

Mr. SENSENBRENNER. Mr. Speaker, on that I demand the yeas and nays. The yeas and nays were ordered.

The SPEAKER pro tempore. Pursuant to clause 8 of rule XX and the Chair's prior announcement, further proceedings on this question will be postponed.

ALTERNATIVE ENERGY RESEARCH AND DEVELOPMENT ACT

Mrs. BIGGERT. Mr. Speaker, I move to suspend the rules and pass the bill (H.R. 6203) to provide for Federal energy research, development, demonstration, and commercial application activities, and for other purposes. The Clerk read as follows:

H.R. 6203

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

SECTION 1. SHORT TITLE.

This Act may be cited as the "Alternative Energy Research and Development Act".

SEC. 2. DEFINITIONS.

For the purposes of this Act—

(1) the term "biomass" has the meaning given that term in section 932(a)(1) of the Energy Policy Act of 2005 (42 U.S.C. 16232(a)(1));

(2) the term "cellulosic feedstock" has the meaning given the term "lignocellulosic feedstock" in section 932(a)(2) of the Energy Policy Act of 2005 (42 U.S.C. 16232(a)(2));

(3) the term "Department" means the Department of Energy;

(4) the term "institution of higher education" has the meaning given that term in section 101(a) of the Higher Education Act of 1965 (20 U.S.C. 1001(a));

(5) the term "National Laboratory" has the meaning given the term "nonmilitary energy laboratory" in section 903(3) of the Energy Policy Act of 2005 (42 U.S.C. 16182(3)); and

(6) the term "Secretary" means the Secretary of Energy.

SEC. 3. ADVANCED BIOFUEL TECHNOLOGIES.

(a) IN GENERAL.—The Secretary shall carry out a program of research, development, demonstration, and commercial application for production of motor and other fuels from biomass.

(b) OBJECTIVES.—The Secretary shall design the program under this section to—

(1) develop technologies that would make ethanol produced from cellulosic feedstocks cost competitive with ethanol produced from corn by 2012;

(2) conduct research and development on how to apply advanced genetic engineering and bioengineering techniques to increase the efficiency and lower the cost of industrial-scale production of liquid fuels from cellulosic feedstocks; and

(3) conduct research and development on the production of hydrocarbons other than ethanol from biomass.

(c) INSTITUTION OF HIGHER EDUCATION GRANTS.—The Secretary shall designate not less than 10 percent of the funds appropriated under subsection (d) for each fiscal year to carry out the program for grants to competitively selected institutions of higher education around the country focused on meeting the objectives stated in subsection (b).

(d) AUTHORIZATION OF APPROPRIATIONS.—From amounts authorized to be appropriated under section 931(c) of the Energy Policy Act

of 2005 (42 U.S.C. 16231(c)), there are authorized to be appropriated to the Secretary to carry out this section—

(1) \$150,000,000 for fiscal year 2007; and

(2) such sums as may be necessary for each of the fiscal years 2008 and 2009.

SEC. 4. ADVANCED HYDROGEN STORAGE TECHNOLOGIES.

(a) IN GENERAL.—The Secretary shall carry out a program of research, development, demonstration, and commercial application for technologies to enable practical onboard storage of hydrogen for use as a fuel for light-duty motor vehicles.

(b) OBJECTIVE.—The Secretary shall design the program under this section to develop practical hydrogen storage technologies that would enable a hydrogen-fueled light-duty motor vehicle to travel 300 miles before refueling.

SEC. 5. ADVANCED SOLAR PHOTOVOLTAIC TECHNOLOGIES.

(a) IN GENERAL.—The Secretary shall carry out a program of research, development, demonstration, and commercial application for advanced solar photovoltaic technologies.

(b) OBJECTIVES.—The Secretary shall design the program under this section to develop technologies that would—

(1) make electricity generated by solar photovoltaic power cost-competitive by 2015; and

(2) enable the widespread use of solar photovoltaic power.

(c) AUTHORIZATION OF APPROPRIATIONS.—There are authorized to be appropriated to the Secretary to carry out this section—

(1) \$148,000,000 for fiscal year 2007; and

(2) such sums as may be necessary for each of the fiscal years 2008 through 2011.

SEC. 6. ADVANCED WIND ENERGY TECHNOLOGIES.

(a) IN GENERAL.—The Secretary shall carry out a program of research, development, demonstration, and commercial application for advanced wind energy technologies.

(b) OBJECTIVES.—The Secretary shall design the program under this section to—

(1) improve the efficiency and lower the cost of wind turbines;

(2) minimize adverse environmental impacts; and

(3) develop new small-scale wind energy technologies for use in low wind speed environments.

(c) AUTHORIZATION OF APPROPRIATIONS.—There are authorized to be appropriated to the Secretary to carry out this section—

(1) \$44,000,000 for fiscal year 2007; and

(2) such sums as may be necessary for each of the fiscal years 2008 through 2011.

SEC. 7. CONTINUING PROGRAMS.

The Secretary shall continue to carry out the research, development, demonstration, and commercial application activities authorized in sections 921(b)(1) (for distributed energy), 923 (for micro-cogeneration technology), and 931(a)(2)(C), (D), and (E)(i) (for geothermal energy, hydropower, and ocean energy) of the Energy Policy Act of 2005.

SEC. 8. PLUG-IN HYBRID ELECTRIC VEHICLE TECHNOLOGY PROGRAM.

(a) SHORT TITLE.—This section may be cited as the "Plug-In Hybrid Electric Vehicle Act of 2006".

(b) DEFINITIONS.—In this section:

(1) BATTERY.—The term "battery" means a device or system for the electrochemical storage of energy.

(2) E85.—The term "E85" means a fuel blend containing 85 percent ethanol and 15 percent gasoline by volume.

(3) ELECTRIC DRIVE TRANSPORTATION TECHNOLOGY.—The term "electric drive transportation technology" means—

(A) vehicles that use an electric motor for all or part of their motive power and that may or may not use offboard electricity, including battery electric vehicles, hybrid electric vehicles, plug-in hybrid electric vehicles, flexible fuel plug-in hybrid electric vehicles, and electric rail; and

(B) related equipment, including electric equipment necessary to recharge a plug-in hybrid electric vehicle.

(4) FLEXIBLE FUEL PLUG-IN HYBRID ELECTRIC VEHICLE.—The term "flexible fuel plug-in hybrid electric vehicle" means a plug-in hybrid electric vehicle warranted by its manufacturer as capable of operating on any combination of gasoline or E85 for its onboard internal combustion or heat engine.

(5) HYBRID ELECTRIC VEHICLE.—The term "hybrid electric vehicle" means a vehicle that—

(A) can be propelled using liquid combustible fuel and electric power provided by an onboard battery; and

(B) utilizes regenerative power capture technology to recover energy expended in braking the vehicle for use in recharging the battery.

(6) PLUG-IN HYBRID ELECTRIC VEHICLE.—The term "plug-in hybrid electric vehicle" means a hybrid electric onroad light-duty vehicle that can be propelled solely on electric power for a minimum of 20 miles under city driving conditions, and that is capable of recharging its battery from an offboard electricity source.

