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SENATE

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ALTERNATIVE FUELED VEHICLES COMPETITIVENESS AND ENERGY SECURITY ACT

SEPTEMBER 6, 2011.—Ordered to be printed

Mr. BINGAMAN, from the Committee on Energy and Natural
Resources, submitted the following

R E P O R T

[To accompany S. 1001]

The Committee on Energy and Natural Resources, to which was referred the bill (S. 1001) to reduce oil consumption and improve energy security, and for other purposes, having considered the same, reports favorably thereon with an amendment and recommends that the bill, as amended, do pass.

The amendment is as follows:

Strike out all after the enacting clause and insert in lieu thereof the following:

SECTION 1. SHORT TITLE; TABLE OF CONTENTS.

(a) SHORT TITLE.—This Act may be cited as the “Alternative Fueled Vehicles Competitiveness and Energy Security Act of 2011”.

(b) TABLE OF CONTENTS.—The table of contents of this Act is as follows:

- Sec. 1. Short title; table of contents.
- Sec. 2. Definitions.
- Sec. 3. Loan guarantees for alternative fuel infrastructure.
- Sec. 4. Advanced technology vehicles manufacturing incentive program.
- Sec. 5. Conventional fuel replacement calculation and assessment.
- Sec. 6. Technical assistance and coordination.
- Sec. 7. Workforce training.
- Sec. 8. Reduction of engine idling and conventional fuel consumption.
- Sec. 9. Electric, hydrogen, and natural gas utility and oil pipeline participation.
- Sec. 10. HOV lane access extension.

SEC. 2. DEFINITIONS.

In this Act:

- (1) ALTERNATIVE FUEL.—The term “alternative fuel” has the meaning given the term in section 301 of the Energy Policy Act of 1992 (42 U.S.C. 13211).
- (2) ALTERNATIVE FUELED VEHICLE.—The term “alternative fueled vehicle” has the meaning given the term in section 301 of the Energy Policy Act of 1992 (42 U.S.C. 13211).
- (3) COMMUNITY COLLEGE.—The term “community college” has the meaning given the term “junior or community college” in section 312 of the Higher Education Act of 1965 (20 U.S.C. 1058).

(4) DEPARTMENT.—The term “Department” means the Department of Energy.

(5) NONROAD VEHICLE.—

(A) IN GENERAL.—The term “nonroad vehicle” means a vehicle that is not licensed for onroad use.

(B) INCLUSIONS.—The term “nonroad vehicle” includes a vehicle described in subparagraph (A) that is used principally—

- (i) for industrial, farming, or commercial use;
- (ii) for rail transportation;
- (iii) at an airport; or
- (iv) for marine purposes.

(6) SECRETARY.—The term “Secretary” means the Secretary of Energy.

SEC. 3. LOAN GUARANTEES FOR ALTERNATIVE FUEL INFRASTRUCTURE.

Section 1703(a) of the Energy Policy Act of 2005 (42 U.S.C. 16513(a)) is amended by adding at the end the following:

“(11) Infrastructure for provision and distribution of alternative fuels.”

SEC. 4. ADVANCED TECHNOLOGY VEHICLES MANUFACTURING INCENTIVE PROGRAM.

Section 136 of the Energy Independence and Security Act of 2007 (42 U.S.C. 17013) is amended—

(1) in subsection (a)—

(A) in paragraph (1)—

(i) by redesignating subparagraphs (A) through (C) as clauses (i) through (iii), respectively, and indenting appropriately;

(ii) in the matter preceding clause (i) (as redesignated by clause (i)), by striking “means an ultra efficient vehicle or a light duty vehicle that meets—” and inserting “means—”

“(A) an ultra efficient vehicle or a light duty vehicle that meets—”;

(iii) in clause (iii) (as redesignated by clause (i)), by striking the period at the end and inserting a semicolon; and

(iv) by adding at the end the following:

“(B) a vehicle (such as a medium-duty or heavy-duty work truck, bus, or rail transit vehicle) that—

“(i) is used on a public street, road, highway, or transitway;

“(ii) meets each applicable emission standard that is established as of the date of the application; and

“(iii) will reduce consumption of conventional motor fuel by 25 percent or more, as compared to existing surface transportation technologies that perform a similar function, unless the Secretary determines that—

“(I) the percentage is not achievable for a vehicle type or class; and

“(II) an alternative percentage for that vehicle type or class will result in substantial reductions in motor fuel consumption within the United States.”;

(B) in paragraph (3)(B)—

(i) by striking “equipment and” and inserting “equipment,”; and

(ii) by inserting “, and manufacturing process equipment” after “suppliers”; and

(C) by striking paragraph (4) and inserting the following:

“(4) QUALIFYING COMPONENTS.—The term ‘qualifying components’ means components, systems, or groups of subsystems that the Secretary determines—

“(A) to be designed to improve fuel economy or otherwise substantially reduce consumption of conventional motor fuel; or

“(B) to contribute measurably to the overall improved fuel use of an advanced technology vehicle, including idle reduction technologies.”;

(2) in subsection (b), in the matter preceding paragraph (1), by striking “to automobile” and inserting “to advanced technology vehicle”;

(3) in subsection (d)(1), in the first sentence, by striking “a total of not more than \$25,000,000,000 in”;

(4) in subsection (h)—

(A) in the subsection heading, by striking “AUTOMOBILE” and inserting “ADVANCED TECHNOLOGY VEHICLE”; and

(B) in paragraph (1)(B), by striking “automobiles” each place it appears and inserting “advanced technology vehicles”; and

(5) in subsection (i), by striking “2012” and inserting “2016”.

SEC. 5. CONVENTIONAL FUEL REPLACEMENT CALCULATION AND ASSESSMENT.

(a) METHODOLOGY.—Not later than 180 days after the date of enactment of this Act, the Secretary shall, by rule, develop a methodology for calculating the equiva-

lent volumes of conventional fuel displaced by use of each alternative fuel to assess the effectiveness of alternative fuel and alternative fueled vehicles in reducing oil imports.

(b) NATIONAL ASSESSMENT.—Not later than 3 years after the date of enactment of this Act, the Secretary shall—

(1) conduct a national assessment (using the methodology developed under subsection (a)) of the effectiveness of alternative fuel and alternative fueled vehicles in reducing oil imports into the United States, including as assessment of—

(A) market penetration of alternative fuel and alternative fueled vehicles in the United States;

(B) successes and barriers to deployment identified by the programs established under this Act; and

(C) the maximum feasible deployment of alternative fuel and alternative fueled vehicles by 2020 and 2030; and

(2) report to Congress the results of the assessment.

SEC. 6. TECHNICAL ASSISTANCE AND COORDINATION.

(a) TECHNICAL ASSISTANCE TO STATE, LOCAL, AND TRIBAL GOVERNMENTS.—

(1) IN GENERAL.—In carrying out this title, the Secretary shall provide, at the request of the Governor, mayor, county executive, public utility commissioner, or other appropriate official or designee, technical assistance to State, local, and tribal governments or to a public-private partnership described in paragraph (2) to assist with the deployment of alternative fuel and alternative fueled vehicles and infrastructure.

