

112TH CONGRESS
1ST SESSION

S. 948

To promote the deployment of plug-in electric drive vehicles, and for other purposes.

IN THE SENATE OF THE UNITED STATES

MAY 11, 2011

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

A BILL

To promote the deployment of plug-in electric drive vehicles,
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,*

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

4 (a) SHORT TITLE.—This Act may be cited as the
5 “Promoting Electric Vehicles Act of 2011”.

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

Sec. 1. Short title; table of contents.
Sec. 2. Findings.
Sec. 3. Definitions.

TITLE I—NATIONAL PLUG-IN ELECTRIC DRIVE VEHICLE
DEPLOYMENT PROGRAM.

- Sec. 101. National Plug-In Electric Drive Vehicle Deployment Program.
- Sec. 102. National assessment and plan.
- Sec. 103. Technical assistance.
- Sec. 104. Workforce training.
- Sec. 105. Federal fleets.
- Sec. 106. Targeted Plug-in Electric Drive Vehicle Deployment Communities Program.
- Sec. 107. Plug-in electric drive vehicle private fleet upgrade program.

TITLE II—RESEARCH AND DEVELOPMENT

- Sec. 201. Research and development program.
- Sec. 202. Advanced batteries for tomorrow prize.
- Sec. 203. Study on the supply of raw materials.
- Sec. 204. Study on the collection and preservation of data collected from plug-in electric drive vehicles.

TITLE III—MISCELLANEOUS

- Sec. 301. Utility planning for plug-in electric drive vehicles.
- Sec. 302. Loan guarantees.
- Sec. 303. Prohibition on disposing of advanced batteries in landfills.
- Sec. 304. Plug-in Electric Drive Vehicle Technical Advisory Committee.
- Sec. 305. Plug-in Electric Drive Vehicle Interagency Task Force.

1 **SEC. 2. FINDINGS.**

2 Congress finds that—

3 (1) the United States is the largest consumer of
 4 petroleum in the world, consuming 19,500,000 bar-
 5rels per day of petroleum products during 2008;

6 (2) high and volatile international oil prices rep-
 7resent a significant and ongoing threat to the eco-
 8nomic and national security of the United States;

9 (3) many of the nations on which the United
 10 States relies for petroleum supplies or that signifi-
 11cantly affect the world petroleum market share nei-
 12ther the national interest nor the values of the
 13 United States;

1 (4) the United States imports more than 50
2 percent of the petroleum needs of the country each
3 day;

4 (5) in 2008, the net deficit of the United States
5 in petroleum trade amounted to more than
6 \$380,000,000,000, or nearly 60 percent of the total
7 trade deficit;

8 (6) the transportation sector of the United
9 States accounts for over $\frac{2}{3}$ of total national petro-
10 leum consumption and is 94 percent reliant on pe-
11 troleum;

12 (7) the electrification of the transportation sec-
13 tor represents a direct pathway to significant reduc-
14 tion in petroleum dependence, because passenger
15 cars and light trucks account for more than 60 per-
16 cent of the transportation petroleum demand and
17 more than 40 percent of total petroleum demand in
18 the United States;

19 (8) the electrification of the transportation sec-
20 tor promotes national energy security because the
21 electric power sector uses a diverse range of domes-
22 tic electricity generation sources;

23 (9) plug-in electric drive vehicles, when running
24 on electric power, produce no tailpipe emissions;

1 (10) the deployment of 700,000 plug-in electric
2 drive vehicles would result in a petroleum savings of
3 approximately 10,000,000 barrels per year compared
4 to the annual petroleum consumption as of the date
5 of enactment of this Act;

6 (11) in 2030, the United States could feasibly
7 deploy more than 100,000,000 plug-in electric drive
8 vehicles, which would result in a petroleum savings
9 of more than 1,000,000,000 barrels of petroleum per
10 year and greenhouse gas reductions of over
11 300,000,000 tons of carbon dioxide compared to the
12 annual petroleum consumption and greenhouse gas
13 emissions as of the date of enactment of this Act;
14 and

15 (12) a targeted deployment program for plug-in
16 electric drive vehicles that is focused on competi-
17 tively selected deployment communities—

18 (A) is a critical component of a com-
19 prehensive effort to speed plug-in electric drive
20 vehicle penetration rates;

21 (B) will contribute to the larger national
22 effort to deploy plug-in electric drive vehicles;

23 (C) will inform best practices for the wide-
24 scale deployment of plug-in electric drive vehi-
25 cles; and

1 (D) will substantially reduce the oil con-
2 sumption of the United States.