(c) PROGRAM.—The Secretary shall conduct a program of research, development, demonstration, and commercial application on technologies needed for the development of plug-in hybrid electric vehicles and electric drive transportation, including—

(1) high capacity, high efficiency batteries, to—

(A) improve battery life, energy storage capacity, and power delivery capacity, and lower cost; and

(B) minimize waste and hazardous material production in the entire value chain, including after the end of the useful life of the batteries;

(2) high efficiency onboard and offboard charging components;

(3) high power drive train systems for passenger and commercial vehicles and for supporting equipment;

(4) onboard energy management systems, power trains, and systems integration for plug-in hybrid electric vehicles, flexible fuel plug-in hybrid electric vehicles, and hybrid electric vehicles, including efficient cooling systems and systems that minimize the emissions profile of such vehicles; and

(5) lightweight materials, including research, development, demonstration, and commercial application to reduce the cost of materials such as steel alloys and carbon fibers.

(d) PLUG-IN HYBRID ELECTRIC VEHICLE DEMONSTRATION PROGRAM.—

(1) ESTABLISHMENT.—The Secretary shall establish a competitive grant pilot demonstration program to provide not more than 25 grants annually to State governments, local governments and public entities, metropolitan transportation authorities, or combinations thereof to carry out a project or projects for demonstration of plug-in hybrid electric vehicles.

(2) APPLICATIONS.—

(A) REQUIREMENTS.—The Secretary shall issue requirements for applying for grants under the demonstration pilot program. The Secretary shall require that applications, at a minimum, include a description of how data will be—

(i) collected on the—

(I) performance of the vehicle or vehicles and the components, including the battery, energy management, and charging systems, under various driving speeds, trip ranges, traffic, and other driving conditions;

(II) costs of the vehicle or vehicles, including acquisition, operating, and maintenance costs, and how the project or projects will be self-sustaining after Federal assistance is completed; and

(III) emissions of the vehicle or vehicles, including greenhouse gases, and the amount of petroleum displaced as a result of the project or projects; and

(ii) summarized for dissemination to the Department, other grantees, and the public.

(B) PARTNERS.—An applicant under subparagraph (A) may carry out a project or projects under the pilot program in partnership with one or more private or nonprofit entities, which may include institutions of higher education, including Historically Black Colleges and Universities, Hispanic Serving Institutions, and other minority-serving institutions.

(3) SELECTION CRITERIA.—

(A) PREFERENCE.—When making awards under this subsection, the Secretary shall consider each applicant's previous experience involving plug-in hybrid electric vehicles and shall give preference to proposals that—

(i) provide the greatest demonstration per award dollar, with preference increasing as the number of miles that a plug-in hybrid electric vehicle can be propelled solely on electric power under city driving conditions increases; and

(ii) maximize the non-Federal share of project funding and demonstrate the greatest likelihood that each project proposed in the application will be maintained or expanded after Federal assistance under this subsection is completed.

(B) BREADTH OF DEMONSTRATIONS.—In awarding grants under this subsection, the Secretary shall ensure the program will demonstrate plug-in hybrid electric vehicles under various circumstances, including—

- (i) driving speeds;
- (ii) trip ranges;
- (iii) driving conditions;
- (iv) climate conditions; and
- (v) topography,

to optimize understanding and function of plug-in hybrid electric vehicles.

(4) PILOT PROJECT REQUIREMENTS.—

(A) SUBSEQUENT FUNDING.—An applicant that has received a grant in one year may apply for additional funds in subsequent years, but the Secretary shall not provide more than \$10,000,000 in Federal assistance under the pilot program to any applicant for the period encompassing fiscal years 2007 through fiscal year 2011.

(B) INFORMATION.—The Secretary shall establish mechanisms to ensure that the information and knowledge gained by participants in the pilot program are shared among the pilot program participants and are available to other interested parties, including other applicants.

(5) AWARD AMOUNTS.—The Secretary shall determine grant amounts, but the maximum size of grants shall decline as the cost of producing plug-in hybrid electric vehicles declines or the cost of converting a hybrid electric vehicle to a plug-in hybrid electric vehicle declines.

(e) COST SHARING.—The Secretary shall carry out the program under this section in compliance with section 988(a) through (d) and section 989 of the Energy Policy Act of 2005 (42 U.S.C. 16352(a) through (d) and 16353).

(f) AUTHORIZATION OF APPROPRIATIONS.—There are authorized to be appropriated to the Secretary—

(1) for carrying out subsection (c), \$100,000,000 for fiscal year 2008 and such sums as may be necessary for each of the fiscal years 2009 through 2011; and

(2) for carrying out subsection (d), \$50,000,000 for fiscal year 2008 and such sums as may be necessary for each of the fiscal years 2009 through 2011.

SEC. 9. PHOTOVOLTAIC DEMONSTRATION PROGRAM.

(a) SHORT TITLE.—This section may be cited as the "Solar Utilization Now Demonstration Act of 2006" or the "SUN Act of 2006".

(b) IN GENERAL.—The Secretary shall establish a program of grants to States to demonstrate advanced photovoltaic technology.

(c) REQUIREMENTS.—

(1) ABILITY TO MEET REQUIREMENTS.—To receive funding under the program under this section, a State must submit a proposal that demonstrates, to the satisfaction of the Secretary, that the State will meet the requirements of subsection (g).

(2) COMPLIANCE WITH REQUIREMENTS.—If a State has received funding under this section for the preceding year, the State must demonstrate, to the satisfaction of the Secretary, that it complied with the requirements of subsection (g) in carrying out the program during that preceding year, and that it will do so in the future, before it can receive further funding under this section.

(3) FUNDING ALLOCATION.—Except as provided in subsection (d), each State submitting a proposal that meets the requirements under subsection (c) shall receive funding under the program based on the proportion of United States population in the State according to the 2000 census. In each fiscal year, the portion of funds attributable under this paragraph to States that have not submitted proposals that meet the requirements under subsection (c) in the time and manner specified by the Secretary shall be distributed pro rata to the States that have submitted proposals that meet the requirements under subsection (c) in the specified time and manner.

(d) COMPETITION.—If more than \$80,000,000 is available for the program under this section for any fiscal year, the Secretary shall allocate 75 percent of the total amount of funds available according to subsection (c)(3), and shall award the remaining 25 percent on a competitive basis to the States with the proposals the Secretary considers most likely to encourage the widespread adoption of photovoltaic technologies. In awarding funds under this subsection, the Secretary may give preference to proposals that would demonstrate the use of newer materials or technologies.

(e) PROPOSALS.—Not later than 6 months after the date of enactment of this Act, and in each subsequent fiscal year for the life of the program, the Secretary shall solicit proposals from the States to participate in the program under this section.

(f) COMPETITIVE CRITERIA.—In awarding funds in a competitive allocation under subsection (d), the Secretary shall consider—

(1) the likelihood of a proposal to encourage the demonstration of, or lower the costs of, advanced photovoltaic technologies; and

(2) the extent to which a proposal is likely to—

(A) maximize the amount of photovoltaics demonstrated;

(B) maximize the proportion of non-Federal cost share; and

(C) limit State administrative costs.

(g) STATE PROGRAM.—A program operated by a State with funding under this section shall provide competitive awards for the demonstration of advanced photovoltaic technologies. Each State program shall—

(1) require a contribution of at least 60 percent per award from non-Federal sources, which may include any combination of State, local, and private funds, except that at least 10 percent of the funding must be supplied by the State;

(2) limit awards for any single project to a maximum of \$1,000,000;

(3) prohibit any nongovernmental recipient from receiving more than \$1,000,000 per year;

(4) endeavor to fund recipients in the commercial, industrial, institutional, governmental, and residential sectors;

(5) limit State administrative costs to no more than 10 percent of the grant;

(6) report annually to the Secretary on—

(A) the amount of funds disbursed;

(B) the amount of photovoltaics purchased; and

(C) the results of the monitoring under paragraph (7);

(7) provide for measurement and verification of the output of a representative sample of the photovoltaics systems demonstrated throughout the average working life of the systems, or at least 20 years;

(8) require that applicant buildings must have received an independent energy efficiency audit during the 6-month period preceding the filing of the application; and

(9) encourage Historically Black Colleges and Universities, Hispanic Serving Institutions, and other minority-serving institutions to apply for grants under this program.

