

Calendar No. 152112TH CONGRESS
1ST SESSION**S. 1001****[Report No. 112-72]**

To reduce oil consumption and improve energy security, and for other purposes.

IN THE SENATE OF THE UNITED STATES

MAY 16, 2011

Mr. WYDEN (for himself and Ms. STABENOW) introduced the following bill; which was read twice and referred to the Committee on Energy and Natural Resources

SEPTEMBER 6, 2011

Reported by Mr. BINGAMAN, with an amendment

[Strike out all after the enacting clause and insert the part printed in *italic*]

A BILL

To reduce oil consumption and improve energy security, and for other purposes.

1 *Be it enacted by the Senate and House of Representa-*
2 *tives of the United States of America in Congress assembled,*

1 **SECTION 1. SHORT TITLE; TABLE OF CONTENTS.**

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

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

Sec. 1. Short title; table of contents.

Sec. 2. Definitions.

**TITLE I—ALTERNATIVE FUEL VEHICLE DEPLOYMENT AND
 INFRASTRUCTURE DEVELOPMENT**

Sec. 101. Loan guarantees for alternative fuel infrastructure.

Sec. 102. Advanced technology vehicles manufacturing incentive program.

Sec. 103. Conventional fuel replacement calculation and assessment.

Sec. 104. Technical assistance and coordination.

Sec. 105. Workforce training.

Sec. 106. Reduction of engine idling and conventional fuel consumption.

Sec. 107. Electric and natural gas utility and oil pipeline participation.

Sec. 108. HOV lane access extension.

Sec. 109. Research, development, and demonstration.

TITLE II—FUNDING AND OFFSETS

Sec. 201. Authorization of appropriations.

Sec. 202. Strategic Petroleum Reserve.

Sec. 203. Transfers.

7 **SEC. 2. DEFINITIONS.**

8 In this Act:

9 (1) **ALTERNATIVE FUEL.**—The term “alter-
 10 native fuel” has the meaning given the term in sec-
 11 tion 30B(e)(4) of the Internal Revenue Code of
 12 1986.

13 (2) **ALTERNATIVE FUEL VEHICLE.**—The term
 14 “alternative fuel vehicle” means—

1 (A) a new qualified alternative fuel motor
2 vehicle (as defined in section 30B(e)(4) of the
3 Internal Revenue Code of 1986);

4 (B) a mixed-fuel vehicle (as defined in sec-
5 tion 30B(e)(5)(B) of that Code);

6 (C) a new qualified plug-in electric drive
7 motor vehicle (as defined in section 30D(d) of
8 that Code); or

9 (D) a nonroad vehicle manufactured to pri-
10 marily use an alternative fuel.

11 (3) COMMUNITY COLLEGE.—The term “commu-
12 nity college” has the meaning given the term “junior
13 or community college” in section 312 of the Higher
14 Education Act of 1965 (20 U.S.C. 1058).

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

17 (5) NONROAD VEHICLE.—

18 (A) IN GENERAL.—The term “nonroad ve-
19 hicle” means a vehicle that is not licensed for
20 onroad use.

21 (B) INCLUSIONS.—The term “nonroad ve-
22 hicle” includes a vehicle described in subpara-
23 graph (A) that is used principally—

24 (i) for industrial, farming, or commer-
25 cial use;

1 (ii) for rail transportation;

2 (iii) at an airport; or

3 (iv) for marine purposes.

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

6 **TITLE I—ALTERNATIVE FUEL**
7 **VEHICLE DEPLOYMENT AND**
8 **INFRASTRUCTURE DEVELOP-**
9 **MENT**

10 **SEC. 101. LOAN GUARANTEES FOR ALTERNATIVE FUEL IN-**
11 **FRASTRUCTURE.**

12 (a) IN GENERAL.—Section 1703(a) of the Energy
13 Policy Act of 2005 (42 U.S.C. 16513(a)) is amended—

14 (1) in paragraph (1), by striking “and” after
15 the semicolon at the end;

16 (2) by redesignating paragraph (2) as para-
17 graph (3); and

18 (3) by inserting after paragraph (1) the fol-
19 lowing:

20 “(2) reduce oil imports through the use of al-
21 ternative fuel (as defined in section 30B(e)(4) of the
22 Internal Revenue Code of 1986); and”.