(2) PUBLIC-PRIVATE PARTNERSHIP.—Technical assistance under this section may be awarded to a public-private partnership, comprised of State, local or tribal governments and nongovernmental entities, including—

(A) electric or natural gas utilities or other alternative fuel distributors;

(B) vehicle manufacturers;

(C) alternative fueled vehicle or alternative fuel technology providers;

(D) vehicle fleet owners;

(E) transportation and freight service providers; or

(F) other appropriate non-Federal entities, as determined by the Secretary.

(3) ASSISTANCE.—The technical assistance described in paragraph (1) may include—

(A) coordination in the selection, location, and timing of alternative fuel recharging and refueling equipment and distribution infrastructure, including the identification of transportation corridors and specific alternative fuels that would be made available;

(B) development of protocols and communication standards that facilitate vehicle refueling and recharging into electric, natural gas, and other alternative fuel distribution systems;

(C) development of codes and standards for the installation of alternative fuel distribution and recharging and refueling equipment;

(D) education and outreach for the deployment of alternative fuel and alternative fueled vehicles; and

(E) utility rate design and integration of alternative fueled vehicles into electric and natural gas utility distribution systems.

(b) COST SHARING.—Cost sharing for assistance awarded under this section shall be consistent with section 988 of the Energy Policy Act of 2005 (42 U.S.C. 16352).

(c) AUTHORIZATION OF APPROPRIATIONS.—There is authorized to be appropriated to carry out this section \$50,000,000 for each of fiscal years 2012 through 2016.

SEC. 7. WORKFORCE TRAINING.

(a) IN GENERAL.—The Secretary, in consultation with the Secretary of Labor, shall award grants to community colleges, other institutions of higher education, and other qualified training and education institutions for the establishment or expansion of programs to provide training and education for vocational workforce development for—

(1) the manufacture and maintenance of alternative fueled vehicles; and

(2) the manufacture, installation, support, and inspection of alternative fuel recharging, refueling, and distribution infrastructure.

(b) PURPOSE.—Training funded under this section shall be intended to ensure that the workforce has the necessary skills needed to manufacture, install, and maintain alternative fuel infrastructure and alternative fueled vehicles.

(c) SCOPE.—Training funded under this section shall include training for—

- (1) electricians, plumbers, pipefitters, and other trades and contractors who will be installing, maintaining, or providing safety support for alternative fuel recharging, refueling, and distribution infrastructure;
- (2) building code inspection officials;
- (3) vehicle, engine, and powertrain dealers and mechanics; and
- (4) others positions as the Secretary determines necessary to successfully deploy alternative fuels and vehicles.

(d) AUTHORIZATION OF APPROPRIATIONS.—There is authorized to be appropriated to carry out this section \$50,000,000 for each of fiscal years 2012 through 2016.

SEC. 8. REDUCTION OF ENGINE IDLING AND CONVENTIONAL FUEL CONSUMPTION.

(a) DEFINITION OF IDLE REDUCTION TECHNOLOGY.—Section 756(a)(5) of the Energy Policy Act of 2005 (42 U.S.C. 16104(a)(5)) is amended—

- (1) in subparagraph (A), by striking “and” after the semicolon at the end;
- (2) in subparagraph (B), by striking the period at the end and inserting “; and”; and
- (3) by adding at the end the following:

“(C) uses an alternative fuel to reduce consumption of conventional fuel and environmental emissions.”.

(b) FUNDING.—Section 756(b)(4)(B) of the Energy Policy Act of 2005 (42 U.S.C. 16104(b)(4)(B)) is amended in clauses (i) and (ii) by striking “fiscal year 2008” each place it appears and inserting “each of fiscal years 2008 through 2016”.

SEC. 9. ELECTRIC, HYDROGEN, AND NATURAL GAS UTILITY AND OIL PIPELINE PARTICIPATION.

(a) IN GENERAL.—The Secretary shall identify barriers and remedies in existing electric and natural gas and oil pipeline transmission and distribution systems to the distribution of alternative fuels and the deployment of alternative fuel recharging and refueling capability, at economically competitive costs of alternative fuel for consumers, including—

- (1) model regulatory rate design and billing for recharging and refueling alternative fueled vehicles;
- (2) electric grid load management and applications that will allow batteries in plug-in electric drive vehicles to be used for grid storage, ancillary services provision, and backup power;
- (3) integration of plug-in electric drive vehicles with smart grid technology, including protocols and standards, necessary equipment, and information technology systems;
- (4) technical and economic barriers to transshipment of biofuels by oil pipelines, or distribution of hydrogen; and
- (5) any other barriers to installing sufficient and appropriate alternative fuel recharging and refueling infrastructure.

(b) CONSULTATION.—The Secretary shall carry out this section in consultation with—

- (1) the Federal Energy Regulatory Commission;
- (2) State public utility commissions;
- (3) State consumer advocates;
- (4) electric and natural gas utility and transmission owners and operators;
- (5) oil pipeline owners and operators;
- (6) hydrogen suppliers; and
- (7) other affected entities.

(c) REPORT.—Not later than 2 years after the date of enactment of this Act, the Secretary shall submit to Congress a report describing actions taken to carry out this section.

SEC. 10. HOV LANE ACCESS EXTENSION.

Section 166(b)(5) of title 23, United States Code, is amended—

- (1) in subparagraph (A), by striking “Before September 30, 2009, the State” and inserting “The State”; and
- (2) in subparagraph (B), by striking “Before September 30, 2009, the State” and inserting “The State”.

PURPOSE OF THE MEASURE

The purpose of S. 1001 is to build upon existing programs to promote alternative fuel vehicles, including support of infrastructure and other mechanisms to enable their widespread deployment.

BACKGROUND AND NEED

In previous energy laws, such as the Energy Independence and Security Act of 2007, Congress has set out incentive programs for the deployment of alternative fuels, alternative fueling infrastructure, and vehicles that use alternative fuels or otherwise reduce the use of petroleum-derived fuels. Although past measures have generated progress in all of these areas, there remain structural impediments, both within the federal programs and in local government and the private sector, that may be hindering the speed of deployment. S. 1001 makes adjustments to the federal framework to try and address some of those barriers and make existing programs more effective.

LEGISLATIVE HISTORY

Senator Wyden introduced S. 1001, with Senator Stabenow as an original cosponsor, on May 16, 2011. The full Committee held a hearing on the bill on June 9, 2011.

The Committee marked up the bill in open business meeting on July 14, 2011, and ordered S. 1001 favorably reported with an amendment in the nature of a substitute.

COMMITTEE RECOMMENDATION AND TABULATION OF VOTES

The Senate Committee on Energy and Natural Resources, in open business session on July 14, by a majority vote of a quorum present, recommends that the Senate pass S. 1001, if amended as described herein.

The rollcall vote on reporting the measure was 12 yeas, 10 nays as follows:

YEAS	NAYS
Mr. Bingaman	Ms. Murkowski
Mr. Wyden	Mr. Barrasso
Mr. Johnson*	Mr. Risch*
Ms. Landrieu	Mr. Lee*
Ms. Cantwell	Mr. Paul*
Mr. Sanders	Mr. Coats
Ms. Stabenow*	Mr. Portman
Mr. Udall	Mr. Hoeven
Mrs. Shaheen	Mr. Heller
Mr. Franken*	Mr. Corker*
Mr. Manchin	
Mr. Coons*	

*Indicates vote by proxy.

