternative motor vehicles manufacturers credit. Also, it would allow a composite energy efficient motor vehicle manufacturing tax credit consisting of an initial investment credit, a fuel economy achievement credit, and an eligible components research and development credit. Section 103 would direct DOT to designate transit-oriented development (TOD) corridors in urban areas, and award grants to state and local governments to for public transit facilities, bicycle facilities, and pedestrian walkways in such a corridor. Section 104 would amend federal transportation law to prescribe phased increases in automobile fuel economy standards. Section 105 would subject sport utility vehicles (SUVs) to the depreciation limit for certain luxury automobiles. Section 106 would require DOT to implement a tire efficiency program. Section 107 would direct DOT to set fuel economy standards for heavy-duty vehicles. Section 201 would double the funding authorization for the DOE weatherization program. Section 202 would authorize funding for the Energy Star Program. Section 203 would extend the renewable electricity production tax credit (PTC) for five years. It also would extend the investment tax credit for residential energy efficient property for seven years. Section 204 would set energy efficiency resource standards for retail electricity and natural gas suppliers that would reach 3% by 2011. Section 205 would set a federal

renewable portfolio standard (RPS) that would start at 1% in 2009 and reach 20% by 2020. Section 206 would make net metering service available from all electric utilities. Title II, Subtitle B, would extend and modify several existing tax incentives for energy efficiency. It would also create some new incentives for efficiency. Section 406 would repeal the federal preemption of state law for automobile fuel economy standards. Title V would authorize funding for several renewable energy R&D programs. Introduced April 19, 2007; referred to Committees on Energy and Commerce, Natural Resources, Science and Technology, Transportation and Infrastructure, and Ways and Means.

H.R. 1954 (Grijalva)

For the renewable electricity production tax credit (PTC), tax benefits would be allocated among multiple owners of a qualified facility. Further, Indian tribal governments would be allowed to transfer the tax benefits other owners. Introduced April 19, 2007; referred to Committee on Ways and Means.

H.R. 1965 (Pomeroy)/H.R. 1821 (McDermott)

For clean renewable energy bonds (CREBs), a limit of \$1 billion per year would be set for 2008 and 2009. Of these amounts, the amount available to governments would be limited to \$625 million per year. Also, certain modifications would be made to the reimbursement period and amortization structure. Introduced April 19, 2007; referred to Committee on Ways and Means.

H.R. 1977 (Berkley)

The solar and geothermal investment tax credit would be expanded to include public utility property. Introduced April 20, 2007; referred to Committee on Ways and Means.

H.R. 1987 (Jefferson)

The small agri-biodiesel tax credit would be expanded to include biodiesel derived from waste vegetable oils. Introduced April 20, 2007; referred to Committee on Ways and Means.

H.R. 2036 (Inslee)/S. 1511 (Akaka)

Marine and Hydrokinetic Renewable Energy Promotion Act. DOE would be directed to create a marine and hydrokinetic renewable energy R&D program. Section 4 would establish a fund to make loans to projects producing marine and hydrokinetic renewable energy. Section 5 would require programmatic environmental impact statements for deployment in U.S. navigable waters. Section 6 would expand the renewable electricity production tax credit (PTC) to cover this equipment. Section 7 would expand the 30% business investment credit and five-year depreciation to include this equipment. House bill introduced April 25, 2007; referred to Committees on Energy and Commerce, Science and Technology, Ways and Means, and Natural Resources. Senate bill introduced May 24, 2007; referred to Committee on Finance.

H.R. 2037 (Kaptur)

Each state and the District of Columbia would be required to ensure that gasoline contains a specified percentage of renewable fuel. The percentages would

be set at 15% after 2014, 25% after 2019, and 30% after 2024. Introduced April 25, 2007; referred to Committees on Energy and Commerce, and Agriculture.

H.R. 2038 (Kind)/S. 1154 (Nelson)

Biogas Production Incentive Act of 2007. A business tax credit for “biogas” production and sales would be established. Eligible biogas must be derived by processing a qualified feedstock — such as livestock manure and other waste material — in an anaerobic digester that contains at least 60% methane and carbon dioxide and trace gases. USDA would be directed to make counter-cyclical payments to qualified biogas producers for facility development. Also, USDA would establish loans, loan guarantees and grants for qualified providers to collect and transport feedstocks to a biogas facility or for equipment and facilities that help collect and transport feedstocks. House bill introduced April 25, 2007; referred to Committees on Ways and Means, and Agriculture. Senate bill introduced April 18, 2007; referred to Committee on Finance.

H.R. 2039 (Levin)

Alternative Fuel Infrastructure Act of 2007. The alternative fuel vehicle refueling property tax credit would be increased from 30%, with a cap at \$30,000, to 50%, with a cap at \$50,000. Also, the credit termination date would be extended to December 31, 2014. Introduced April 25, 2007; referred to Committee on Ways and Means.

H.R. 2079 (L. Smith)

Plug-In Hybrid Electric Vehicle Act of 2007. DOE would be directed to conduct an R, D, and D program for plug-in hybrid electric vehicles and related advanced vehicle technologies. Also, a competitive grant program would be created to support plug-in hybrid electric vehicle demonstration projects by state and local governments and by regional transportation authorities. Introduced April 30, 2007; referred to Committee on Science and Technology.

H.R. 2083 (Gordon)/S. 1101 (Lincoln)

The energy efficiency regulatory standard for residential clothes washers would be put into law. The standard for residential dishwashers would be increased by 35% in 2010 and thereafter. The standard for residential dehumidifiers would be increased in 2012 and thereafter. Also, DOE would be directed to set a new standard for refrigerators in a rulemaking that would take effect by 2014. House bill introduced May 1, 2007; referred to Committee on Energy and Commerce. Senate bill introduced April 12, 2007; referred to Committee on Energy and Natural Resources.

H.R. 2112 (Israel)

Purchasing Low-Emission Vehicles for Use in Government (PLUG) Act of 2007. The federal government would be directed to acquire at least 50,000 plug-in hybrid electric vehicles over five fiscal years. Introduced May 2, 2007; referred to Committee on Oversight and Government Reform.

H.R. 2137 (Levin)

Super-Efficient Appliance Incentives and Market Transformation Act of 2007. EPACT (P.L. 109-58) established investment tax credits for manufacturers of certain types of energy efficient appliances. The bill would modify the credit for certain

dishwashers, clothes washers, refrigerators, and dehumidifiers produced after 2007. The credit would be capped at \$100 million per year. House bill introduced May 3, 2007; referred to Committee on Ways and Means. Senate bill introduced May 24, 2007; referred to Committee on Finance.

H.R. 2144 (DeLauro)

Farm, Nutrition, and Community Investment Act of 2007. Certain farm programs would be reauthorized. Title III contains energy provisions. Funding would be established, extended, and/or authorized for biomass and biorefinery R&D; regional work on the climate carbon cycle, renewable energy, and climate change programs; the farm and ranch energy efficiency rebate program, and the alternative use for biofuel byproducts program. Also, electric utilities would be required to provide net metering service to farm and rural customers. Introduced May 5, 2007; referred to Committees on Agriculture, Energy and Commerce, Education and Labor, and Ways and Means.

H.R. 2154 (Herseth)

Rural Energy for America Act of 2007. Section 9006 (the renewable energy systems and energy efficiency improvement program) of the 2002 Farm Security Act would be reauthorized through 2012, and it would be renamed as the Rural Energy for America Program (REAP). Rural school districts would be eligible for REAP. REAP would be authorized to provide assistance to those that produce and sell electricity generated by new renewable energy systems. The maximum amount of loan guarantees for most projects would be increased to \$25 million. The maximum amount of loan guarantees would be increased to \$100 million for projects producing renewable fuels from cellulosic biomass. States and other eligible entities could receive grants to provide rebates to farmers, ranchers, rural school districts, and rural small businesses to purchase renewable energy systems and make energy efficiency improvements. Rebates would be limited to the lower of \$10,000 or 50% of the purchase cost. Overall funding authority for REAP would increase from \$71 million in FY2008 to \$250 million in FY2012. Introduced May 3, 2007; referred to Committee on Agriculture.

H.R. 2171 (Reyes)/H.R. 2196 (Reyes)

Knowledge Is Power Act. Electric utilities would be required to disclose to consumers, through their periodic billing statements, the percentage mix of energy technologies and fuels used to generate the electricity sold within the distribution utility's distribution area. In describing such mix, each such utility shall disclose the percentage of electricity generated from coal, from gas, from nuclear, from any other fuel, and from any particular type (including solar, wind, biomass, landfill gas, ocean tidal, ocean wave, ocean current, ocean thermal, geothermal, municipal solid waste, or hydroelectric) of renewable energy. H.R. 2171 introduced May 3, 2007; referred to Committee on Energy and Commerce. H.R. 2196 introduced May 7, 2007; referred to Committee on Energy and Commerce.

H.R. 2178 (Walberg)

The Energy Independence Through Bio-diesel Act. Starting five years after enactment, all diesel fuel would be required to contain a minimum of 2% biofuel. Introduced May 3, 2007; referred to Committee on Energy and Commerce.

H.R. 2196 (Reyes)

Knowledge Is Power Act. This bill is identical to H.R. 2171. Introduced May 7, 2007; referred to Committee on Energy and Commerce.

H.R. 2215 (Inslee)

EPA would be directed to establish a low-carbon fuel performance standard for fuels used in motor vehicles. The standard would be expressed as an average over a five-year period. Relative to an EPA-determined baseline, the standard would require greenhouse gas emissions to be reduced by a 3% average over the period from 2015 through 2019. The standard would increase gradually, until it reached 21% for the period from 2045 through 2049. A standard would also be set for aircraft fuel. These standards would also likely have the effect of improving vehicle fuel use efficiency. Introduced May 8, 2007; referred to Committee on Energy and Commerce.

H.R. 2218 (Kaptur)

Biofuels Energy independence Act of 2007. USDA would be authorized to create loan programs and loan guarantee programs to support the development, production, distribution, and storage of biofuels. Also, USDA would be authorized to establish a Biofuels Feedstocks Energy Reserve. Conditions would be set to guide USDA in making purchases to the reserve, releases from the reserve, and storage payments to producers. Introduced May 8, 2007; referred to Committee on Agriculture.

H.R. 2229 (Gordon)

United States-Israel Energy Cooperation Act. A grant program would be established at DOE to fund eligible ventures between the United States and Israel to support R&D and commercialization renewable energy, energy efficiency, and alternative fossil energy sources. (This bill is similar, but not identical, to H.R. 1838 and S. 838.) Introduced May 9, 2007; referred to Committee on Science and Technology.

H.R. 2261 (Lucas)

Rural America Energy Act of 2007. Section 2 would authorize USDA's Commodity Credit Corporation (CCC) to make \$25 million in loans for projects involving cellulosic ethanol cogeneration, cellulosic hydrogen for fuel cells, and biomass gasification. Section 3 would increase CCC funding for small renewable energy (§ 9006) projects. Section 4 would extend the renewable energy production tax credit (PTC) for five years, through the end of 2013. Section 5 would authorize \$1 million for feasibility studies of a dedicated ethanol pipeline. Section 6 would promote production of biofuels crops. Section 7 would provide transitional assistance to farmers that plant dedicated crops for a cellulosic ethanol refinery. Section 8 would establish a tax credit for wind energy equipment installation by rural home owners, ranchers, farmers, and small businesses. Introduced May 10, 2007; referred to Committees on Agriculture, Ways and Means, Financial Services, and Energy and Commerce.

H.R. 2272 (Gordon)/S. 761 (Reid)

America COMPETES Act of 2007. Section 2005 (Division B) would establish an Advanced Research Projects Authority-Energy (ARPA-E) at DOE. The new

Authority would focus on overcoming the “long-term and high-risk technological barriers” in the development of renewable energy, energy efficiency, and other technologies. “Such sums” as necessary would be authorized for each fiscal year from 2008 through 2011. House bill introduced May 10, 2007; referred to Committee on Science and Technology. Passed House by voice vote May 21, 2007. In Senate, S. 761 introduced March 5, 2007. Passed Senate (88-8), amended, April 25, 2007. Senate incorporated S. 761 into H.R. 2272 as an amendment in the nature of a substitute, and passed the Senate version of H.R. 2272 by unanimous consent on July 19, 2007. Conference report filed (H.Rept. 110-289) August 1, 2007. House and Senate agreed to conference report August 2, 2007. Signed by President August 9, 2007.

H.R. 2296 (Garlach)

Future Fuels Act. A tax credit would be made available to eligible manufacturers for production of advanced technology motor vehicles. The fuel economy calculations for manufacturer incentives for dual fueled vehicles would be revised. A schedule would be set for increased the share of alternative fueled or flexible fuel vehicles. An incentive program would be established for insurance providers to sell auto insurance on a per-mile basis. Policies and procedures would be set for testing and labeling tires for fuel economy. Introduced May 14, 2007; referred to Committees on Energy and Commerce, Transportation and Infrastructure, and Ways and Means.

H.R. 2298 (Gordon)/H.R. 2990 (Doggett)

Ground source (geothermal) heat pump systems would become eligible for the business investment tax credit. This credit (IRC section 48[a][3]) is currently available for solar and geothermal equipment. Introduced May 14, 2007; referred to Committee on Ways and Means.

H.R. 2304 (McNerney)

Advanced Geothermal Energy Research and Development Act of 2007. DOE would be instructed to focus R&D and commercial application programs on expanding geothermal energy production from hydrothermal systems. In particular, RD&D and commercial applications would focus on increasing the reliability of site characterizations and cost-shared field demonstrations would be conducted (§ 4). RD&D and commercial application would develop component technology, improve reservoir performance models, and assess environmental impacts (§ 5). RD&D and commercial applications would be employed to enhance geothermal technologies and a collaboration with industry would focus on reservoir stimulation techniques at a variety of different sites (§ 6). A grant program would be created to promote geothermal energy production from oil and gas fields (§ 7). Federal cost share requirements would be set in accordance with Section 988 of EPACT (§ 8). DOE would be directed to award grants to universities and academic consortia to establish two Centers for Geothermal Technology Transfer (§ 9). The Geothermal America program would be created (§ 10). A report to Congress on advanced concepts and technologies would be required (§ 11). A total of \$90 million per year would be authorized for FY2008 through FY2012 (§13). Introduced May 14, 2007; referred to Committee on Science and Technology. Reported, amended (H.Rept. 110-203) June 21, 2007. Incorporated into H.R. 3221 as Subtitle C of Title IV on Science and Technology.

H.R. 2305 (Nunes)

Energy Conservation through 'Smart Meters' Act of 2007. A five-year accelerated depreciation recovery period would be established for qualified energy management devices. Introduced May 14, 2007; referred to Committee on Ways and Means.

H.R. 2313 (Hooley)

Marine Renewable Energy Research and Development Act of 2007. R&D, demonstration, and commercial application programs would be established at DOE for marine (tidal, currents, waves, and ocean thermal) renewable energy technologies. Introduced May 15, 2007; referred to Committee on Science and Technology. Reported, amended (H.Rept. 110-203) June 21, 2007. Incorporated into H.R. 3221 as Subtitle B of Title IV on Science and Technology.

H.R. 2337 (Rahall)

Energy Policy Reform and Revitalization Act of 2007. Sections 231 through 235 would require wind energy developers to assess and mitigate the impact of turbines on birds and wildlife. Section 307 would establish a pilot program to develop a strategic solar reserve, and would identify and assess potential sites on federal lands for concentrating solar power (CSP) systems. Section 309 would establish a program to use biomass from federal forest lands. Introduced May 16, 2007; referred to Committee on Natural Resources, Committee on Agriculture, and Committee on Science and Technology. Hearing held May 23, 2007. Ordered reported (amended) June 13, 2007. Incorporated into H.R. 3221 as Title VII, Natural Resources Committee Provisions. Reported amended (H.Rept. 110-296, Part I) August 3, 2007.