(h) UNEXPENDED FUNDS.—If a State fails to expend any funds received under subsection (c) or (d) within 3 years of receipt, such remaining funds shall be returned to the Treasury.

(i) REPORTS.—The Secretary shall report to Congress 5 years after funds are first distributed to the States under this section—

(1) the amount of photovoltaics demonstrated;

(2) the number of projects undertaken;

(3) the administrative costs of the program;

(4) the amount of funds that each State has not received because of a failure to submit a qualifying proposal, as described in subsection (c)(3);

(5) the results of the monitoring under subsection (g)(7); and

(6) the total amount of funds distributed, including a breakdown by State.

(j) AUTHORIZATION OF APPROPRIATIONS.—There are authorized to be appropriated to the Secretary for the purposes of carrying out this section—

(1) \$50,000,000 for fiscal year 2008; and

(2) such sums as may be necessary for each of the fiscal years 2009 through 2011.

SEC. 10. ENERGY EFFICIENT BUILDING GRANT PROGRAM.

(a) ENERGY EFFICIENT BUILDING PILOT GRANT PROGRAM.—

(1) IN GENERAL.—Not later than 6 months after the date of enactment of this Act, the Secretary shall establish a pilot program to award grants to businesses and organizations for new construction of energy efficient buildings, or major renovations of buildings that will result in energy efficient buildings, to demonstrate innovative energy efficiency technologies, especially those sponsored by the Department.

(2) AWARDS.—The Secretary shall award grants under this subsection competitively to those applicants whose proposals—

(A) best demonstrate—
(i) likelihood to meet or exceed the standards referred to in subsection (b)(2);

(ii) likelihood to maximize cost-effective energy efficiency opportunities; and
(iii) advanced energy efficiency technologies; and

(B) maximize the leverage of private investment for costs related to increasing the energy efficiency of the building.

(3) CONSIDERATION.—The Secretary shall give due consideration to proposals for buildings that are likely to serve low and moderate income populations.

(4) AMOUNT OF GRANTS.—Grants under this subsection shall be for up to 50 percent of design and energy modeling costs, not to exceed \$50,000 per building. No single grantee may be eligible for more than 3 grants per year under this program.

(5) GRANT PAYMENTS.—
(A) INITIAL PAYMENT.—The Secretary shall pay 50 percent of the total amount of the grant to grant recipients upon selection.

(B) REMAINDER OF PAYMENT.—The Secretary shall pay the remaining 50 percent of the grant only after independent certification, by a professional engineer or other qualified professional, that operational buildings are energy efficient buildings as defined in subsection (b).

(C) FAILURE TO COMPLY.—The Secretary shall not provide the remainder of the payment unless the building is certified within 6 months after operation of the completed building to meet the requirements described in subparagraph (B), or in the case of major renovations the building is certified within 6 months of the completion of the renovations.

(6) REPORT TO CONGRESS.—Not later than 3 years after awarding the first grant under this subsection, the Secretary shall transmit to Congress a report containing—

(A) the total number and dollar amount of grants awarded under this subsection; and

(B) an estimate of aggregate cost and energy savings enabled by the pilot program under this subsection.

(7) ADMINISTRATIVE EXPENSES.—Administrative expenses for the program under this subsection shall not exceed 10 percent of appropriated funds.

(b) DEFINITION OF ENERGY EFFICIENT BUILDING.—For purposes of this section the term “energy efficient building” means a building that—

(1) achieves a reduction in energy consumption of—

(A) at least 30 percent for new construction, compared to the energy standards set by the 2004 International Energy Conservation Code (in the case of residential buildings) or ASHRAE Standard 90.1-2004; or

(B) at least 20 percent for major renovations, compared to energy consumption before renovations are begun;

(2) is constructed or renovated in accordance with the most current, appropriate, and applicable voluntary consensus standards, as determined by the Secretary, such as those listed in the assessment under section 914(b), or revised or developed under section 914(c), of the Energy Policy Act of 2005; and

(3) after construction or renovation—
(A) uses heating, ventilating, and air conditioning systems that perform at no less than Energy Star standards; or

(B) if Energy Star standards are not applicable, uses Federal Energy Management Program recommended heating, ventilating, and air conditioning products.

(c) AUTHORIZATION OF APPROPRIATIONS.—There are authorized to be appropriated to the Secretary for carrying out this section—

(1) \$10,000,000 for fiscal year 2008; and

(2) such sums as may be necessary for each of the fiscal years 2009 through 2011.

SEC. 11. ENERGY TECHNOLOGY TRANSFER.

Section 917 of the Energy Policy Act of 2005 (42 U.S.C. 16197) is amended to read as follows:

“SEC. 917. ADVANCED ENERGY TECHNOLOGY TRANSFER CENTERS.

“(a) GRANTS.—Not later than 18 months after the date of enactment of the Alternative Energy Research and Development Act, the Secretary shall make grants to non-profit 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, to be located in areas the Secretary determines have the greatest need of the services of such Centers. In establishing the network, the Secretary shall consider the special needs and opportunities for increased energy efficiency for manufactured and site-built housing, including construction, renovation, and retrofit. In making awards under this section, the Secretary shall—

“(1) give priority to applicants already operating or partnered with an outreach program capable of transferring knowledge and information about advanced energy efficiency methods and technologies;

“(2) ensure that, to the extent practicable, the program enables the transfer of knowledge and information—

“(A) about a variety of technologies and

“(B) in a variety of geographic areas; and

“(3) give preference to applicants that would significantly expand on or fill a gap in existing programs in a geographical region.

“(b) ACTIVITIES.—Each Center shall operate a program to encourage demonstration and commercial application of advanced energy methods and technologies through education and outreach to building and industrial professionals, and to other individuals and organizations with an interest in efficient energy use. Funds awarded under this section may be used for the following activities:

“(1) Developing and distributing informational materials on technologies that could use energy more efficiently.

“(2) Carrying out demonstrations of advanced energy methods and technologies.

“(3) Developing and conducting seminars, workshops, long-distance learning sessions, and other activities to aid in the dissemination of knowledge and information on technologies that could use energy more efficiently.

“(4) Providing or coordinating onsite energy evaluations, including instruction on the commissioning of building heating and cooling systems, for a wide range of energy end-users.

“(5) Examining the energy efficiency needs of energy end-users to develop recommended research projects for the Department.

“(6) Hiring experts in energy efficient technologies to carry out activities described in paragraphs (1) through (5).

“(c) APPLICATION.—A person seeking a grant under this section shall submit to the Secretary an application in such form and containing such information as the Secretary may require. The Secretary may award a grant under this section to an entity already in existence if the entity is otherwise eligible under this section. The application shall include, at a minimum—

“(1) a description of the applicant’s outreach program, and the geographic region it would serve, and of why the program would

be capable of transferring knowledge and information about advanced energy technologies that increase efficiency of energy use;

“(2) a description of the activities the applicant would carry out, of the technologies that would be transferred, and of any other organizations that will help facilitate a regional approach to carrying out those activities;

“(3) a description of how the proposed activities would be appropriate to the specific energy needs of the geographic region to be served;

“(4) an estimate of the number and types of energy end-users expected to be reached through such activities; and

“(5) a description of how the applicant will assess the success of the program.

