

This bill also authorizes USFA to focus on the pressing challenges of fires involving hazardous materials as well as advanced topics in emergency medical services.

This legislation is the product of bipartisan collaboration and is supported by major fire service organizations, including the International Association of Fire Chiefs, the International Association of Fire Fighters, the National Volunteer Fire Council, the National Fire Protection Association, and the Congressional Fire Services Institute.

The Senate passed S. 2606 unanimously on September 18, 2008. I urge my colleagues to support this vital legislation, bringing it one step closer to becoming law.

Ms. EDWARDS of Maryland. 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 Maryland (Ms. EDWARDS) that the House suspend the rules and pass the Senate bill, S. 2606.

The question was taken.

The SPEAKER pro tempore. In the opinion of the Chair, two-thirds being in the affirmative, the ayes have it.

Mr. HALL of Texas. 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 motion will be postponed.

□ 1600

EXPRESSING SUPPORT FOR THE DESIGNATION OF A 4-H NATIONAL YOUTH SCIENCE DAY

Ms. EDWARDS of Maryland. Mr. Speaker, I move to suspend the rules and agree to the resolution (H. Res. 1390) expressing support for the designation of a 4-H National Youth Science Day.

The Clerk read the title of the resolution.

The text of the resolution is as follows:

H. RES. 1390

Whereas barely 18 percent of 12th grade students perform at or above the proficient level in science;

Whereas the need for science education, especially outside the classroom, is crucial to our country's ability to remain globally competitive;

Whereas today only 32.4 percent of undergraduates in the United States are leaving college with a bachelor's degree in science or engineering, compared to 63.3 percent in Japan, 62.1 percent in Germany, and 56.2 percent in China;

Whereas American businesses will face a competitive crisis with the advancing science- and technology-driven global economy unless they have a workforce that has been trained in scientific fields;

Whereas the future global economy will be driven by market sectors that are based in science, engineering, and technology;

Whereas current scientists and engineers are retiring in record numbers, creating a potentially large void of skilled workers;

Whereas 4-H and other out-of-school programs that focus on science, engineering and technology are an important part of edu-

cating and developing leaders who are well-trained and technically competent;

Whereas 4-H is preparing America's future workforce by developing their passion for science, engineering, and technology at an early age;

Whereas 4-H's educational programs have an unparalleled reach of more than 6,000,000 youth in all 50 States;

Whereas 4-H, in partnership with more than 106 land-grant universities, shape programs in the sciences that are important to today's workforce and critical for managing the world's resources for years to come;

Whereas youth, parents, teachers, schools, and youth organizations have the ability to participate in fun, accessible, science-related activities that encourage youth exploration and experimentation at an early age; and

Whereas October 8, 2008 would be an appropriate day to designate as 4-H National Youth Science Day: Now, therefore, be it

Resolved, That the House of Representatives—

(1) expresses support for the designation of a 4-H National Youth Science Day;

(2) requests that the President issue a proclamation calling upon the people of the United States to observe 4-H National Youth Science Day;

(3) encourages the people of the United States to observe the day with appropriate ceremonies and activities; and

(4) encourages young people of all ages and backgrounds to pursue science studies and enter into science careers.

The SPEAKER pro tempore. Pursuant to the rule, the gentlewoman from Maryland (Ms. EDWARDS) and the gentleman from Texas (Mr. HALL) each will control 20 minutes.

The Chair recognizes the gentlewoman from Maryland.

GENERAL LEAVE

Ms. EDWARDS of Maryland. Mr. Speaker, I ask unanimous consent that all Members may have 5 legislative days to revise and extend their remarks and include extraneous material on H. Res. 1390, the resolution now under consideration.

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

There was no objection.

Ms. EDWARDS of Maryland. Mr. Speaker, I yield myself such time as I may consume.

Mr. Speaker, I rise today in strong support of House Resolution 1390 and 4-H programs across America. 4-H works with over 6 million youths in all 50 States to help develop citizenship, leadership and life skills. 4-H has been doing this and doing it well for over 100 years.

What some people may not know is that one of 4-H's primary focuses today is in the area of science and technology. Through its summer camps, fairs, cultural events and other programs, 4-H has focused on the goal of providing American youths with a solid background in science and technology. Moreover, 4-H programs get children excited and interested in these fields, which we know is a critical element in a child's education success in the sciences.

As this resolution correctly points out, American students consistently rank behind our international peers in

the fields of science and technology. We clearly need to do more if we want to ensure that the next generation of Americans have the high-tech skills to compete in the global marketplace. That is why it is so important that organizations like 4-H continue to do the excellent work they are doing.

I would like to thank the sponsor of this resolution, Mr. CARDOZA, for recognizing the importance of the work of 4-H in the advancement of science, and I urge my colleagues to support this resolution.

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

Mr. HALL of Texas. Mr. Speaker, I yield myself such time as I may consume.

Mr. Speaker, the resolution before us today would designate October 8 as 4-H National Youth Science Day. I, as well as 21 other Members of this body, was a proud member of 4-H and know firsthand the good work that this organization performs. "Head, heart, hands and health," that is what the four Hs stand for.