H.R. 2354 (Visclosky)/S. 133 (Obama)

American Fuels Act of 2007. Section 2 would create an Office of Energy Security in the Executive Office of the President. Section 3 would provide a production tax credit to manufacturers of flexible fuel vehicles. Section 4 would establish a retail sales incentive for alternative fuels. Section 5 would prohibit certain restrictions on the installation of alternative fuel pumps. Section 6 would create an increasing percentage standard for biodiesel, or other alternative diesel fuel, content in diesel fuels. Section 7 would create an excise tax credit for the production of cellulosic ethanol from biomass. Section 8 would establish an incentive for federal and state fleets to use medium- and heavy-duty hybrid vehicles. Section 9 would establish an investment tax credit for qualified ethanol blending and processing equipment. Section 10 would increase public access to alternative fuel refueling stations on federal property. Section 11 would restrict the use of funds in the Mass Transit Account of the Highway Trust Fund to the purchase of clean fuel buses. Section 12 would require the Department of Defense to increase the use of alternative fuels. Section 13 would increase federal requirements for the use of electric vehicles and plug-in hybrid vehicles. Introduced May 16, 2007; referred to Committee on Energy and Commerce, Committee on Ways and Means, Committee on Transportation and Infrastructure, Committee on Armed Services, Committee on Oversight and Government Reform, Committee on Judiciary. Senate bill introduced January 4, 2007; referred to Committee on Finance.

H.R. 2361 (Doggett)

Responsible Renewable Energy Tax Credit Act of 2007. The tax credit for renewable diesel would be disallowed whenever the fuel is produced in part from petroleum, natural gas, or coal feedstocks. Introduced May 17, 2007; referred to Committee on Ways and Means.

H.R. 2372 (DeLauro)

Windfall Energy Alternatives for the Nation (WEAN) Off of Oil Act of 2007. Section 2 would impose a temporary windfall profit tax on crude oil. Section 3 would deposit revenues from the tax into a Strategic Energy Efficiency and Renewables Reserve. Funds from the Reserve would be available to offset (make deficit-neutral) the cost of subsequent legislation to invest in renewable energy and energy efficiency measures. Introduced May 17, 2007; referred to Committees on Ways and Means, on Budget, and on Rules.

H.R. 2389 (Shuler)

Small Energy Efficient Businesses Act. The bill would give small firms that are acquiring or developing energy efficient technologies more flexible loan terms. The Small Business Administration (SBA) would be directed to develop a strategy for educating small firms about energy efficiency. An energy efficiency program would be created to support Small Business Development Centers (SBDCs). Further, the bill aims to spur investment in the production of biofuels and in the development of energy efficient technology by expanding the Small Business Investment Corporation (SBIC) and by increasing investment in small producers. A Renewable Fuel Capital Investment (RFCI) program would also be created to help small firms develop renewable energy sources and new technologies. Introduced May 17, 2007; referred to Committee on Small Business. Hearings held, ordered reported May 23, 2007. Incorporated in H.R. 3221 as Title III on Small Energy Efficient Businesses.

H.R. 2419 (Peterson)

Farm, Nutrition, and Bioenergy Act of 2007. Agricultural-based energy programs established by the Farm Security Act of 2002 would be expanded and continued through FY2012. A total of about \$3.2 billion in new funding is proposed including \$1.4 billion for biofuels production incentives, \$800 million to underwrite up to \$2 billion in loan guarantees for biorefineries, \$420 million for research on biomass feedstocks and production, and new mandatory funding for a cellulosic biomass feedstock reserve. Most new funding would be directed away from corn-based ethanol and toward cellulosic-based biofuels and other new technologies. Section 2002 would include biobased products composed of at least 5% intermediate ingredients and feedstocks in the procurement preference program set by §9002 of the 2002 Farm Security Act (P.L. 107-171). The U.S. Department of Agriculture (USDA) would be required to issue criteria for determining which products, intermediate ingredients, and feedstocks would qualify for the USDA Certified Biobased Product label. Section 9003 would provide loan guarantees for up to 90% of loans used to help pay for development, construction, and retrofitting of biorefineries and biofuel production plants to demonstrate the commercial viability of converting biomass to fuels or chemicals. Loan guarantees may cover up to \$2 billion in loans, split evenly between relatively small plants (up to \$100 million) and larger plants (\$100 to \$250 million). USDA would determine the maximum loan term. Selection criteria for the loans would follow those for the existing grants

program in §9003 of the 2002 Farm Act. Further, the level of local ownership would be added as a new selection criteria. Section 9004 would extend the energy audit and renewable energy development program, which requires that USDA make competitive grants to assist farmers, ranchers, and rural small businesses in becoming more energy efficient and in using renewable energy technology and resources. Section 9005 would rename and reauthorize the program in §9006 of the 2002 Farm Act, which makes grants and authorizes loans and loan guarantees to farmers, ranchers, and rural businesses to cover up to 25% of the purchase cost for renewable energy systems and energy efficiency improvements. Funding would be increased from the current \$3 million to \$50 million in 2008, and then rise to \$150 million in 2012. The limit on the maximum amount of the combined loan and grant would increase from 50% to 75% of the total. Also 15% of funds would be reserved for projects that cost \$50,000 or less. Section 9006 would modify findings of the Biomass R&D Act of 2000 to include biodiesel; and it would amend the definition of technical study areas to clarify that research areas include sugar processing and refining plants. The current law provision that would authorize an additional annual appropriation of \$200 million through 2015 would remain in effect. Section 9007 would amend the program under section 9010 of the 2002 Farm Act, which provides payments that encourage producers to increase purchases of eligible commodities that are used to expand production of bioenergy. Also, it would clarify that — in addition to biodiesel and fuel grade ethanol — the term “bioenergy” would include (a) the production of heat and power from an eligible feedstock at a biofuels plant, (b) biomass gasification, and (c) hydrogen made from cellulosic commodities for fuel cells. Corn starch would be excluded from the list of eligible feedstocks under the program. The funding level would be increased from the current level of \$0 for 2007 to \$1.5 billion for the period 2008 through 2012. Section 9008 would reauthorize Sun Grants (§9011 of the 2002 Farm Act) to promote research, extension, and education related to biobased energy and product technologies. The current authorization of \$75 million per year for 2007 through 2010 would be extended through 2012. Section 9009 would create an Energy Council at USDA to coordinate departmental energy policy and to consult with other agencies. Section 9010 would direct USDA to establish a pilot grant program to help farmers demonstrate the feasibility of making farms energy-neutral using existing technologies. Section 9011 would authorize USDA to make cost-shared grants to enable eligible rural communities to develop renewable energy systems to increase their energy self-sufficiency. Appropriations of \$5 million would be authorized in 2008 and such sums as necessary for 2009 through 2012. Section 9012 would encourage students to pursue employment in renewable energy-related jobs. Section 9013 would require USDA to purchase sugar to produce bioenergy, if necessary to avoid forfeitures of sugar to the Commodity Credit Corporation, and to ensure that the sugar loan program is operated at no cost to the federal government. Section 9014 would provide \$1 million for feasibility studies for the construction of a dedicated ethanol pipeline; and it would require a report to Congress on the results of such studies. Introduced May 22, 2007; referred to Committees on Agriculture and Foreign Affairs. House Committee on the Agriculture reported (H.Rept. 110-256, Part I) July 23, 2007. House passed, amended, by a vote of 231 to 191, July 27, 2007. Also, the energy provisions of this bill were incorporated into H.R. 3221 as Title V on Agriculture Energy.

H.R. 2420 (Lantos)

International Climate Cooperation Re-engagement Act of 2007. Title I would direct the Administration to resume international climate change negotiations that would subject the U.S. to binding cuts in greenhouse gas emissions. It would also establish an Office on Global Climate Change within the Department of State to be headed by an Ambassador-at-Large for global climate change who would be the United States' chief negotiator in future climate talks. Title II would promote clean and efficient energy technologies in foreign countries, provide assistance to developing countries, provide educational outreach to India and China, expand or create trade missions to encourage private sector trade and investment in clean energy technologies, and would direct the Agency for International Development to work with developing nations to improve energy efficiency and adopt clean energy technology. Title III would establish the International Clean Energy Foundation to make grants to promote alternative energy technology projects outside of the United States, and would seek contributions from foreign governments to supplement U.S. funding of such projects. Appropriations would be authorized. Introduced May 22, 2007; referred to the Committee on Foreign Affairs. Reported (H.Rept. 110-215) June 28, 2007. Incorporated into H.R. 3221 as Title II on the International Climate Cooperation Re-engagement Act of 2007.

H.R. 2426 (Boswell)/S. 859

Ethanol Infrastructure Expansion Act of 2007. DOE would be required to fund feasibility studies for constructing dedicated ethanol pipelines (§4). Also, DOE would be directed to carry out a program to address technical factors that prevent ethanol transportation in existing pipelines (§5). Funding at \$1 million would be authorized for each program (§6). House bill introduced May 22, 2007; referred to Committee on Transportation and Infrastructure. Senate bill introduced March 13, 2007; referred to Committee on Energy and Natural Resources.

H.R. 2428 (Edwards)

Biofuels Research Initiative Act of 2007. A Bio Energy Consortium of universities would be established to coordinate bioenergy and biomass R&D programs. Competitive grants for such R&D would be distributed through regional consortia to land grant universities. A funding level of \$50 million would be authorized. Introduced May 22, 1007; referred to Committee on Agriculture.

H.R. 2437 (Israel)

A DOE advisory committee would be established to recommend strategies for energy efficiency and renewable energy finance and investment options. Introduced May 22, 2007; referred to Committee on Energy and Commerce.

H.R. 2441 (Matheson)

Renewable Schools Energy Act of 2007. Interest-free bonds would be provided to public school districts in certain eligible states for the purchase of renewable energy products and systems. Total bonding authority would be \$50 million for 2008, \$100 million for 2009, and \$150 million for 2010. Introduced May 22, 2007; referred to Committee on Ways and Means.

H.R. 2447 (Wynn)

Energy and Environment Block Grant Act of 2007. A program would be established to provide grants to local governments for development and implementation of an Energy Efficiency and Climate Protection Strategy. Funding would be authorized. Introduced May 23, 2007; referred to Committees on Energy and Commerce and on Science and Technology.

H.R. 2454 (Burgess)

Twenty percent biodiesel (B20) fuel blends would be qualified as an alternative fuel for corporate average fuel economy purposes. Introduced May 23, 2007; referred to Committee on Energy and Commerce.

H.R. 2459 (Fossella)

Reduce Individuals' Dependence on Energy Act of 2007 (RIDE Act of 2007). An income tax deduction, capped at \$1,320, would be provided to individuals for certain mass public transportation expenses. Introduced May 23, 2007; referred to Committee on Ways and Means.

H.R. 2483 (R. Hall)

Support would be provided for R&D and demonstration on energy technologies to ensure the Nation's continued supply and efficient use of affordable, reliable, and clean energy. Introduced May 24, 2007; referred to Committee on Science and Technology.

H.R. 2496 (Conaway)

Fuel Consumption Education Act. A public-private partnership between DOE and industry groups would be established to create a public education campaign to inform drivers about short term measures that conserve transportation fuel. Introduced May 24, 2007; referred to Committee on Energy and Commerce.

H.R. 2505 (Donnelly)

Promoting the Use of Mixed Petroleum Act or the E85 PUMP Act. The investment tax credit for alternative vehicle refueling property would be extended for five years, from the end of 2008 through the end of 2013. Also, the ceiling on the credit would be increased from 30% to 50% of the equipment cost and the cap would be increased from \$30,000 to \$50,000. Introduced May 24, 2007; referred to Committee on Ways and Means, and Committee on Judiciary.

H.R. 2513 (J. Hall)

Advertising for any automobile model would be required to show fuel use and fuel cost for that model. Introduced May 24, 2007; referred to Committee on Energy and Commerce.

H.R. 2528 (Markey)/S. 1434 (Pryor)

Federal Building Renewal and Energy Savings Act of 2007. Section 2 would require each federal agency to conduct an energy and water assessment of its buildings and facilities every three years, implement water and energy efficiency saving measures based on the assessment, use a web-based tracking system to certify compliance, and record energy use data into a benchmarking system such as the Energy Star Portfolio Manager. Section 3 would promote federal agency use of

energy savings performance contracts (ESPCs) and utility energy service contracts. House bill introduced May 24, 2007; referred to Committee on Energy and Commerce. Senate bill introduced May 12, 2007; referred to Committee on Energy and Natural Resources.

H.R. 2555 (H. Wilson)

Renewable Energy Credit Extension Act of 2007. Section 2 would extend the electricity production tax credit (PTC) for certain renewable resources for five years, to the end of 2013. Section 3 would allow otherwise unused portions of the credit to be transferred to a third party. Introduced May 24, 2007; referred to Committee on Ways and Means.

H.R. 2556 (H. Wilson)/S. 1321 (Bingaman)

Energy Savings Act of 2007. Title I is the Biofuels for Energy Security and Transportation Act. Subtitle A would extend and increase the Renewable Fuels Standard, starting with 8.5 billion gallons in 2008 and rising to 36 billion gallons in 2022. Starting in 2016, an increasing portion of the requirement would have to be met with advanced biofuels, including cellulosic ethanol, biobutanol, and other fuel derived from unconventional biomass feedstocks. Subtitle B would provide grants for renewable fueling infrastructure, increase the DOE bioenergy R&D funding authorization, establish 11 bioenergy research centers, provide loan guarantees for renewable fuel facilities, provide research grants for states with low rates of ethanol production, provide grants for infrastructure for transportation of biomass to local refineries, establish a biorefinery information center, and establish a national biodiesel fuel quality standard. Title II is the Energy Efficiency Promotion Act. Subtitle A would promote energy efficient lighting technologies and expand certain lighting efficiency standards. Subtitle B would expedite new energy efficiency standards for heating and cooling products and home appliances, provide incentives for the manufacture of energy efficient consumer electronics, and establish an efficiency program for industrial and commercial facilities. Subtitle C would authorize funding for a DOE R&D program on lightweight materials, provide loan guarantees for fuel-efficient auto parts manufacturers, provide incentives for advanced technology automobile manufacturing, authorize awards for qualified investments to refurbish manufacturing facilities that produced advanced technology vehicles, authorize a 10-year R&D program to support the ability of the U.S. to remain globally competitive in global energy storage systems for motor transportation, and authorize a five-year R&D program for electric drive technologies. Subtitle D would set national goals for reducing gasoline usage in transportation, set goals for improving overall energy productivity, authorize funding to educate consumers about how to save energy, and direct modernization of the electricity grid system. Subtitle E would require federal fleets to reduce gasoline usage, increase federal purchase of renewable energy, authorize the Energy-Saving Performance Contracts (ESPCs) program permanently, require federal buildings to reduce energy use, require the identification of federal sites for combined heat and power (CHP), require that fossil energy use in federal buildings be reduced, establish an initiative for energy efficient commercial buildings, and require HUD to update efficiency standards for all public and assisted housing. Subtitle F would increase authorized funding for the DOE Weatherization program, reauthorize the State Energy program, require state utility regulatory commissions to consider federal standards to promote energy efficiency, authorize NREL to provide technical

assistance, authorize grants to local governments, authorize grants to universities for demonstration projects, authorize workforce training programs, and authorize assistance to states to reduce school bus idling. Senate bill introduced May 7, 2007; referred to Committee on Energy and Natural Resources. Reported (S.Rept. 110-65) May 7, 2007. House bill introduced May 24, 2007; referred to Committees on Energy and Commerce, Science and Technology, Transportation and Infrastructure, Oversight and Government, and Financial Services. Senate bill introduced May 7, 2007; referred to Committee on Energy and Natural Resources. Reported (S.Rept. 110-65) May 7, 2007.

H.R. 2557 (Weller)/H.R. 765 (Weller)

The alternative motor vehicle credit would be increased and extended for certain flexible fuel hybrid vehicles. Introduced June 5, 2007; referred to Committee on Ways and Means.

H.R. 2594 (Knollenberg)

Safe and Fuel Efficient Driving Act of 2007. A public relations and education campaign would be established to promote responsible and fuel-efficient driving. Appropriations of \$20 million would be authorized for each fiscal year from 2008 through 2012. Introduced June 6, 2007; referred to Committees on Energy and Commerce and on Transportation and Infrastructure.

H.R. 2619 (Johnson)

DOT would be directed to make a grant to an eligible energy-related research organization to establish and operate an ethanol anti-idling power unit research program. Program goals include development of an ethanol-powered solid oxide fuel cell power system and promotion of commercial uses of ethanol fuel cell power systems in vehicles. Introduced June 7, 2007; referred to Committee on Science and Technology.