23 (b) CATEGORIES.—Section 1703(b) of the Energy
24 Policy Act of 2005 (42 U.S.C. 16513(b)) is amended by
25 adding at the following:

1 “(11) The production and distribution of—
 2 “(A) alternative fuel (as defined in section
 3 30B(e)(4) of the Internal Revenue Code of
 4 1986); or
 5 “(B) advanced biofuel (as defined in sec-
 6 tion 211(o)(1) of the Clean Air Act (42 U.S.C.
 7 7545(o)(1))).”.

8 **SEC. 102. ADVANCED TECHNOLOGY VEHICLES MANUFAC-**
 9 **TURING INCENTIVE PROGRAM.**

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

12 (1) in subsection (a)—

13 (A) in paragraph (1)—

14 (i) by redesignating subparagraphs
 15 (A) through (C) as clauses (i) through
 16 (iii), respectively, and indenting appro-
 17 priately;

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

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

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

4 (iv) by adding at the end the fol-
5 lowing:

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

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

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

14 “(iii) will reduce consumption of con-
15 ventional motor fuel by 25 percent or
16 more, as compared to existing surface
17 transportation technologies that perform a
18 similar function, unless the Secretary de-
19 termines that—

20 “(I) the percentage is not achiev-
21 able for a vehicle type or class; and

22 “(II) an alternative percentage
23 for that vehicle type or class will re-
24 sult in substantial reductions in motor

1 fuel consumption within the United
2 States; and

3 “(C) an alternative fuel vehicle (as defined
4 in section 2 of the Alternative Fuel Vehicles
5 Competitiveness and Energy Security Act of
6 2011) that—

7 “(i) meets each applicable emission
8 standard that is established as of the date
9 of the application; and

10 “(ii) will reduce consumption of con-
11 ventional fuel by 25 percent or more, as
12 compared to existing surface transpor-
13 tation technologies that perform a similar
14 function, unless the Secretary determines
15 that—

16 “(I) the percentage is not achiev-
17 able for a vehicle type or class; and

18 “(II) an alternative percentage
19 for that vehicle type or class will re-
20 sult in substantial reductions in con-
21 ventional fuel consumption within the
22 United States.”;

23 (B) in paragraph (3)(B)—

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

1 (ii) by inserting “, and manufacturing
2 process equipment” after “suppliers”; and
3 (C) by striking paragraph (4) and insert-
4 ing the following:

5 “(4) QUALIFYING COMPONENTS.—The term
6 ‘qualifying components’ means components, systems,
7 or groups of subsystems that the Secretary deter-
8 mines—

9 “(A) to be designed to improve fuel econ-
10 omy or the substitution of conventional fuel
11 with—

12 “(i) alternative fuel (as defined in sec-
13 tion 30B(e)(4) of the Internal Revenue
14 Code of 1986); or

15 “(ii) advanced biofuel (as defined in
16 section 211(o)(1) of the Clean Air Act (42
17 U.S.C. 7545(o)(1))); or

18 “(B) to contribute measurably to the over-
19 all improved fuel use of an advanced technology
20 vehicle, including idle reduction technologies.”;

21 (2) in subsection (b), in the matter preceding
22 paragraph (1), by striking “to automobile” and in-
23 serting “to advanced technology vehicle”;

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

4 (4) in subsection (h)—

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

8 (B) in paragraph (1)(B), by striking
9 “automobiles” each place it appears and insert-
10 ing “advanced technology vehicles”; and

11 (5) in subsection (i), by striking “2012” and in-
12 serting “2016”.

13 **SEC. 103. CONVENTIONAL FUEL REPLACEMENT CALCULA-**
14 **TION AND ASSESSMENT.**

15 (a) **METHODOLOGY.**—Not later than 180 days after
16 the date of enactment of this Act, the Secretary shall, by
17 rule, develop a methodology for calculating the equivalent
18 volumes of conventional fuel displaced by use of each alter-
19 native fuel to assess the effectiveness of alternative fuel
20 and alternative fuel vehicles in reducing oil imports.

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

24 (1) conduct a national assessment (using the
25 methodology developed under subsection (a)) of the

1 effectiveness of alternative fuel and alternative fuel
 2 vehicles in reducing oil imports into the United
 3 States, including an assessment of—

4 (A) market penetration of alternative fuel
 5 and alternative fuel vehicles in the United
 6 States;

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

10 (C) the maximum feasible deployment of
 11 alternative fuel and alternative fuel vehicles by
 12 2020 and 2030; and

13 (2) report to Congress the results of the assess-
 14 ment.