“(d) SELECTION CRITERIA.—The Secretary shall award grants under this section on the basis of the following criteria, at a minimum:

“(1) The ability of the applicant to carry out the proposed activities.

“(2) The extent to which the applicant will coordinate the activities of the Center with other entities as appropriate, such as State and local governments, utilities, universities, and National Laboratories.

“(3) The appropriateness of the applicant’s outreach program for carrying out the program described in this section.

“(4) The likelihood that proposed activities could be expanded or used as a model for other areas.

“(e) COST-SHARING.—In carrying out this section, the Secretary shall require cost-sharing in accordance with the requirements of section 988 for commercial application activities.

“(f) DURATION.—

“(1) INITIAL GRANT PERIOD.—A grant awarded under this section shall be for a period of 5 years.

“(2) INITIAL EVALUATION.—Each grantee under this section shall be evaluated during its third year of operation under procedures established by the Secretary to determine if the grantee is accomplishing the purposes of this section described in subsection (a). The Secretary shall terminate any grant that does not receive a positive evaluation. If an evaluation is positive, the Secretary may extend the grant for 3 additional years beyond the original term of the grant.

“(3) ADDITIONAL EXTENSION.—If a grantee receives an extension under paragraph (2), the grantee shall be evaluated again during the second year of the extension. The Secretary shall terminate any grant that does not receive a positive evaluation. If an evaluation is positive, the Secretary may extend the grant for a final additional period of 3 additional years beyond the original extension.

“(4) LIMITATION.—No grantee may receive more than 11 years of support under this section without reapplying for support and competing against all other applicants seeking a grant at that time.

“(g) PROHIBITION.—None of the funds awarded under this section may be used for the construction of facilities.

“(h) DEFINITIONS.—For purposes of this section:

“(1) ADVANCED ENERGY METHODS AND TECHNOLOGIES.—The term ‘advanced energy methods and technologies’ means all methods and technologies that promote energy efficiency and conservation, including distributed generation technologies, and life-cycle analysis of energy use.

“(2) CENTER.—The term ‘Center’ means an Advanced Energy Technology Transfer Center established pursuant to this section.

“(3) DISTRIBUTED GENERATION.—The term ‘distributed generation’ means an electric power generation technology, including photovoltaic, small wind and micro-combined heat and power, that is designed to serve retail electric consumers on-site.

“(4) COOPERATIVE EXTENSION.—The term ‘Cooperative Extension’ means the extension services established at the land-grant colleges and universities under the Smith-Lever Act of May 8, 1914.

“(5) LAND-GRANT COLLEGES AND UNIVERSITIES.—The term ‘land-grant colleges and universities’ means—

“(A) 1862 Institutions (as defined in section 2 of the Agricultural Research, Extension, and Education Reform Act of 1998 (7 U.S.C. 7601));

“(B) 1890 Institutions (as defined in section 2 of that Act); and

“(C) 1994 Institutions (as defined in section 2 of that Act).

“(i) AUTHORIZATION OF APPROPRIATIONS.—In addition to amounts otherwise authorized to be appropriated in section 911, there are authorized to be appropriated for the program under this section such sums as may be appropriated.”

SEC. 12. GREEN ENERGY EDUCATION.

(a) DEFINITION.—For the purposes of this section:

(1) DIRECTOR.—The term “Director” means the Director of the National Science Foundation.

(2) HIGH PERFORMANCE BUILDING.—The term “high performance building” has the meaning given that term in section 914(a) of the Energy Policy Act of 2005 (42 U.S.C. 16194(a)).

(b) GRADUATE TRAINING IN ENERGY RESEARCH AND DEVELOPMENT.—

(1) FUNDING.—In carrying out research, development, demonstration, and commercial application activities authorized for the Department, the Secretary may contribute funds to the National Science Foundation for the Integrative Graduate Education and Research Traineeship program to support projects that enable graduate education related to such activities.

(2) CONSULTATION.—The Director shall consult with the Secretary when preparing solicitations and awarding grants for projects described in paragraph (1).

(c) CURRICULUM DEVELOPMENT FOR HIGH PERFORMANCE BUILDING DESIGN.—

(1) FUNDING.—In carrying out advanced energy technology research, development, demonstration, and commercial application activities authorized for the Department related to high performance buildings, the Secretary may contribute funds to curriculum development activities at the National Science Foundation for the purpose of improving undergraduate or graduate interdisciplinary engineering and architecture education related to the design and construction of high performance buildings, including development of curricula, of laboratory activities, of training practicums, or of design projects. A primary goal of curriculum development activities supported under this section shall be to improve the ability of engineers, architects, and planners to work together on the incorporation of advanced energy technologies during the design and construction of high performance buildings.

(2) CONSULTATION.—The Director shall consult with the Secretary when preparing solicitations and awarding grants for projects described in paragraph (1).

(3) PRIORITY.—In awarding grants with respect to which the Secretary has contributed

funds under this subsection, the Director shall give priority to applications from departments, programs, or centers of a school of engineering that are partnered with schools, departments, or programs of design, architecture, and city, regional, or urban planning, and due consideration to applications from Historically Black Colleges and Universities and other minority serving institutions.

SEC. 13. ARPA-E STUDY.

(a) IN GENERAL.—The Secretary shall enter into an arrangement with the National Academy of Sciences to conduct a detailed study of, and make further recommendations on, the October 2005 National Academy of Sciences recommendation to establish an Advanced Research Projects Agency-Energy (in this section referred to as ARPA-E).

(b) REPORT.—Not later than 12 months after the date of enactment of this Act, the Secretary shall transmit to Congress the study described in subsection (a) and the Secretary’s response to the findings, conclusions, and recommendations of that study.

(c) TERMS OF REFERENCE.—The Secretary shall ensure that the study described in subsection (a) addresses the following questions:

(1) What basic research related to new energy technologies is occurring now, what entities are funding it, and what is preventing the results of that research from reaching the market?

(2) What economic evidence indicates that the limiting factor in the market penetration of new energy technologies is a lack of basic research on pathbreaking new technologies? What barriers do those trying to develop new energy technologies face during later stages of research and development?

(3) To what extent is the Defense Advanced Research Projects Agency an appropriate model for an energy research agency, given that the Federal Government would not be the primary customer for its technology and where cost is an important concern?

(4) How would research and development sponsored by ARPA-E differ from research and development conducted by the National Laboratories or sponsored by the Department through the Office of Science, the Office of Energy Efficiency and Renewable Energy, the Office of Fossil Energy, the Office of Electricity Delivery and Energy Reliability, and the Office of Nuclear Energy?

(5) Should industry or National Laboratories be recipients of ARPA-E grants? What institutional or organizational arrangements would be required to ensure that ARPA-E sponsors transformational, rather than incremental, research and development?

SEC. 14. COAL METHANATION.

(a) PROGRAM.—The Secretary shall establish a program of research, development, demonstration, and commercial application of coal gasification facilities that convert coal into pipeline quality gaseous fuels for direct use or subsequent chemical or physical conversion.

(b) PROCEDURES.—The program established under subsection (a) shall be carried out using procedures described in title XVII of the Energy Policy Act of 2005.

SEC. 15. ALTERNATIVE BIOBASED FUELS AND ULTRA LOW SULFUR DIESEL.