H.R. 2635 (Waxman)

Carbon-Neutral Government Act of 2007. A goal would be set to make the federal government carbon-neutral by 2050. Title I would require inventories of emissions and opportunities for offsets. Several energy and fuel efficiency policies would be undertaken to meet the goal, including standards for federal fleet emissions (§ 201); green building requirements (§ 204, 205, 206); and agency purchases of energy efficient products (§ 203), alternative fuels (§ 207), and renewable energy (§ 208). Reports on progress would be required (§ 209, 210). Introduced June 7, 2007; referred to Committees on Oversight and Government Reform, Energy and Commerce, Armed Services, Transportation and Infrastructure, Natural Resources, and Agriculture. On June 12, 2007 the House Committee on Oversight and Government Reform ordered reported by voice vote. Incorporated into H.R. 3221 as Title VI on Carbon-Neutral Government.

H.R. 2641 (Visclosky)/S. 1751 (Dorgan)

Energy and Water Development and Related Agencies Appropriations Act, 2008. House bill would provide \$1.9 billion for energy efficiency and renewable energy programs, including \$200 million for solar energy, \$250 million for biomass fuels, \$235 million to develop technologies for improved vehicle fuel efficiency, \$146 million for research on technologies to increase energy efficiency in buildings,

\$246 million for weatherization grants, \$22 million for research on generating power from water flow, \$44 million for research on geothermal energy, and \$213 for hydrogen technologies. Reported (H.Rept. 110-185) June 6, 2007. Earmark package reported (H.Rept. 110-185, Part 2) July 12, 2007. Passed House (312-112) July 17, 2007. Senate bill reported (S.Rept. 110-127) July 9.

H.R. 2642 (Edwards)/S. 1645 (Reed)

Military Construction and Veterans Affairs and Related Agencies Appropriations Act, 2008. Section 409 of the House bill would require all light bulbs purchased with funding from this Act to have an EPA “Energy Star” energy efficiency designation. House bill reported (H.Rept. 110-186) June 11, 2007. Passed House (409-2) June 15, 2007. Senate bill reported (S.Rept. 110-85) June 18, 2007.

H.R. 2643 (Dicks)/S. 1696 (Feinstein)

Department of the Interior, Environment, and Related Agencies Appropriations Act, 2008. Section 603 of the House bill would require all light bulbs purchased with funding from this Act to have either EPA “Energy Star” or Federal Energy Management Program (FEMP) energy efficiency designation. House bill reported (H.Rept. 110-187) June 11, 2007. Earmark package reported (H.Rept. 110-187, Part 2) June 22, 2007. Passed House (272-155) June 27, 2007. Senate bill reported (S.Rept. 110-91) June 26, 2007.

H.R. 2652 (English)

Generating Renewable Energy and Encouraging Novel Technologies Act of 2007. Title I would extend several investment tax credits for renewable energy and set an accelerated cost recovery period for transmission and distribution equipment. Title II would extend the PTC for nine years and expand it to include tidal, wave, and ocean thermal energy. Title III would extend some alternative fuel tax credits and establish a new investment tax credit for cellulosic ethanol plant property. Title IV would extend and modify incentives for business solar equipment, appliances, and energy efficient commercial buildings. Introduced June 11, 2007; referred to Committee on Ways and Means.

H.R. 2691 (Walz)

Incentives for wind facilities that produce electricity would be expanded. Section 1 would create a partial exemption from passive activity. Section 2 would allow the PTC to be allowed against the alternative minimum tax. Introduced June 12, 2007; referred to Committee on Ways and Means.

H.R. 2701 (Oberstar)

Transportation Energy Security and Climate Change Mitigation Act of 2007. Energy efficient transportation and public buildings would be promoted, including incentives for the use of alternative fuel vehicles and renewable energy. Title I would establish a Center for Climate Change and Environment at the DOT that would address strategies for reducing transportation-related energy use. Title II would provide grants for public transit, enhance commuter rail transit, and increase the federal share for congestion mitigation (CMAQ) projects. Title III would create a green locomotive grant program. Title IV would establish a green ports initiative. Title V would create a CLEEN engine and airframe technology partnership. Title VI (Subtitle A) would set minimum energy performance standards for energy efficiency

and renewable energy use in GSA buildings (§ 601), extend the basis for building life-cycle energy use from 25 years to 40 years (§ 602), and would require that a photovoltaic system be installed at DOE's headquarters building (§ 603). Title VI (Subtitle C) would require the Architect of the Capitol to conduct a feasibility study for a solar photovoltaic roof installation (§ 651), establish an E-85 refueling station for the Capitol complex (§ 652), and require that energy efficiency measures be included in the Capitol complex master plan. Introduced June 13, 2007; referred to Committee on Transportation and Infrastructure. Ordered reported (amended) June 20, 2007. Incorporated into H.R. 3221 as Title VIII on Transportation and Infrastructure.

H.R. 2742 (Arcuri)

The renewable energy production tax credit (PTC) would be modified to provide incentive rate parity for open-loop and closed-loop biomass facilities. Introduced June 15, 2007; referred to the Committee on Ways and Means.

H.R. 2751 (Harman)

Leveraging Innovative Gains in High-efficiency Technology (LIGHT) Bulbs Act. The sale of certain light bulbs would be prohibited, namely those that emit less than (1) 25 lumens per watt, effective January 1, 2010, and (2) 60 lumens per watt, effective January 1, 2015. Exemptions would be allowed in certain cases, and civil penalties would be set for violations. Incentives would be provided for domestic production of more efficient light bulbs. Introduced Jun 15, 2007; referred to Committee on Energy and Commerce.

H.R. 2764 (Lowey)

Department of State, Foreign Operations and Related Programs Appropriations Act, 2008. Title II of the House-passed version would specify that at least 10% of the aggregate loan, guarantee, and insurance authority available to the Export-Import Bank under this or any prior Act should be used for renewable energy and environmentally beneficial products and services. Section 633(b) would allow funds for embassy construction and certain programs to be used to support "energy programs aimed at reducing greenhouse gas emissions." Section 691(a) requires that at least \$501 million of the funds under "Development Assistance" would be available for programs that directly "protect biodiversity and promote clean energy." Section 691(b) would require a report on climate change activities that includes an accounting of all expenditures used to promote transfer and deployment of "U.S. clean energy and energy efficiency technologies." Section 699H would require all light bulbs purchased with funding from this Act to have either EPA "Energy Star" or Federal Energy Management Program (FEMP) energy efficiency designation. In the Senate version, under Title III provisions for the U.S. Agency for International Development (AID) Program for Environment and Energy Conservation, the Senate Appropriations Committee report states that at least "\$195 million from all accounts in this act to support policies and programs in developing countries that promote energy efficiency, renewable energy, and cleaner energy technologies, including \$15 million for USAID's Office of Energy and Information Technology." The funding would apply to small hydro, solar, and wind projects, particularly in areas where other sources of energy are not available. Also, U.S. agencies would be expected to "continue to participate in the nine-agency Clean Energy Technology Exports Initiative." House version reported (H.Rept. 110-197) July 13, 2007. Passed House

by vote of 241-178 on July 19, 2007. Senate version reported (S.Rept. 110-128) July 10, 2007.

H.R. 2767 (Weller)

A nonrefundable tax credit of \$15 would be provided for the purchase of energy efficient tires. Also, DOT would be required to establish an energy efficient tire rating program. Introduced June 18, 2007; referred to Committees on Ways and Means and on Energy and Commerce.

H.R. 2771 (Wasserman-Shultz)/S. 1686 (Landrieu)

Legislative Branch Appropriations Act, 2008. Section 104 of the House bill would make “energy conservation” activities eligible for support under the revolving loan fund. Section 209 would require all light bulbs purchased with funding from this Act to have either EPA “Energy Star” or Federal Energy Management Program (FEMP) energy efficiency designation. House bill reported (H.Rept. 110-198) June 19, 2007. Passed House by vote of 216-176 on June 22, 2007. Senate bill reported (S.Rept. 110-89) June 25, 2007.

H.R. 2773 (Lampson)

Biofuels Research and Development Enhancement Act. The bill aims to improve information about federal biofuels research programs, focus research on infrastructure and biorefineries, study potential impacts of increased biofuels use, and increase authorized funding for DOE biofuels research. An authorization of \$25 million would be created to provide grants for biofuels RD&D and commercial applications in states that have low rates of ethanol production. Introduced June 19, 2007; referred to Committee on Science and Technology. Ordered reported June 22, 2007. Incorporated into H.R. 3221 as Subtitle E of Title IV on Science and Technology.

H.R. 2774 (Giffords)

Solar Energy Research and Advancement Act of 2007. A DOE program of thermal energy storage R&D would be required to conduct studies on integrating concentrating solar power into regional electricity transmission systems. A total authorization of \$43 million would be provided, spread over five years. Introduced June 19, 2007; referred to Committee on Science and Technology. Incorporated into H.R. 3221 as Subtitle D of Title IV on Science and Technology. Reported amended (H.Rept. 110-303) August 3, 2007.

H.R. 2776 (Rangel)

Renewable Energy and Energy Conservation Tax Act of 2007. Title I addresses production incentives. The renewable electricity production tax credit (PTC) would be extended for four years, through the end of 2012 (§ 101). The PTC would be extended to cover facilities that produce electricity from waves, tides, and other marine resources (§ 102). The business investment tax credit for solar energy and fuel cell equipment would be modified and extended for eight years, through the end of 2016 (§ 103). A total of \$2 billion in new clean renewable energy tax credit bonds would be made available (§ 104) For the residential solar and fuel cell investment tax credit, the dollar limit would be repealed and the allowance against the alternative minimum tax would be repealed. Title II (Subtitle A) addresses fuels and transportation incentives. A new tax credit would be established for qualified plug-in

hybrid vehicles, capped at \$4,000, plus \$2,000 for certain batteries, and subject to a manufacturer production run limit of 60,000 vehicles (§ 201). The alternative refueling property credit would be extended for one year, through the end of 2010, and increased to 50% with a cap of \$50,000 (§ 202). The biodiesel production tax credit and the renewable diesel tax credit would be extended for two years, through the end of 2010 (§ 203). A new 50 cent per gallon credit would be established for cellulosic ethanol production (§ 204). Employer transportation fringe benefits options would be extended to include \$20 per month for bicycle commuting (§ 205). Title II (Subtitle B) addresses other energy efficiency incentives. New energy conservation bonds would be created to support energy efficiency, renewable energy, mass transit, and other measures that reduce greenhouse gas emissions (§ 211). Bonds could be issued by state governments, local governments, and American Indian tribes. The program would be capped at \$3.6 billion. New energy efficiency assistance bonds would be created to provide States with funds for loans and grants to consumers for energy-efficiency property and home improvements (§ 212). The tax deduction for construction of energy-efficient commercial buildings would be extended (§ 213). The manufacturers credit for energy efficient appliances would be modified (§ 214), and a five-year depreciation period would be applied to certain energy management devices (§ 215). Title III would establish sources for revenue offsets. Introduced June 19, 2007; referred to Committee on Ways and Means. Reported (H.Rept. 110-214) June 27, 2007. Brought to House floor August 4, 2007. Approved by a vote of 221 to 189. Incorporated into H.R. 3221 as “Division B.”

H.R. 2798 (Sherman)

Overseas Private Investment Corporation (OPIC) Reauthorization Act of 2007. OPIC would be directed to establish a goal to increase its support for projects that use, develop, or otherwise promote clean energy technologies over a four-year period. Introduced June 20, 2007; referred to Committee on Foreign Affairs. Ordered to be reported June 26, 2007. Passed House by voice vote on July 23, 2007.

H.R. 2809 (Inslee) New Apollo Energy Act of 2007. A broad range of energy efficiency and renewable energy measures would be established with goals for increasing manufacturing jobs, reducing foreign oil dependence, and address climate change. Section 441 would create a renewable electricity portfolio standard that reaches 20% by 2020. Subtitle C of Title VI would direct the Export-Import Bank to increase support for renewable energy equipment exports. Title VIII would establish sources for revenue offsets. Introduced June 21, 2007; referred to Committee on Energy and Commerce.

H.R. 2810 (Jefferson)

A production tax credit would be established for biomethane generated from biomass. The credit would be equivalent (3,412 Btu’s of biomethane equals 1 kilowatt-hour of electricity) in monetary amount and years of duration to the renewable electricity production tax credit (PTC). Introduced June 21, 2007; referred to Committee on Ways and Means.

H.R. 2838 (Faleomavaega)

Insular Areas Energy Act of 2007. DOE’s Innovative Technology Loan Guarantee Program (EPACT Title 17) would be permitted to apply to federal installations worldwide, including the U.S. Insular Areas and nations in free

association with the United States. Also, loans would be authorized for ocean thermal energy conversion projects. Introduced June 22, 2007; referred to Committees on Energy and Commerce and on Science and Technology.

H.R. 2847 (Solis)

Green Jobs Act of 2007. The Workforce Investment Act of 1998 would be amended to establish an energy efficiency and renewable energy worker training program. Specifically, the bill would authorize up to \$125 million in funding to establish national and state job training programs, administered by the U.S. Department of Labor, to help address job shortages that are impairing growth in green industries, such as energy efficient buildings and construction, renewable electric power, energy efficient vehicles, and biofuels development. Introduced June 25, 2007; referred to Committee on Education and Labor. Reported, amended (H.Rept. 110-262) July 27, 2007. Incorporated into H.R. 3221 as Title I on Green Jobs.

H.R. 2848 (Cardoza)/S. 1016 (Menendez)

Solar Opportunity and Local Access Rights Act. Energy independence and self-sufficiency would be promoted by providing for net metering by certain small electric energy generation systems. Introduced June 25, 2007; referred to Committees on Energy and Commerce, Science and Technology, Oversight and Government Reform, and Financial Services.

H.R. 2867 (McHenry)

Independence Prize Act of 2007. DOE would be authorized to establish a program for making prizes for advanced technologies for the production, consumption, and distribution of non-petroleum-based alternative energy and energy efficiency. Introduced June 26, 2007; referred to Committee on Science and Technology.

H.R. 2890 (L. Smith)

Solar Utilization Now (SUN) Demonstration Act of 2007. A program of grants to the states would be established. States would be empowered to award competitive grants for advanced photovoltaic technology the demonstration in commercial, industrial, institutional, governmental, and residential sectors. Introduced June 27, 2007; referred to Committee on Science and Technology.

H.R. 2927 (Hill)

The combined corporate average fuel economy (CAFE) standards for cars and light trucks would be increased to a range from 32 to 35 mpg by 2022. Also, the domestic development and production of advanced technology vehicles would be promoted. Introduced June 28, 2007; referred to Committee on Energy and Commerce.

H.R. 2947 (Udall)

Energy Efficient Buildings Promotion Act. Energy performance standards would be established for new federal and federally supported buildings. The standards would also apply to major building renovations. Introduced June 28, 2007; referred to Committees on Energy and Commerce, Science and Technology, Transportation and Infrastructure, and Ways and Means.

H.R. 2950 (H. Wilson)

Renewable Fuels, Consumer Protection, and Energy Efficiency Act of 2007. This broad energy policy bill has many provisions for efficiency and renewables. Title I on biofuels would increase the renewable fuel standard (RFS) to 8.5 billion gallons in 2008, rising to 36 billion gallons by 2022. Title II on energy efficiency promotion parallels S. 1419, with provisions for lighting, equipment standards, high efficiency vehicles, federal agencies, state and local governments, and marine energy resources. Title III would establish a broad range of measures for public buildings. Title V would set a new combined vehicle CAFE standard of 35 mpg by 2020. Title IX would establish a renewable portfolio standard of 3.75% in 2010, rising to 15% by 2020. Introduced June 28, 2007; referred to Committees on Energy and Commerce, Science and Technology, Education and Labor, Transportation and Infrastructure, Natural Resources, Oversight and Government Reform, Financial Services, Foreign Affairs, Small Business, Judiciary, Armed Services, Intelligence, and Agriculture.

H.R. 2990 (Doggett)/H.R. 2298 (Gordon)

Geothermal heat pump systems would become eligible for the energy tax credit and the residential energy efficient property tax credit. Introduced July 11, 2007; referred to Committee on Ways and Means.