15 **SEC. 104. TECHNICAL ASSISTANCE AND COORDINATION.**

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

18 (1) **IN GENERAL.—**In carrying out this title, the
 19 Secretary shall provide, at the request of the Gov-
 20 ernor, mayor, county executive, public utility com-
 21 missioner, or other appropriate official or designee,
 22 technical assistance to State, local, and tribal gov-
 23 ernments or to a public-private partnership de-
 24 scribed in paragraph (2) to assist with the deploy-

1 ment of alternative fuel and alternative fuel vehicles
2 and infrastructure.

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

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

10 (B) vehicle manufacturers;

11 (C) alternative fuel vehicle or alternative
12 fuel technology providers;

13 (D) vehicle fleet owners;

14 (E) transportation and freight service pro-
15 viders; or

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

18 ~~(3) ASSISTANCE.~~—The technical assistance de-
19 scribed in paragraph (1) may include—

20 (A) coordination in the selection, location,
21 and timing of alternative fuel recharging and
22 refueling equipment and distribution infrastruc-
23 ture, including the identification of transpor-
24 tation corridors and specific alternative fuels
25 that would be made available;

1 (B) development of protocols and commu-
2 nication standards that facilitate vehicle refuel-
3 ing and recharging into electric, natural gas,
4 and other alternative fuel distribution systems;

5 (C) development of codes and standards
6 for the installation of alternative fuel distribu-
7 tion and recharging and refueling equipment;

8 (D) education and outreach for the deploy-
9 ment of alternative fuel and alternative fuel ve-
10 hicles; and

11 (E) utility rate design and integration of
12 alternative fuel vehicles into electric and natural
13 gas utility distribution systems.

14 (b) **COST SHARING.**—Cost sharing for assistance
15 awarded under this section shall be consistent with section
16 988 of the Energy Policy Act of 2005 (42 U.S.C. 16352).

17 (c) **AUTHORIZATION OF APPROPRIATIONS.**—There is
18 authorized to be appropriated to carry out this section
19 \$50,000,000 for each of fiscal years 2012 through 2016.

20 **SEC. 105. WORKFORCE TRAINING.**

21 (a) **WORKFORCE TRAINING.**—

22 (1) **IN GENERAL.**—The Secretary, in consulta-
23 tion with the Secretary of Labor, shall award grants
24 to community colleges, other institutions of higher
25 education, and other qualified training and edu-

1 eation institutions for the establishment or expansion
2 sion of programs to provide training and education
3 for vocational workforce development for—

4 (A) the manufacture and maintenance of
5 alternative fuel vehicles; and

6 (B) the manufacture and installation and
7 inspection of alternative fuel recharging, refuel-
8 ing, and distribution infrastructure.

9 (2) PURPOSE.—Training funded under this
10 subsection shall be intended to ensure that the work-
11 force has the necessary skills needed to manufac-
12 ture, install, and maintain alternative fuel infra-
13 structure and alternative fuel vehicles.

14 (3) SCOPE.—Training funded under this sub-
15 section shall include training for—

16 (A) electricians, plumbers, pipefitters, and
17 other trades and contractors who will be install-
18 ing alternative fuel recharging, refueling, and
19 distribution infrastructure;

20 (B) building code inspection officials;

21 (C) vehicle, engine, and powertrain dealers
22 and mechanics; and

23 (D) others positions as the Secretary de-
24 termines necessary to successfully deploy alter-
25 native fuels and vehicles.

1 (b) AUTHORIZATION OF APPROPRIATIONS.—There is
 2 authorized to be appropriated to carry out this section
 3 \$50,000,000 for each of fiscal years 2012 through 2016.

4 **SEC. 106. REDUCTION OF ENGINE IDLING AND CONVEN-**
 5 **TIONAL FUEL CONSUMPTION.**

6 (a) DEFINITION OF IDLE REDUCTION TECH-
 7 NOLOGY.—Section 756(a)(5) of the Energy Policy Act of
 8 2005 (42 U.S.C. 16104(a)(5)) is amended—

9 (1) in subparagraph (A), by striking “and”
 10 after the semicolon at the end;

11 (2) in subparagraph (B), by striking the period
 12 at the end and inserting “; and”; and

13 (3) by adding at the end the following:

14 “(C) uses an alternative fuel to reduce con-
 15 sumption of conventional fuel and environ-
 16 mental emissions.”.