3 **SEC. 3. DEFINITIONS.**

4 (a) IN GENERAL.—In this Act:

5 (1) AGENCY.—The term “agency” has the
6 meaning given the term “Executive agency” in sec-
7 tion 105 of title 5, United States Code.

8 (2) CHARGING INFRASTRUCTURE.—The term
9 “charging infrastructure” means any property (not
10 including a building) if the property is used for the
11 recharging of plug-in electric drive vehicles, includ-
12 ing electrical panel upgrades, wiring, conduit,
13 trenching, pedestals, and related equipment.

14 (3) COMMITTEE.—The term “Committee”
15 means the Plug-in Electric Drive Vehicle Technical
16 Advisory Committee established by section 304.

17 (4) DEPLOYMENT COMMUNITY.—The term “de-
18 ployment community” means a community selected
19 by the Secretary to be part of the targeted plug-in
20 electric drive vehicles deployment communities pro-
21 gram under section 106.

22 (5) ELECTRIC UTILITY.—The term “electric
23 utility” has the meaning given the term in section
24 3 of the Public Utility Regulatory Policies Act of
25 1978 (16 U.S.C. 2602).

1 (6) FEDERAL-AID SYSTEM OF HIGHWAYS.—The
 2 term “Federal-aid system of highways” means a
 3 highway system described in section 103 of title 23,
 4 United States Code.

5 (7) PLUG-IN ELECTRIC DRIVE VEHICLE.—The
 6 term “plug-in electric drive vehicle” has the meaning
 7 given the term in section 131(a)(5) of the Energy
 8 Independence and Security Act of 2007 (42 U.S.C.
 9 17011(a)(5)).

10 (8) PRIZE.—The term “Prize” means the Ad-
 11 vanced Batteries for Tomorrow Prize established by
 12 section 202.

13 (9) SECRETARY.—The term “Secretary” means
 14 the Secretary of Energy.

15 (10) TASK FORCE.—The term “Task Force”
 16 means the Plug-in Electric Drive Vehicle Inter-
 17 agency Task Force established by section 305.

18 (b) DEFINITION OF PLUG-IN ELECTRIC DRIVE VEHI-
 19 CLE.—Section 131(a)(5) of the Energy Independence and
 20 Security Act of 2007 (42 U.S.C. 17011(a)(5)) is amend-
 21 ed—

22 (1) by redesignating subparagraphs (A), (B),
 23 and (C) as clauses (i), (ii), and (iii), respectively,
 24 and indenting appropriately;

1 (2) by striking “means a vehicle that—” and
 2 inserting “means—

3 “(A) a vehicle that—”;

4 (3) in subparagraph (A)(iii) (as so redesign-
 5 nated), by striking the period at the end and insert-
 6 ing “; and”;

7 (4) by adding at the end the following:

8 (A) any other motor vehicle—

9 “(i) for which the motive electric
 10 power can be recharged from an external
 11 source of power; and

12 “(ii) that has a maximum speed of
 13 greater than 25 miles per hour.”.

14 **TITLE I—NATIONAL PLUG-IN**
 15 **ELECTRIC DRIVE VEHICLE**
 16 **DEPLOYMENT PROGRAM.**

17 **SEC. 101. NATIONAL PLUG-IN ELECTRIC DRIVE VEHICLE**
 18 **DEPLOYMENT PROGRAM.**

19 (a) IN GENERAL.—There is established within the
 20 Department of Energy a national plug-in electric drive ve-
 21 hicle deployment program for the purpose of assisting in
 22 the deployment of plug-in electric drive vehicles.

