

Let us remember this day, and let us pledge to work harder and more constructively to build a stronger America.

RECOGNIZING SEPTEMBER 11 AS A NATIONAL DAY OF SERVICE AND REMEMBRANCE

SPEECH OF

HON. NICK J. RAHALL II

OF WEST VIRGINIA

IN THE HOUSE OF REPRESENTATIVES

Wednesday, September 9, 2009

Mr. RAHALL. Mr. Speaker, I rise today to recognize the first-ever federally-designated National Day of Service and Remembrance for September 11, 2001.

Yesterday, as I stood in Statuary Hall with members of Congress and President Obama in the Ceremony of Remembrance for the more than 2,000 people who lost their lives as a result of this act of terror, I was overwhelmed by a sense of sadness, but also a sense of pride. Although the world was irrevocably changed by these senseless acts of violence, tomorrow as Americans we have decided to honor those who died not with anger and violence, but by serving others through the Edward M. Kennedy Serve America Act—which was supported by the 9/11 families—and designates each September 11 as a National Day of Service and Remembrance.

The Edward M. Kennedy Serve America Act of 2009 is bipartisan, landmark legislation that will triple volunteer opportunities across the country and create a new service corps for education, health care, energy, and veterans. It is through this bill that the United We Serve initiative was born to encourage Americans to give back to their communities through continuous community service.

September 11th is a somber day, but the service work inspired by this legislation has and will continue to celebrate West Virginia and our great Nation, a country that has not and will not sink to a level of hatred and violence. Instead, our nation will face forward and choose to make a positive impact by donating our time to better our communities and our fellow citizens while truly honoring the victims who died eight years ago.

On September 11, 2001 two hijacked passenger planes were flown into each tower of the World Trade Center, while a third plane was flown into the Pentagon. The fourth and final hijacked plane crashed into a field in Pennsylvania after the heroic efforts of passengers to take back control of the plane. These events had a profound impact across southern West Virginia. Not only because of the monumental damage and loss of life caused by the attack, but also because one of our own, Dr. Paul Ambrose a Cabell County native and Marshall University School of Medicine graduate, died in the terrorist attack on the Pentagon.

In West Virginia we truly do know our neighbors and the death of this West Virginian deeply affected our community. However, each year we gather in his honor to celebrate the great things about our state and its people. This year Fit Fest '09 will be held to honor Paul Dr. Ambrose, and will feature fitness activities including kids races, and a 5k walk/run.

Other activities to honor the victims of the 9/11 attacks include a Day of Service, spon-

sored by the Rahall Transportation Institute, in cooperation with the Citizens Conservations Corps and the Greater Huntington Park and Recreation District at St. Clouds Commons, which will help bring attention to the Paul Ambrose Trail for Health, as Dr. Ambrose was passionate about improving the health of his community and the Nation.

Today, I commend the incredible bravery and patriotism of the families and friends of the victims of 9/11, who have been working for years to make September 11th a national day of both remembrance and service. Their unending contributions to honor their loved ones' memories and unfulfilled promises continue to enhance the lives of others. I also want to recognize Dr. Ken and Sharon Ambrose, whose constant vigil has enriched their son's legacy and the livelihoods of countless West Virginians.

This day is truly a tribute to the loved ones that we all have lost and the spirit of freedom that this great Nation holds so close to its heart.

RECOGNIZING CONTRIBUTIONS OF AMERICAN COUNCIL OF ENGINEERING COMPANIES

SPEECH OF

HON. MARK E. SOUDER

OF INDIANA

IN THE HOUSE OF REPRESENTATIVES

Wednesday, September 9, 2009

Mr. SOUDER. Mr. Speaker, I would like to express my support for H. Res. 447 and recognize the American Council of Engineering Companies for its 100 years of service to the engineering industry and the Nation. In Indiana, the American Council of Engineers has been active for 50 years and currently represents over 100 firms throughout the state.

The engineering industry has been responsible for tremendous developments in the transportation, environmental and energy infrastructure that contribute to our economic success. Indiana has long been known as the "Crossroads of America" and our transportation infrastructure is fundamental to our economic health. Engineers design and create critical infrastructure to help ensure the goods we produce in our area are able to move to market.