17 (b) FUNDING.—Section 756(b)(4)(B) of the Energy
 18 Policy Act of 2005 (42 U.S.C. 16104(b)(4)(B)) is amend-
 19 ed in clauses (i) and (ii) by striking “fiscal year 2008”
 20 each place it appears and inserting “each of fiscal years
 21 2008 through 2016”.

22 **SEC. 107. ELECTRIC AND NATURAL GAS UTILITY AND OIL**
 23 **PIPELINE PARTICIPATION.**

24 (a) IN GENERAL.—The Secretary shall identify bar-
 25 riers and remedies in existing electric and natural gas and

1 oil pipeline transmission and distribution systems to the
2 distribution of alternative fuels and the deployment of al-
3 ternative fuel recharging and refueling capability, at eco-
4 nomically competitive costs of alternative fuel for con-
5 sumers, including—

6 (1) model regulatory rate design and billing for
7 recharging and refueling alternative fuel vehicles;

8 (2) electric grid load management and applica-
9 tions that will allow batteries in plug-in electric drive
10 vehicles to be used for grid storage, ancillary serv-
11 ices provision, and backup power;

12 (3) integration of plug-in electric drive vehicles
13 with smart grid technology, including protocols and
14 standards, necessary equipment, and information
15 technology systems;

16 (4) technical and economic barriers to trans-
17 shipment of biofuels by oil pipelines; and

18 (5) any other barriers to installing sufficient
19 and appropriate alternative fuel recharging and re-
20 fueling infrastructure.

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

23 (1) the Federal Energy Regulatory Commission;

24 (2) State public utility commissions;

25 (3) State consumer advocates;

1 (4) electric and natural gas utility and trans-
2 mission owners and operators;

3 (5) oil pipeline owners and operators; and

4 (6) other affected entities.

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

9 **SEC. 108. HOV LANE ACCESS EXTENSION.**

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

12 (1) in subparagraph (A), by striking “Before
13 September 30, 2009, the State” and inserting “The
14 State”; and

15 (2) in subparagraph (B), by striking “Before
16 September 30, 2009, the State” and inserting “The
17 State”.

18 **SEC. 109. RESEARCH, DEVELOPMENT, AND DEMONSTRATION.**
19 **TION.**

20 (a) RESEARCH, DEVELOPMENT, AND DEMONSTRATION.—
21

22 (1) IN GENERAL.—The Secretary, in consulta-
23 tion with the Secretary of Defense, the Secretary of
24 Commerce, and the Secretary of Transportation,
25 shall support research, development, and demonstra-

1 tion of alternative fuel vehicles and charging and re-
2 fueling technology, including support for the manu-
3 facture and deployment of those vehicles and tech-
4 nologies; that will—

5 (A) allow the United States to meet or ex-
6 ceed the petroleum import reduction goals of
7 this Act;

8 (B) develop technologies that minimize life-
9 cycle energy use in the production and distribu-
10 tion of alternative fuels; and

11 (C) maintain United States technological
12 leadership in alternative vehicle technology.

13 (2) USE OF FUNDS.—The program may include
14 funding for—

15 (A) the development of alternative fuel ve-
16 hicle technologies, including new technologies
17 for on-board alternative fuel and energy storage
18 and drive train components for vehicles; and

19 (B) production and distribution tech-
20 nologies and systems for alternative fuels, in-
21 cluding—

22 (i) grid connectivity technology for
23 electric vehicles;

24 (ii) recycling technology and prac-
25 ticable uses of catalysts;

- 1 (iii) vehicle batteries; and
 2 (iv) other components after the useful
 3 life in a vehicle or alternative fuel produc-
 4 tion facility.

5 (b) AUTHORIZATION OF APPROPRIATIONS.—There is
 6 authorized to be appropriated to carry out this section
 7 \$100,000,000 for each of fiscal years 2012 through 2016.

8 **TITLE II—FUNDING AND** 9 **OFFSETS**

10 **SEC. 201. AUTHORIZATION OF APPROPRIATIONS.**

11 Except as otherwise provided in this Act, there are
 12 authorized to be appropriated to carry out this Act and
 13 the amendments made by this Act such sums as are nec-
 14 essary.