23 (b) GOALS.—The goals of the national program de-
 24 scribed in subsection (a) include—

1 (1) the reduction and displacement of petro-
2 leum use by accelerating the deployment of plug-in
3 electric drive vehicles in the United States;

4 (2) the reduction of greenhouse gas emissions
5 by accelerating the deployment of plug-in electric
6 drive vehicles in the United States;

7 (3) the facilitation of the rapid deployment of
8 plug-in electric drive vehicles, particularly into the
9 mainstream consumer market;

10 (4) the achievement of significant market pene-
11 trations by plug-in electric drive vehicles nationally;

12 (5) the establishment of models for the rapid
13 deployment of plug-in electric drive vehicles nation-
14 ally, including models for the deployment of residen-
15 tial, private, and publicly available charging infra-
16 structure;

17 (6) the increase of consumer knowledge and ac-
18 ceptance of plug-in electric drive vehicles;

19 (7) the encouragement of the innovation and in-
20 vestment necessary to achieve mass market deploy-
21 ment of plug-in electric drive vehicles;

22 (8) the facilitation of the integration of plug-in
23 electric drive vehicles into electricity distribution sys-
24 tems and the larger electric grid while maintaining
25 grid system performance and reliability;

1 (9) the provision of technical assistance to com-
2 munities across the United States to prepare for
3 plug-in electric drive vehicles; and

4 (10) the support of workforce training across
5 the United States relating to plug-in electric drive
6 vehicles.

7 (c) DUTIES.—In carrying out this title, the Secretary
8 shall—

9 (1) provide technical assistance to State, local,
10 and tribal governments that want to create deploy-
11 ment programs for plug-in electric drive vehicles in
12 the communities over which the governments have
13 jurisdiction;

14 (2) perform national assessments of the poten-
15 tial deployment of plug-in electric drive vehicles
16 under section 102;

17 (3) synthesize and disseminate data from the
18 deployment of plug-in electric drive vehicles;

19 (4) develop best practices for the successful de-
20 ployment of plug-in electric drive vehicles;

21 (5) carry out workforce training under section
22 104;

23 (6) establish the targeted plug-in electric drive
24 vehicle deployment communities program under sec-
25 tion 106; and

1 (7) in conjunction with the Task Force, make
2 recommendations to Congress and the President on
3 methods to reduce the barriers to plug-in electric
4 drive vehicle deployment.

5 (d) REPORT.—Not later than 18 months after the
6 date of enactment of this Act and biennially thereafter,
7 the Secretary shall submit to the appropriate committees
8 of Congress a report on the progress made in imple-
9 menting the national program described in subsection (a)
10 that includes—

11 (1) a description of the progress made by—

12 (A) the technical assistance program under
13 section 103; and

14 (B) the workforce training program under
15 section 104; and

16 (2) any updated recommendations of the Sec-
17 retary for changes in Federal programs to promote
18 the purposes of this title.

19 (e) NATIONAL INFORMATION CLEARINGHOUSE.—
20 The Secretary shall make available to the public, in a
21 timely manner, information regarding—

22 (1) the cost, performance, usage data, and tech-
23 nical data regarding plug-in electric drive vehicles
24 and associated infrastructure, including information

1 from the deployment communities established under
2 section 106; and

3 (2) any other educational information that the
4 Secretary determines to be appropriate.

5 (f) AUTHORIZATION OF APPROPRIATIONS.—For the
6 period of fiscal years 2011 through 2016, there are au-
7 thorized to be appropriated \$100,000,000 to carry out sec-
8 tions 101 through 103.

9 **SEC. 102. NATIONAL ASSESSMENT AND PLAN.**

10 (a) IN GENERAL.—The Secretary shall carry out a
11 national assessment and develop a national plan for plug-
12 in electric drive vehicle deployment that includes—

13 (1) an assessment of the maximum feasible de-
14 ployment of plug-in electric drive vehicles by 2020
15 and 2030;

16 (2) the establishment of national goals for mar-
17 ket penetration of plug-in electric drive vehicles by
18 2020 and 2030;

19 (3) a plan for providing technical assistance to
20 communities across the United States to prepare for
21 plug-in electric drive vehicle deployment;

22 (4) a plan for quantifying the reduction in pe-
23 troleum consumption and the net impact on green-
24 house gas emissions due to the deployment of plug-
25 in electric drive vehicles;

1 (5) in consultation with the Task Force, any
2 recommendations to the President and to Congress
3 for changes in Federal programs (including laws,
4 regulations, and guidelines)—

5 (A) to better promote the deployment of
6 plug-in electric drive vehicles; and

7 (B) to reduce barriers to the deployment of
8 plug-in electric drive vehicles; and

9 (6) a plan for integrating the successes and
10 barriers to deployment identified by the deployment
11 communities program established under section 106
12 to prepare communities across the United States for
13 the rapid deployment of plug-in electric drive vehi-
14 cles;

15 (b) TIMING.—

16 (1) INITIAL DRAFT.—Not later than 1 year
17 after the date of enactment of this Act, the Sec-
18 retary shall complete an initial draft of the national
19 plan that includes the matters described in para-
20 graphs (1) through (5) of subsection (a).