My Congressional District is the manufacturing center of the country and has the highest percentage manufacturing jobs in the United States. However, in recent years, these positions are increasingly becoming more hi-tech and require higher levels of skills and training.

The American Council of Engineering Companies of Indiana is helping to meet this need through college scholarship programs that awarded \$17,500 in 2009 to Indiana residents who are pursuing a Bachelors or Masters in engineering at an Indiana school. With programs like Project "Lead the Way," the American Council of Engineering Companies partners with Middle Schools and High Schools to promote engineering, and make science and math relevant to young students by demonstrating how these technical skills can be applied in every day life.

Through these educational outreach programs, the American College of Engineering Companies is working to address the need for

a skilled workforce and helping to generate interest in the math and science skills necessary for the next generation to succeed in our competitive global economy.

I ask my colleagues to join me in recognizing the American Council of Engineering Companies on its 100th year anniversary.

IN HONOR AND REMEMBRANCE OF SIDNEY J. CARGLE, SR.

HON. DENNIS J. KUCINICH

OF OHIO

IN THE HOUSE OF REPRESENTATIVES

Thursday, September 10, 2009

Mr. KUCINICH. Madam Speaker, I rise today in honor and remembrance of Sidney J. Cargle, Sr., devoted and loving husband, father, grandfather, great-grandfather, brother, cousin and friend to many. Mr. Cargle's devotion to his family, service to community and church, and kind heart and joyous life has left a permanent mark on the lives of countless individuals throughout our community.

Mr. Cargle taught his children by example, instilling in them the significance of a strong work ethic, service to others and higher education. He retired from the State of Ohio as Assistant State Auditor, and continued his life-long commitment to bettering our community and our nation through his grass roots involvement in many civic endeavors, including his long-time dedication to the local political process. Mr. Cargle served as the President of the Shaker Heights Democratic Club, and held leadership positions, including Elected Member of the Executive Committee of the Cuyahoga County Democratic Party.

Armed with a kind heart, great sense of humor and a certain grace, Mr. Cargle and Mrs. Cargle were the foundation of the family. For more than twenty years, Mr. and Mrs. Cargle volunteered many hours as members and leaders of the Lane Metropolitan CME Church, where Mr. Cargle also served as President of Lay Leaders.

Madam Speaker and colleagues, please join me in honor and remembrance of Sidney J. Cargle, Sr., whose joy for life, kind heart and quick smile will forever reflect within the hearts and memories of those who loved and knew him best—especially his family and close friends. I extend my heartfelt condolences to Mr. Cargle's beloved wife of 51 years, Virginia; to his children, Linda Ann, Richard, Stacy, Sharon, Sidney and Spencer; to his grandchildren, great-grandchildren; and to his siblings, nieces and nephews and many friends. Mr. Cargle's loving devotion to his family and community, his beautiful spirit and joyous life will continue to touch the hearts of many—especially his wife and children—and he will never be forgotten.

HEAVY DUTY HYBRID VEHICLE RESEARCH, DEVELOPMENT, AND DEMONSTRATION ACT OF 2009

SPEECH OF

HON. F. JAMES SENSENBRENNER, JR.

OF WISCONSIN

IN THE HOUSE OF REPRESENTATIVES

Wednesday, September 9, 2009

Mr. SENSENBRENNER. Mr. Speaker, I rise to urge support for my Hybrid Truck bill. New

taxes are not the only solution to climate change. We need to focus on our economy as we work to reduce our emissions. We can over-regulate our businesses, cripple our economic development, and watch as China and India race past us—sputtering greenhouse gases along the way—or Congress can create incentives that encourage the development of new technologies that will reduce our emissions, foster economic development, and allow U.S. manufacturers to export their energy-saving technologies worldwide.

Commercial traffic is truly vital to the American economy, and the fuel costs for trucks directly affect costs for all Americans. Higher prices for their fuel raise the prices of our food, healthcare, manufacturing, retail, waste removal, and other goods and services. While our economy would not survive without them, trucks consume huge quantities of oil, which raises the cost of their business, increases our dependence on oil, and injects greenhouse gases into our environment.