(a) ALTERNATIVE FUEL AND ULSD INFRASTRUCTURE AND ADDITIVES RESEARCH AND DEVELOPMENT.—The Secretary, in consultation with the National Institute of Standards and Technology, shall carry out a program of research, development, demonstration, and commercial application of materials to be added to alternative biobased fuels and Ultra Low Sulfur Diesel fuels to make them more

compatible with existing infrastructure used to store and deliver petroleum-based fuels to the point of final sale. The program shall address—

(1) materials to prevent or mitigate—
(A) corrosion of metal, plastic, rubber, cork, fiberglass, glues, or any other material used in pipes and storage tanks;
(B) dissolving of storage tank sediments;
(C) clogging of filters;
(D) contamination from water or other adulterants or pollutants;
(E) poor flow properties related to low temperatures;

(F) oxidative and thermal instability in long-term storage and use;

(G) increased volatile emissions;

(H) microbial contamination;

(I) problems associated with electrical conductivity; and

(J) increased nitrogen oxide emissions;

(2) alternatives to conventional methods for refurbishment and cleaning of gasoline and diesel tanks, including tank lining applications; and

(3) other problems as identified by the Secretary in consultation with the National Institute of Standards and Technology.

(b) SULFUR TESTING FOR DIESEL FUELS.—

(1) PROGRAM.—The Secretary, in consultation with the National Institute of Standards and Technology, shall carry out a research, development, and demonstration program on portable, low-cost, and accurate methods and technologies for testing of sulfur content in fuel, including Ultra Low Sulfur Diesel and Low Sulfur Diesel.

(2) SCHEDULE OF DEMONSTRATIONS.—Not later than 1 year after the date of enactment of this Act, the Secretary shall begin demonstrations of technologies under paragraph (1).

(c) STANDARD REFERENCE MATERIALS AND DATA BASE DEVELOPMENT.—Not later than 6 months after the date of enactment of this Act, the National Institute of Standards and Technology shall develop a physical properties data base and standard reference materials for alternative fuels. Such data base and standard reference materials shall be maintained and updated as appropriate as additional alternative fuels become available.

SEC. 16. BIOENERGY.

(a) AUTHORIZATION OF APPROPRIATIONS.—Section 931 of the Energy Policy Act of 2005 (42 U.S.C. 16231) is amended—

(1) in subsection (c)(1), by inserting “, including \$25,000,000 for section 932(d)(1)(B)(v)” after “section 932(d)”;

(2) in subsection (c)(2), by inserting “, including \$25,000,000 for section 932(d)(1)(B)(v)” after “section 932(d)”;

(3) in subsection (c)(3), by inserting “, including \$25,000,000 for section 932(d)(1)(B)(v)” after “section 932(d)”.

(b) BIOENERGY PROGRAM.—Section 932(d)(1)(B) of the Energy Policy Act of 2005 (42 U.S.C. 16232(d)(1)(B)) is amended—

(1) by striking “and” at the end of clause (iii); and

(2) by adding after clause (iv) the following new clause:

“(v) biodegradable natural plastics from biomass; and”.

The SPEAKER pro tempore. Pursuant to the rule, the gentlewoman from Illinois (Mrs. BIGGERT) and the gentleman from Tennessee (Mr. GORDON) each will control 20 minutes.

The Chair recognizes the gentlewoman from Illinois.

GENERAL LEAVE

Mrs. BIGGERT. Mr. Speaker, I ask unanimous consent that all Members may have 5 legislative days to revise and extend their remarks and to include extraneous material on H.R. 6203, the bill now under consideration.

The SPEAKER pro tempore. Is there objection to the request of the gentleman from Illinois?

There was no objection.

Mrs. BIGGERT. Mr. Speaker, I yield myself such time as I may consume.

I rise today in strong support of H.R. 6203, the Alternative Energy and Research Development Act.

As its title suggests, this bill is designed to advance development of a number of alternative energy technologies by establishing policy goals and focusing research on key technical challenges.

Building on the excellent R&D provisions the Science Committee included in the Energy Policy Act of 2005, or EPACT, H.R. 6203 supports the development of biofuels from cellulose, meaning feedstocks other than corn; biodegradable natural plastics from biomass; technologies for hydrogen storage onboard vehicles; advanced solar technologies that are economical and make solar power cost competitive in a decade; technologies that minimize the cost and environmental impact and maximize the efficiency of harnessing the power of the wind; and advanced battery technologies specifically for plug-in hybrid electric vehicles.

In addition to requiring the DOE to continue carrying out the geothermal energy, hydropower distributor and cogeneration research authorized in EPACT, H.R. 6203 supports research to convert coal into pipeline quality gaseous fuels.

The bill also promotes energy conservation in three important ways. First, it provides incentives for the construction of energy efficient buildings. Today's buildings consume 50 percent of the Nation's supply of natural gas and 70 percent of its electricity, more energy than any other sector of the economy, including industry and transportation.

Second, the bill offers grants to States who deploy solar cells and purchase plug-in hybrid electric vehicles.

Finally, it establishes a cooperative extension program to encourage the use of advanced energy technologies patterned after the successful agricultural extension programs that aided farmers in incorporating advanced technologies and food production.

H.R. 6203 is a modified version of H.R. 5656, which was approved by the Science Committee in July. Like most bills that emerge from the Science Committee, H.R. 6203 represents a compilation of great ideas from a number of members of the committee, including my colleagues from Texas, LAMAR SMITH and MIKE McCAUL. And I would

especially like to thank the ranking member, Mr. GORDON, for his leadership and his additions to the bill. The bill was further perfected in committee by Representatives RALPH HALL, DORIS MATSUI, LYNN WOOLSEY, SHEILA JACKSON-LEE, EDDIE BERNICE JOHNSON, KEN CALVERT, AL GREEN, BRIAN BAIRD, and BRAD MILLER. I want to thank my colleagues on the committee for their contributions. H.R. 6203 is the product of a truly bipartisan effort.

Mr. Speaker, high natural gas prices and the summer spike in gasoline prices serve as a stark reminder that the path to energy independence is a long and arduous one.

□ 1945

To make significant progress down this path requires a steadfast commitment from Congress and the Federal Government to support the development of advanced energy technologies and alternative fuels that will help end our addiction to oil and gasoline.

The bill we are considering today would do just that in a fiscally responsible way. In some cases, it gives new direction to research funding authorized in EPACT. In others, the House already has appropriated funds for the programs.

I urge my colleagues to support H.R. 6203.

Mr. Speaker, I reserve the balance of my time.

Mr. GORDON. Mr. Speaker, I yield myself such time as I may consume.

Mr. Speaker, I rise in support of H.R. 6203. This bill is very similar to Mrs. BIGGERT's H.R. 5656 which the Science Committee passed favorably in June. We support the changes that were made and believe they express some of the concerns our Members had with H.R. 5656.

The original bill contained a number of important provisions from Democratic Members, and I want to thank Chairwoman BIGGERT for working with us to include them in this most recent version. I am especially pleased to see my bill, H.R. 5658, included as section 15 of this bill.

If our country is serious about reducing our dependency on foreign oil, we need to get serious about mobilizing the infrastructure necessary to distribute and dispense the next generation of fuels.

The bill instructs the Department of Energy and the National Institute of Standards and Technology to research fuel additives and other technologies that would make biodiesel fuels more compatible with the country's petroleum-based infrastructure.

My bill, contained in section 15, also addresses potential challenges as fuel suppliers transition to ultra-low sulfur diesel, a fuel significantly cleaner than traditional diesel.

This section instructs the Department of Energy and NIST to develop

portable, low-cost, and accurate methods suppliers can use to test sulfur content in fuels. It should be noted that in no way is this meant to interfere with the authority or activities of the EPA to continue the successful transition to ultra-low sulfur diesel or other fuels programs. It is intended to assist companies that are complying with EPA's programs, and I encourage DOE and NIST to coordinate these activities with EPA.