With over 6 million youth participating, it is a much larger organization today than it was when I was a boy, but it has the focus of helping young people reach their full potential. That focus remains the same.

As we discuss frequently on this floor, and as the newspapers reflect almost daily, our innovative spirit is the stronghold of the Nation's success. But we must do a better job of energizing our children to be interested in science, engineering and technology if we are to remain the world's leader in innovation.

The purpose of the 4-H National Youth Science Day is to do just that. The National Science Experiment is the designated activity for the first annual 4-H National Youth Science Day and will focus on water conservation. Through this special day and through its science, engineering and technology programs, 4-H has a goal of preparing 1 million new young people to excel in science, engineering and technology by 2013. I applaud them for these endeavors, and encourage my colleagues to join me in supporting this resolution.

Mr. CARDOZA. Mr. Speaker, I rise today in full support of officially recognizing October 8, 2008, as 4-H National Youth Science Day.

To show its commitment to providing a quality science education, 4-H National Youth Science Day will take place during National 4-H Week and features a "National Science Experiment"—a designated science activity that will engage youth across the country in environmental issues relating to water conservation and groundwater contamination.

Over 100 years ago, 4-H began with the creation of agriculture projects geared at ensuring the future of our Nation's rural youth. Today, with a membership of 6 million young people, 4-H is America's largest youth organization and is an essential tool to engage and educate our future generations of scientists and inventors at a young age.

My own daughter Brittany had a very positive experience with 4-H in California learning

how to sew and quilt and raising her heifer named Lucy.

4-H's efforts to make science education enjoyable and interesting are noteworthy as barely 18 percent of 12th grade students in the United States are currently performing at or above the proficient level in science.

Similarly, only 32.4 percent of undergraduates in America are leaving college with a bachelor's degree in science or engineering, and a majority of scientists believe that the United States is falling behind in science and innovation.

In response to these sobering statistics, the National Academy of Sciences issued the timely report *Rising Above the Gathering Storm*, calling for an ambitious national program to address the need for increased math and science education.

According to the report, two important factors that America depends on to compete successfully in the global marketplace are: (1) a well-trained and technically competent workforce; and (2) the production of scientific and technological innovations.

Recognizing and promoting these goals is critical if America is going to remain a competitive leader in the global economy, and assistance from programs like 4-H will be vital in this effort.

I urge my colleagues to join me in my support for H. Res. 1390 to officially recognize October 8, 2008, as 4-H National Youth Science Day and encourage young people of all ages and backgrounds to pursue their interest in science and innovation.

Mr. HALL of Texas. Mr. Speaker, I yield back the balance of my time.

Ms. EDWARDS of Maryland. Mr. Speaker, I yield back the balance of my time.

The SPEAKER pro tempore (Mr. SALAZAR). The question is on the motion offered by the gentlewoman from Maryland (Ms. EDWARDS) that the House suspend the rules and agree to the resolution, H. Res. 1390.

The question was taken; and (two-thirds being in the affirmative) the rules were suspended and the resolution was agreed to.

A motion to reconsider was laid on the table.

HEAVY DUTY HYBRID VEHICLE RESEARCH, DEVELOPMENT, AND DEMONSTRATION ACT OF 2008

Ms. EDWARDS of Maryland. Mr. Speaker, I move to suspend the rules and pass the bill (H.R. 6323) to establish a research, development, demonstration, and commercial application program to promote research of appropriate technologies for heavy duty plug-in hybrid vehicles, and for other purposes, as amended.

The Clerk read the title of the bill.

The text of the bill is as follows:

H.R. 6323

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 "Heavy Duty Hybrid Vehicle Research, Development, and Demonstration Act of 2008".

SEC. 2. ADVANCED HEAVY DUTY HYBRID VEHICLE TECHNOLOGY RESEARCH, DEVELOPMENT, DEMONSTRATION, AND COMMERCIAL APPLICATION PROGRAM.

(a) **ESTABLISHMENT.**—The Secretary shall establish a competitive research, development, demonstration, and commercial application program (referred to in this Act as the "program") to provide grants to applicants to carry out projects to advance research and development and to demonstrate technologies for advanced heavy duty hybrid vehicles.

(b) **APPLICATIONS.**—

(1) **IN GENERAL.**—The Secretary shall issue requirements for applying for grants under the program.

(2) **SELECTION CRITERIA.**—The Secretary shall establish selection criteria for awarding grants under the program. In evaluating applications, the Secretary shall—

(A) consider the ability of applicants to successfully complete both phases described in subsection (c); and

(B) give priority to applicants who are best able to—

(i) fill existing research gaps and achieve the greatest advances beyond the state of current technology; and

(ii) achieve the greatest reduction in fuel consumption and emissions.

(3) **PARTNERS.**—An applicant for a grant under this section may carry out a project in partnership with other entities.

(4) **SCHEDULE.**—

(A) **APPLICATION REQUEST.**—Not later than 180 days after the date of the enactment of this Act, the Secretary shall publish in the Federal Register, and elsewhere as appropriate, a request for applications to undertake projects under the program. Applications shall be due not later than 90 days after the date of such publication.