The answer is not to burden these businesses, already strained by high fuel costs, with additional taxes for the carbon dioxide they release. Instead, we need to encourage the development and introduction of technologies that will reduce their fuel consumption.

The technologies we need already exist. Everyone has seen hybrid cars. This technology, which combines gas and electric motors for a powerful and efficient engine, is even more practical in trucks. Even though there are fewer trucks on the road, trucks use more fuel.

Utility trucks, for example, typically drive short distances to and from a work site, but sit idle for hours while on site. A plug-in hybrid truck would use less fuel getting to and from the site, and could operate without any fuel while on site. Ultimately, a plug-in hybrid engine in a utility truck could use up to 60 percent less fuel.

Delivery trucks constantly stop and go. Hybrid engines excel at this type of driving because the engine can essentially turn off during short accelerations, while coasting, and when it is at a stop.

Developing these technologies will have benefits beyond fuel savings. By making our trucks more efficient, we will make our goods and services more affordable and become leaders in these new technologies. By helping American manufacturers research and commercialize new technologies, we can strengthen our economy, reduce our dependence on foreign oil, and lower our emissions.

H.R. 445 is one example of how technology, not taxes, can solve our energy crisis. This legislation will accelerate research of plug-in hybrid technology in trucks by creating grants for manufacturers to build, test, and sell plug-in hybrid utility and delivery trucks. This bill will put plug-in hybrid trucks on the road and help advance research and accelerate commercialization of an important technology.

Mr. SENSENBRENNER. Mr. Speaker, I would like to submit the following memo regarding H.R. 445:

HEAVY DUTY HYBRID VEHICLE RESEARCH, DEVELOPMENT, AND DEMONSTRATION ACT OF 2009

I. PURPOSE OF THE BILL

The purpose of H.R. 445, the 'Heavy Hybrid Truck Research, Development, and Demonstration Act of 2009,' is to establish a research, development, demonstration, and

commercial application program to promote research of appropriate technologies for heavy duty hybrid vehicles, and for other purposes.

II. BACKGROUND AND NEED FOR LEGISLATION

Because large, heavy duty trucks rely on a diesel or gasoline internal combustion engine for power, they typically have relatively low fuel economy and high emissions. This is especially evident in trucks with duty-cycles that require frequent starts and stops or long periods of engine idling to power auxiliary systems such as bucket lifters, trash compactors, off-board power tools, air conditioning, refrigeration, or other work-related equipment. Switching a portion of the driving and auxiliary power loads away from the internal combustion engine to an alternate power source would enable these vehicles to realize considerable fuel savings and emissions reductions compared to conventional models. The Environmental Protection Agency (EPA) estimates that an average delivery truck using a hybrid drive system could save approximately 1,000 gallons of diesel per year compared to one with a conventional drive system.

High fuel prices and tightening emissions standards provide an added impetus for the development of new heavy duty hybrid truck systems. Several manufacturers have technologies in various stages of development for a range of large commercial vehicle platforms such as package delivery vans, buses, refuse collection trucks, large utility 'bucket' trucks, construction vehicles, and short- and long-haul tractor trailer trucks. Research supported by the Department of Defense (DOD) has also been a key driver of innovation for heavy hybrids since these technologies can provide several strategic advantages including substantial noise reduction, a source of alternative power for radar and weapons systems, reduction of overall weight and maintenance requirements, and longer ranges between vehicle refueling. Despite substantial investment in both the defense and commercial sectors, the cost of research and development and the final price of heavy duty hybrid vehicles remain prohibitively high, even for military applications. Consequently, there remain significant technical obstacles to development and final commercial application of these technologies that federally-sponsored R&D activities can help to overcome.