H.R. 3031 (Inslee)

Advanced Design in Energy for Living Efficiently Act of 2007. A program would be established to create and distribute information about green building design. Criteria would be established for education and training of architects, engineers, and developers in green building design and application. A blue ribbon panel would be selected to provide advice and counsel to the EPA Administrator on policy issues related to energy conservation in buildings and green building design. Standards would be set for construction of new buildings to reduce carbon emissions. A study would be required of the use of FHA energy efficient mortgages. Grants would be established to help state educational agencies promote energy efficiency in school buildings, block grants would be provided to States to renovate buildings, and loan guarantees would be provided for institutions of higher education. The tax deduction for energy efficient commercial buildings would be increased and extended. Introduced July 12, 2007; referred to Committees on Energy and Commerce, Transportation and Infrastructure, Education and Labor, Oversight and Government Reform, Financial Services, and Ways and Means.

H.R. 3043 (Obey)/S. 1710 (Harkin)

Departments of Labor, Health and Human Services, and Education, and Related Agencies Appropriations Act, 2008. Section 530 of the House bill would require all light bulbs purchased with funding from this Act to have an EPA "Energy Star" energy efficiency designation. House bill reported (H.Rept. 110-231) July 13, 2007. Passed House (276-140) July 19, 2007. Senate bill reported (S.Rept. 110-107) June 27, 2007.

H.R. 3044 (McHugh)

Agrofuel Rural Energy Empowerment Act. Loans, loan guarantees, and grants would be made available to farmers, ranchers, and rural small businesses for the use of anaerobic digesters to produce renewable energy. The use of anaerobic digesters

would be promoted to improve environmental quality at animal waste management facilities. Introduced July 13, 2007; referred to Committee on Agriculture.

H.R. 3059 (Barton)

Section 1 would increase Corporate Average Fuel Economy (CAFE) standards to 35 miles per gallon for passenger cars and 27.5 miles per gallon for light trucks, including SUVs, by 2022. Section 2 would allow a manufacturer to transfer CAFE credits to other compliance categories within the overall fleet. Section 3 would direct DOT to establish a partnership with industry, public interest, and consumer groups to establish a public education campaign about measures to conserve transportation fuel. Introduced July 17, 2007; referred to Committee on Energy and Commerce.

H.R. 3074 (Olver)/S. 1789 (Murray)

Departments of Transportation, and Housing and Urban Development, and Related Agencies Appropriations Act, 2008. Section 164 of the House-passed bill would require each Federal Transit Administration grant for a new or rehabilitated public transit bus to include full support for it to be outfitted as a hybrid-electric bus. Section 413 would require all light bulbs purchased with funding from this Act to have an EPA “Energy Star” or Federal Energy Management Program (FEMP) energy efficiency designation. Section 227 of the Senate bill would allow certain HUD-related contracts to be extended for eight years in order to make energy efficiency improvements. House bill reported (H.Rept. 110-238) July 18, 2007. Passed House (268-153) July 24, 2007. Senate bill reported (S.Rept. 110-131) July 16, 2007.

H.R. 3089 (Thornberry)

No More Excuses Energy Act of 2007. Section 201 would extend the renewable energy production tax credit (PTC) for 10 years, through the end of 2018. Introduced July 18, 2007; referred to Committees on Natural Resources, Ways and Means, and Energy and Commerce.

H.R. 3101 (Shea-Porter)

The Biomass Research and Development Act of 2000 would be modified to include “heating fuel” produced from biomass in the definition of biobased fuel. Introduced July 19, 2007; referred to Committees on Agriculture, and on Science and Technology.

H.R. 3105 (Faleomavaega)

Ocean Thermal Energy Tax and Energy Credits Act of 2007. Under Section 2, the renewable energy electricity production tax credit (PTC) would be expanded to include ocean thermal energy facilities. Under Section 3, the business energy investment tax credit would be expanded to include ocean thermal energy projects. Introduced July 19, 2007; referred to Committee on Ways and Means.

H.R. 3107 (Hodes)/S. 1697 (Sununu)

Renewable Energy Tax Parity Act of 2007. A tax credit for residential biomass fuel property expenditures would be established. The equipment must have a thermal efficiency of 75% or higher, and the credit would be capped at \$2,000. House bill introduced July 19, 2007; referred to Committee on Ways and Means. Senate bill introduced June 26, 2007; referred to Committee on Finance.

H.R. 3161 (DeLauro)/S. 1859 (Kohl)

Agriculture, Rural Development, Food and Drug Administration, and Related Agencies Appropriations Act, 2008. The House bill provides nearly double the FY2007 funding and more than 20% more than the request. It includes resources for research, assistance to farmers and ranchers, and loans to businesses. For the Rural Community Advancement Program, the bill recommends \$350 million for biomass and renewable energy loan guarantees. For the Renewable Energy Program, the bill includes \$46 million for grants and loans. This is \$23 million more than the FY2007 appropriation and \$12.1 million more than the request. The Senate bill recommends \$28.5 million for the Renewable Energy Program. House bill reported (H.Rept. 110-258) July 24, 2007. Senate bill reported (S.Rept. 110-134) July 24, 2007. Passed House by vote of 237 to 18 on August 2, 2007.

H.R. 3197 (Holt)

The Secretary of Education would be directed to provide grants to State and local educational agencies for Energy Smart schools and Energy Star programs. Introduced July 27, 2007; referred to Committee on Education and Labor.

H.R. 3221 (Pelosi)

New Direction for Energy Independence, National Security, and Consumer Protection Act. This omnibus bill includes nine titles that cover a broad array of provisions. It represents the integration of several bills that include a draft bill by Committee on Energy and Commerce along with H.R. 364, H.R. 2304, H.R. 2313, H.R. 2337, H.R. 2389, H.R. 2420, H.R. 2635, H.R. 2701, H.R. 2773, H.R. 2774, H.R. 2776, and H.R. 2847. A floor amendment (H.Amdt. 1748) to create a 15% renewable energy portfolio standard (RPS) was adopted by a vote of 220 to 190. The tax provisions were collected in H.R. 2776, which included a four-year extension of the renewable electricity production tax credit and several other efficiency and renewables incentives. H.R. 2776 was approved by a vote of 221 to 189; then it was incorporated into H.R. 3221. Introduced July 30, 2007; brought to House floor August 4, 2007. Passed House, amended, August 4, 2007.

H.R. 3226 (DeLauro)

New Opportunities for Fuel Efficient Fleets Act. States would be encouraged to acquire hybrid motor vehicles to satisfy fleet acquisition requirements, when publicly available fueling facilities that dispense E85 fuel are not convenient or accessible in the State. Introduced July 30, 2007; referred to Committee on Energy and Commerce.

H.R. 3238 (Boucher)

Title I would promote the development of a renewable fuels infrastructure. DOE would be required to establish a grant program to help install, replace, or convert existing infrastructure for use with renewable fuel, including E85. Technical assistance and marketing grants would be provided. DOE would be authorized \$200 million annually to support those two grant programs. Grant awards to a large, vertically integrated oil company would be prohibited. The Petroleum Marketing Practices Act (PMPA) would be amended to prohibit a franchise agreement from restricting the franchisee's ability to install renewable fuel infrastructure, convert existing infrastructure to renewable fuel use, advertise the availability of renewable fuel, or sell renewable fuel in any specified area of the marketing premises. DOE,

would be directed to report to Congress on the market penetration of FFVs and on the feasibility of requiring motor fuel retailers to install E85 compatible dispensers. DOE would be required to conduct a study on the feasibility of the constructing dedicated ethanol pipelines. EPA would be directed to conduct a study of the feasibility of widespread use of ethanol blended gasoline with levels of ethanol greater than 10%. DOE would be required to study and report to Congress on the adequacy of railroad infrastructure for ethanol fuel delivery. To help manufacturers better design engines for biodiesel use, EPA would be directed to set regulations that establish uniform per gallon fuel standards for biodiesel fuel. EPACT would be amended to increase the authorized amount of grants for cellulosic ethanol production and to establish criteria that promote geographical dispersion of grant recipients and feedstock diversity. DOT would be required to engage in a consumer education campaign about the availability of flexible-fuel vehicles and the locations where renewable fuels can be purchased. The procedures for obtaining a waiver under section 211(f)(4) of the Clean Air Act related to renewable fuels and renewable fuel additives would be modified. A grant program would be created to support domestic development and production of flexible-fuel vehicles. An authorization of \$50 million would be provided to support cellulosic ethanol grants to 10 entities from 1890 land grant colleges, Historically Black Colleges and Universities, Tribal-serving institutions, or Hispanic-serving institutions. Each federal agency would be required to install renewable fuel pumps at their fleet fueling centers and to prepare an annual report on its progress. DOE, EPA, EIA, and USDA would be directed to conduct a study of impacts from increased renewable fuel use including energy security, public health and the environment, and job creation. For States with low rates of ethanol production, DOE would be required to provide grants to eligible entities for research on renewable fuel production technologies. B20 biodiesel blend would be made eligible as an alternative fuel for the purposes complying with Corporate Average Fuel Economy (CAFE) requirements. Title II would promote energy cooperation between the United States and Israel. Introduced July 31, 2007; referred to Committees on Energy and Commerce, Transportation and Infrastructure, Science and Technology, and Oversight and Government Reform. Committee on Energy and Commerce reported amended (H.Rept. 110-306 Part I) August 3, 2007. The provisions of this bill were incorporated into Title IX (Subtitle D) of H.R. 3221.

H.R. 3274 (Israel)

Grants would be authorized to encourage cooperation between the United States and China on joint research, development, or commercialization of carbon capture and sequestration technology, improved energy efficiency, or renewable energy sources. Introduced August 1, 2007; referred to Committee on Energy and Commerce and Committee on Science and Technology.

Senate Bills (with House Companions)

S.Con.Res. 3 (Salazar)/H.Con.Res. 25 (Peterson)

The sense of the Congress would be expressed that it is the goal of the United States that, not later than January 1, 2025, the agricultural, forestry, and working land of the United States should provide from renewable resources not less than 25% of the total energy consumed in the United States and continue to produce safe, abundant, and affordable food, feed, and fiber. Senate bill introduced January 17, 2006; referred to Committee on Agriculture, Nutrition, and Forestry.

House bill introduced January 10, 2007; referred to Committees on Agriculture, Energy and Commerce, and Natural Resources.

S.Con.Res. 21 (Conrad)/H.Con.Res. 99 (Spratt)

This resolution would revise the congressional budget for FY2007, establish the budget for FY2008, and set forth appropriate budgetary levels for FY2009 through FY2012. Section 307 of the Senate resolution would create a deficit-neutral reserve fund that could be used for renewable energy, energy efficiency, and responsible development of oil and natural gas. Section 332 would create a deficit-neutral reserve fund for extension through 2015 of certain energy tax incentives, including the renewable energy electricity production tax credit (PTC), Clean Renewable Energy Bonds, and provisions for energy efficient buildings, products, and power plants. Section 338 would create a deficit-neutral reserve fund for manufacturing initiatives that could include tax and R&D measures that support alternative fuels, automotive technologies, energy technologies, and the infrastructure to support the technologies. The House resolution provides funding for energy (Function 270) above the President's request that "could be used for research, development, and deployment of renewable and alternative energy." Section 207 of the House resolution would create a deficit-neutral reserve fund that fulfills the purposes of H.R. 6 (CLEAN Energy Act, §301a), namely to "facilitate the development of conservation and energy efficiency technologies, clean domestic renewable energy resources, and alternative fuels that will reduce our reliance on foreign oil." Senate Committee on the Budget reported (without written report) March 16, 2007. Passed Senate (52-47) March 23, 2007. House Committee on the Budget reported (H.Rept. 110-69) March 23, 2007. Passed House (216-210) March 28, 2007. Senate bill passed in House with amendment (212-207) May 8, 2007; House appointed conferees. Senate appointed conferees May 9, 2007. Conference reported (H.Rept. 110-153) May 17, 2007. House agreed to conference report (214-209) May 17, 2007. Senate agreed to conference report (52-40) May 17, 2007.

S.Con.Res. 212 (Coleman)

The sense of the Senate would be expressed that any comprehensive, mandatory greenhouse gas emissions reduction program enacted by Congress should include several provisions, including one that provides effective incentives to private entities that sell electricity to increase the percentage of sales generated by clean energy sources. Introduced May 21, 2007; referred to Committee on Environment and Public Works.

S.Res. 30 (Biden)/H.Con.Res. 104 (Carnahan)

The sense of the Senate would be expressed that the United States should return to international negotiations on climate change and take a leadership role in those negotiations. The resolution would recognize that there are security and economic benefits from reducing greenhouse gas emissions and from markets for new, climate-friendly technologies. Senate bill introduced January 16, 2007; referred to Committee on Foreign Relations. Reported (without a written report) March 29, 2007. House bill introduced April 23, 2007. Referred to Committee on Foreign Affairs April 29, 2007.

S.Res. 113 (Bingaman)

On the 30th anniversary of the incorporation of the Alliance to Save Energy, the resolution commends the achievements of the Alliance and recognizes its importance. Passed Senate March 20, 2007.

S. 6 (Reid)

National Energy and Environmental Security Act of 2007. Expresses the sense of Congress that Congress should enact, and the President should sign, legislation to enhance the security of the United States by reducing the dependence of the United States on foreign and unsustainable energy sources and the risks of global warming by requiring greenhouse gas reductions and supporting environmentally friendly technologies. Introduced January 4, 2007; referred to Committee on Finance.

S. 23 (Harkin)/H.R. 559 (Delahunt)

Biofuels Security Act of 2007. Section 101 would modify the EPACT (§1501) requirement that renewable fuel content reach 7.5 billion gallons in 2012, accelerating the requirement to 10 billion gallons by 2010 and then rising to 30 billion gallons by 2020 and 60 billion gallons by 2030. Other provisions would require E85 pumps at branded gasoline stations (§102), increased use of alternative fuels in the federal fleet (§103), increased manufacturers percentage of dual-fueled vehicles (§201), and increased manufacturers incentives for dual-fueled vehicles (§202). Senate bill introduced January 4, 2007; referred to Committee on Commerce, Science, and Transportation. House bill introduced January 18, 2007; referred to Committees on Energy and Commerce, Oversight and Government Reform, and Judiciary.

S. 36 (Thune)

Biofuels Innovation Program Act of 2007. Matching grants up to \$30,000 would be created for business planning and assistance to develop farm-based production of dedicated energy and biomass crops and to attract or create a cellulosic biofuels facility. Also, incentives would be offered to farmers who plant switchgrass, and other cellulosic feedstocks, and deliver them to biorefineries. Introduced May 23, 2007; referred to Committee on Agriculture.

S. 129 (Allard)

Energy-Efficient Computer Servers Study. Section 1 would direct EPA to study and report to Congress on the growth in energy use by computer servers. Section 2 would express the sense of the Senate that it is in the best interest of the United States for purchasers of computer servers to give high priority to energy efficiency as a factor in determining best value and performance. Introduced January 4, 2007; referred to Committee on Energy and Natural Resources.

S. 133 (Obama)/H.R. 2354 (Visclosky)

American Fuels Act of 2007. Section 2 would create an Office of Energy Security in the Executive Office of the President. Section 3 would provide a production tax credit to manufacturers of flexible fuel vehicles. Section 4 would establish a retail sales incentive for alternative fuels. Section 5 would prohibit certain restrictions on the installation of alternative fuel pumps. Section 6 would create an increasing percentage standard for biodiesel, or other alternative diesel fuel, content in diesel fuels. Section 7 would create an excise tax credit for the production of

cellulosic ethanol from biomass. Section 8 would establish an incentive for federal and state fleets to use medium- and heavy-duty hybrid vehicles. Section 9 would establish an investment tax credit for qualified ethanol blending and processing equipment. Section 10 would increase public access to alternative fuel refueling stations on federal property. Section 11 would restrict the use funds in the Mass Transit Account of the Highway Trust Fund to the purchase of clean fuel buses. Section 12 would require the Department of Defense to increase the use of alternative fuels. Section 13 would increase federal requirements for the use of electric vehicles and plug-in hybrid vehicles. Senate bill introduced January 4, 2007; referred to Committee on Finance. House bill introduced May 16, 2007; referred to Committees on Energy and Commerce, Science and Technology, Ways and Means, Transportation and Infrastructure, Oversight and Government Reform, Armed Services, and Judiciary.

S. 146 (Boxer)

Government Fleet Fuel Economy Act of 2007. The federal government would be required to purchase and lease fuel efficient automobiles. Introduced January 4, 2007; referred to Committee on Commerce, Science, and Transportation.