15 **SEC. 202. STRATEGIC PETROLEUM RESERVE.**

16 (a) LEVEL.—Section 154(a) of the Energy Policy and
 17 Conservation Act (42 U.S.C. 6234(a)) is amended by
 18 striking “1 billion barrels of petroleum products” and in-
 19 serting “the quantity of crude oil and petroleum fuels im-
 20 ported into the United States each year from countries
 21 that are not signatories to North American Free Trade
 22 Agreement during an average 90-day period during the
 23 most recent calendar year for which data are available”.

24 (b) FILLING STRATEGIC PETROLEUM RESERVE TO
 25 CAPACITY.—Section 301(c) of the Energy Policy Act of

1 2005 (42 U.S.C. 6240 note; Public Law 109-58) is
2 amended by striking paragraph (1).

3 **SEC. 203. TRANSFERS.**

4 (a) FISCAL YEAR 2009.—Of the funds appropriated
5 under section 101 of division A of the Consolidated Secu-
6 rity, Disaster Assistance, and Continuing Appropriations
7 Act, 2009 (Public Law 110-329; 122 Stat. 3574) for the
8 Strategic Petroleum Reserve under the heading “Strategic
9 Petroleum Reserve” of title III of the Energy and Water
10 Development and Related Agencies Appropriations Act,
11 2008 (Public Law 110-161; 121 Stat. 1959),
12 \$31,500,000 is transferred to carry out this Act and the
13 amendments made by this Act.

14 (b) FISCAL YEAR 2010.—Of the funds appropriated
15 under the heading “Strategic Petroleum Reserve” of title
16 III of the Energy and Water Development and Related
17 Agencies Appropriations Act, 2010 (Public Law 111-85;
18 123 Stat. 2862), \$25,000,000 is transferred to carry out
19 this Act and the amendments made by this Act.

20 (c) USE OF PROCEEDS.—Notwithstanding any other
21 provision of law, any proceeds from the sale or exchange
22 of oil necessary to reach and maintain the authorized ca-
23 pacity established pursuant to section 154(a) of the En-
24 ergy Policy and Conservation Act (42 U.S.C. 6234(a)) and
25 provide for normal maintenance and operation of the Re-

1 serve shall be transferred to carry out this Act and the
2 amendments made by this Act.

3 **SECTION 1. SHORT TITLE; TABLE OF CONTENTS.**

4 (a) *SHORT TITLE.*—This Act may be cited as the “Al-
5 ternative Fueled Vehicles Competitiveness and Energy Se-
6 curity Act of 2011”.

7 (b) *TABLE OF CONTENTS.*—The table of contents of this
8 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.

9 **SEC. 2. DEFINITIONS.**

10 *In this Act:*

11 (1) *ALTERNATIVE FUEL.*—The term “alternative
12 fuel” has the meaning given the term in section 301
13 of the Energy Policy Act of 1992 (42 U.S.C. 13211).

14 (2) *ALTERNATIVE FUELED VEHICLE.*—The term
15 “alternative fueled vehicle” has the meaning given the
16 term in section 301 of the Energy Policy Act of 1992
17 (42 U.S.C. 13211).

18 (3) *COMMUNITY COLLEGE.*—The term “commu-
19 nity college” has the meaning given the term “junior

1 or community college” in section 312 of the Higher
2 Education Act of 1965 (20 U.S.C. 1058).

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

5 (5) *NONROAD VEHICLE.*—

6 (A) *IN GENERAL.*—The term “nonroad vehi-
7 cle” means a vehicle that is not licensed for
8 onroad use.

9 (B) *INCLUSIONS.*—The term “nonroad vehi-
10 cle” includes a vehicle described in subparagraph

11 (A) that is used principally—

12 (i) for industrial, farming, or commer-
13 cial use;

14 (ii) for rail transportation;

15 (iii) at an airport; or

16 (iv) for marine purposes.

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

19 **SEC. 3. LOAN GUARANTEES FOR ALTERNATIVE FUEL INFRA-**
20 **STRUCTURE.**

21 Section 1703(a) of the Energy Policy Act of 2005 (42
22 U.S.C. 16513(a)) is amended by adding at the end the fol-
23 lowing:

24 “(11) Infrastructure for provision and distribu-
25 tion of alternative fuels.”.