Managing a comprehensive federal R&D program is complicated by the fact that there is no one-size-fits-all hybrid solution for the entire heavy duty vehicle sector. The power demands of heavy duty trucks are as varied as the applications, and deploying hybrid models into heavy truck fleets is more complicated than simply scaling up the hybrid systems used for passenger vehicles. For example, through the course of an average drive cycle the charging and discharging of a hybrid system on a refuse truck with its frequent starts and stops, dumpster lifting, and trash compaction will be considerably different than that of a utility truck, which may idle in one place for several hours to operate a boom or other equipment. Furthermore, developing hybrid systems for long-haul tractor trailer rigs (Class VIII) presents an even greater challenge since these vehicles seldom brake during a drive cycle, providing few opportunities for battery systems to recharge through regenerative braking. The energy storage devices and related control systems may be altogether different for each of these platforms. Future generations of heavy trucks may also include plug-in hybrid electric models that can store more electric energy in larger banks of batteries and charge these batteries through direct connection to the electricity grid either

while in operation on a jobsite or in a parking lot or garage.

The majority of federal funding for hybrid vehicle R&D has focused on passenger vehicles which far outnumber heavy trucks. However, the federal R&D portfolio should address the significant potential for fuel savings and emissions reductions through improvements in the heavy duty vehicle sector, and take advantage of the ability of this sector to deploy new technologies quickly. For example, according to the Oshkosh Truck Corporation, there are approximately 90,000 refuse trucks in the United States. Their collective fuel consumption is equivalent to 2.5 million passenger vehicles (based on 10,000 gallons/year per truck). Eaton Corporation estimates that as few as 10,000 hybrid electric trucks could reduce diesel fuel usage by 7.2 million gallons per year (approx. 1 million barrels of oil), reduce annual NOx emissions by the amount equivalent to removing New York City's passenger cars for 25 days, and reduce carbon dioxide emissions by 83,000 tons.

Energy storage technology options for hybrid trucks generally include batteries, hybrid hydraulic systems, and ultra-capacitors. Batteries receive the most attention and research funding because of their applicability throughout the transportation sector. To expand the use of electricity in the vehicles sector, batteries must be smaller, lighter, cheaper, and more powerful. Vehicle batteries typically fall into one of three families of technologies: lead-acid, nickel metal hydride (NiMH), and lithium-ion (Li-ion). Lead-acid batteries have many advantages including their relative simplicity and low cost, wide-scale availability, domestic manufacturing capacity, and established recycling infrastructure. NiMH batteries are found in the current generation of hybrid vehicles and will be the battery of choice for many of the first generation heavy hybrid trucks. However, high weight and low power density are significant issues for both lead-acid and NiMH batteries. Many in the industry believe the future of hybrids depends on breakthroughs in new battery technologies, such as the lithium-ion (Li-ion) batteries with their comparatively low weight and high power density. In addition to resolving remaining serious technical issues such as heat management, the cost of manufacturing Li-ion batteries remains prohibitively high for large-scale deployment in vehicles. There is also concern that the U.S. is falling behind countries like Japan, China and France in the race to develop and mass produce batteries for hybrid vehicles. Consequently, a significant effort is underway to build up a domestic supply chain.

Plug-in hybrid applications that include an energy storage system charged by an external power source are a particularly attractive option for certain platforms of heavy duty vehicles. Furthermore, heavy truck fleets provide a valuable test-bed for demonstrating technologies that may ultimately end up in the passenger vehicle market. Plug-in Hybrid Vehicles (PHEV) is a critical near-to-mid term technology option for drastically reducing the nation's dependence on foreign oil. PHEV's, unlike traditional hybrid application, shift most of the vehicle's energy source from petroleum to domestically produced power from the electricity grid while still providing sufficient power to handle heavy duty applications. Some studies suggest that PHEV's may have the added benefit of reducing transportation-related carbon emissions, even if the electricity is generated solely from coal. Much research remains in developing the technology to reduce the weight and cost of the systems while improving reliability.