21 (2) FINAL VERSION.—Not later than 18
22 months after the date of enactment of this Act, the
23 Secretary shall complete a final version of the na-
24 tional plan that includes the matters described in
25 paragraphs (1) through (6) of subsection (a).

1 (c) UPDATES.—Not later than 2 years after the date
 2 of development of the plan described in subsection (a), and
 3 not less frequently than once every 2 years thereafter, the
 4 Secretary shall use market data and information from the
 5 targeted plug-in electric drive vehicle deployment commu-
 6 nities program established under section 106 and other
 7 relevant data to update the plan to reflect real world mar-
 8 ket conditions.

9 **SEC. 103. TECHNICAL ASSISTANCE.**

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

12 (1) IN GENERAL.—In carrying out this title, the
 13 Secretary shall provide, at the request of the Gov-
 14 ernor, Mayor, county executive, or the designee of
 15 such an official, technical assistance to State, local,
 16 and tribal governments to assist with the deployment
 17 of plug-in electric drive vehicles.

18 (2) REQUIREMENTS.—The technical assistance
 19 described in paragraph (1) shall include—

20 (A) training on codes and standards for
 21 building and safety inspectors;

22 (B) training on best practices for exped-
 23 iting permits and inspections;

24 (C) education and outreach on frequently
 25 asked questions relating to the various types of

1 plug-in electric drive vehicles and associated in-
2 frastructure, battery technology, and disposal;
3 and

4 (D) the dissemination of information re-
5 garding best practices for the deployment of
6 plug-in electric drive vehicles.

7 (3) PRIORITY.—In providing technical assist-
8 ance under this subsection, the Secretary shall give
9 priority to—

10 (A) communities that have established
11 public and private partnerships, including part-
12 nerships comprised of—

13 (i) elected and appointed officials
14 from each of the participating State, local,
15 and tribal governments;

16 (ii) relevant generators and distribu-
17 tors of electricity;

18 (iii) public utility commissions;

19 (iv) departments of public works and
20 transportation;

21 (v) owners and operators of property
22 that will be essential to the deployment of
23 a sufficient level of publicly available
24 charging infrastructure (including privately
25 owned parking lots or structures and com-

1 commercial entities with public access loca-
2 tions);

3 (vi) plug-in electric drive vehicle man-
4 ufacturers or retailers;

5 (vii) third-party providers of charging
6 infrastructure or services;

7 (viii) owners of any major fleet that
8 will participate in the program;

9 (ix) as appropriate, owners and opera-
10 tors of regional electric power distribution
11 and transmission facilities; and

12 (x) other existing community coali-
13 tions recognized by the Department of En-
14 ergy;

15 (B) communities that, as determined by
16 the Secretary, have best demonstrated that the
17 public is likely to embrace plug-in electric drive
18 vehicles, giving particular consideration to com-
19 munities that—

20 (i) have documented waiting lists to
21 purchase plug-in electric drive vehicles;

22 (ii) have developed projections of the
23 quantity of plug-in electric drive vehicles
24 supplied to dealers; and

1 (iii) have assessed the quantity of
2 charging infrastructure installed or for
3 which permits have been issued;

4 (C) communities that have shown a com-
5 mitment to serving diverse consumer charging
6 infrastructure needs, including the charging in-
7 frastructure needs for single- and multi-family
8 housing and public and privately owned com-
9 mercial infrastructure; and

10 (D) communities that have established reg-
11 ulatory and educational efforts to facilitate con-
12 sumer acceptance of plug-in electric drive vehi-
13 cles, including by—

14 (i) adopting (or being in the process
15 of adopting) streamlined permitting and
16 inspections processes for residential charg-
17 ing infrastructure; and

18 (ii) providing customer informational
19 resources, including providing plug-in elec-
20 tric drive information on community or
21 other websites.