While I support Mrs. BIGGERT's bill, I personally believe the committee should be sending a stronger message regarding the future of high-risk, high-payoff energy R&D.

Specifically, we should move towards the establishment of an Advanced Research Projects Agency for Energy, or ARPA-E, as directed in my bill, H.R. 4435.

There is a need for an organization capable of finding and promoting research breakthroughs and converting those findings into potentially transformational energy technologies that will make this country more energy self-sufficient.

Mr. Speaker, all in all, I believe this is a good bill with some strong energy research programs. I urge its adoption.

Mr. Speaker, I reserve the balance of my time.

Mrs. BIGGERT. Mr. Speaker, I recognize a valuable member of the Science Committee, the gentleman from Texas (Mr. SMITH) for 3 minutes.

Mr. SMITH of Texas. Mr. Speaker, first of all, I would like to thank the gentlewoman from Illinois, who is the chairman of the Science Committee's Subcommittee on Energy for yielding to me; and I want to express my appreciation to Mrs. BIGGERT for assembling this legislation, which will contribute mightily to our energy independence.

H.R. 6203, the Alternative Energy Research and Development Act, incorporates two pieces of legislation that I introduced: the Plug-in Hybrid Electric Vehicle Act of 2006 and the Solar Utilization Now, or SUN Act, of 2006. They will reduce our Nation's dependence on foreign sources of oil by promoting plug-in hybrid vehicles and the use of solar power.

The Plug-in Hybrid Electric Vehicle Act establishes a partnership between public and private entities and requires the Secretary of Energy to carry out a program of research and development for plug-in hybrid electric vehicles and electric drive transportation technology. The goal is to develop a plug-in vehicle that can travel up to 40 miles on battery power alone.

The bill also establishes a pilot program of grants to State and local governments and metropolitan transportation authorities.

Congress has a responsibility to help promote this new technology.

I introduced the SUN Act of 2006 because the answer to much of our energy needs in fact comes up every

morning. The goal of this legislation is to make electricity from solar power cost-competitive by 2015. The SUN Act encourages State governments and private industry to team up to apply for Federal grants. Solar power is clean, plentiful, and it generates zero emissions and zero waste.

The Federal Government needs to ensure that the research and development of alternative energy technologies continues. Americans are concerned about high gas prices, our dependence on foreign oil and global warming. This bill addresses those concerns and is good for our energy security, national security and environmental security.

Mr. Speaker, I want to thank Congresswoman BIGGERT for taking the lead on these issues and for getting this package to the House floor.

Mr. GORDON. Mr. Speaker, we have no other requests for time, and I yield back the balance of my time.

Mrs. BIGGERT. Mr. Speaker, I recognize another member of the Science Committee who has worked hard in this area, the gentleman from Texas (Mr. MCCALL), for 2 minutes.

Mr. MCCALL of Texas. Mr. Speaker, I want to first thank Congresswoman BIGGERT for her leadership on this bill. We have worked very hard to get to this point to get this bill on the floor. I was very proud to be a part of it. I thank you again for your leadership. And I thank Congressman KIRK for helping us in this effort and my colleague from Texas, Mr. SMITH, for his hard work.

This alternative energy legislation is crucial for America. But it isn't just an alternative energy issue. It is also very much a national security issue. For some time now, we in the Congress have been pushing towards reducing America's addiction to foreign sources of oil. This is a giant step in the right direction. This bill will provide research and development for energy independence, for clean energy technologies, for plug-in hybrid vehicles, solar power, wind, biofuels, clean coal technologies, and hydrogen.

If passed, this visionary legislation will put us on the track to provide cheaper and more reliable alternatives to fossil fuels and will work to provide a cleaner environment for our children and our grandchildren.

I want to thank our colleagues on the other side of the aisle for their strong support of this legislation as well. It is an important bill for America's energy future.

Mrs. BIGGERT. Mr. Speaker, I recognize the gentleman from Tennessee (Mr. WAMP), who is not a member of the Science Committee but has been so helpful as a member of the Policy Committee and of the Appropriations Committee, and I yield 3 minutes.

Mr. WAMP. Mr. Speaker, I thank Mrs. BIGGERT and Mr. GORDON for their leadership.

For 6 years, I have had the privilege of serving as the co-Chair in the House of the Renewable Energy Efficiency Caucus with MARK UDALL of Colorado, which is over half of the House. They have a similar caucus in the Senate. There is widespread bipartisan support for these programs. I think it is so important that we do this.

I want to say that one of the under-reported stories of the last 2 years is the impact of last year's energy bill, the final agreement. I didn't support the House bill, but I supported the final bill because the Senate made it so much better, advanced especially the production of ethanol. There are at least 41 new ethanol plants under construction across America today because alternative fuels is what we need to advance.

Leadership cries out for us to do what we need to do for the next generation with respect to energy, regardless of what energy costs today. Some people think if it is \$4 a gallon you have to make changes, but if it is \$2 a gallon you don't need to. No, we need to. And leadership cries out for us to be aggressive.

And I am a conservative. Sometimes conservatives forget we are supposed to conserve, to save, to be efficient. Plus our dependence on other sources of energy is causing our country to not be independent and to really be vulnerable. So this is a security issue.

I think, frankly, if we don't do things like this we are being penny-wise and pound-foolish. These initiatives are real. They are substantive. This is a great first step.

It is really a second step. I think EPACT was the first step. This is the second step. I would even argue next year we need to do a third step and continue to advance this cause.

We didn't balance the budget for 3 years by cutting spending. We did slow the rate of growth of spending, but we balanced the budget because the economy grew because we led the world in information. EARL BLUMENAUER, from out on your side of this country. The Microsoft explosion was a robust, U.S. manufacturing export-driven economy where revenues surpassed expenses and we balanced the budget.

We can do that again, solving the world's energy problems because we are the smartest people in the world. A dynamic, export-driven economy if we will invest in energy solutions for the world, and you can't just expect it to happen. The government plays a role. We have to lead on this issue.

This is a double negative, but I with close with this: We cannot afford not to do this. That is what the House needs to understand. We cannot afford not to do this. Please support this bill, move it forward, and then let's go further in the 110th Congress.

Mr. GORDON. Mr. Speaker, will the gentleman yield?

Mr. WAMP. I yield to the gentleman from Tennessee.

Mr. GORDON. Let me just add my voice to my friend and colleague from Tennessee to say he has been a strong, consistent leader in this area, and I want to thank you for that. It has made this Congress better for your efforts.

Mr. WAMP. Reclaiming my time, thank you for your leadership, and thank you, Mrs. BIGGERT.

Mrs. BIGGERT. Mr. Speaker, I recognize the gentleman from Illinois (Mr. KIRK). He has been the chairman of the Suburban Caucus, and this bill has been on the Suburban Caucus list for those bills that are important to not only suburban areas but all over the country, and I yield 2 minutes.

Mr. KIRK. Mr. Speaker, I thank my colleague from Illinois who put together this legislation as a leader in Congress. Along with Congressman MCCALL of Texas, you have outlined an alternative energy and renewable fuels future for the country in a bipartisan way, along with the gentleman from Tennessee.

The U.S. imports nearly 5 billion barrels of oil a year. And there has been a recent decline in the price of gas across the United States, but we need oil independence to protect us from a volatile world of oil markets, increasing global pollution, and unstable leaders in Iran and Venezuela. We know that alternative energy and renewable fuels equals national security for the United States.