COMMITTEE AMENDMENTS

The Committee adopted an amendment in the nature of a substitute, which: (1) replaced tax code definitions with definitions from the Energy Policy Act of 1992 (42 U.S.C. 13211); (2) removed “advanced biofuels” from the category of projects proposed to be made eligible for loan guarantees under section 1703 of the Energy Policy Act of 2005; (3) added distribution of hydrogen to the matters to be studied under section 9; (4) deleted the research and development section (section 109 of S. 1001 as introduced), as it was deemed to be substantially redundant to the provisions in S. 734,

previously acted upon by the Committee; and (5) removed the title related to the Strategic Petroleum Reserve.

SECTION-BY-SECTION ANALYSIS

Section 1 contains the short title.

Section 2 defines terms used in the bill.

Section 3 adds infrastructure for provision and distribution of alternative fuels as a new category of project that may receive loan guarantees under title 17 of the Energy Policy Act of 2005.

Section 4 expands the Department of Energy's existing Advanced Technology Vehicle Manufacturing (ATVM) loan program so that efficient medium and heavy trucks, buses, and rail transit vehicles are eligible (currently, only light duty vehicles are eligible) and allows the Secretary of Energy to reduce the efficiency gains required for each selected project below 25 percent upon a determination it is not achievable. The section further strikes the existing \$25 billion cap on loan volume, adds production of alternative fuel vehicles as another category of manufacturing eligible for loans, and clarifies the availability of loans to component manufacturers. Finally, it extends the appropriations authorization by 4 years (from 2012 to 2016).

Section 5 directs the Secretary to develop a methodology to quantify the amount of oil displaced by alternative fuels, and within 3 years report to Congress with an assessment of alternative fuel deployment, deployment potential, and barriers to market entry.

Section 6 directs the Secretary to provide technical assistance to state, local, tribal governments, and public-private partnerships with those governments to assist with deployment of alternative fuels, vehicles, and infrastructure, with costs shared. It also authorizes \$50 million per year for 5 years for this activity.

Section 7 directs the Secretary, in consultation with the Secretary of Labor, to provide grants for workforce training to community colleges and other institutions of higher education to develop training programs for manufacturing, maintaining, and installing alternative fuel vehicles and refueling infrastructure. It also authorizes \$50 million per year for 5 years for this activity.

Section 8 addresses an alternative fuel to reduce consumption of conventional fuel and environmental emissions to definition of idle reduction technology in section 756(a)(5) of the Energy Policy Act of 2005. It also reauthorizes the program at the 2008 level (\$45 million and \$20 million for clauses (i) and (ii), respectively) through 2016.

Section 9 directs the Secretary to work with the Federal Energy Regulatory Commission, utilities, state utility commissions, and other stakeholders to identify barriers to alternative fuel deployment in existing electric, hydrogen, natural gas, and oil transmission and distribution systems, and report back to Congress within 2 years.

Section 10 extends state authority to allow energy-efficient vehicles in HOV lanes by deleting the existing 2009 deadline for state action.

COST AND BUDGETARY CONSIDERATIONS

The following estimate of costs of this measure has been provided by the Congressional Budget Office:

S. 1001—Alternative Fueled Vehicles Competitiveness and Energy Security Act of 2011

Summary: S. 1001 would authorize appropriations for a variety of activities aimed at promoting the development and deployment of alternative fueled vehicles. Current law defines such vehicles as those that consume fuel other than petroleum or that use technologies that consume significantly less petroleum than conventional vehicles. The bill also would expand eligibility requirements for two existing loan programs administered by the Department of Energy (DOE) to include projects related to such vehicles.

CBO estimates that implementing S. 1001 would have a discretionary cost of \$595 million over the 2012–2016 period, assuming appropriation of the necessary amounts. We also estimate that expanding DOE’s loan programs would increase direct spending by \$350 million over the next 10 years; therefore, pay-as-you-go procedures apply. Enacting S. 1001 would not affect revenues.

S. 1001 contains no intergovernmental or private-sector mandates as defined in the Unfunded Mandates Reform Act (UMRA).

Estimated cost to the Federal Government: The estimated budgetary impact of S. 1001 is shown in the following table. The costs of this legislation fall within budget function 270 (energy) and 300 (natural resources and environment).

	By fiscal year, in millions of dollars—					
	2012	2013	2014	2015	2016	2012–2016
CHANGES IN SPENDING SUBJECT TO APPROPRIATION						
Estimated Authorization Level	167	188	188	188	189	920
Estimated Outlays	48	108	131	147	161	595
CHANGES IN DIRECT SPENDING ¹						
Estimated Budget Authority	0	0	0	0	0	0
Estimated Outlays	30	50	100	100	40	320

¹ CBO estimates that S. 1001 would increase direct spending by \$350 million over the 2012–2021 period.

Basis of estimate: CBO estimates that implementing S. 1001 would have a discretionary cost of \$595 million over the 2012–2016 period. We also estimate that the bill would increase direct spending by \$350 million over the 2012–2021 period. For this estimate, CBO assumes that S. 1001 will be enacted near the start of fiscal year 2012 and that necessary funds will be provided each year.

Spending subject to appropriation

S. 1001 would specifically authorize appropriations totaling \$825 million over the 2012–2016 period for DOE and the Environmental Protection Agency (EPA) to carry out a variety of activities to improve the energy efficiency of vehicles and promote the deployment of alternative fueled vehicles and infrastructure. That specified amount includes:

- \$325 million for EPA to support the deployment of technologies to reduce energy consumed by heavy-duty vehicles and locomotives when idling;

- \$250 million for DOE to provide technical assistance to state, local, and tribal governments to develop infrastructure, systems, and education programs related to facilities to recharge and refuel alternative fueled vehicles; and,
- \$250 million for grants to institutions of higher learning and vocational training to expand programs to train individuals to work in industries related to alternative fueled vehicles.

In addition, CBO estimates that implementing other provisions of S. 1001 would require appropriations totaling \$95 million over the 2012–2016 period. That amount includes \$90 million for DOE to continue to administer the Advanced Technology Vehicle Manufacturing (ATVM) Loan Program and \$5 million to complete various studies and reports. In total, assuming the appropriation of amounts specified and estimated to be necessary, CBO estimates that implementing S. 1001 would cost \$595 million over the 2012–2016 period, with additional outlays occurring in later years. That estimate is based on historical spending patterns for activities similar to those authorized under S. 1001.

Direct spending

S. 1001 would broaden eligibility criteria for two of DOE’s existing credit programs—the ATVM program, which provides direct loans to support the cost of retrofitting facilities intended to produce energy-efficient light-duty vehicles and components for such vehicles, and the program established under title 17 of the Energy Policy Act of 2005, which provides loan guarantees for projects that involve certain types of innovative energy technologies. Broadly speaking, S. 1001 would expand both programs to allow DOE to increase credit support for projects related to alternative fueled vehicles and infrastructure. In particular, changes to the ATVM program would make it easier for manufacturers of vehicle components to qualify for loans and permit DOE to make loans to manufacturers of energy-efficient medium- and heavy-duty vehicles and transit vehicles. S. 1001 would add infrastructure to provide and distribute alternative fuels to the list of projects eligible for loan guarantees under the title 17 program.

Under current law, DOE has budget authority and specified limits on loan volumes for both programs that CBO estimates will not be fully utilized over the next 10 years. As a result, we expect that executing new loans or loan guarantees under S. 1001 would require no new budget authority or increased loan limitations over the next several years, and that DOE could meet the demand for such credit support within its existing budget authority and loan authority. Because increasing the amount of spending from that existing authority would require no further Congressional action, enacting S. 1001 would result in an increase in direct spending.