S. 162 (Lugar)

National Fuels Initiative. Section 102 would modify and extend the alcohol fuel and alternative fuel tax credits. Section 103 would require major oil companies to phase-in the installation of E85 fuel pumps at gasoline stations, reaching 100% by 2017. Section 104 would require manufacturers to increase the share of dual fueled automobiles to 100% by 2017. Introduced January 4, 2007; referred to Committee on Finance.

S. 167 (Boxer)/H.R. 395 (Salazar)

Cellulosic Ethanol Development and Implementation Act of 2007. DOE would be required to provide grants to eligible entities to carry out research, development, and demonstration projects on cellulosic ethanol and construct infrastructure that enables retail gas stations to dispense cellulosic ethanol for vehicle fuel to reduce the consumption of petroleum-based fuel. Introduced January 4, 2007; referred to Committee on Environment and Public Works.

S. 183 (Stevens)

Improved Passenger Automobile Fuel Economy Act of 2007. The corporate average fuel economy (CAFÉ) standard for passenger automobiles would be increased to 40 miles per gallon by 2017. Introduced January 4, 2007; referred to Committee on Commerce, Science, and Transportation.

S. 193 (Lugar)

Energy Diplomacy and Security Act of 2007. Expresses the sense of Congress on several aspects of international energy cooperation, with a special emphasis on increasing the use of sustainable energy sources. Urges the Department of State to seek immediately to establish: (1) strategic energy partnerships with the governments of major energy producers and major energy consumers, and with governments of other countries; (2) petroleum crisis response mechanisms with the governments of China and India; (3) a Western Hemisphere energy crisis response mechanism; and (4) a regional-based ministerial Hemisphere Energy Cooperation Forum. Urges the

President to place on the agenda for discussion at the Governing Board of the International Energy Agency the merits of establishing an international energy program application procedure. Urges the Hemisphere Energy Cooperation Forum (established in response to this act) to implement: (1) an Energy Crisis Initiative; (2) an Energy Sustainability Initiative; and (3) an Energy for Development Initiative. Encourages the Department of State to approach other governments in the Western Hemisphere to seek cooperation in establishing a Hemisphere Energy Industry Group of industry and government representatives, coordinated by the U.S. Government Introduced January 4, 2007; referred to Committee on Foreign Relations. Reported (S.Rept. 110-54) April 12, 2007.

S. 280 (Lieberman)/H.R. 620 (Olver)

Climate Stewardship and Innovation Act of 2007. A program to reduce greenhouse gas emissions would be established through a market-driven system of tradeable allowances and support for the deployment of new climate change-related technologies. Section 323 may be the most significant for energy efficiency and renewable energy: DOE would be directed to create a production incentive, funded with proceeds from an auction of tradeable emission allowances (specified in §162), for R&D on low-cost/no-cost (full life cycle basis) emission reduction technologies, with a maximum project value of \$100 million. Also, Title III's Subtitle A on "Innovation Infrastructure" includes a study of technology transfer barriers and increase of innovation incentive from 15% to 25% (§311), authorization for the Department of Commerce to create a nonprofit enterprise that supports technologies (§312), empowerment of national laboratories to establish spinoff enterprises (§313), a directive that the National Science Foundation create a plan to support technologies at universities (§314), a 50% grant program at the Department of Commerce to support deployment of technologies (§315), a study of patent law to facilitate technology deployment (§318), and information distribution about DOE's best practices for energy efficiency programs, (§319). Subtitle B includes DOE audit incentives for retail electricity suppliers (§351), R&D on transportation options such as renewable hydrogen, cellulosic ethanol, and biodiesel (§352), and energy audits for large commercial businesses (§353). Senate bill introduced January 12, 2007; referred to Committee on Environment and Public Works. House bill introduced January 22, 2007; referred to Committees on Energy and Commerce, Science and Technology, and Natural Resources. Hearing held July 24, 2007.

S. 298 (Murkowski)

Renewable Energy, Fuel Reduction, and Economic Stabilization and Enhancement Act of 2007. Also referred to as the REFRESH Act. DOE would be authorized funding for a grant program to support geothermal energy (§ 101), ocean energy (§ 102), and plug-in hybrid vehicles (§ 103). The National Highway Traffic Safety Administration (NHTSA) would be required to study and report on testing of CAFE standards (§ 201), and prescribe tire efficiency standards (§ 202). DOT would be authorized to create a grant program for states to support telecommuting to curb traffic congestion. Introduced January 16, 2007; referred to Committee on Finance.

S. 306 (Schumer)/H.R. 490 (McNulty)

Mohawk River Hydroelectric Projects Licensing Act of 2007. The Federal Energy Regulatory Commission (FERC) would be prohibited from issuing a new license for a hydroelectric project on the Mohawk River in New York state if the

project has been operating under annual licenses for 10 or more years, unless FERC (1) issues a public notice that it will accept other valid license applications to develop or dispose of the project works or water resource (including certain nonpower license applications) and (2) approves a license application, according to the requirements of this act, if other valid license applications are submitted, or if FERC has issued a new license that is not yet final. Also, processing and approval procedures would be established. Any new power license issued for such a project would be required to include the same license conditions relating to the use of affected waters, as provided in the license for a specified Potomac Light & Power Company Project. Further, this act would be declared as applicable to specified hydroelectric projects for which (1) a new license has been issued at the time of this act but which has not yet become final under law, (2) there are pending judicial appeals, (3) the time has not yet lapsed for filing such appeals, or (4) there is a pending appeal of the Clean Water Act section 401 Water Quality Certificate. Senate bill introduced January 16, 2007; referred to Committee on Energy and Natural Resources. House bill introduced January 16, 2007; referred to Committee on Energy and Commerce.

S. 309 (Sanders)

Global Warming Pollution Reduction Act. The Clean Air Act would be amended to direct EPA to set milestones for reducing greenhouse gas emissions through a number of market-based programs and other means, of which many involve energy efficiency or renewable energy. Section 704 includes a declining emissions cap with a technology-indexed stop price, that involves energy efficiency and renewable energy technologies. Section 707 would set certain standards for vehicle CO₂ emissions, which may have a similar effect as vehicle energy efficiency standards, such as those in the Corporate Average Fuel Economy (CAFE) standard. It also calls for an NAS study of the potential for energy efficiency technologies to reduce emissions in the non-highway portion of the transportation sector. Sections 708 and 709 establish electric generation standards that call for improved energy efficiency. Section 711(c) would express the Sense of the Senate that federal funds for clean, low-carbon energy R&D and deployment should be increased by at least 100% each year for 10 years. Section 712 would direct EPA to create an energy efficiency performance standard that calls on retail electricity suppliers (utilities) to reduce electricity use, starting with 0.25% 2008 and rising steadily to 9.0% in 2020, along with a national system of tradable credits and a minimum fee of four cents per kilowatt-hour (kwh). Section 713 would require that EPA establish a renewable energy portfolio standard (RPS) with a target that starts at 5% in 2008 and rises steadily to 20% in 2020. Section 716 would call for the President to establish a task force to recommend a strategy for a foreign assistance program that supports low-carbon (renewable) and energy efficiency technologies. Section 719 would amend the renewable fuel standard (RFS) to require that at least 5 billion gallons of low-carbon renewable fuels come into commercial use in vehicles by 2015. Section 721 would require federal executive branch agencies to use vehicles that are “as fuel-efficient as practicable.” Introduced February 8, 2007; referred to Committee on Environment and Public Works.

S. 317 (Feinstein)

Electric Utility Cap and Trade Act of 2007. Under Title I, Section 717 would create a Climate Action Trust Fund at the Department of the Treasury, with proceeds from the auctions of tradeable emission allowances established under Section 715.

DOE would be directed to issue regulations that establish a “low- and zero-emitting carbon technologies program” and an “energy efficiency technology program” to support technology development and deployment with low-interest loans, loan guarantees, grants, and financial awards. The maximum shares of funding would be limited to 35% for development and deployment of low/no carbon technologies, 15% for development and deployment of energy efficiency technologies for buildings and industry, and 10% for R&D on energy efficiency technologies. Section 736 would establish offset credits for certain projects, including those that reduce emissions from fossil fuel combustion at residential and commercial buildings. Under Title II, section 204 would authorize the National Institute of Standards’ Manufacturing Extension Partnership program promote emission-reduction technologies for use by small manufacturers. Introduced January 17, 2007; referred to Committee on Environment and Public Works.

S. 331 (Thune)/H.R. 570 (Rogers)

Moneys collected from violations of the corporate average fuel economy (CAFE) program would be placed in an Energy Security Fund to provide grants that support infrastructure needed to increase the availability of alternative fuels. Senate bill introduced January 18, 2007; referred to Committee on Energy and Natural Resources. House bill introduced January 18; referred to Committee on Energy and Commerce.

S. 339 (Bayh)/H.R. 670 (Engel)

Dependence Reduction through Innovation in Vehicles and Energy (DRIVE) Act. The national security and stability of the United States economy would be promoted by reducing oil dependence through the use of alternative fuels and new technology. Title I would establish a national oil savings target and action plan. Title II would set a broad range of policies for improving the fuel efficiency of vehicles. The provisions would include tire efficiency, idling reduction, plug-in hybrids, R&D, advanced diesel vehicles, manufacturing credits, consumer incentives, federal fleet requirements, reduced incentives for gas-guzzlers, and vehicle efficiency. Title III would set a broad range of policies for renewable energy and alternative fuels. The provisions would include modifications to tax credits for refueling property, biodiesel, and small ethanol producers. A minimum requirement would be set for cellulosic biofuels and sugar ethanol. Production incentives would be established for cellulosic biofuels. Low-interest loan and grant programs would be established for E85 fuel. Also, Transit-Oriented Development Corridors would be designated in certain urban areas. Senate bill introduced January 18, 2007; referred to Committee on Finance. House bill introduced January 24, 2007; referred to Committees on Energy and Commerce, Science and Technology, Ways and Means, Transportation and Infrastructure, and Oversight and Government Reform.

S. 357 (Feinstein)

Ten-in-Ten Fuel Economy Act. On May 8, 2007, the Senate Committee on Commerce, Science, and Transportation marked up the bill with an amendment in the nature of a substitute. The amended bill would require that the corporate average fuel economy standard (CAFE) for new cars and light trucks be increased to 35 miles per gallon (mpg) by 2020 and require a 4% annual increase for 10 years thereafter. Starting in 2011, a 4% annual increase would also be required for medium- and heavy-duty trucks. The reported bill also includes a controversial provision that

would criminalize price gouging in fuel markets during an energy emergency. Original bill introduced January 22, 2007; referred to Committee on Commerce, Science, and Transportation. Amended bill ordered to be reported by voice vote on May 8, 2007.

S. 365 (Graham)/H.R. 632 (Lipinski)

H-Prize Act of 2007. DOE would be authorized to establish monetary prizes for achievements in overcoming scientific and technical barriers associated with hydrogen energy. Senate bill introduced January 23, 2007; referred to Committee on Energy and Natural Resources. House bill introduced January 23, 2007; referred to Committee on Science and Technology. Reported amended (H.Rept. 110-171) June 5, 2007. Passed House (408-8) June 6, 2007.

S. 386 (Chambliss)

Cellulosic Ethanol Incentive Act of 2007. The renewable fuel standard (RFS) would be increased from 7.5 billion gallons to 10.0 billion gallons in 2012 and to 33.3 billion gallons in 2030. Further, a standard for cellulosic ethanol would be created starting at 250 million gallons in 2010 and rising to 20.3 billion gallons in 2030. Introduced January 24, 2007; referred to Committee on Environment and Public Works.

S. 411 (Smith)/H.R. 1924 (Meek)

After 2006, the renewable energy production tax credit (PTC) would be modified to eliminate the reduction in the credit rate for power produced by open-loop biomass, small irrigation power, landfill gas, trash combustion, and hydropower facilities. Thus, the same credit rate would be allowed for all renewable resource facilities covered by the credit. Senate bill introduced January 26, 2007; referred to Committee on Finance. House Bill introduced April 18, 2007; referred to Committee on Ways and Means.

S. 425 (Smith)

The renewable energy production tax credit (PTC) would be expanded to include “kinetic hydropower” that is generated from river currents, tidal currents, ocean waves, or ocean thermal energy conversion. Introduced January 29, 2007; referred to Committee on Finance.

S. 426 (Nelson)

Biofuels Investment Trust Fund Act. All funds collected from the tariff on imports of ethanol would be invested in the R&D and deployment of biofuels, especially cellulosic ethanol produced from biomass feedstocks. Introduced January 29, 2007; referred to Committee on Energy and Natural Resources.

S. 485 (Kerry)

Global Warming Reduction Act of 2007. An economy-wide global warming pollution emission cap-and-trade program would be established to assist the economic transition to new clean energy technologies, protect employees and affected communities, and protect companies and consumers from significant increases in energy costs. Introduced February 1, 2007; referred to Committee on Finance.

S. 489 (Warner)

Green Buildings Act of 2007. Green building requirements would be set to increase energy efficiency in the federal government. Similar to S. 506/H.R. 121. Introduced February 5, 2007; referred to Committee on Environment and Public Works.

S. 506 (Lautenberg)/H.R. 121 (Doyle)

High-Performance Green Buildings Act of 2007. Title I would establish a federal office of green buildings in the General Services Administration (GSA) to coordinate efforts in federal agencies. This activities of this office would include outreach to federal agencies, review related R&D findings, and the development of guidance for life-cycle costing and contracting. Section 107 would authorize \$4 million for Title I activities. Title II would identify incentives and procurement practices to promote federal use of green building activities. Section 203 directs GAO to audit the performance of this act's provisions and report to Congress. Title III directs GSA to conduct an annual demonstration project from 2009 through 2014 and authorizes a total of \$10 million for those projects, and it calls for annual demonstration projects at universities, with an additional \$10 million authorization. Senate bill introduced February 6, 2007; referred to Committee on Environment and Public Works. House bill introduced January 4, 2007; referred to Committee on Energy and Commerce. Ordered to be reported (amended) June 6, 2007.

S. 541 (Feingold)

Rural Opportunities Act of 2007. The Farm Security Act of 2002 would be amended to promote local and regional support for sustainable bioenergy and biobased products. USDA would be authorized to create a program that makes grants to universities for R&D to support regional bioenergy development and production. The funding would also support state energy plans, other renewable energy and energy efficiency activities, and energy development by cooperatives. Further, the Government Accountability Office (GAO) would be directed to study policies to increase incentives for bioenergy and to help maintain local ownership of energy facilities. Also, the renewable energy program (§ 9006) of the Farm Security Act of 2002 would be reauthorized. Introduced February 8, 2007; referred to Committee on Agriculture.

S. 590 (Smith)/H.R. 550 (McNulty)

Securing America's Energy Independence Act of 2007. The residential investment tax credit for energy efficient property, and the commercial investment tax credit for solar energy property and qualified fuel cell property, would be extended for eight years, from the end of 2008 to the end of 2016. Also, such credits would be allowed to be applied against alternative minimum tax liability. The definition of "energy property" would be expanded to include certain equipment that uses solar energy to generate or store excess electricity. A special credit amount based on kilowatt capacity would be set for solar photovoltaic energy property and residential energy efficient property. A tax credit would be allowed for the full amount of qualified photovoltaic property expenditures. That credit is currently limited to 30%. A three-year recovery period would be allowed for accelerated depreciation for solar energy and fuel cell property. Senate bill introduced February 14, 2007; referred to Committee on Finance. House bill introduced January 18, 2007; referred to Committee on Ways and Means.

S. 672 (Salazar)

Rural Community Renewable Energy Bonds Act. Tax-exempt bond financing would be made available for qualified renewable energy electricity production facilities that have less than 40 megawatts of capacity. The facilities could use wind, biomass, solar power, hydropower, and other renewable resources. Introduced February 16, 2007; referred to Committee on Finance.

S. 673 (Salazar)/H.R. 1772 (Blumenauer)

Rural Wind Energy Development Act. An investment tax credit (§2) and accelerated depreciation (§3) would be established for the installation of wind energy property by rural homeowners, farmers, ranchers, and small businesses. The tax credit is capped at \$3,000/kilowatt and more than 50% of the electricity must be used on-site. Senate bill introduced February 16, 2007; referred to Committee on Finance. House bill introduced March 29, 2007; referred to Committee on Ways and Means.