22 (4) BEST PRACTICES.—The Secretary shall col-
23 lect and disseminate information to State, local, and
24 tribal governments creating plans to deploy plug-in

1 electric drive vehicles on best practices (including
2 codes and standards) that uses data from—

3 (A) the program established by section
4 106;

5 (B) the activities carried out by the Task
6 Force; and

7 (C) existing academic and industry studies
8 of the factors that contribute to the successful
9 deployment of new technologies, particularly
10 studies relating to alternative fueled vehicles.

11 (5) GRANTS.—

12 (A) IN GENERAL.—The Secretary shall es-
13 tablish a program to provide grants to State,
14 local, and tribal governments or to partnerships
15 of government and private entities to assist the
16 governments and partnerships—

17 (i) in preparing a community deploy-
18 ment plan under section 106; and

19 (ii) in preparing and implementing
20 programs that support the deployment of
21 plug-in electric drive vehicles.

22 (B) APPLICATION.—A State, local, or trib-
23 al government that seeks to receive a grant
24 under this paragraph shall submit to the Sec-
25 retary an application for the grant at such

1 time, in such form, and containing such infor-
2 mation as the Secretary may prescribe.

3 (C) USE OF FUNDS.—A State, local, or
4 tribal government receiving a grant under this
5 paragraph shall use the funds—

6 (i) to develop a community deploy-
7 ment plan that shall be submitted to the
8 next available competition under section
9 106; and

10 (ii) to carry out activities that encour-
11 age the deployment of plug-in electric drive
12 vehicles including—

13 (I) planning for and installing
14 charging infrastructure, particularly
15 to develop and demonstrate diverse
16 and cost-effective planning, installa-
17 tion, and operations options for de-
18 ployment of single family and multi-
19 family residential, workplace, and
20 publicly available charging infrastruc-
21 ture;

22 (II) updating building, zoning, or
23 parking codes and permitting or in-
24 spection processes;

1 (III) workforce training, includ-
 2 ing the training of permitting offi-
 3 cials;

4 (IV) public education described
 5 in the proposed marketing plan;

6 (V) supplementing (and not sup-
 7 planting) the number of plug-in elec-
 8 tric drive vehicles that are purchased
 9 by State, local, and tribal govern-
 10 ments; and

11 (VI) any other activities, as de-
 12 termined to be necessary by the Sec-
 13 retary.

14 (D) CRITERIA.—The Secretary shall de-
 15 velop and publish criteria for the selection of
 16 technical assistance grants, including require-
 17 ments for the submission of applications under
 18 this paragraph.

19 (E) AUTHORIZATION OF APPROPRIA-
 20 TIONS.—There are authorized to be appro-
 21 priated such sums as are necessary to carry out
 22 this paragraph.

23 (b) UPDATING MODEL BUILDING CODES, PERMIT-
 24 TING AND INSPECTION PROCESSES, AND ZONING OR
 25 PARKING RULES.—

1 (1) IN GENERAL.—Not later than 1 year after
2 the date of enactment of this Act, the Secretary, in
3 consultation with the American Society of Heating,
4 Refrigerating and Air-Conditioning Engineers, the
5 International Code Council, and any other organiza-
6 tions that the Secretary determines to be appro-
7 priate, shall develop and publish guidance for—

8 (A) model building codes for the inclusion
9 of separate circuits for charging infrastructure,
10 as appropriate, in new construction and major
11 renovations of private residences, buildings, or
12 other structures that could provide publicly
13 available charging infrastructure;

14 (B) model construction permitting or in-
15 spection processes that allow for the expedited
16 installation of charging infrastructure for pur-
17 chasers of plug-in electric drive vehicles (includ-
18 ing a permitting process that allows a vehicle
19 purchaser to have charging infrastructure in-
20 stalled not later than 1 week after a request);
21 and

22 (C) model zoning, parking rules, or other
23 local ordinances that—

24 (i) facilitate the installation of pub-
25 licly available charging infrastructure, in-

1 cluding commercial entities that provide
 2 public access to infrastructure; and

3 (ii) allow for access to publicly avail-
 4 able charging infrastructure.

5 (2) OPTIONAL ADOPTION.—An applicant for se-
 6 lection for technical assistance under this section or
 7 as a deployment community under section 106 shall
 8 not be required to use the model building codes, per-
 9 mitting and inspection processes, or zoning, parking
 10 rules, or other ordinances included in the report
 11 under paragraph (1).