CBO cannot predict the specific types of projects likely to proceed under S. 1001, but based on information from the Energy Information Administration and industry sources about the anticipated timeframe involved in deploying alternative fueled vehicles and related infrastructure, we expect that DOE would use its existing authority to provide credit support to a few projects over the next 10 years. Taken as a whole, CBO estimates that enacting S. 1001 would increase direct spending by \$350 million for those activities over the 2012–2021 period—that amount is equivalent to roughly

10 percent of the amount that DOE has obligated to date for loans to support the deployment of advanced technology vehicles.

The above estimate is driven primarily by increased spending of existing balances for the ATVM program. The Congress appropriated \$7.5 billion for that program in 2009. According to DOE, as of August 2011, the agency has obligated roughly \$3.5 billion to support six loans totaling \$9.1 billion at an average subsidy rate of about 38 percent. Under current law, CBO expects that a significant portion of DOE's remaining \$4 billion in unobligated balances will not be spent over the next 10 years. As a result, CBO estimates that S. 1001 would increase direct spending of those balances. In particular, CBO expects that easing eligibility requirements for manufacturers of vehicle components would permit DOE to proceed with pending applications for loans to support projects that would not otherwise qualify under current law. In addition, CBO expects that at least some loans would be made to manufacturers of energy-efficient medium- and heavy-duty vehicles and transit vehicles.

Finally, CBO expects that any added spending for title 17 loan guarantees to support investments in recharging and refueling infrastructure for advanced vehicles would most likely be issued toward the end of the 2012–2021 period and would be largely offset by fees paid by borrowers, resulting in an insignificant net budgetary impact.

Pay-as-you-go considerations: The Statutory Pay-As-You-Go Act of 2010 establishes budget-reporting and enforcement procedures for legislation affecting direct spending or revenues. The net changes in outlays that are subject to those pay-as-you-go procedures are shown in the following table. Those changes result from provisions of S. 1001 that would expand eligibility requirements for two existing loan programs and increase DOE's use of previously enacted authority to issue direct loans and guarantees for projects related to alternative fueled vehicles and infrastructure.

CBO ESTIMATE OF PAY-AS-YOU-GO EFFECTS FOR S. 1001 AS ORDERED REPORTED BY THE SENATE COMMITTEE ON ENERGY AND NATURAL RESOURCES ON JULY 14, 2011

	By fiscal year, in millions of dollars—												
	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2012–2016	2012–2021	
NET INCREASE OR DECREASE (–) IN THE DEFICIT													
Statutory Pay-As-You-Go Impact	30	50	100	100	40	10	5	5	5	5	320	350	

Intergovernmental and private-sector impact: S. 1001 contains no intergovernmental or private-sector mandates as defined in UMRA. The bill would authorize grants to institutions of higher education and technical assistance to state, local, and tribal governments for activities related to the deployment of alternative-fuel vehicles. Any costs to those entities would be incurred voluntarily as a condition of federal assistance.

Estimate prepared by: Federal costs: Megan Carroll and Kathleen Gramp; Impact on State, local, and Tribal Governments: Ryan Miller; Impact on the private sector: Amy Petz.

Estimate approved by: Theresa Gullo, Deputy Assistant Director for Budget Analysis.

REGULATORY IMPACT EVALUATION

In compliance with paragraph 11(b) of rule XXVI of the Standing Rules of the Senate, the Committee makes the following evaluation of the regulatory impact which would be incurred in carrying out S. 1001.

The bill is not a regulatory measure in the sense of imposing Government established standards or significant economic responsibilities on private individuals and businesses, but rather providing direct loans, loan guarantees, and grants to private industry that may be voluntarily applied for.

No personal information would be collected in administering programs authorized under the bill. Therefore, there would be no impact on personal privacy.

While an applicant to the loan, loan guarantee, and grant programs authorized in the measure will have to submit paperwork through the application process, little if any additional paperwork would be required of any entity or person that is not an applicant to a program.

CONGRESSIONALLY DIRECTED SPENDING

The bill, as reported, does not contain any congressionally directed spending items, limited tax benefits, or limited tariff benefits as defined in rule XLIV of the Standing Rules of the Senate.

EXECUTIVE COMMUNICATIONS

The testimony provided by the Department of Energy on June 9, 2011 follows:

STATEMENT OF KATHLEEN HOGAN, DEPUTY ASSISTANT SECRETARY FOR ENERGY EFFICIENCY, OFFICE OF ENERGY EFFICIENCY AND RENEWABLE ENERGY, DEPARTMENT OF ENERGY

Chairman Bingaman, Ranking Member Murkowski and Members of the Committee, thank you for the opportunity to discuss the Department of Energy's (DOE's) energy efficiency and Advanced Vehicles Technology Programs. The Administration is still reviewing the Reducing Federal Energy Dollars Act of 2011 (S. 963), the Energy Savings and Industrial Competitiveness Act of 2011 (S. 1000), and the Alternative Fuel Vehicles Competitiveness and Energy Security Act of 2011 (S. 1001). While the Administration does not take a position at this time, my statement will provide you with information on work DOE is already doing to create jobs, build a new clean energy economy, and help save consumers and businesses money through improved energy efficiency.

At EERE, we work to remove the barriers to the rapid conversion of innovative research into commercial products, manufacturing, and jobs. And we work with other federal, state, and local governments to speed the adoption of these American innovations. The new businesses in clean energy production, installation, and operation are

playing a key role driving economic growth and job creation.

The market for clean energy technology is growing quickly and many countries have mounted aggressive national efforts to capture market share. China, for example, has moved quickly to dominate the development of next generation clean energy products through low-cost production and investments in research infrastructure. As the President said, “this is our generation’s Sputnik moment.” To show his clear commitment to our future, he has asked for a significant increase in funding for energy efficiency and renewable energy in the FY12 budget proposal, even in a budget which moves overall domestic discretionary spending to the lowest levels in a generation.

To win the future, we have to be a nation that makes, creates, and innovates. Across the country, we are seeing strong evidence that the out-build and out-innovate pillars the Administration has put forward are paying off. In October of last year, for example, manufacturing posted its first twelve-month gain in more than ten years, and has added close to 250,000 jobs since the December 2009 low. The Administration continues to be optimistic about the prospects for manufacturing in the recovery.

Manufacturing remains one of the most globally competitive economic sectors we have. It also is one of the most visible economic sectors we have, with middle-class Americans clearly understanding the impact that strengthened manufacturing has on their lives and their communities.

The challenges we face mean that we need to move with unprecedented speed and scale. Success is measured by private innovation and investment but can begin with well-crafted federal programs that will help achieve a number of important goals:

- A vigorous and profitable residential and commercial building retrofit industry, cost-effectively saving 30–50 percent of the energy used in existing buildings;
- Solar energy, offshore wind energy, and geothermal plants fully competitive with conventional sources of electricity;
- Fuels that can be drop-in replacements for gasoline, diesel fuel, or jet fuel priced competitively with products produced from petroleum;
- Large fleets of electric and hybrid cars supported by a network of charging stations to support them; and
- Trucks with over 50% improvement in fuel economy.