S. 696 (Baucus)

Energy Research Act of 2007. An Advanced Research Projects Administration - Energy (ARPA-E) would be established independent of, but in coordination with, the Department of Energy. An authorization of \$5.5 billion over five years would support acceleration of energy innovations, including those focused on alternative energy sources and energy efficiency. Introduced February 27, 2007; referred to Committee on Energy and Natural Resources.

S. 701 (Clinton)

Strategic Energy Fund Act of 2007. A temporary fee on major oil company profits would be imposed, and policies for royalties would be revised, raising \$50 billion for a Strategic Energy Fund. The Fund would be used to (1) expand the renewable energy electricity production tax credit (PTC) for five years; (2) increase tax incentives for hybrid, clean diesel, and other advanced vehicles; (3) create incentives for automobile manufacturers; (4) put \$500 million toward advanced battery development to support plug-in hybrid vehicles; (5) extend the ethanol tax credit to 2012; (6) for cellulosic ethanol, provide \$2 billion for R&D and loan guarantees to cover the first billion gallons of production capacity (7) increase incentives for energy efficiency in homes and offices; and (8) create a \$9 billion Advanced Research Projects Agency. Introduced February 28, 2007; referred to Committee on Finance.

S. 761 (Reid)/H.R. 2272 (Gordon)

America COMPETES Act of 2007. Section 2005 (Division B) would establish an Advanced Research Projects Authority-Energy (ARPA-E) at DOE. The new Authority would focus on overcoming the “long-term and high-risk technological barriers” in the development of renewable energy, energy efficiency, and other technologies. “Such sums” as necessary would be authorized for each fiscal year from 2008 through 2011. S. 761 introduced March 5, 2007. Passed Senate (88-8), amended, April 25, 2007. Senate incorporated S. 761 into H.R. 2272 as an amendment in the nature of a substitute, and passed the Senate version of H.R. 2272 by unanimous consent on July 19, 2007. House bill introduced May 10, 2007; referred to Committee on Science and Technology. Passed House May 21, 2007.

S. 767 (Obama)/H.R. 1506 (Markey)

CAFE Fuel Economy Reform Act of 2007. DOT's National Highway Traffic Safety Administration (NHTSA) would be directed to increase new passenger car fuel economy by 4% annually for model year (MY) 2009 through MY2011 and for MY2013 through MY2018, attaining no less than 35 mpg by MY2018. Senate bill introduced March 6, 2007; referred to Committee on Commerce, Science, and Transportation. House bill introduced March 14, 2007; referred to Committee on Energy and Commerce.

S. 768 (Obama)/H.R. 1506 (Markey)

CAFE Fuel Economy Reform Act of 2007. DOT's National Highway Traffic Safety Administration (NHTSA) would be directed to increase new passenger car fuel economy by 4% annually for model year (MY) 2009 through MY2011 and for MY2013 through MY2018, attaining no less than 35 mpg by MY2018. Senate bill introduced March 6, 2007; referred to Committee on Finance. House bill introduced March 14, 2007; referred to Committee on Energy and Commerce.

S. 818 (Sanders)

National Priorities Act of 2007. Certain tax deductions established for 2001 through 2004 would be rescinded, and some Department of Defense appropriations would be reduced. From the revenue amounts made available, Section 5 would provide \$27.1 billion for programs to increase energy efficiency and to increase investment in renewable energy, public transit, and high-speed rail. Introduced March 8, 2007; referred to Committee on Finance.

S. 822 (Snowe)/H.R. 1385 (McDermott)

EXTEND the Energy Efficiency Incentives Act of 2007. Section 101 would create a new performance-based investment tax credit for residential energy efficiency improvements that produce an energy savings of 20% or more. The credit would terminate at the end of 2011. Section 102 would extend the existing (EPACT §1333) residential tax credit for energy efficiency measures in existing homes for four years, from the end of 2007 through the end of 2011. Section 201 would extend the existing (EPACT §1332) tax credit for energy efficiency measures in new homes for three years, from the end of 2008 through the end of 2011. Section 202 would extend the existing (EPACT §1331) tax deduction for energy efficiency measures in commercial buildings through the end of 2012 and increase the amount of the deduction. Section 203 would establish a new tax deduction for energy efficient low-rise buildings. Section 204 would expand the list (EPACT §1331) of energy efficiency measures in commercial buildings that qualify for a tax deduction and make them eligible through the end of 2011. Section 301 would establish a new tax credit for energy savings training and certification costs and certification equipment expenditures. Senate bill introduced March 8, 2007; referred to Committee on Finance. House bill introduced March 7, 2007; referred to Committee on Ways and Means.

S. 828 (Baucus)

On-Farm Energy Production Act. The Environmental Quality Incentives Program (EQIP) authorized under the Farm Security Act of 2002 would be amended to provide incentives worth up to about 50% of the cost for farmers and ranchers to install wind, solar, and biodiesel equipment to produce energy need for farm operations. Introduced March 8, 2007; referred to Committee on Agriculture.

S. 838 (Smith)/H.R. 1838 (Sherman)

United States-Israel Energy Cooperation Act. Enhanced cooperation would be focused on renewable energy R&D. DOE's Office of Energy Efficiency and Renewable Energy would be directed to administer a grant program that supports this cooperation and to report on its results. A revolving fund, the Energy Research and Development Activities Fund, would be created at the Department of the Treasury. Also, \$20 million per year would be authorized for FY2008 through FY2014. Senate bill introduced March 12, 2007; referred to Committee on Energy and Natural Resources. House bill introduced March 29, 2007; referred to Committee on Energy and Commerce. Ordered Reported July 25, 2007.

S. 859 (Harkin)/H.R. 2426

Ethanol Infrastructure Expansion Act of 2007. A DOE program would be established to award funds to study the feasibility of constructing dedicated ethanol pipelines. A funding authorization of \$1 million would be set. Senate bill introduced March 13, 2007; referred to Committee on Energy and Natural Resources. House bill introduced May 22, 2007; referred to Committee on Transportation and Infrastructure.

S. 872 (Lincoln)

The biodiesel income tax credit and the biodiesel excise tax credit would be extended for nine years, from the end of 2008 to the end of 2017. Introduced March 14, 2007; referred to Committee on Finance.

S. 875 (Dorgan)

Security and Fuel Efficiency Energy (SAFE) Act of 2007. A goal would be set to improve energy security through a 50% reduction in the oil intensity of the economy by 2030. This would be achieved, in part, by raising the fuel efficiency of the vehicular transportation fleet and by increasing the availability of alternative fuel sources. Introduced March 14, 2007; referred to Committee on Finance. Hearing held May 8, 2007.

S. 894 (Lincoln)/H.R. 139 (Granger)

Idling Reduction Tax Credit Act of 2007. A business tax credit of 25% of the cost of a qualifying idling reduction device, up to \$1,000, would be created. Defines "qualifying idling reduction device" as any device that is (1) installed on a heavy-duty diesel-powered on-highway vehicle to provide services that would otherwise require the operation of the main drive engine while the vehicle is temporarily parked or stationary; and (2) certified by DOE to reduce long-duration idling. DOE would be directed to publish standards for certifying such devices. Senate bill introduced March 15, 2007; referred to Committee on Finance. House bill introduced January 4, 2007; referred to Committee on Ways and Means.

S. 919 (Menendez)/H.R. 1551 (Kind)

Healthy Farms, Foods, and Fuels Act of 2007. Title II would support energy programs at USDA. This would include reauthorization of energy audit and renewable energy development programs (§ 203), renewable energy systems and energy efficiency programs (§ 204), bioenergy (§ 205), and biomass R&D (§ 206). Senate bill introduced March 20, 2007; referred to Committee on Agriculture. House bill introduced March 15, 2007; referred to Committees on Agriculture, Education and Labor, and Armed Services.

S. 987 (Bingaman)

Biofuels for Energy Security and Transportation (BEST) Act of 2007. The national requirement for renewable fuels would be extended and increased. It would start with 8.5 billion gallons in 2008 and rise to 36 billion gallons in 2022. Starting in 2016, an increasing portion of the requirement would have to be met with advanced biofuels, including cellulosic ethanol, biobutanol, and other fuel derived from unconventional biomass feedstocks. Also, the DOE bioenergy R&D funding authorization would be increased by 50% from FY2007 through FY2009 to establish seven bioenergy research centers, research grants for states with low rates of ethanol production, and loan guarantees for renewable fuel facilities. Introduced March 26, 2007; referred to Committee on Energy and Natural Resources. Hearing held April 12, 2007. Incorporated into S. 1321.

S. 962 (Bingaman)/H.R. 1933 (Udall)

Department of Energy Carbon Capture and Storage Research, Development, and Demonstration Act of 2007. This bill does not support energy efficiency or renewable energy. However, its provisions for carbon sequestration are a key part of the omnibus energy bills, H.R. 3221 and the Senate version of H.R. 6. DOE would be directed to: (1) carry out fundamental science and engineering research to develop and document new approaches to capture and store carbon dioxide; (2) ensure that fundamental research is appropriately applied to energy technology development activities and the field testing of carbon sequestration activities; (3) promote regional carbon sequestration partnerships to conduct geologic sequestration tests involving carbon dioxide in a variety of geological settings; and (4) conduct at least seven initial large-volume sequestration tests for geological containment of carbon dioxide. Further, DOE would be directed, in making competitive awards, to give preference to proposals from partnerships among industrial, academic, and government entities. Senate bill introduced March 22, 2007; referred to Committee on Energy and Natural Resources. Hearing (S. Hrg. 110-83) held April 16, 2007. Incorporated into S. 1321 and then into the Senate-passed version of H.R. 6. House bill introduced April 14, 2007; referred to Committee on Science and Technology. Reported amended (H.Rept. 110-301) August 3, 2007.

S. 992 (Boxer)/S. 1637 (Inhofe)

Public Buildings Cost Reduction Act of 2007. The General Services Administration (GSA) would be directed to establish a program to speed the use of cost-effective energy-efficient lighting equipment and other technologies and practices. Further, GSA would be required to prepare a five-year plan to replace inefficient lighting in GSA buildings using available funds. Also, an EPA matching grant program would be created to help local governments renovate buildings to

improve energy efficiency. For this program, \$20 million would be authorized. Introduced March 27, 2007; referred to Committee on Environment and Public Works. Reported (S.Rept. 110-60) May 3, 2007.

S. 1000 (Stevens)

Telework Enhancement Act of 2007. All federal employees would be eligible for telework, unless shown otherwise by their employer. Also, each agency would be required to designate at least one full-time employee to be a Telework Managing Officer. This person would implement telework policy and serve as liaison between employees and managers. Introduced March 27, 2007; referred to Committee on Homeland Security and Governmental Affairs.

S. 1007 (Lugar)

United States - Brazil Energy Cooperation Pact of 2007. The Secretary of State would be directed to work with the Government of Brazil and other foreign governments to form partnerships that aim to accelerate biofuels production, cellulosic ethanol research, and infrastructure improvements. The goals are to alleviate poverty, create jobs, and increase income, while improving energy security and protecting the environment. Programs and activities that would be established include a regional energy forum, feasibility studies, grants, extension services, carbon (CO₂) trading, and a study of the ethanol tariff. A funding authorization of \$59 million would be set for FY2008. Introduced March 28, 2007; referred to Committee on Foreign Relations.

S. 1016 (Menendez)/H.R. 2848 (Cardoza)

Solar Opportunity and Local Access Rights (SOLAR) Act. The Public Utility Regulatory Policies Act (PURPA) would be amended to establish net metering, by allowing home solar equipment to connect to the grid and guaranteeing that excess power could be sold back to the utility at a fair rate. Homeowners associations would be prohibited from restricting access to solar and local permit fees would be reduced. Introduced March 28, 2007; referred to Committee on Energy and Natural Resources.

S. 1020 (Hutchison)

Creating Renewable Energy through Science and Technology (CREST) Act. The act establishes and authorizes funding for a Council on Renewable Energies (CORE) at the National Science Foundation. The Council would advise Congress on renewable energy strategy including offshore wind production, solar power, geothermal energy, alternative biofuels, and wave energy. It would also facilitate collaboration across federal agencies. Introduced March 28, 2007; referred to Committee on Energy and Natural Resources.

S. 1055 (Biden)/H.R. 1915 (Castle)

American Automobile Industry Promotion Act of 2007. DOE would be directed to establish a program for RD&D, and commercial application of innovative electric drive transportation technology (i.e. plug-in hybrid vehicles, plug-in hybrid fuel cell vehicles, engine dominant hybrid vehicles, and fuel cell vehicles). DOE would be required to arrange with the National Academy of Sciences to assess state-of-the-art battery technologies that could be applied to electric drive transportation. Also, DOE would be directed to carry out an Advanced Battery Initiative to support RD&D and commercial application of battery technologies in on-road or non-road vehicles.

Requirements for the lean burn vehicle technology credit would be modified. EPA would be empowered to define biodiesel fuel and biodiesel fuel blends, and would be required set standards for each biodiesel blend. Senate bill introduced March 29, 2007; referred to Committee on Finance. House Bill introduced April 18, 2007; referred to Committees on Science and Technology, Ways and Means, and Energy and Commerce.

S. 1059 (Clinton)

Zero Emissions Building Act. Federal building energy efficiency standards would be improved. Starting in 2007, federal buildings would be designed to use 50% less fossil energy (and greenhouse gas emissions) than a comparable, previously built federal building. The amount of fossil energy reduction would increase step-wise, reaching 100% (zero emissions) by 2030. Introduced March 29, 2007; referred to Committee on Energy and Natural Resources.

S. 1072 (Stevens)

Energy efficiency (and other provisions) of Executive Order 13423 would be codified into public law. Energy intensity at each agency would be required to be reduced by 3% annually through 2014. Each agency would be required to meet half of its renewable energy requirement with “new” sources. Energy efficiency goals would be set for water use, vehicles, and acquisition of products and services. Lighting efficiency would also be required to increase. Introduced March 29, 2007; referred to Committee on Homeland Security and Governmental Affairs.

S. 1073 (Feinstein)

Clean Fuels and Vehicles Act. The Clean Air Act would be amended to promote the use of fuels with low life-cycle CO₂ emissions, establish a CO₂ performance standard for motor vehicle fuels, and require a significant decrease in CO₂ from motor vehicles. By 2016 automakers would be required to reduce tailpipe emissions by 30% below 2002 levels. Also, by 2015, oil refiners and importers would be required to reduce GHG emissions by 3% below 2007 levels. Further, EPA would be required to quantify total emissions of each fuel and develop a fuel labeling program. Additionally, a carbon-credit trading program would be established. Introduced March 29, 2007; referred to Committee on Environment and Public Works.

S. 1076 (Inouye)/H.R. 1356 (Oberstar)

Section 606 would require the Federal Aviation Administration (FAA) to establish a research consortium with goals to increase aircraft fuel efficiency 25% relative to 1997 subsonic aircraft technology and to determine the feasibility of using alternative fuels in aircraft. Senate bill introduced March 29, 2007; referred to Committee on Finance. House bill introduced March 6, 2007; referred to Committees on Transportation and Infrastructure, Science and Technology, and Ways and Means.

S. 1101 (Lincoln)/H.R. 2083 (Gordon)

The energy efficiency regulatory standard for residential clothes washers would be put into law. The standard for residential dishwashers would be increased by 35% in 2010 and thereafter. The standard for residential dehumidifiers would be increased in 2012 and thereafter. Also, DOE would be directed to set a new standard for

refrigerators in a rulemaking that would take effect by 2014. Senate bill introduced April 12, 2007; referred to Committee on Energy and Natural Resources. House bill introduced May 1, 2007; referred to Committee on Energy and Commerce.

S. 1106 (Thune)

Ethanol Tariff Extension and Caribbean Basin Initiative Investigation Act. The U.S. tariff on imported ethanol would be extended for two years, from the end of 2008 to the end of 2010. Also, the Department of the Treasury would be required to prepare a study of duty-free ethanol imports and report to Congress on its findings. Introduced April 12, 2007; referred to Committee on Finance.