12 (3) SMART GRID INTEGRATION.—In developing
 13 the model codes or ordinances described in para-
 14 graph (1), the Secretary shall consider smart grid
 15 integration.

16 **SEC. 104. WORKFORCE TRAINING.**

17 (a) MAINTENANCE AND SUPPORT.—

18 (1) IN GENERAL.—The Secretary, in consulta-
 19 tion with the Committee and the Task Force, shall
 20 award grants to institutions of higher education and
 21 other qualified training and education institutions
 22 for the establishment of programs to provide train-
 23 ing and education for vocational workforce develop-
 24 ment through centers of excellence.

1 (2) PURPOSE.—Training funded under this
2 subsection shall be intended to ensure that the work-
3 force has the necessary skills needed to work on and
4 maintain, and provide emergency assistance relating
5 to, plug-in electric drive vehicles and the infrastruc-
6 ture required to support plug-in electric drive vehi-
7 cles.

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

10 (A) first responders;

11 (B) electricians and contractors who will
12 be installing infrastructure;

13 (C) engineers;

14 (D) code inspection officials; and

15 (E) dealers and mechanics.

16 (b) DESIGN.—The Secretary shall award grants to
17 institutions of higher education and other qualified train-
18 ing and education institutions for the establishment of
19 programs to provide training and education in designing
20 plug-in electric drive vehicles and associated components
21 and infrastructure to ensure that the United States can
22 lead the world in this field.

23 (c) AUTHORIZATION OF APPROPRIATIONS.—There is
24 authorized to be appropriated \$150,000,000 to carry out
25 this section.

1 **SEC. 105. FEDERAL FLEETS.**

2 (a) IN GENERAL.—Electricity consumed by Federal
3 agencies to fuel plug-in electric drive vehicles—

4 (1) is an alternative fuel (as defined in section
5 301 of the Energy Policy Act of 1992 (42 U.S.C.
6 13218)); and

7 (2) shall be accounted for under Federal fleet
8 management reporting requirements, not under Fed-
9 eral building management reporting requirements.

10 (b) ASSESSMENT AND REPORT.—Not later than 180
11 days after the date of enactment of this Act and every
12 3 years thereafter, the Federal Energy Management Pro-
13 gram of the Department of Energy and the General Serv-
14 ices Administration, in consultation with the Task Force,
15 shall complete an assessment of Federal Government
16 fleets, including the Postal Service and the Department
17 of Defense, and submit a report to Congress that de-
18 scribes—

19 (1) for each Federal agency, which types of ve-
20 hicles the agency uses that would or would not be
21 suitable for near-term and medium-term conversion
22 to plug-in electric drive vehicles, taking into account
23 the types of vehicles for which plug-in electric drive
24 vehicles could provide comparable functionality and
25 lifecycle costs;

1 (2) how many plug-in electric drive vehicles
 2 could be deployed by the Federal Government in 5
 3 years and in 10 years, assuming that plug-in electric
 4 drive vehicles are available and are purchased when
 5 new vehicles are needed or existing vehicles are re-
 6 placed;

7 (3) the estimated cost to the Federal Govern-
 8 ment for vehicle purchases under paragraph (2); and

9 (4) a description of any updates to the assess-
 10 ment based on new market data.

11 (c) INVENTORY AND DATA COLLECTION.—

12 (1) IN GENERAL.—In carrying out the assess-
 13 ment and report under subsection (b), the Federal
 14 Energy Management Program, in consultation with
 15 the General Services Administration, shall—

16 (A) develop an information request for
 17 each agency that operates a fleet of at least 20
 18 motor vehicles; and

19 (B) establish guidelines for each agency to
 20 use in developing a plan to deploy plug-in elec-
 21 tric drive vehicles.

22 (2) AGENCY RESPONSES.—Each agency that
 23 operates a fleet of at least 20 motor vehicles shall—

1 (A) collect information on the vehicle fleet
2 of the agency in response to the information re-
3 quest described in paragraph (1); and

4 (B) develop a plan to deploy plug-in elec-
5 tric drive vehicles.

6 (3) ANALYSIS OF RESPONSES.—The Federal
7 Energy Management Program shall—

8 (A) analyze the information submitted by
9 each agency under paragraph (2);

10 (B) approve or suggest amendments to the
11 plan of each agency to ensure that the plan is
12 consistent with the goals and requirements of
13 this Act; and

14 (C) submit a plan to Congress and the
15 General Services Administration to be used in
16 developing the pilot program described in sub-
17 section (e).