Small federal investments have led to major breakthroughs like the invention of the internet and Global Positioning Systems or “GPS” found in most cellular devices today. Similarly, EERE investments past, present, and future are critical to achieving these goals. As one example, in 2009, the U.S. had only two, relatively small, factories manufacturing advanced vehicle batteries, and produced less than two percent of the world’s hybrid vehicle bat-

teries.¹ But over the next few years, thanks to investments from the American Recovery and Reinvestment Act of 2009 (Recovery Act) in battery and electric drive component manufacturing, and electric drive demonstration and infrastructure, the U.S. will be able to produce enough batteries and components to support 500,000 plug-in and electric vehicles per year. High volume manufacturing, coupled with battery technology advances, design optimization, and material cost reductions, could lead to a drop in battery costs of 50 percent by 2013 compared to 2009, which will lower the cost of electric vehicles, making them accessible to more consumers.

These kinds of breakthroughs are especially important in the transportation sector, which alone accounts for approximately two-thirds of the United States' oil consumption and contributes to one-third of the Nation's greenhouse gas (GHG) emissions.² After housing, transportation is the second biggest monthly expense for most American families.³ As the President said in his recent energy speech, "In an economy that relies so heavily on oil, rising prices at the pump affect everybody." Emphasizing that "there are no quick fixes," the President outlined a portfolio of actions which, taken together, could cut U.S. oil imports by a third by 2025.

The draft legislation being addressed today focuses on three areas:

- Clean energy in the Federal sector
- Energy efficiency in the industrial sector and building codes
- Alternative fuel vehicles

General comments are provided on each of these three areas, but the Department has no comments on the specific content of the legislation, as these bills are currently under review by the Administration.

CLEAN ENERGY IN THE FEDERAL SECTOR

Constructing and operating Federal facilities in a sustainable manner has numerous well-documented benefits, including:

- Saving taxpayer dollars through optimized life-cycle cost-effective actions;
- Enhancing employee productivity through the provision of safe, healthy and environmentally appealing workplaces;
- Reducing environmental impacts through decreased energy, water, and materials use; and
- Moving the overall market conditions toward higher performance, through the Federal demand for sustainable facilities.

These benefits are sizable, in part, due to the size of the Federal Government. The Federal Government is estimated to use about 1.6 percent of the Nation's total en-

¹ http://www.whitehouse.gov/sites/default/files/blueprint_secure_energy_future.pdf.

² http://www1.eere.energy.gov/vehiclesandfuels/pdfs/vehicles_fs.pdf.

³ <http://www.bels.gov/news.release/cesan.nr0.htm>.

ergy, occupy nearly 500,000 buildings, operate more than 600,000 vehicles, and purchase more than \$500 billion per year in goods and services.

The Federal government is making substantial progress toward its sustainability goals mandated in EAct 2005, EISA 2007, and Executive Order 13514, signed by President Obama in October, 2009. For example, in FY 2010, the Federal Government reported a 15 percent decrease in site-delivered Btu per square foot compared with baseline year 2003. This meets the EISA statutory reduction goal for FY 2010.

FY 2010 was also the highest level year to date for the use of Energy Savings Performance Contracting with these contacts totaling more than \$560 million in investment in Federal facilities. This type of performance-based contracting is extremely important to meeting the Federal sustainability goals due to the pressures on Federal appropriations and increasing goals for reduced energy intensity, energy savings goals that increase to 30% by 2015.

In FY 2010, Federal agencies also reported purchasing or producing renewable electric energy representing 5.2 percent of the Federal Government's electricity use, achieving the EAct 2005 goal of five percent. This more than doubled renewable energy use as a percentage of total facility electricity use since 2003. The five percent goal remains in place until FY 2013, when it will increase to 7.5 percent under current statute. Not counted in this metric is the significant amount of non-electric renewable energy produced and purchased by the Government that displaces the need for additional electric generation. This includes thermal energy, such as solar hot water and space heating, geothermal energy, steam from biomass, and landfill methane.

DOE is also making progress to improve the transparency of Federal building energy efficiency, as required under EISA 2007, Section 432. DOE expects to have a web-based system that provides information on the energy efficiency of metered buildings and on the cost-effective improvement opportunities that exist in Federal facilities publicly available by Fall 2011.

ENERGY EFFICIENCY IN THE INDUSTRIAL SECTOR AND BUILDING CODES

The Energy Savings and Industrial Competitiveness Act (S. 1000) outlines new provisions for building codes, appliance standards, and industrial energy efficiency among other areas.

Energy-conserving appliance standards are one of the significant steps the Administration has taken to save energy in homes and businesses nationwide, and pave the way toward a clean energy future for our country.⁴ Since January 2009, the Department of Energy has finalized new efficiency standards for more than twenty household

⁴<http://www.whitehouse.gov/issues/energy-and-environment>.

and commercial products, which are projected to cumulatively save consumers between \$250 billion and \$300 billion over the next 20 years.⁵ These standards can provide an immediate and economically responsible way to increase the nation's energy security while protecting the environment. Improvements in energy efficiency can be made today to yield significant near-term and long-term economic and environmental benefits for the nation.⁶

In 2007, Congress recognized the importance of negotiated consensus standards, amending the Energy Policy and Conservation Act (EPCA) to allow for an expedited rulemaking process in the event a representative group of stakeholders could reach agreement. Several DOE rules currently under development and review overlap with the proposed consensus standards. Although the agency cannot presuppose the level of the final standards, it is seriously considering these consensus recommendations. The agency's preliminary analyses accompanying the proposed rules for these standards suggest that the potential net benefits from these recommended levels could yield tens of billions of dollars in fuel savings and lower greenhouse gas emissions.

U.S. industry accounts for about one-third of U.S. energy use while contributing to about 12% of U.S. Gross Domestic Product.⁷ Improving industrial energy efficiency will result in saving money and enhancing U.S. competitiveness in the world's manufacturing sector. By partnering with the private sector, DOE has already managed to save more than 9.3 quadrillion Btu of energy and reduced carbon emissions by over 206 million metric tons.

Supply chain energy efforts can make an important contribution to overall industrial efficiency and the competitive position of domestic suppliers. Analysis suggests that a large part of the carbon footprint for many consumer products can be attributed to the supply chain—from raw materials, transport, and packaging to the energy consumed in manufacturing processes—on the order of 40 to 60 percent. DOE and the Environmental Protection Agency (EPA) both have existing initiatives that address supply chain efficiency, such as *Save Energy Now*[®] at DOE and ENERGY STAR. For example, through its national *Save Energy Now*[®] initiative, DOE encourages manufacturing companies to engage their supply chains in energy and carbon management, while at EPA, ENERGY STAR has engaged whole industries to support their customers and supply chains in building effective energy management programs. Specifically, DOE and EPA develop processes and resources to assist companies in promoting energy management to their industrial suppliers and customers. *Save Energy Now*[®] LEADER Companies make a voluntary

⁵ <http://www.energy.gov/news/9582.htm>

⁶ See, for example: McKinsey and Company (2007). Reducing U.S. Greenhouse Gas Emissions: How Much at What Cost? (<http://www.epa.gov/cleanenergy/documents/suca/cost-effectiveness.pdf>) and Lazard Associates. Feb. 2009. Levelized Cost of Energy Analysis Version 3.0.