This legislation will accelerate the development of advanced and clean technologies. It promotes the implementation of solar photovoltaic, wind, geothermal and hydropower. It establishes a research and development program for the conversion of coal into pipeline-quality fuel.

In my State of Illinois, we have a 250-year American supply of coal, one of the largest supplies in the United States; and with the development of clean coal technology we can better utilize a vast resource to help out the energy independence of the United States.

The grants, incentives and programs established in this bipartisan bill have the potential to save American consumers billions of dollars, create thousands of new jobs and dramatically decrease energy consumption and pollution. In achieving the goals set forth in this bipartisan bill, we end our addiction to foreign oil and enhance our national security.

Mr. Speaker, on a day in which we look at the loss of a colleague in this House, in which we see vigorous foreign policy debate, what is being missed without a single reporter in the gallery is bipartisan legislation working on an alternative-energy future for the Nation. It is a story that should not be missed, both parties joining together

to make sure that we enhance renewable and alternative fuels and that we make sure that America leads.

Mrs. BIGGERT. Mr. Speaker, I recognize the gentleman from Maryland (Mr. BARTLETT), a long-time member of the Science Committee, for 3 minutes.

Mr. BARTLETT of Maryland. Mr. Speaker, there have been in the last couple of years two major government-sponsored studies on energy. One was a big SAIC report, commonly called the Hirsch Report. The other was a more recent report by the Corps of Engineers, and both of them reached essentially the same conclusion.

□ 2000

The world has either peaked in oil production, conventional oil production, or it will shortly peak in oil production with potentially devastating consequences. The Hirsch report said that the world has never faced a problem like this, that mitigation consequences will be unprecedented.

Today I got across my desk a flyer from a group here on the Hill that said that we ought to be cautious about this suspension vote because some new programs were suggested here. I hope, Mr. Speaker, that some new programs are suggested here because the reality is the Hirsch report said if you didn't anticipate the peaking of oil, in 20 years there were going to be economic consequences.

We knew 25 years ago that this was a reality. By 1980, 1981, we absolutely knew that M. King Huppert was right. The United States had peaked in 1970. We are well down that slope now. He predicted the world would be peaking about now.

I hope, Mr. Speaker, that there are a lot of new programs in here because we don't have 10 years. We don't have 20 years. I think we have essentially run out of time. We have run out of energy.

And don't be lulled into complacency by this find of oil in the gulf. Instead of our responding, saying here is some energy and we can invest in alternatives, what we have said is, I don't need to buy that hybrid now; I can now buy an SUV. We have exactly the wrong response to this.

Please, this is a great bill. I hope there are new programs in it. My only complaint with the bill is it doesn't have enough new programs in it.

Thank you very much for a great bill. Everybody should vote "yes" on this.

Mr. GORDON. Mr. Speaker, I ask unanimous consent to reclaim my time.

The SPEAKER pro tempore. Is there objection to the request of the gentleman from Tennessee?

There was no objection.

Mr. GORDON. Mr. Speaker, I yield 2 minutes to the gentlewoman from Texas (Ms. JACKSON-LEE).

Ms. JACKSON-LEE of Texas. Mr. Speaker, let me rise in support of this

legislation and ask my colleagues to support it and thank the gentlewoman from Illinois and the gentleman from Tennessee for their leadership and to comment on how the Science Committee provides such a contribution in a bipartisan way of looking at the next generation of alternative fuels.

Representing what has been called the "energy capital of the world," I know the use of fossil fuels, oil, gas, coal. And, frankly, I believe that energy connotes opportunity, new energy alternatives, and our companies are called "energy companies." So this gives us the opportunity in a bipartisan way to take this country forward.

I will drop tonight legislation that deals with cellulose research on ethanol to encourage the production of ethanol in a different manner. And I hope that as we are dependent at this time on oil, gas, and coal that we will also look to the research opportunities that have been created by this legislation and the forward-thinking aspects that this legislation generates. Research, investment in research, generates value for the consumers, efficiency for the consumers, and low cost for the consumers.

And, frankly, all of the dialogue that we have had, whether we are for or against wars that are raging around the world, all of us have discussed the question of dependency on foreign energy resources. This legislation allows us in a thoughtful manner to create a pathway of independence for America.

And I want to thank the gentleman for yielding and thank the gentlewoman and ask my colleagues to support this legislation. And I hope in the Science Committee in the 110th Congress we will be in the forefront of alternative energies because I would be delighted to have those same energy companies in Houston, Texas, of which I know may be listening and certainly not fearful because we are using oil and we are using gas, but in any event to diversify and utilize alternative fuels, and I think we will be the better for it. I ask my colleagues to support it.

Mr. GORDON. Mr. Speaker, I yield such time as he may consume to the gentleman from Arizona (Mr. FLAKE).

Mr. FLAKE. Mr. Speaker, I thank the gentlewoman and the gentleman for yielding.

I just think there ought to be somebody who stands and says that research like this is going on in the private sector, continually, as it should be. That is where it ought to be. I hope that we can reach more energy independence. But when we look at the situation that we have now with a massive deficit and a huge debt, I think it is too much to ask, particularly given the oil prices where they are and the fact that there are huge profits being made by oil companies who have plenty of room to actually fund a lot of this research on their own, and it is a little too much to

ask taxpayers, in my view, to come in. And I have heard the price tag to be somewhere around \$400 million. That would seem to me to be a bit steep.

So I for one do not support the legislation. I know that it has overwhelming broad bipartisan support, and I am not hopeful that my views will prevail. But I just want to add that I think that this, for the taxpayers at this time, is not a wise move.

Mrs. BIGGERT. Mr. Speaker, I yield 1 minute to Mr. BARTLETT from Maryland.

Mr. BARTLETT of Maryland. Mr. Speaker, we have 2 percent of the non-reserves of oil. We use 25 percent of the world's oil. We import almost two-thirds of what we use. Ten years from now when we look back, our regret is going to be that there wasn't ten times as much money in this bill for these programs.

This is desperately needed. The market is neither omniscient nor omnipotent. It will not solve this problem. If this government does not solve it, it won't be solved because the private sector cannot do it. We need real leadership in this area, and that is a major responsibility of government.

And again I say mark it down. Ten years from now you will look back and say why wasn't there ten times as much money in that bill because we really needed it?

This falls far short of what we ought to be doing, but at least it is something. Please vote for it.

Mrs. BIGGERT. Before I close, Mr. Speaker, I would like to insert in the RECORD an exchange of letters between the Committees on Science and Education and the Workforce.

COMMITTEE ON EDUCATION AND THE WORKFORCE, HOUSE OF REPRESENTATIVES, 2181 RAYBURN HOUSE OFFICE BUILDING,

Washington, DC, September 29, 2006.

Hon. SHERWOOD BOEHLERT,
Chairman, Committee on Science, 2320 Rayburn HOB, Washington, DC.

DEAR CHAIRMAN BOEHLERT: I am writing to confirm our mutual understanding with respect to consideration of H.R. 6203, to provide for Federal energy research, development, demonstration, and commercial application, activities, and for other purposes. Education provisions in Section 12 of the bill as introduced are within the jurisdiction of the Committee on Education and the Workforce.

Given the importance of moving this bill forward promptly, I will not request the referral of H.R. 6203 to the Committee on Education and the Workforce. However, I do so only with the understanding that this procedural route should not be construed to prejudice the Committee on Education and the Workforce's jurisdictional interest and prerogative on these provisions or any other similar legislation and will not be considered as precedent for consideration of matters of jurisdictional interest to my Committee in the future.