(B) **APPLICATION SELECTION.**—Not later than 90 days after the date on which applications for grants under the program are due, the Secretary shall select, through a competitive process, all applicants to be awarded a grant under the program.

(5) **NUMBER OF GRANTS.**—The Secretary shall determine the number of grants to be awarded under the program based on the technical merits of the applications received. The number of grants awarded under the program shall not be less than 3 or more than 7, and at least half of the grants awarded shall be for plug-in hybrid technology.

(6) **AWARD AMOUNTS.**—The Secretary shall award not more than \$3,000,000 to each recipient per year for each of the 3 years of the project.

(c) **PROGRAM REQUIREMENTS; TWO PHASES.**—Each grant recipient shall be required to complete two phases:

(1) **PHASE ONE.**—

(A) **IN GENERAL.**—In phase one, the recipient shall research and demonstrate advanced hybrid technology by producing or retrofitting one or more advanced heavy duty hybrid vehicles.

(B) **REPORT.**—Not later than 60 days after the completion of phase one, the recipient shall submit to the Secretary a report containing data and analysis of—

(i) the performance of each vehicle in carrying out the testing procedures developed by the Secretary under subparagraph (E);

(ii) the performance during such testing of each vehicle's components, including the battery, energy management system, charging system, and power controls;

(iii) the projected cost of each vehicle, including acquisition, operating, and maintenance costs; and

(iv) the emissions levels of each vehicle, including greenhouse gas levels.

(C) **TERMINATION.**—The Secretary may terminate the grant program with respect to the project of a recipient at the conclusion of phase one if the Secretary determines that the recipient cannot successfully complete the requirements of phase two.

(D) **TIMING.**—Phase one begins upon receipt of a grant under the program and has a duration of one year.

(E) **TESTING PROCEDURES.**—The Secretary shall develop standard testing procedures to be used by recipients in testing each vehicle. Such procedures shall include testing a vehicle's performance under typical operating conditions.

(2) **PHASE TWO.**—

(A) **IN GENERAL.**—In phase two, the recipient shall demonstrate advanced manufacturing processes and technologies by producing or retrofitting 50 advanced heavy duty hybrid vehicles.

(B) **REPORT.**—Not later than 60 days after the completion of phase two, the recipient shall submit to the Secretary a report containing—

(i) an analysis of the technological challenges encountered by the recipient in the development of the vehicles;

(ii) an analysis of the technological challenges involved in mass producing the vehicles; and

(iii) the manufacturing cost of each vehicle, the estimated sale price of each vehicle, and the cost of a comparable non-hybrid vehicle.

(C) **TIMING.**—Phase two begins at the conclusion of phase one and has a duration of two years.

(d) **RESEARCH ON VEHICLE USAGE AND ALTERNATIVE DRIVE TRAINS.**—The Secretary shall conduct research into alternative power train designs for use in advanced heavy duty hybrid vehicles. Such research shall compare the estimated cost, including operating and maintenance costs, emissions reductions, and fuel savings of each design with similar non-hybrid power train designs under the conditions in which these vehicles are typically used, including, for each vehicle type—

(1) number of miles driven;

(2) time spent with the engine at idle;

(3) horsepower requirements;

(4) length of time the maximum or near maximum power output of the vehicle is needed; and

(5) any other factors that the Secretary considers appropriate.

(e) **REPORT TO THE CONGRESS.**—Not later than 60 days after the Secretary receives the reports from grant recipients under subsection (c)(2)(B), the Secretary shall submit to the Congress a report containing—

(1) an identification of the grant recipients and a description of the projects to be funded;

(2) an identification of all applicants who submitted applications for the program;

(3) all data contained in reports submitted by grant recipients under subsection (c);

(4) a description of the vehicles produced or retrofitted by recipients in phase one and phase two of the project, including an analysis of the fuel efficiency of such vehicles; and

(5) the results of the research carried out under subsections (d) and (h).

(f) **COORDINATION AND NONDUPLICATION.**—To the maximum extent practicable, the Secretary shall coordinate, and not duplicate, activities under this Act with other programs and laboratories of the Department of Energy and other Federal research programs.

(g) **COST SHARING.**—Section 988 of the Energy Policy Act of 2005 (42 U.S.C. 16352) shall apply to the program established pursuant to this section.

(h) **ELECTRICAL GRID RESEARCH PILOT PROGRAM.**—The Secretary shall establish a pilot program through the National Laboratories and Technology Centers of the Department of Energy to research and test the effects on the domestic electric power grid of the widespread use of plug-in hybrid vehicles, including plug-in hybrid vehicles that are advanced heavy duty hybrid vehicles.

(i) **DEFINITIONS.**—For purposes of this section:

(1) **ADVANCED HEAVY DUTY HYBRID VEHICLE.**—The term "advanced heavy duty hybrid vehicle" means a vehicle with a gross weight between 14,000 pounds and 33,000 pounds that is fueled, in part, by a rechargeable energy storage system.