⁷ http://www1.eere.energy.gov/industry/about/pdfs/itp_program_fact_sheet.pdf.

commitment to reduce their energy intensity by 25 percent in 10 years. Many of these companies are interested in improving the efficiency of their supply chains as well. ENERGY STAR boasts a growing group of corporations that have used ENERGY STAR to influence key suppliers to effectively manage energy.

DOE is also working with Superior Energy Performance (SEP), a voluntary certification program helping to provide industrial facilities with a roadmap for achieving continual improvement in energy efficiency while maintaining competitiveness. A central element of SEP is implementation of the International Organization for Standardization (ISO) 50001 energy management standard, with additional requirements to achieve and document energy intensity improvements. DOE is working through SEP to bring ISO 50001 to the U.S. Upon its publication this American National Standards Institute-accredited program is anticipated to provide companies with a framework for fostering energy efficiency at the plant level and a consistent methodology for measuring and validating energy efficiency and intensity improvements. This new framework has the opportunity to be an important tool to integrate into supply chain efforts.

ALTERNATIVE FUEL VEHICLES

Few technologies hold greater promise for reducing our dependence on oil than alternative fuel vehicles. The Administration has set a goal to have the United States become the first country with a million electric vehicles on the road. Meeting this goal will help the United States become a leader in the clean energy economy, while capitalizing on the ingenuity of American industry. Manufacturing products needed for the clean energy economy will generate long term economic strength in the U.S., creating jobs across the country while reducing air pollution and greenhouse gas emissions. The Administration supports the goal of utilizing alternative fuel technologies to break our dependence on oil and to move toward a clean energy future. The DOE looks forward to working with Congress to achieve these objectives.

DOE's Vehicle Technologies Program is helping the Nation lead the way in alternative fuel vehicle innovation. DOE has helped reduce the cost of PHEV Lithium Ion batteries to \$650 per kilowatt-hour, a 35% reduction from the 2008 baseline of \$1,000 per kilowatt-hour. This is making oil alternatives competitive in general while specifically increasing U.S. competitiveness in the global market.

CONCLUSION

In conclusion, the Department of Energy thanks the Subcommittee for the opportunity to comment on these proposed initiatives. We look forward to working with Congress to develop strong, effective clean energy policy to ensure U.S. leadership on these global issues and in the

clean energy economy. I am happy to answer any questions Committee Members may have.

STATEMENT OF JONATHAN SILVER, EXECUTIVE DIRECTOR OF
THE LOAN PROGRAMS OFFICE, DEPARTMENT OF ENERGY

INTRODUCTION

Chairman Bingaman, Ranking Member Murkowski, and members of the Committee, thank you for the opportunity to testify today. My name is Jonathan Silver, and I am the Executive Director of the Department of Energy's (DOE) Loan Programs Office (LPO). DOE's loan programs provide critical support for the nation's commercial deployment of clean energy technologies, and the jobs and economic growth that come with them. I welcome the opportunity to discuss the Advanced Technology Vehicles Manufacturing (ATVM) Loan Program with you and to highlight our significant accomplishments.

BACKGROUND OF THE ATVM LOAN PROGRAM

As you know, the Loan Programs Office administers three separate programs: the ATVM Loan Program and the Title XVII Section 1703 and Section 1705 loan guarantee programs. The ATVM Loan Program was established by Section 136 of the Energy Independence and Security Act of 2007, and provides direct loans to support the manufacturing of advanced technology vehicles and qualifying components in the United States. As noted by GAO in their most recent report, although the authorizing statute does not specifically identify goals for the Program, ATVM Program staff have established clear goals and performance metrics to measure the program's success. In achieving these goals, the Program helps create next-generation jobs in the automotive and component manufacturing industries.

The Program provides loans to automobile and automobile parts manufacturers for the cost of reequipping, expanding, or establishing manufacturing facilities in the United States to produce advanced technology vehicles or qualified components, and for associated engineering integration costs. In 2010, Section 136 was amended to include ultra-efficient vehicles within the definition of advanced technology vehicles.

The FY 2009 Continuing Resolution (CR), which was enacted on September 30, 2008, appropriated \$7.5 billion in credit subsidy to support up to \$25 billion in loans under the ATVM Loan program. The FY 2009 CR also provided DOE with \$10 million to administer the Program. On November 5, 2008, DOE issued the Interim Final Rule for the Program. DOE accomplished this effort in approximately half of the 60-day timeframe mandated by Congress. The program began receiving applications on December 2, 2008.

The ATVM Program has received numerous applications from both automobile original equipment manufacturers (OEMs) and component manufacturers.

VALUE OF ATVM LOAN PROGRAM

ATVM funding has played a critical role in the development of plug-in hybrid and electric vehicles by providing long-term capital when private financing was not available. It is important to remember that the ATVM Loan Program is not a grant program; loans must be repaid. We review projects on a competitive basis, and we do not fund every eligible project. We ensure that the loans we support meet our statutory requirement of having a reasonable prospect of repayment. Every project that receives financing must first go through a rigorous financial, legal and technical review process—similar to, and in some ways more comprehensive than, what a private sector lender would conduct—before a single dollar of taxpayer money is put to work.

Moreover, the programs can efficiently and effectively leverage government resources to spur private-sector investment. The financing provided by the loan programs is “additive.” It is intended to finance projects that—because they would have difficulty accessing conventional debt markets—might otherwise not get built. A relatively small amount of appropriated credit subsidy can support large amounts of new private sector investment. When a loan is fully repaid, the nation will have benefited from the incentivized private sector investment at relatively little cost to taxpayers.

The potential benefits of the Program are great. In addition to improvements in fuel economy, ATVM Loan Program projects promote economic growth and job creation. They create construction and permanent operating jobs in manufacturing communities where job growth has long been stagnant. In addition, these projects contribute to the build-out of the domestic supply chain and manufacturing base that we will need to “win” the clean energy future.

To date, DOE has issued five ATVM loans totaling \$8.3 billion. These funds will support advanced vehicle projects in nine states and the companies supported estimate these projects will preserve or create almost 38,000 manufacturing or permanent jobs. The Program also provides substantial support to the US automotive supply chain. According to information received from the companies, more than 65 percent of the parts for Fisker’s Karma vehicle are expected to come from US manufacturers, and the VPG facility alone is estimated to support approximately 800 sales, service, parts and supplier professionals. In an economic downturn that threatened the entire domestic auto industry, the Program helped re-establish US leadership across multiple automotive technologies including plug-in, high-efficiency gasoline, and natural gas vehicles.

ATVM loans support three of the world’s first electric car factories in Delaware, Tennessee and California, as

well as the only factory-built light-duty vehicle to date that meets or exceeds accessibility guidelines of the Americans with Disabilities Act. In total, our projects will save approximately 282 million gallons of gasoline annually—roughly the same as removing 545,000 passenger vehicles from the roads.

S. 1000 AND S. 1001

The Administration is continuing to review these bills and does not have a position on them at this time. My comments will be limited to Section 202 of S. 1000 and Sections 101 and 102 of S. 1001 as they address issues that would fall under the Loan Program Office at the Department of Energy.

S. 1000 would expand Title XVII to finance energy efficiency upgrades to existing buildings. The new program would target certain building types, including commercial, industrial, municipal, university, school, and hospital facilities. The President's 2012 budget requests \$100 million for loan guarantee subsidy costs to support up to \$2 billion in loan guarantees for energy efficiency retrofits of universities, schools, and hospitals. However, as noted above the Administration is continuing to review the specifics of this bill.