1 **SEC. 4. ADVANCED TECHNOLOGY VEHICLES MANUFAC-**
2 **TURING INCENTIVE PROGRAM.**

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

5 *(1) in subsection (a)—*

6 *(A) in paragraph (1)—*

7 *(i) by redesignating subparagraphs (A)*
8 *through (C) as clauses (i) through (iii), re-*
9 *spectively, and indenting appropriately;*

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

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

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

20 *(iv) by adding at the end the following:*

21 *“(B) a vehicle (such as a medium-duty or*
22 *heavy-duty work truck, bus, or rail transit vehi-*
23 *cle) that—*

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

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

4 “(iii) will reduce consumption of con-
5 ventional motor fuel by 25 percent or more,
6 as compared to existing surface transpor-
7 tation technologies that perform a similar
8 function, unless the Secretary determines
9 that—

10 “(I) the percentage is not achiev-
11 able for a vehicle type or class; and

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

17 (B) in paragraph (3)(B)—

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

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

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

24 “(4) *QUALIFYING COMPONENTS.*—The term
25 ‘qualifying components’ means components, systems,

1 or groups of subsystems that the Secretary deter-
2 mines—

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

6 “(B) to contribute measurably to the overall
7 improved fuel use of an advanced technology ve-
8 hicle, including idle reduction technologies.”;

9 (2) in subsection (b), in the matter preceding
10 paragraph (1), by striking “to automobile” and in-
11 serting “to advanced technology vehicle”;

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

15 (4) in subsection (h)—

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

19 (B) in paragraph (1)(B), by striking “*auto-*
20 *mobiles*” each place it appears and inserting
21 “*advanced technology vehicles*”; and

22 (5) in subsection (i), by striking “2012” and in-
23 serting “2016”.

1 **SEC. 5. CONVENTIONAL FUEL REPLACEMENT CALCULA-**
2 **TION AND ASSESSMENT.**

3 (a) *METHODOLOGY.*—Not later than 180 days after the
4 date of enactment of this Act, the Secretary shall, by rule,
5 develop a methodology for calculating the equivalent vol-
6 umes of conventional fuel displaced by use of each alter-
7 native fuel to assess the effectiveness of alternative fuel and
8 alternative fueled vehicles in reducing oil imports.

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

11 (1) conduct a national assessment (using the
12 methodology developed under subsection (a)) of the ef-
13 fectiveness of alternative fuel and alternative fueled
14 vehicles in reducing oil imports into the United
15 States, including as assessment of—

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

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

22 (C) the maximum feasible deployment of al-
23 ternative fuel and alternative fueled vehicles by
24 2020 and 2030; and

25 (2) report to Congress the results of the assess-
26 ment.

1 **SEC. 6. TECHNICAL ASSISTANCE AND COORDINATION.**

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

4 (1) *IN GENERAL.*—*In carrying out this title, the*
5 *Secretary shall provide, at the request of the Gov-*
6 *ernor, mayor, county executive, public utility com-*
7 *missioner, or other appropriate official or designee,*
8 *technical assistance to State, local, and tribal govern-*
9 *ments or to a public-private partnership described in*
10 *paragraph (2) to assist with the deployment of alter-*
11 *native fuel and alternative fueled vehicles and infra-*
12 *structure.*

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

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

20 (B) *vehicle manufacturers;*

21 (C) *alternative fueled vehicle or alternative*
22 *fuel technology providers;*

23 (D) *vehicle fleet owners;*

24 (E) *transportation and freight service pro-*
25 *viders; or*

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

3 (3) ASSISTANCE.—The technical assistance de-
4 scribed in paragraph (1) may include—

5 (A) coordination in the selection, location,
6 and timing of alternative fuel recharging and re-
7 fueling equipment and distribution infrastruc-
8 ture, including the identification of transpor-
9 tation corridors and specific alternative fuels
10 that would be made available;

11 (B) development of protocols and commu-
12 nication standards that facilitate vehicle refuel-
13 ing and recharging into electric, natural gas,
14 and other alternative fuel distribution systems;

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

18 (D) education and outreach for the deploy-
19 ment of alternative fuel and alternative fueled
20 vehicles; and

21 (E) utility rate design and integration of
22 alternative fueled vehicles into electric and nat-
23 ural gas utility distribution systems.