18 (d) BUDGET REQUEST.—Each agency of the Federal
19 Government shall include plug-in electric drive vehicle pur-
20 chases identified in the report under subsection (b) in the
21 budget of the agency to be included in the budget of the
22 United States Government submitted by the President
23 under section 1105 of title 31, United States Code.

24 (e) PILOT PROGRAM TO DEPLOY PLUG-IN ELECTRIC
25 DRIVE VEHICLES IN THE FEDERAL FLEET.—

1 (1) IN GENERAL.—The Administrator of Gen-
2 eral Services shall acquire plug-in electric drive vehi-
3 cles and the requisite charging infrastructure to be
4 deployed in a range of locations in Federal Govern-
5 ment fleets, which may include the United States
6 Postal Service and the Department of Defense, dur-
7 ing the 5-year period beginning on the date of enact-
8 ment of this Act.

9 (2) DATA COLLECTION.—The Administrator of
10 General Services shall collect data regarding—

11 (A) the cost, performance, and use of plug-
12 in electric drive vehicles in the Federal fleet;

13 (B) the deployment and integration of
14 plug-in electric drive vehicles in the Federal
15 fleet; and

16 (C) the contribution of plug-in electric
17 drive vehicles in the Federal fleet toward reduc-
18 ing the use of fossil fuels and greenhouse gas
19 emissions.

20 (3) REPORT.—Not later than 6 years after the
21 date of enactment of this Act, the Administrator of
22 General Services shall submit to the appropriate
23 committees of Congress a report that—

24 (A) describes the status of plug-in electric
25 drive vehicles in the Federal fleet; and

1 (B) includes an analysis of the data col-
 2 lected under this subsection.

3 (4) PUBLIC WEB SITE.—The Federal Energy
 4 Management Program shall maintain and regularly
 5 update a publicly available Web site that provides in-
 6 formation on the status of plug-in electric drive vehi-
 7 cles in the Federal fleet.

8 (f) ACQUISITION PRIORITY.—Section 507(g) of the
 9 Energy Policy Act of 1992 (42 U.S.C. 13257(g)) is
 10 amended by adding at the end the following:

11 “(5) PRIORITY.—The Secretary shall, to the
 12 maximum extent practicable, prioritize the acquisi-
 13 tion of plug-in electric drive vehicles (as defined in
 14 section 131(a) of the Energy Independence and Se-
 15 curity Act of 2007 (42 U.S.C. 17011(a)) over non-
 16 electric alternative fueled vehicles.”.

17 (g) MAXIMUM PURCHASE PRICE OF MOTOR VEHI-
 18 CLE.—Section 702 of the Consolidated Appropriations
 19 Act, 2010 (31 U.S.C. 1343 note; Public Law 111–117)
 20 is amended—

21 (1) by striking “section 16 of the Act of August
 22 2, 1946 (60 Stat. 810),” and inserting “section
 23 1343(e) of title 31, United States Code,”; and

24 (2) by inserting before the period at the end the
 25 following: “: *Provided further*, That the limits set

1 forth in this section shall not apply to any vehicle
 2 that is a commercial vehicle and that operates using
 3 an emerging motor vehicle technology, including
 4 plug-in hybrid electric and hydrogen fuel cell vehi-
 5 cles”.

6 (h) AUTHORIZATION OF APPROPRIATIONS.—There is
 7 authorized to be appropriated for the Federal Government
 8 to pay for incremental costs to purchase or lease plug-
 9 in electric drive vehicles and the requisite charging infra-
 10 structure for Federal fleets \$25,000,000.

11 **SEC. 106. TARGETED PLUG-IN ELECTRIC DRIVE VEHICLE**
 12 **DEPLOYMENT COMMUNITIES PROGRAM.**

13 (a) ESTABLISHMENT.—

14 (1) IN GENERAL.—There is established within
 15 the national plug-in electric drive deployment pro-
 16 gram established under section 101 a targeted plug-
 17 in electric drive vehicle deployment communities pro-
 18 gram (referred to in this section as the “Program”).

19 (2) EXISTING ACTIVITIES.—In carrying out the
 20 Program, the Secretary shall coordinate and supple-
 21 ment, not supplant, any ongoing plug-in electric
 22 drive deployment activities under section 131 of the
 23 Energy Independence and Security Act of 2007 (42
 24 U.S.C. 17011).