S. 1001 would add two new categories of vehicles to those now eligible for a loan under the ATVM Program. Vehicles currently eligible for ATVM loans include certain light duty and ultra-efficient vehicles. The proposed bill would add medium and heavy-duty trucks, bus and rail vehicles, as well as alternative fuel vehicles. These vehicles would need to satisfy certain loan eligibility requirements set out in the proposed bill, including reducing the consumption of conventional motor fuel. The proposed bill would also expand the scope of components that are eligible for a loan under the ATVM program.

The bill would also amend the Title XVII loan guarantee program to include, as part of the 1703 program's mandate, the reduction of oil imports through alternative fuel projects. It would also make projects that produce and distribute alternative fuel and advanced biofuels eligible for 1703 loan guarantees.

ADDRESSING THE GAO FINDINGS

As you are aware, the U.S. Government Accountability Office (GAO) completed its audit of the ATVM Loan Program in February of this year. The stated objectives of the audit were to (1) identify the steps DOE has taken to implement the ATVM loan program, (2) examine the ATVM program's progress in awarding loans, (3) assess how the program is overseeing the loans, and (4) evaluate the extent to which DOE can assess its progress toward meeting program goals. The auditors made only two recommendations: (i) that the Program accelerate its efforts to engage the engineering expertise needed for effective technical oversight of loan recipients, and (ii) that the Program de-

velop sufficient, quantifiable performance measures for its three program goals.

The GAO report noted that DOE had taken numerous steps to successfully implement the ATVM Program. In addition to setting out Program goals for increasing U.S. fuel economy as a whole, advancing U.S. automotive technology, and protecting taxpayers' financial interests, the Program also established rigorous technical, financial, and environmental eligibility requirements for applicants.

The GAO also acknowledged that the Program has successfully set procedures for overseeing the financial and technical performance of borrowers, but asserted that it did not engage engineering expertise in a timely matter for certain projects that need additional technical oversight. First, because of their technical expertise, the Program leverages staff in DOE's Office of Energy Efficiency and Renewable Energy (EERE) to determine whether applicants and proposed projects meet the Program's technical eligibility criteria. EERE performs most of the technical eligibility analysis for the ATVM Loan Program, and uses a model from the Argonne National Laboratory to analyze certain applicant-provided technical data. Second, as we related in our response to the GAO report, the ATVM Loan Program—consistent with its procedures—has regularly engaged both internal and external expertise to help oversee borrowers' compliance with the loans' technical requirements. In addition to experienced engineers on staff, we have—contracted with the country's leading independent engineering firms to ensure that the projects are being delivered as agreed. These large, private sector firms have decades of experience in monitoring and overseeing complex vehicle and technology projects—and thousands of specialized experts.

We also disagree with GAO's recommendations on the appropriate phase to begin close technical scrutiny of certain large projects. GAO suggested, for example, a detailed review of the engineering integration stage, which is typically software-based design, scheduling, and logistics. A formal engineering assessment at this very preliminary stage would increase transaction costs but would not yield insights that would increase effectiveness of the ATVM program.

For every project supported by ATVM loans, DOE utilizes engineering expertise on a regular basis during vehicle assembly and component manufacturing facility construction. Given the wide variation in ATVM projects, however, it is neither possible nor prudent to subject them all to an identical engineering review. The Program tailors the review for each project to deploy engineering expertise when and where it is most needed in order to achieve the highest confidence in the quality of the project and its ability to repay the loan.

Additionally, the Loan Program's Portfolio Management Division continuously monitors both a borrower's adherence to the technical specifications in its approved busi-

ness plan, and its financial performance relative to the terms and conditions of the loan agreement. Program engineers attend quarterly progress meetings with the borrowers and participate in on-site inspections of assembly plants and construction sites. Financial covenants are specifically crafted to provide timely warnings to DOE prior to a borrower developing financial issues that may impact the project. This level of attention gives DOE the ability to closely monitor both the technical performance and financial health of each borrower for the life of the loan.

The Department also disagrees with GAO's second stated concern, that the Program has not developed sufficiently robust performance metrics. To support this position, GAO expressed concern that external auditors reported instances in which three of the four borrowers did not spend funds as required. The Program has been successful in verifying that loan funds are spent by the borrowers as intended by the ATVM Loan Program. As GAO reported, the ATVM program uses external auditors to oversee borrowers' financial performance. Out of \$3.5 billion in loan disbursements over fifteen months, DOE's auditors have identified less than \$1 million in total funds that were problematic. The largest of the overages, in dollars, represented less than 1/100th of one percent of the relevant loan. Each problem that has been identified was corrected immediately, and procedures were quickly put in place to ensure that the errors did not occur again.

GAO also recommended that the ATVM Loan Program develop quantifiable performance measures for ATVM Program goals. DOE believes that the ATVM Loan Program has established clear performance measures and operated in a manner consistent with its authorizing statute and implementing regulations. DOE believes the analyses suggested by GAO go well beyond the statutory requirement set out under Section 136.

CONCLUSION

In the past two years, the ATVM loan program has shown great success. We are making a meaningful contribution to our national clean energy goals while creating new and permanent jobs. We will continue to administer all of the DOE loan programs, including the ATVM program, in the most effective and efficient way possible—while appropriately protecting taxpayer funds.

Thank you again for inviting me here today. I look forward to responding to your questions.

CHANGES IN EXISTING LAW

In compliance with paragraph 12 of rule XXVI of the Standing Rules of the Senate, changes in existing law made by the bill S. 1001, as ordered reported, are shown as follows (existing law proposed to be omitted is enclosed in black brackets, new matter is printed in italic, existing law in which no change is proposed is shown in roman):

ENERGY POLICY ACT OF 2005

Public Law 109–58, as amended

AN ACT To ensure jobs for our future with secure, affordable, and reliable energy.

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TITLE VII—VEHICLES AND FUEL

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Subtitle D—Miscellaneous

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SEC. 756. REDUCTION OF ENGINE IDLING.

(a) DEFINITIONS.—In this section:

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(5) IDLE REDUCTION TECHNOLOGY.—The term “idle reduction technology” means an advanced truck stop electrification system, auxiliary power unit, or other technology that—

(A) is used to reduce long-duration idling; **[and]**

(B) allows for the main drive engine or auxiliary refrigeration engine to be shut down**[.] and;**

(C) uses an alternative fuel to reduce consumption of conventional fuel and environmental emissions.

* * * * *

(b) IDLE REDUCTION TECHNOLOGY BENEFITS, PROGRAMS, AND STUDIES.—

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(4) IDLE REDUCTION AND ENERGY CONSERVATION DEPLOYMENT PROGRAM.—

(A) ESTABLISHMENT.—

(i) IN GENERAL.—Not later than 90 days after the date of enactment of this Act, the Administrator, in consultation with the Secretary of Transportation shall, through the Environmental Protection Agency’s SmartWay Transport Partnership, establish a program to support deployment of idle reduction and energy conservation technologies.

(ii) PRIORITY.—The Administrator shall give priority to the deployment of idle reduction and energy conservation technologies based on the costs and beneficial effects on air quality and ability to lessen the emission of criteria air pollutants.