The Department of Energy (DOE) has funded limited research on the hybridization of

trucks, most recently through the 21st Century Truck Partnership which conducts research and development through joint public and private efforts. Other federal agencies involved in the 21st Century Truck Partnership include the Department of Defense, the Department of Transportation, and EPA. Because of the highly fragmented nature of the heavy duty vehicle manufacturing industry, there is limited in-house research and testing capabilities for even the largest of firms. The industry often relies on research efforts of unique Federal facilities such as DOE's National Renewable Energy Laboratory and Argonne National Laboratory, the EPA's National Vehicle and Fuel Emissions Laboratory, and the Army's National Automotive Center. Despite the potential economic and environmental benefits of hybrid trucks and the considerable technical hurdles that remain, the 21st Century Truck Partnership is facing decreased funding and an uncertain future as the administration chooses to focus federal research on the passenger vehicle market. DOE does not currently offer any competitive grants that target the development of technologies applicable for use in hybrid trucks.

III. SUMMARY OF MAJOR PROVISIONS OF THE BILL

H.R. 445 directs the Secretary of DOE (Secretary) to establish a grant program for the development of advanced heavy duty hybrid vehicles. The bill gives the Secretary the discretion to award between three and seven grants based on the technical merits of the proposals received. At least half of the awarded grants must be for the development of plug-in hybrid trucks.

Grants are awarded to applicants for two phases of research and development. In phase one, recipients must build at least one advanced heavy duty hybrid vehicle, conduct studies of the vehicle, and report to DOE on the performance, cost, and emissions levels of the vehicle. In phase two, recipients must produce 50 advanced heavy duty hybrid vehicles and report to DOE on the technological challenges and estimated costs involved in wide-scale manufacture.

H.R. 445 also directs the Secretary to conduct a study of alternative power train designs for use in advanced heavy duty hybrid vehicles. The study includes analysis of different designs under conditions of typical use. The bill also directs the Secretary to establish a pilot program through the National Laboratories to research and test the effects on the domestic electric power grid of widespread use of plug-in hybrid vehicles.

Grant applicants may include partnerships between manufacturers, electrical utilities, or other entities to fulfill the program's requirements. Awards under H.R. 445 will be for up to \$3 million per year for three years. The bill also amends the Energy Storage Competitiveness Act of 2007 (enacted as section 641(g)(1) of the Energy Independence and Security Act of 2007 (42 U.S.C. 17231(g)(1)) to include heavy trucks in the Secretary's priorities for applied energy storage research.

IV. SECTION-BY-SECTION ANALYSIS OF THE BILL

Section 1. Short title

H.R. 445 can be cited as the "Heavy Duty Hybrid Vehicle Research, Development, and Demonstration Act of 2009."

Section 2. Advanced Heavy Duty Hybrid Vehicle Technology Research, Development, Demonstration, and Commercial Application Program

Section 2(a) directs the Secretary to establish a program to provide grants to carry out projects to advance research and demonstrate technologies for advanced heavy duty hybrid vehicles.

Section 2(b) requires the Secretary to issue application requirements and to establish

criteria for making grant awards. The Secretary must give priority to applicants who are best able to advance the current state of technology and achieve the greatest reductions in fuel consumption and emissions. To be eligible, recipients must produce trucks with a gross weight between 14,000 and 33,000 pounds (e.g. Class IV through Class VII vehicles). The Secretary is given discretion to award between three and seven grants based on the technical merits of the applications received. At least half of the grants are to be awarded for plug-in hybrid technology. Applicants can partner with other entities to fulfill the obligations of the program.

Section 2(c) defines two phases of research by award recipients. In phase one, each recipient has one year to build or retrofit one or more advanced heavy duty hybrid vehicles. Recipients are required to collect and analyze data on the performance of key vehicle components; the estimated costs of producing, operating, and maintaining the vehicle; the emissions of the vehicle; and on overall vehicle performance according to guidelines established by the Secretary.

If, at the conclusion of phase one, it is clear that a grant recipient will be unable to complete the requirements of phase two, the Secretary has the discretion to waive the requirement for phase two research and terminate the grant to that recipient.

In phase two, recipients are required to demonstrate the advanced manufacturing processes of heavy duty plug-in vehicles by producing or retrofitting 50 advanced heavy duty hybrid vehicles within two years. Recipients must also report on the major technological obstacles they encounter in developing and producing the vehicles and on the projected costs of each vehicle.

Award recipients are eligible to receive three million dollars per year for three years to complete both phases of the development program.