S. 1115 (Bingaman)

Energy Efficiency Promotion Act of 2007. Title I would promote advanced lighting technology by requiring all federal lighting to be Energy Star rated by 2010 (§ 101), expanding efficiency standards for incandescent reflector lamps (§ 102), creating the “Bright Tomorrow” lighting prizes for solid state (LED) lighting developments (§ 103), and establishing a “Sense of the Senate” to pass mandatory energy efficiency performance targets for lighting products (§ 104). Title II would expedite new energy efficiency standards by legislating standards for residential boilers (§ 207), electric motors (§ 209), and some home appliances (§ 210, same as S. 1101/H.R. 2083). DOE would be directed to set standards by rulemaking for furnace fans (§ 203). Also, DOE would be allowed to set standards for multiple components (§ 201) and regional standards for heating and cooling equipment (§ 202). Further, it would authorize R&D on improved efficiency for appliances and buildings in cold climates (§ 211) and provide incentives for the manufacture of high-efficiency consumer products (§ 212). Other provisions would guide expedited rulemakings (§ 204), clarify limits to federal preemption of state standards (§ 205), and require Energy Guide labels for several types of consumer electronic products. Title III promotes high-efficiency vehicles, advanced batteries, and energy storage. Section 301 would authorize funding for a DOE R&D program on light-weight materials. Section 302 would provide loan guarantees for facilities that manufacture fuel-efficient vehicles. Section 303 would authorize awards for qualified investments to refurbish manufacturing facilities that produced advanced technology vehicles. Section 304 would authorize a 10-year R&D program to support U.S. competitiveness in global energy storage markets and a five-year R&D program for electric drive technologies. Title IV would set several energy efficiency goals that include reducing gasoline use 45% by 2030 (§ 401), improving energy productivity to 2.6% by 2012 (§ 402), and authorizing funding to educate consumers about how to save energy. Title V would promote federal leadership in energy efficiency and renewable energy. Section 501 would require federal and state fleets to reduce petroleum use 30% by 2016. Section 502 would increase the federal purchase of renewable energy to 15% by 2015. Section 503 would authorize the Energy-Saving Performance Contracts (ESPCs) program permanently. Section 504 would require that federal buildings reduce energy use 30% by 2015. Section 505 would require the identification of federal sites for combined heat and power (CHP). Section 506 would require that fossil energy use in federal buildings be reduced 50%, compared with similar buildings from the past that were not subject to the standard. New and renovated buildings would be required to attain “carbon neutral” status by 2030. Section 507 would require HUD to update efficiency standards for all public and assisted housing. Title VI would improve energy efficiency assistance to state and

local governments by increasing the authorization for the DOE Weatherization program (§ 601), reauthorizing the State Energy program (§ 602), requiring state utility regulatory commissions to consider federal standards to promote energy efficiency, authorizing NREL to provide technical assistance (§ 604), authorizing grants to local governments (§ 605), authorizing grants to universities for demonstration projects (§ 606), authorizing workforce training programs (§ 607), and authorizing fund for education programs to reduce school bus idling (§ 608). Introduced April 16, 2007; referred to Committee on Energy and Natural Resources. Hearing held April 23, 2007. Incorporated into S. 1321.

S. 1118 Dorgan

Fuel Efficiency Energy Act of 2007. Starting in model year 2013, corporate average fuel economy (CAFE) standards would increase by 4% annually, through 2030. However, DOT, in consultation with the National Academy of Sciences, may prescribe a lower standard if it determines that the increase would not be technologically achievable, would compromise safety, or would not be cost-effective. Introduced April 16, 2007; referred to Committee on Commerce, Science, and Transportation.

S. 1151 (Obama)/H.R. 1920 (Inslee)

Health Care for Hybrids Act. A program would be created to provide up to 10% of the health care costs for retired auto industry employees. In exchange, each company would agree to invest half of its reduced costs into R&D, retooling, manufacture, and/or employee retraining for the use of fuel-efficient and alternative fuel technologies in its vehicle lines. Senate bill introduced April 18, 2007; referred to Committee on Finance. House bill introduced April 18, 2007; referred to Committees on Ways and Means and on Energy and Commerce.

S. 1154 (Nelson)/H.R. 2038 (Kind)

Biogas Production Incentive Act of 2007. A business tax credit for “biogas” production and sales would be established. Eligible biogas must be derived by processing a qualified feedstock — such as livestock manure and other waste material — in an anaerobic digester that contains at least 60% methane and carbon dioxide and trace gases. USDA would be directed to make counter-cyclical payments to qualified biogas producers for facility development. Also, USDA would establish loans, loan guarantees, and grants for qualified providers to collect and transport feedstocks to a biogas facility or for equipment and facilities that help collect and transport feedstocks. Senate bill introduced April 18, 2007; referred to Committee on Finance. House bill introduced April 25, 2007; referred to Committees on Ways and Means and on Agriculture.

S. 1158 (Inhofe)

Alternative Fuel Standard Act of 2007. This bill would implement part of the 20-in-10 proposal presented by the President in the State of the Union 2007 speech. The current renewable fuel standard (RFS) would be replaced by an alternative fuel standard (AFS) that requires 10 billion gallons of “alternative” fuels in 2010, rising to 35 billion gallons in 2017. Qualifying fuels would be expanded beyond renewable fuels, such as ethanol, to include transportation fuels derived from natural gas, coal, and hydrogen and other sources. Introduced April 19, 2007; referred to Committee on Environment and Public Works.

S. 1165 (Cardin)

American Green Building Act of 2007. Federal buildings would be required to be designed, constructed, and certified to meet or exceed the U.S. Green Building Council's Leadership in Energy and Environmental Design (LEED) "silver" rating for green buildings. However, the head of the agency with jurisdiction over the building may decide that, due to energy or national security requirements, achievement of such a rating would be impracticable. Introduced April 19, 2007; referred to Committee on Environment and Public Works.

S. 1207 (Landrieu)

Giving Reductions to Energy Efficient New Buildings Act. Also referred to as the GREEN Buildings Act. The investment tax deduction for energy efficient commercial buildings would be extended from the end of 2008 to the end of 2013. Further, the deduction would be increased from \$1.80 to \$2.25 per square foot. Introduced April 25, 2007; referred to Committee on Finance.

S. 1238 (Casey)

Revenues obtained by rescinding certain tax loopholes and by imposing a windfall profits tax on integrated oil companies would be put into a reserve fund to support biofuels R&D and infrastructure development. Introduced April 26, 2007; referred to Committee on Finance.

S. 1242 (Tester)

A crop insurance pilot program would be established for experimental biofuel crops. Loans and loan guarantees would be provided to producers of experimental biofuel crops. Grants would be established for research facilities and universities for studies of crops as animal feed and for research on harvesting and planting techniques for such crops. Introduced April 26, 2007; referred to Committee on Agriculture.

S. 1291 (Thune)

Wind Energy Development Act of 2007. Section 2 would extend the renewable energy production tax credit (PTC) for four years, through the end of 2012. After 2007, the annual inflation adjustment to the credit would cease. Section 3 would extend the provision for clean renewable energy "tax credit" bonds for four years, through the end of 2012. Also, the total annual limit for the bonds would be increased to \$2.25 billion, including a limit of \$725 million per year for governments, and \$250 million per year for American Indian tribes. Introduced May 3, 2007; referred to Committee on Finance.

S. 1297 (Boxer)

Advanced Clean Fuels Act of 2007. The volume-based Renewable Fuel Standard is currently set at 7.5 billion gallons per year by 2012. The bill would set a new standard of 12.0 billion gallons by 2011, rising to 35.0 billion gallons by 2025. Introduced May 3, 2007; referred to Committee on Environment and Public Works.

S. 1321 (Bingaman)/H.R. 2556 (Wilson)

Energy Savings Act of 2007. This bill incorporates provisions from S. 987 and S. 1115. Title I is the Biofuels for Energy Security and Transportation Act (many provisions are similar to provisions in S. 987). Title II is the Energy Efficiency

Promotion Act (many provisions are similar to provisions in S. 1115). For a detailed summary of this bill see H.R. 2556. Senate bill introduced May 7, 2007; referred to Committee on Energy and Natural Resources. Reported (S.Rept. 110-65) May 7, 2007. House bill introduced May 24, 2007; referred to Committees on Energy and Commerce, Science and Technology, Transportation and Infrastructure, Oversight and Government, and Financial Services.

S. 1324 (Obama)

National Low-Carbon Fuel Standard Act of 2007. A standard would be set that reduces greenhouse gas emissions from transportation fuel. The standard would also have the effect of improving fuel efficiency. The production of biofuels would be increased by setting a low-carbon fuel standard for petroleum-based fuels. The Renewable Fuels Standard (RFS) would be increased from 12 billion gallons to 15 billion gallons of renewable fuel by 2012. Additional standards would be established to prevent damage to air, land, and water quality caused by biofuels production. Introduced May 7, 2007; referred to Committee on Environment and Public Works.

S. 1346 (Mikulski)/H.R. 1766 (Van Hollen)

Chesapeake's Healthy and Environmentally Sound Stewardship of Energy and Agriculture Act (CHESSEA) Act of 2007. Under §9003 of the Farm Security Act, Section 11 would create a USDA program that provides grants, loans, and loan guarantees for biofuels and biorefineries in Chesapeake Bay Watershed states. From FY2008 through FY2013, the Commodity Credit Corporation (CCC) would provide program funding of \$100 million per year. Under § 9006 of the Farm Security Act, Section 12 would provide grants and loans for renewable energy and energy efficiency projects, capped at 25% of the project cost. CCC funding for this program would start at \$60 million in FY2008 and increase to \$250 million in FY2012. Introduced May 9, 2007; referred to Committee on Agriculture.

S. 1358 (Grassley)

10 by 10 Act. The current renewable fuel standard that would reach 7.5 billion gallons per year by 2012 would be replaced with a standard that requires all gasoline sold for use in motor vehicles to contain 10% renewable fuel by 2010 and thereafter. Introduced May 10, 2007; referred to Committee on Environment and Public Works.

S. 1370 (Cantwell)

The Clean Energy Investment Assurance Act of 2007. Section 2 would extend the renewable energy electricity production tax credit (PTC) for five years and make it apply to thermal energy production too. Section 3 would, after the end of 2008, raise the volume cap for clean renewable energy bonds from \$1.2 billion per year to \$5.0 billion per year. Section 4 would extend the residential energy efficient (solar) property investment tax credit for eight years, extend it to include storage air conditioners, and modify the cap. Section 5 would extend the business investment tax credit for solar equipment for eight years, expand it to include storage air conditioners, and modify the cap. Section 6 would extend the nonbusiness energy-efficient equipment investment tax credit for five years and raise the cap for certain equipment. Section 7 would extend for five years the investment tax credit for building new energy-efficient homes. Section 8 would extend for five years the deduction for energy efficient commercial buildings, and increase the maximum deduction. Section 9 would make qualified energy management devices eligible for

a five-year depreciation recovery period. Introduced May 11, 2007; referred to Committee on Finance.

S. 1389 (Obama)/H.R. 1728 (Honda)

Global Warming Education Act. Section 4 would establish a national education campaign to disseminate information on and promote implementation of new technologies, programs, and incentives related to energy efficiency and renewable energy. Senate bill introduced May 14, 2007; referred to Committee on Health, Education, Labor, and Pensions. House bill introduced March 29, 2007; referred to Committee on Science and Technology.

S. 1403 (Klobuchar)

Farm-to-Fuel Investment Act. USDA would designate “bioenergy cropsheds” located within 50 miles of an existing or planned biofuels refinery. From 2008 through 2012, USDA’s Commodity Credit Corporation would provide a total of \$350 million in financial assistance to help farmers convert to bioenergy crops. USDA would provide the assistance through three-year contracts with producers that switch to bioenergy crop production. Introduced May 15, 2007; referred to Committee on Agriculture.

S. 1407 (Pryor)

Smart Buildings Act. A 20-year depreciation cost recovery period, calculated on a straight line basis, would be created for energy efficient heating, ventilation, air conditioning, and commercial refrigeration systems installed in nonresidential buildings and placed in service during calendar years 2008 through 2011. Introduced May 16, 2007; referred to Committee on Finance.

S. 1411 (Launtenberg)

The Environmental Protection Agency would establish an office to measure and report on greenhouse gas emissions from federal agencies. Energy-related emissions would be a key focus. Introduced May 16, 2007; referred to Committee on Environment and Public Works.

S. 1419 (Reid)

Renewable Fuels, Consumer Protection, and Energy Efficiency Act of 2007. This omnibus bill is derived from four other bills. Titles I, II, and III are taken from S. 1321/H.R. 2556. Title IV is taken from S. 992, as reported by the Senate Committee on the Environment on May 3, 2007. Titles V and VI are taken from the amended version of S. 357, as reported May 8, 2007, by the Senate Committee on Commerce, Science, and Transportation. Title VII is taken from S. 193, as reported by the Senate Committee on Foreign Relations on April 12, 2007. The individual title popular names are: Title I, Biofuels for Energy Security and Transportation; Title II, Energy Efficiency Promotion; Title III, Carbon Capture and Storage Research, Development, and Demonstration; Title IV, Public Buildings Cost Reduction; Title V, Corporate Average Fuel Economy Standards; Title VI, Price Gouging; and Title VII, Energy Diplomacy and Security. Introduced May 17, 2007; ordered Placed on Senate Legislative Calendar under General Orders. Calendar No. 156.

S. 1422 (Lugar)

Farm Risk Management Act for the 21st Century. The Farm Security Act of 2002 would be amended to revise and extend programs for federal biobased product procurement, biorefinery development, and rural renewable energy development. Also, current renewable and energy efficiency provisions would be replaced with the Rural Energy for America program, which would be funded through FY2014. Introduced May 17, 2007; referred to Committee on Finance.

S. 1491 (Klobuchar)

Ethanol Education and Expansion Act of 2007. Section 2 would direct USDA to provide \$20 million from the Commodity Credit Corporation to fund grants to fuel producers for the installation of ethanol-85% (E85) fuel infrastructure. Section 3 would provide competitive grants to educate certain parties about the benefits of E85 fuel use. The targets of the education may include public and private vehicle fleet operators, other interested entities, and the general public. Introduced May 25, 2007; referred to Committee on Energy and Natural Resources.

S. 1424 (Schumer)

Farm, Nutrition, and Community Investment Act of 2007. Title VII has provisions for farm-related energy efficiency and renewable energy. Section 7002 would direct the federal government to procure biobased products. Section 7003 would provide grants for biorefinery development. Section 7004 would create an energy audit and renewable energy development program. Section 7005 would require USDA to provide grants and production credits to encourage cooperative development of renewable energy systems and energy efficiency improvements. Section 7006 would extend certain provisions for biomass R&D. Section 7007 would extend certain biomass research and extension provisions for six years and expand it to include grants to universities for work on climate change. Section 7008 would direct USDA to provide grants and loans for cellulosic ethanol development on industrial lands. Section 7009 would establish an energy efficiency rebate program for farmers and ranchers. Section 7010 would provide grants for research on alternative uses for biofuel byproducts. Section 7011 would establish a national net metering program for farm energy production. Introduced May 17, 2007; referred to Committee on Finance.

S. 1434 (Pryor)/H.R. 2528 (Markey)

Federal Building Renewal and Energy Savings Act of 2007. Section 2 would require each federal agency to conduct an energy and water assessment of its buildings and facilities every three years, implement water and energy efficiency saving measures based on the assessment, use a web-based tracking system to certify compliance, and record energy use data into a benchmarking system such as the Energy Star Portfolio Manager. Section 3 would promote federal agency use of energy savings performance contracts (ESPCs) and utility energy service contracts. Senate bill introduced May 12, 2007; referred to Committee on Energy and Natural Resources. House bill introduced May 24, 2007; referred to Committee on Energy and Commerce.

S. 1491 (Klobuchar)

Ethanol Education and Expansion Act of 2007. Section 2 would direct USDA to provide \$20 million from the Commodity Credit Corporation to fund grants to fuel

producers for the installation of ethanol-85% (E85) fuel infrastructure. Section 3 would provide competitive grants to educate certain parties about the benefits of E85 fuel use. The targets of the education may include public and private vehicle fleet operators, other interested entities, and the general public. Introduced May 25, 2007; referred to Committee on Energy and Natural Resources.

S. 1497 (Cardin)

Energy Independence Act. A bipartisan Commission on “energy independence” would be established. Its task would be to study and review policy changes that are needed for the United States to achieve energy independence. Introduced May 24, 2007; referred to Committee on Energy and Natural Resources.