(B) FUNDING.—

(i) AUTHORIZATION OF APPROPRIATIONS.—There are authorized to be appropriated to the Administrator to carry out subparagraph (A) for the purpose of reducing extended idling from heavy-duty vehicles \$19,500,000 for fiscal year 2006, \$30,000,000 for fiscal year 2007, and \$45,000,000 for **[fiscal year 2008]** *each of fiscal years 2008 through 2016.*

(ii) LOCOMOTIVES.—There are authorized to be appropriated to the administrator to carry out subparagraph (A) for the purpose of reducing extended idling from locomotives \$10,000,000 for fiscal year 2006, \$15,000,000 for fiscal year 2007, and \$20,000,000 for [fiscal year 2008] each of fiscal years 2008 through 2016.

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TITLE XVII—INCENTIVES FOR INNOVATIVE TECHNOLOGIES

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SEC. 1703. ELIGIBLE PROJECTS.

(a) IN GENERAL.—The Secretary may make guarantees under this section only for projects that—

- (1) avoid, reduce, or sequester air pollutants or anthropogenic emissions of greenhouse gases; and
- (2) employ new or significantly improved technologies as compared to commercial technologies in service in the United States at the time the guarantee is issued.

* * * * *

(11) *Infrastructure for provision and distribution of alternative fuels.*

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ENERGY INDEPENDENCE AND SECURITY ACT OF 2007

Public Law 110–140, as amended

AN ACT To move the United States toward greater energy independence and security, to increase the production of clean renewable fuels, to protect consumers, to increase the efficiency of products, buildings, and vehicles, to promote research on and deploy greenhouse gas capture and storage options, and to improve the energy performance of the Federal Government, and for other purposes.

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TITLE I—ENERGY SECURITY THROUGH IMPROVED VEHICLE FUEL ECONOMY

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Subtitle B—Improved Vehicle Technology

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SEC. 136. ADVANCED TECHNOLOGY VEHICLES MANUFACTURING INCENTIVE PROGRAM.

(a) DEFINITIONS.—In this section:

(1) ADVANCED TECHNOLOGY VEHICLE.—The term “advanced technology vehicle” [means an ultra efficient vehicle or a light duty vehicle that meets—] *means—*

(A) *an ultra efficient vehicle or a light duty vehicle that meets—*

[(A)] (i) the Bin 5 Tier II emission standard established in regulations issued by the Administrator of the Environmental Protection Agency under section 202(i) of the Clean Air Act (42U.S.C. 7521(i)), or a lower-numbered Bin emission standard;

[(B)] (ii) any new emission standard in effect for fine particulate matter prescribed by the Administrator under that Act (42 U.S.C. 7401 et seq.); and

[(C)] (iii) at least 125 percent of the average base year combined fuel economy for vehicles with substantially similar attributes [.];

(B) a vehicle (such as a medium-duty or heavy-duty work truck, bus, or rail transit vehicle) that—

(i) is used on a public street, road, highway, or transitway;

(ii) meets each applicable emission standard that is established as of the date of the application; and

(iii) will reduce consumption of conventional motor fuel by 25 percent or more, as compared to existing surface transportation technologies that perform a similar function, unless the Secretary determines that—

(I) the percentage is not achievable for a vehicle type or class; and

(II) an alternative percentage for that vehicle type or class will result in substantial reductions in motor fuel consumption within the United States.

* * * * *

(3) ENGINEERING INTEGRATION COSTS.—The term “engineering integration costs” includes the cost of engineering tasks relating to—

(A) incorporating qualifying components into the design of advanced technology vehicles; and

(B) designing tooling and [equipment and] equipment developing manufacturing processes and material suppliers and manufacturing process equipment for production facilities that produce qualifying components or advanced technology vehicles.

[(4)] QUALIFYING COMPONENTS.—The term “qualifying components” means components that the Secretary determines to be—

[(A)] designed for advanced technology vehicles; and

[(B)] installed for the purpose of meeting the performance requirements of advanced technology vehicles.]

(4) QUALIFYING COMPONENTS.—The term “qualifying components” means components, systems, or groups of subsystems that the Secretary determines—

(A) to be designed to improve fuel economy or otherwise substantially reduce consumption of conventional motor fuel; or

(B) to contribute measurably to the overall improved fuel use of an advanced technology vehicle, including idle reduction technologies.

* * * * *

(b) **ADVANCED VEHICLES MANUFACTURING FACILITY.**—The Secretary shall provide facility funding awards under this section **[to automobile]** *to advanced technology vehicle* manufacturers, ultra efficient vehicle manufacturers, and component suppliers to pay not more than 30 percent of the cost of—

(1) reequipping, expanding, or establishing a manufacturing facility in the United States to produce—

* * * * *

(d) **DIRECT LOAN PROGRAM.**—

(1) **IN GENERAL.**—Not later than 1 year after December 19, 2007, and subject to the availability of appropriated funds, the Secretary shall carry out a program to provide **[a total of not more than \$25,000,000,000 in]** loans to eligible individuals and entities (as determined by the Secretary) for the costs of activities described in subsection (b) of this section. The loans shall be made through the Federal Financing Bank, with the full faith and credit of the United States Government on the principal and interest. The full credit subsidy shall be paid by the Secretary using appropriated funds.

* * * * *

(h) **SET ASIDE FOR SMALL **[AUTOMOBILE] ADVANCED TECHNOLOGY VEHICLE** MANUFACTURERS AND COMPONENT SUPPLIERS.**—

(1) **DEFINITION OF COVERED FIRM.**—In this subsection, the term “covered firm” means a firm that—

(A) employs less than 500 individuals; and

(B) manufactures ultra efficient vehicles, **[automobiles] advanced technology vehicles**, or components of *advanced technology vehicles* **[automobiles]**.

(2) **SET ASIDE.**—Of the amount of funds that are used to provide awards for each fiscal year under subsection (b) of this section, the Secretary shall use not less than 10 percent to provide awards to covered firms or consortia led by a covered firm.

(i) **AUTHORIZATION OF APPROPRIATIONS.**—There are authorized to be appropriated such sums as are necessary to carry out this section for each of fiscal years 2008 through **[2012] 2016**.

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TITLE 23—HIGHWAYS

CHAPTER 1—FEDERAL-AID HIGHWAYS

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SEC. 166. HOV FACILITIES.

(b) **EXCEPTIONS.**—

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(5) **LOW EMISSION AND ENERGY-EFFICIENT VEHICLES.**—

(A) **INHERENTLY LOW EMISSION VEHICLE.**—**[Before September 30, 2009, the State]** *The State* agency may allow vehicles that are certified as inherently low-emission vehicles pursuant to section 88.311–93 of title 40, Code of Federal Regulations (or successor regulations), and are labeled in accordance with section 88.312–93 of such title (or successor regulations), to use the HOV facility if the agency

establishes procedures for enforcing the restrictions on the use of the facility by the vehicles.

(B) OTHER LOW EMISSION AND ENERGY-EFFICIENT VEHICLES.—[Before September 30, 2009, the State] *The State* agency may allow vehicles certified as low emission and energy-efficient vehicles under subsection (e), and labeled in accordance with subsection (e), to use the HOV facility if the operators of the vehicles pay a toll charged by the agency for use of the facility and the agency—

(i) establishes a program that addresses the selection of vehicles under this paragraph; and

(ii) establishes procedures for enforcing the restrictions on the use of the facility by the vehicles.

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