Section 2(d) directs the Secretary to conduct a study of alternative power train designs for use in advanced heavy duty hybrid vehicles. The study would analyze these different designs under conditions which they are typically used, including the average number of miles driven, the time spent with the engine at idle, horsepower requirements, the length of time the maximum power is required, and other factors the Secretary determines to be appropriate.

Section 2(e) requires the Secretary to report to Congress within 60 days on the findings of the reports submitted by grant recipients.

Section 2(f) and 2(g) require the Secretary to coordinate the research conducted under this program with other research conducted by the Department. The cost sharing provisions of section 988 of the Energy Policy Act of 2005 (42 U.S.C. 16352) apply to the program.

Section 2(h) directs the Secretary to establish a pilot program through DOE's National Laboratories to research and test the effects on the domestic electric power grid of the widespread use of plug-in hybrid vehicles, including heavy duty plug-in hybrid trucks.

Section 2(i) defines the terms: advanced heavy duty hybrid vehicle, greenhouse gas, plug-in hybrid, retrofit, and Secretary for the purposes of this section.

Section 2(j) authorizes appropriations of \$16 million per year for fiscal years 2010 through 2012.

Section 3. Expanding research in hybrid technology for large vehicles

This section amends the United States Energy Storage Competitiveness Act of 2007 (enacted as section Sec. 641(g)(1) of the Energy Independence and Security Act of 2007 (42 U.S.C. 17231(g)(1)) to include vehicles with a gross weight over 8501 pounds in the Sec-

retary's priorities for advanced energy storage.

V. VIEWS

The hybridization of heavy duty trucks is an important goal that has been largely overlooked by the Federal government. While numerous federal grants are available for the production of hybrid and plug-in hybrid passenger vehicles, there are no grants available that specifically target the development of heavy duty hybrid vehicles. This is an unfortunate oversight. Federal investment in this research will result in improvements in the fuel efficiency and emission profiles of heavy duty vehicles and is likely to provide significant economic benefits as well as benefits in energy efficiency and air quality.

The Secretary is encouraged to award the maximum number of grants if sufficient meritorious applications are received. Research applicable to heavy duty vehicles that make frequent stops such as delivery trucks, buses, and refuse collection vehicles and vehicles that idle on job sites for extensive periods to operate auxiliary functions such as utility 'bucket' trucks should receive the highest priority for funding under this program. This research and development program is not intended to provide support for research and development on large, Class IV, passenger trucks. The definition of Advanced Heavy Duty Hybrid Vehicle included in the legislation specifically excludes Class VIII heavy duty vehicles (e.g. long-haul tractor trailer trucks). Significantly different technical requirements of those platforms merits funding under separate programs.

It is important to provide funding to applicants best able to provide the greatest potential advancement over current technologies and for research that is most likely to lead to reduced fuel consumption and reduced emissions. In many cases, this will mean awarding applicants who propose hybrid designs that rely on multiple sources of energy for propulsion, and integration of propulsion and auxiliary power systems as this approach entails a greater technical challenge.

Intellectual property rights and ownership of actual vehicles built under this program are intended to benefit the grant recipients who develop them. The Department of Energy is encouraged to grant waivers of such rights.

RECOGNIZING ROMULO CAMARGO OF CRYSTAL RIVER, FLORIDA

HON. GINNY BROWN-WAITE

OF FLORIDA

IN THE HOUSE OF REPRESENTATIVES

Thursday, September 10, 2009

Ms. GINNY BROWN-WAITE of Florida. Madam Speaker, I rise today to honor an American soldier who was wounded in service to our Nation during the conflict in Afghanistan. Army Ranger Romulo "Romy" Camargo is a member of the United States Army who served with honor and distinction on the battlefield.

Moving to Citrus County as a third-grader, Romy spent the majority of his adolescence in Crystal River. He graduated from Crystal River High in 1993, where he captained his swim and wrestling teams.

He spent the past 14 years in the Army, eight of which with the Special Forces, and served three tours in Afghanistan. Last year while serving second in command of his team, Operational Detachment Alpha 7115, his squad was ambushed. Chief Camargo sustained a gunshot wound in the back of his