1 (b) *COST SHARING.*—*Cost sharing for assistance*
 2 *awarded under this section shall be consistent with section*
 3 *988 of the Energy Policy Act of 2005 (42 U.S.C. 16352).*

4 (c) *AUTHORIZATION OF APPROPRIATIONS.*—*There is*
 5 *authorized to be appropriated to carry out this section*
 6 *\$50,000,000 for each of fiscal years 2012 through 2016.*

7 **SEC. 7. WORKFORCE TRAINING.**

8 (a) *IN GENERAL.*—*The Secretary, in consultation with*
 9 *the Secretary of Labor, shall award grants to community*
 10 *colleges, other institutions of higher education, and other*
 11 *qualified training and education institutions for the estab-*
 12 *lishment or expansion of programs to provide training and*
 13 *education for vocational workforce development for—*

14 (1) *the manufacture and maintenance of alter-*
 15 *native fueled vehicles; and*

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

19 (b) *PURPOSE.*—*Training funded under this section*
 20 *shall be intended to ensure that the workforce has the nec-*
 21 *essary skills needed to manufacture, install, and maintain*
 22 *alternative fuel infrastructure and alternative fueled vehi-*
 23 *cles.*

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

1 (1) electricians, plumbers, pipefitters, and other
 2 trades and contractors who will be installing, main-
 3 taining, or providing safety support for alternative
 4 fuel recharging, refueling, and distribution infrastruc-
 5 ture;

6 (2) building code inspection officials;

7 (3) vehicle, engine, and powertrain dealers and
 8 mechanics; and

9 (4) others positions as the Secretary determines
 10 necessary to successfully deploy alternative fuels and
 11 vehicles.

12 (d) *AUTHORIZATION OF APPROPRIATIONS.*—There is
 13 authorized to be appropriated to carry out this section
 14 \$50,000,000 for each of fiscal years 2012 through 2016.

15 **SEC. 8. REDUCTION OF ENGINE IDLING AND CONVEN-**
 16 **TIONAL FUEL CONSUMPTION.**

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

20 (1) in subparagraph (A), by striking “and” after
 21 the semicolon at the end;

22 (2) in subparagraph (B), by striking the period
 23 at the end and inserting “; and”; and

24 (3) by adding at the end the following:

1 “(C) uses an alternative fuel to reduce con-
 2 sumption of conventional fuel and environmental
 3 emissions.”.

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

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

11 (a) *IN GENERAL.*—The Secretary shall identify bar-
 12 riers and remedies in existing electric and natural gas and
 13 oil pipeline transmission and distribution systems to the
 14 distribution of alternative fuels and the deployment of alter-
 15 native fuel recharging and refueling capability, at economi-
 16 cally competitive costs of alternative fuel for consumers, in-
 17 cluding—

18 (1) model regulatory rate design and billing for
 19 recharging and refueling alternative fueled vehicles;

20 (2) electric grid load management and applica-
 21 tions that will allow batteries in plug-in electric drive
 22 vehicles to be used for grid storage, ancillary services
 23 provision, and backup power;

24 (3) integration of plug-in electric drive vehicles
 25 with smart grid technology, including protocols and

1 standards, necessary equipment, and information
2 technology systems;

3 (4) technical and economic barriers to trans-
4 shipment of biofuels by oil pipelines, or distribution
5 of hydrogen; and

6 (5) any other barriers to installing sufficient and
7 appropriate alternative fuel recharging and refueling
8 infrastructure.

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

11 (1) the Federal Energy Regulatory Commission;

12 (2) State public utility commissions;

13 (3) State consumer advocates;

14 (4) electric and natural gas utility and trans-
15 mission owners and operators;

16 (5) oil pipeline owners and operators;

17 (6) hydrogen suppliers; and

18 (7) other affected entities.

19 (c) *REPORT.*—Not later than 2 years after the date of
20 enactment of this Act, the Secretary shall submit to Con-
21 gress a report describing actions taken to carry out this sec-
22 tion.

23 **SEC. 10. HOV LANE ACCESS EXTENSION.**

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

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

4 (2) *in subparagraph (B), by striking “Before*
5 *September 30, 2009, the State” and inserting “The*
6 *State”.*

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A BILL

To reduce oil consumption and improve energy security, and for other purposes.

SEPTEMBER 6, 2011

Reported with an amendment