S. 1508 (Dorgan)

Clean Energy Production Tax Incentives Act. Increases the rate of the tax credit for producing electricity from renewable sources and extends the credit through 2018. Extends the limitation amount for clean renewable energy bonds through 2017. Extends the tax credit for investment in fuel cell and solar property through 2018. Introduced May 24, 2007; referred to Committee on Finance.

S. 1511 (Akaka)/H.R. 2036 (Inslee)

Marine and Hydrokinetic Renewable Energy Promotion Act. DOE would be directed to create a marine and hydrokinetic renewable energy R&D program. Section 4 would establish a fund to make loans to projects producing marine and hydrokinetic renewable energy. Section 5 would require programmatic environmental impact statements for deployment in U.S. navigable waters. Section 6 would expand the renewable electricity production tax credit (PTC) to cover this equipment. Section 7 would expand the 30% business investment credit and five-year depreciation to include this equipment. House bill introduced April 25, 2007; referred to Committees on Energy and Commerce, Science and Technology, Ways and Means, and Natural Resources. Senate bill introduced May 24, 2007; referred to Committee on Finance.

S. 1525 (Smith)/H.R. 2137 (Levin)

Super-Efficient Appliance Incentives and Market Transformation Act of 2007. EPACT (P.L. 109-58) established investment tax credits for manufacturers of certain types of energy efficient appliances. The bill would modify the credit for certain dishwashers, clothes washers, refrigerators, and dehumidifiers produced after 2007. The credit would be capped at \$100 million per year. Senate bill introduced May 24, 2007; referred to Committee on Finance. House bill introduced May 3, 2007; referred to Committee on Ways and Means.

S. 1526 (Stevens)

Bright Idea Act of 2007. DOE would be directed to establish energy efficiency standards for general service lamps manufactured or sold after 2013. Reports on mercury use and lamp labeling would also be required. Introduced May 24, 2007; referred to Committee on Energy and Natural Resources.

S. 1531 (Reid)

Clean Renewable Energy and Economic Development Incentives Act of 2007. Title I of S. 1531 would extend three existing tax incentives and establish six new

ones.²⁴ Section 101 would extend the renewable energy electricity production tax credit (PTC) for 10 years, to the end of 2018.²⁵ For certain large facilities, such as geothermal and biomass power plants, recognition of credit eligibility could be extended for up to two years after the placed-in-service deadline.²⁶ Section 102 would extend the clean renewable energy bonds (CREBs) for 10 years.²⁷ The national total bond limit would be \$1.2 billion per year for 2007 through 2008 and \$1.0 billion per year for 2009 through 2018. Section 103 would establish a tax credit bond for water conservation. Section 104 would create a 10% investment tax credit for geothermal exploration. For residential installations of small wind equipment, Section 105 would establish a 30% investment tax credit, with a limit of \$1,000 per kilowatt (kw). Section 106 would extend for five years the investment tax credit for the construction of new energy efficient homes.²⁸ Section 107 would create a 20% investment tax credit for manufacturing equipment used to produce advanced batteries. Section 108 would establish renewable school energy bonds, with a national bond limit of \$50 million in 2008, \$100 million in 2009, and \$150 million in 2010. Under Section 109, bonds would be issued to finance new renewable energy facilities, including equipment that uses tidal, wave, current, and ocean thermal energy. Title II of S. 1531 would permanently extend two tax incentives for solar energy equipment and it would establish three new incentives for solar equipment.²⁹ Section 201 would extend permanently the 30% value of the investment tax credit for business installations of solar equipment.³⁰ In Section 202, the investment tax credit for solar (30%) and geothermal (10%) equipment would be made available to public utilities. Under Section 203, the 30% residential energy efficiency investment tax credit would be extended permanently.³¹ Further, the cap would be raised to \$3,000/kw for solar electric equipment, \$2,000 for solar heating and cooling equipment, and \$500 for fuel cells. Section 204 would make certain solar equipment

²⁴ The extensions are in §101, §102, and §106. The new incentives are in §103, §104, §105, §107, §108, and §109.

²⁵ The PTC provision of the Tax Relief Act of 2006 (P.L. 109-432, §201) will expire at the end of 2008. The PTC was previously set by the Energy Policy Act (EPACT, §1301)

²⁶ To qualify under this provision, such plants would have to fulfill two conditions. First, the plant would have to be under construction at the time that the placed-in-service deadline occurs. Second, the plant would have to be operational, producing and selling electricity, within two years after the deadline.

²⁷ The CREBs provision of the Tax Relief Act (§202) will expire at the end of 2008. CREBs were created by EPACT (§1303).

²⁸ The new energy efficient new homes credit in the Tax Relief Act (§205) will expire at the end of 2008. The new homes credit was created by EPACT (§1332).

²⁹ The credit extensions are in §201 and §203. The new incentives are in §202, §204, and §211.

³⁰ The 30% value of the business solar investment tax credit in the Tax Relief Act (§207) will revert back to 10% at the end of 2008. The 30% value of this credit was established by EPACT (§1337).

³¹ The residential energy efficiency credit in the Tax Relief Act (§206) will expire at the end of 2008. This credit was created by EPACT (§1335).

eligible for a three-year accelerated depreciation period. Section 211 would establish a 30% investment tax credit for facilities that manufacture solar energy equipment. Brought up on the Senate floor during action on H.R. 6. The bill was read twice and referred to the Committee on Finance.

S. 1543 (Bingaman)

National Geothermal Initiative Act of 2007. A goal would be set to obtain 20% of electricity from geothermal energy by 2030. To achieve this, a national geothermal initiative would be established to advance technology development and encourage increased energy production. More than \$500 million in funding would be authorized. The U.S. Agency for International Development (AID) would be directed to promote international market development for the use of geothermal resources, including the African Rift Geothermal Development Facility. The U.S. Trade and Development Agency would be required to support that initiative. Introduced June 5, 2007; referred to Committee on Energy and Natural Resources.

S. 1547 (Levin)/H.R. 1585 (Skelton)

National Defense Authorization Act for Fiscal Year 2008. In both bills, DOD would be allowed to use up to \$70 million of its authorized appropriations for energy conservation projects (§ 2402). Under the Senate bill, DOD would also be authorized to enter into multi-year contracts to purchase electricity from renewable energy sources for a period not to exceed 10 years (§ 826). Senate bill introduced June 5, 2007; referred to Committee on Armed Services. Reported (S.Rept. 110-77). Referred to Committee on Intelligence, June 13, 2007. Committee reported (S.Rept. 110-125) June 29, 2007. Under the House bill, DOD facilities would be directed to install energy efficient light fixtures and bulbs (§ 2853). Also, DOD would be required to use renewable energy to meet 25% of its electricity needs by 2025 (§ 2854). House bill introduced March 20, 2007; referred to Committee on Armed Services. Reported (H.Rept. 110-46) May 11, 2007. House passed on May 17, 2007.

S. 1548 (Levin)

Department of Defense Authorization Act for Fiscal Year 2008. Section 826 would authorize the Secretary of Defense to enter into contracts for a period not to exceed 10 years for the purchase of electricity from sources of renewable energy. Introduced June 5, 2007; referred to Committee on Armed Services. Reported without written report, June 13, 2007. Referred to Committee on Intelligence, June 13, 2007. Committee reported without written report, June 29, 2007.

S. 1554 (Collins)

Energy Independence, Clean Air and Climate Security Act. Title I has several provisions to improve transportation fuel efficiency. Fuel economy standards for cars would be increased to 35 mpg by 2019 and 45 mpg by 2030 (§ 102). An investment credit would be created for manufacturers to produce more energy-efficient vehicles (§ 123). EPA would be directed to develop fuel economy standards for heavy duty vehicles (§ 125). The law that preempts states from establishing fuel economy standards for motor vehicles would be repealed (§ 127). A 30% improvement in the fuel efficiency of federal fleets would be required (§ 128). Title II has some provisions that would promote renewable fuels. Title IV has several provisions aimed at reducing heating and electricity bills. The renewable electricity production tax credit (PTC) would be extended for four years, through the end of 2012 (§ 403).

DOE would be directed to establish an energy efficiency resource standard that requires electricity and natural gas suppliers to reduce energy use by 0.25% 2007, rising to 3.0% by 2011. Similarly, a standard would be set to reduce peak demand by 0.25% in 2007, rising to 3.75% by 2011 (§ 404). Electric utilities would be required to meet a renewable portfolio standard (RPS), by obtaining a percentage of their electricity from renewables, starting at 1% in 2008 and rising to 20% in 2020 (§ 405). Introduced June 6, 2007; referred to Committee on Finance.

S. 1562 (Biden)

Fluorescent Lightbulb Implementation Program to Save Americans Value and Energy. DOE would be directed to provide grants to States for the distribution of compact fluorescent lights. Introduced June 6, 2007; referred to Committee on Energy and Natural Resources.

S. 1567 (Klobuchar)

A renewable energy portfolio standard (RPS) would be established for the period from 2010 to 2025. DOE would be instructed to establish: (1) a renewable energy credit trading program under which electric utilities shall submit to DOE renewable energy credits to certify their RPS compliance; and (2) a state renewable energy account program for grants to state agencies to promote renewable energy production (including programs that promote technologies that reduce the use of electricity at customer sites such as solar water heating). The Federal Energy Regulatory Commission (FERC) would be directed to issue and enforce regulations to ensure that an electric utility recovers all prudently incurred costs associated with compliance. Also, DOE would be directed to study and report to Congress on methods to increase transmission line capacity for wind energy development. Introduced June 7, 2007; referred to Committee on Energy and Natural Resources.

S. 1600 (Hagel)

An energy innovation information and collaboration network, the “Energy Technologies Innovation Network,” would be established. The network would provide a forum for scientists and entrepreneurs from academia, industry, and government labs to collaborate and collect information and ideas about innovative energy technologies. Introduced June 12, 2007; referred to Committee on Energy and Natural Resources.

S. 1601 (Hagel)

Energy Infrastructure Tax Reform and Incentives Act of 2007. The effective tax rate would be lowered for certain investments in energy infrastructure. In particular, incentives would be created for transmission systems, energy management devices, cellulosic ethanol facilities equipment, and ethanol pipelines. Also, the renewable electricity production tax credit (PTC) would be extended for five years, through the end of 2013. The business energy tax credit would be expanded to include green buildings. Introduced June 12, 2007; referred to Committee on Finance.

S. 1602 (Hagel)

Clean, Reliable, Efficient and Secure Energy Act of 2007. Title I on electricity includes a provision that would establish a “clean energy portfolio standard” that would aim to increase total electricity production from renewables and nuclear energy from the current level of about 30% of total electricity to 50% by 2030 (§

103). The standard for new production would start at 5% in 2012 and rise to 20% by 2030. Title II on transportation includes a provision that would increase automobile fuel economy by 4% annually. Also, the standard for renewable (biodiesel) fuel content in diesel fuel would be set at 250 million gallons in 2008, rising to two billion gallons in 2015 (§ 204). Title III on buildings includes a provision that would authorize \$100 million per year over 10 years to capitalize a fund to support green buildings in federal agencies (§ 301). Also, DOE would be directed to establish a grant program to support energy efficiency in public schools (§ 302). Title V would reestablish an Office of Technology Assessment. Introduced June 12, 2007; referred to Committee on Energy and Natural Resources.

S. 1616 (Durbin)

Biodiesel Promotion and Quality Assurance Act of 2007. A biodiesel fuel standard would be established, starting at 450 million gallons in 2008, rising to 1.25 billion gallons in 2012 (§ 3). Standards for biodiesel labeling and fuel quality would also be established. Introduced June 13, 2007; referred to Committee on Environment and Public Works.

S. 1617 (Hatch)

Fuel Reduction using Electrons to End Dependence On the Mid-East (FREEDOM) Act of 2007. To support the market for plug-in hybrid vehicles, this bill would establish an investment tax credit for consumer purchases (§ 2), create a manufacturer incentive focused on expensing of equipment (§ 3), and establish a tax credit for electric utilities that provide consumer rebates for vehicle purchases (§ 4). Introduced June 14, 2007; referred to Committee on Finance. Ordered to be reported August 1, 2007.

S. 1618 (Salazar)

A tax credit of \$1.28 per gallon would be established for the production of cellulosic biofuel. Introduced June 14, 2007; referred to Committee on Finance.

S. 1619 (Wyden)

Oil Independence, Limiting Subsidies, and Accelerating Vehicle Efficiency (OILSAVE) Act. A tax credit would be established for fuel-efficient motor vehicles. The size of the credit would be prorated, based on fuel economy. For passenger cars, the credit would start at \$630 for 34.5 mpg and rise to \$1,660 for 59.5 mpg and higher. For light trucks, the credit would start at \$630 for 27.5 mpg and rise to \$1,860 for 59.5 mpg and higher. Introduced June 14, 2007; referred to Committee on Finance.

S. 1637 (Inhofe)/S. 992 (Boxer)

A program would be established to accelerate the use of geothermal heat pumps at facilities of the General Services Administration. Introduced June 15, 2007; referred to Committee on Environment and Public Works.

S. 1656 (Snowe)

Small Business Energy Efficiency Act of 2007. Loans for renewable energy systems and energy efficiency projects would be authorized under the Express Loan Program of the Small Business Administration. Introduced June 19, 2007; referred to Committee on Small Business and Entrepreneurship.

S. 1657 (Kerry)

Small Business Energy Efficiency Act of 2007. The Small Business Administration (SBA) would be directed to create a small business energy efficiency program through the Small Business Development Centers (SBDCs), encourage telecommuting, support innovation, and provide express loans. Introduced June 19, 2007; referred to Committee on Small Business and Entrepreneurship.

S. 1697 (Sununu)/H.R. 3107 (Hodes)

Renewable Energy Tax Parity Act of 2007. A tax credit for residential biomass fuel property expenditures would be established. The equipment must have a thermal efficiency of 75% or higher, and the credit would be capped at \$2,000. Senate bill introduced June 26, 2007; referred to Committee on Finance. House bill introduced July 19, 2007; referred to Committee on Ways and Means.

S. 1766 (Bingaman)

Low Carbon Economy Act of 2007. A cap-and-trade program of emission allowances would be created to reduce greenhouse gas (GHG) emissions from the production and use of energy. The program would be similar to the Acid Rain Program. The targets are to reduce U.S. GHG emissions to 2006 levels by 2020 and to 1990 levels by 2030. In place of submitting allowances, the government would allow companies to make a payment at a fixed price. This "Technology Accelerator Payment (TAP)" price would start at \$12 per metric ton of CO₂-equivalent in the first year of the program and rise steadily each year thereafter at 5% above inflation. If technology improves rapidly and if additional policies such as a higher fuel economy standard and a renewable portfolio standard are adopted, the TAP option would never be engaged. Conversely, if technology improves less rapidly than expected and program costs exceed projections, companies could make a payment into the "Energy Technology Deployment Fund" at the TAP price, to cover a portion or all of their allowance submission requirement. Section 204 would allocate to states 9% of the total amount of allowances issued each year. The states would be allowed to use those allowances to promote energy efficiency and investment in "non-emitting" electricity generation technology. Section 401 establishes the Energy Technology Deployment Fund (ETDF). It specifies that 45% of the funds would be used to carry out a zero- or low-carbon energy technologies program. This program would include a reverse auction to award incentives for electricity production from certain new generation technologies and for manufacture of certain high-efficiency consumer products. Seven percent would be used to carry out cellulosic biomass ethanol and municipal solid waste technology deployment programs. Also, 20% of the ETDF funds would be used for an advanced technology vehicles manufacturing incentive program. Renewable energy facilities that receive tradable renewable energy credits under a federal renewable portfolio standard would not be eligible for support under this section. Under Section 410(f), the U.S. Department of State would, starting in 2010, begin to use 20% of the ETDF funds to support an International Technology Deployment Program (ITDP). This program may include loan guarantees, cost shared projects, joint R&D initiatives, and strategies to eliminate financing and market barriers. Introduced July 11, 2007; referred to Committee on Environment and Public Works.

S. 1791 (Klobuchar)

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S. 1813 (Coleman)

Individuals would be provided with an opportunity to participate in the financing or ownership of local biorefineries. Introduced July 18, 2007; referred to Committee on Energy and Natural Resources.

S. 1828 (Inhofe)

EPA would be required to study the feasibility of increasing the use of ethanol-blended gasoline. Introduced July 19, 2007; referred to Committee on Environment and Public Works.

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