Finally, I ask that you include a copy of our exchange of letters in the Congressional Record during the consideration of H.R. 6203.

If you have questions regarding this matter, please do not hesitate to contact me.

Sincerely,

HOWARD P. "BUCK" MCKEON,
Chairman.

HOUSE OF REPRESENTATIVES,
COMMITTEE ON SCIENCE,
Washington, DC, September 29, 2006.

Hon. HOWARD P. "BUCK" MCKEON,
*Chairman, Committee on Education and the
Workforce, 2181 Rayburn House Office
Building, Washington, DC.*

DEAR MR. CHAIRMAN: Thank you for your letter regarding the consideration of H.R. 6203, the Alternative Energy Research and Development Act. I appreciate your waiving your Committee's right to a referral on this bill so that it can move expeditiously to the floor.

I recognize your Committee's jurisdiction over education provisions in Section 12 of the bill and will support any request you may make to have conferees on H.R. 6203 or similar legislation. The exchange of letters between our two committees will be included in the Congressional Record when the bill is considered on the floor.

Thank you for your attention to this matter.

Sincerely,

SHERWOOD BOEHLERT,
Chairman.

Mr. Speaker, yesterday's headlines announced that the national average price of gasoline dropped another 12 cents in the last week, the seventh straight week that gasoline prices have fallen. That is certainly good news for the American consumer in the U.S., and businesses.

However, we cannot allow ourselves to be lulled into a sense of complacency whenever the price of gasoline drops. We have to face the fact that we cannot meet today's energy needs, much less tomorrow's, with yesterday's energy infrastructure and technology. We must reduce our reliance on expensive natural gas and Mid-Eastern oil and instead encourage the use of clean, efficient alternatives like solar, wind, hydrogen, and biofuels. These advanced energy technologies offer the best hope for diversifying energy supplies. They can improve efficiency. They can promote conservation. And perhaps most importantly, they can bring us ever closer to ending our reliance on Mid-Eastern oil.

I want to thank the staff who worked so hard to bring this bill to the floor today, including Bill Koetzle in the Speaker's office and Michael Ference in the majority whip's office. And I want to thank the staff of the Science Committee for all their hard work on this bill and the many others we have worked on together over the past years. And particularly I want to commend David Goldston for his tireless efforts on behalf of the committee and its chairman. Both he and my good friend, Chairman BOEHLERT, will be missed.

Again, I urge my colleagues to support H.R. 6203.

Mr. BOEHLERT. Mr. Speaker, I rise in strong support of this bill, but I rise mostly to

praise the Members who have contributed to it: Chairman JUDY BIGGERT, and Congressmen LAMAR SMITH and MIKE MCCAUL not only wrote the excellent provisions of this bill, but it's been their persistence that has enabled it to come to the floor today. I also want to recognize my ranking Member, Mr. GORDON, and his colleagues, who have also contributed provisions to this bill.

This bill should be one of the easiest votes we cast this Congress and certainly today. The bill commits our Nation to conducting more research and development on the technologies that will reduce our dependence on foreign oil. That includes biomass, solar, wind, hydrogen, and hybrid vehicle technologies. It's a non-controversial list; indeed, it's a must-do list.

Many of the provisions in the bill originated with the President's Advanced Energy Initiative.

This bill is quite frankly the bare minimum we can do; it establishes the R&D foundation we need to build from. I urge my colleagues to support this valuable measure.

Mr. HONDA. Mr. Speaker, I rise in support of H.R. 6203, which is very similar to a bill we marked up earlier this year in the Science Committee, with some of the more expensive and contentious elements taken out.

I'm pleased that this bill, which enjoys bipartisan support, contains amendments offered by a number of my colleagues in committee, including Mr. BAIRD, Ms. EDDIE BERNICE JOHNSON, Mr. BRAD MILLER, Ranking Member GORDON, Ms. MATSUI, Mr. AL GREEN, Ms. WOOLSEY, Ms. JACKSON-LEE.

The bill addresses research on a wide range of important energy technologies, including advanced biofuels, hydrogen storage, wind energy, plug in hybrid vehicles, energy efficient buildings, and alternative biobased fuels and ultra low sulfur diesel.

The bill also establishes programs for energy technology transfer and green energy education, and calls for a study of an advanced Research Projects Agency for Energy.

I'm particularly pleased that the bill includes research on advanced solar photovoltaic technologies and a photovoltaic demonstration program. In August, Chairwoman BIGGERT and I held a field hearing in my district that focused on photovoltaics.

At the hearing, the witnesses, and let me just note there were 2 Nobel Prize winners on the panel, described how the relatively high cost current supply constraints associated with currently available solar technologies are limiting adoption. But they also outlined several research directions that will help reduce costs and ease manufacturing, which will expand availability.

So I'm glad that this bill will help move that research along and establish a demonstration program to speed adoption, with the goal of making electricity generated by solar photovoltaic power cost-competitive by 2015.

I have some concerns about the ramifications of the coal methanation section in the area of greenhouse gas emissions. While I want to reduce America's dependence on foreign oil as much as anyone, in doing so we need to be mindful of the harmful effects of global climate change.

Converting coal to liquid or gaseous fuels results in much greater carbon dioxide emis-

sions than for conventional crude oil derived hydrocarbon fuels. I hope that any plants built using such an approach will incorporate carbon capture and storage, in order to keep those gases out of our atmosphere.

The rapid development of alternative energy sources is essential to our nation's security, and while I wish we could do more, I'm happy to support the efforts included in H.R. 6203 and ask my colleagues to vote for it.

Mrs. BIGGERT. Mr. Speaker, I yield back the balance of my time.

The SPEAKER pro tempore. The question is on the motion offered by the gentlewoman from Illinois (Mrs. BIGGERT) that the House suspend the rules and pass the bill, H.R. 6203.

The question was taken; and (two-thirds having voted in favor thereof) the rules were suspended and the bill was passed.

A motion to reconsider was laid on the table.

GENERAL LEAVE

Mrs. BIGGERT. Mr. Speaker, I ask unanimous consent that all Members may have 5 legislative days in which to revise and extend their remarks and include extraneous material on Senate 3661.

The SPEAKER pro tempore. Is there objection to the request of the gentlewoman from Illinois?

There was no objection.

SUPPORTING THE GOALS AND IDEALS OF RED RIBBON WEEK

Mr. DEAL of Georgia. Mr. Speaker, I move to suspend the rules and agree to the resolution (H. Res. 1028) supporting the goals and ideals of Red Ribbon Week.

The Clerk read as follows:

H. Res. 1028

Whereas the purpose of the Red Ribbon Campaign is to commemorate the service of Enrique "Kiki" Camarena, a Drug Enforcement Administration Special Agent who died in the line of duty in 1985 while engaged in the battle against illicit drugs;

Whereas the Red Ribbon Campaign is nationally recognized and is in its twenty-first year of celebration, helping to preserve Special Agent Camarena's memory and further the cause for which he gave his life;

Whereas the Governors and Attorneys General of the States, the National Family Partnership, Parent Teacher Associations, Boys and Girls Clubs of America, and more than 100 other organizations throughout the United States annually cosponsor Red Ribbon Week during the period of October 23 through October 31;

Whereas the objective of Red Ribbon Week is to promote drug-free communities through drug prevention efforts, education, parental involvement, and community-wide support;

Whereas drug and alcohol abuse contributes to domestic violence and sexual assaults, and places the lives of children at risk;

Whereas drug abuse is one of the major challenges that the Nation faces in securing a safe and healthy future for families and children;