25 (3) DEPLOYMENT.—

1 (A) IN GENERAL.—The Secretary shall es-
 2 tablish a competitive process to select deploy-
 3 ment communities for the Program.

4 (B) ELIGIBLE ENTITIES.—In selecting
 5 participants for the Program under paragraph
 6 (1), the Secretary shall only consider applica-
 7 tions submitted by State, tribal, or local govern-
 8 ment entities (or groups of State, tribal, or
 9 local government entities).

10 (C) SELECTION.—Not later than 1 year
 11 after the date of enactment of this Act and not
 12 later than 1 year after the date on which any
 13 subsequent amounts are appropriated for the
 14 Program, the Secretary shall select the deploy-
 15 ment communities under this paragraph.

16 (D) TERMINATION.—The Program shall be
 17 carried out for a 3-year period beginning on the
 18 date funding under this Act is first provided to
 19 the deployment community.

20 (b) GOALS.—The goals of the Program are—

21 (1) to facilitate the rapid deployment of plug-
 22 in electric drive vehicles, including—

23 (A) the deployment of 400,000 plug-in
 24 electric drive vehicles in the deployment commu-
 25 nities selected under paragraph (2);

1 (B) the near-term achievement of signifi-
2 cant market penetration in deployment commu-
3 nities; and

4 (C) supporting the achievement of signifi-
5 cant market penetration nationally;

6 (2) to establish models for the rapid deployment
7 of plug-in electric drive vehicles nationally, including
8 for the deployment of single-family and multifamily
9 residential, workplace, and publicly available charg-
10 ing infrastructure;

11 (3) to increase consumer knowledge and accept-
12 ance of, and exposure to, plug-in electric drive vehi-
13 cles;

14 (4) to encourage the innovation and investment
15 necessary to achieve mass market deployment of
16 plug-in electric drive vehicles;

17 (5) to demonstrate the integration of plug-in
18 electric drive vehicles into electricity distribution sys-
19 tems and the larger electric grid while maintaining
20 or improving grid system performance, security, and
21 reliability;

22 (6) to demonstrate protocols and communica-
23 tion standards that facilitate vehicle integration into
24 the grid and provide seamless charging for con-

1 sumers traveling through multiple utility distribution
2 systems;

3 (7) to investigate differences among deployment
4 communities and to develop best practices for imple-
5 menting vehicle electrification in various commu-
6 nities, including best practices for planning for and
7 facilitating the construction of residential, work-
8 place, and publicly available infrastructure to sup-
9 port plug-in electric drive vehicles;

10 (8) to collect comprehensive data on the pur-
11 chase and use of plug-in electric drive vehicles, in-
12 cluding charging profile data at unit and aggregate
13 levels, to inform best practices for rapidly deploying
14 plug-in electric drive vehicles in other locations, in-
15 cluding for the installation of charging infrastruc-
16 ture;

17 (9) to reduce and displace petroleum use and
18 reduce greenhouse gas emissions by accelerating the
19 deployment of plug-in electric drive vehicles in the
20 United States; and

21 (10) to increase domestic manufacturing capac-
22 ity and commercialization in a manner that will es-
23 tablish the United States as a world leader in plug-
24 in electric drive vehicle technologies.

1 (c) DEPLOYMENT COMMUNITY SELECTION CRI-
2 TERIA.—

3 (1) IN GENERAL.—The Secretary shall ensure,
4 to the maximum extent practicable, that selected de-
5 ployment communities serve as models of deploy-
6 ment for various communities across the United
7 States.

8 (2) SELECTION.—In selecting communities
9 under this section, the Secretary—

10 (A) shall ensure, to the maximum extent
11 practicable, that—

12 (i) the combination of selected com-
13 munities is diverse in population, popu-
14 lation density, demographics, urban and
15 suburban composition, typical commuting
16 patterns, climate, and type of utility (in-
17 cluding investor-owned, publicly owned, co-
18 operatively owned, distribution-only, and
19 vertically integrated utilities);

20 (ii) the combination of selected com-
21 munities is diverse in geographic distribu-
22 tion, and at least 1 deployment community
23 is located in each Petroleum Administra-
24 tion for Defense District;

1 (iii) at least 1 community selected has
2 a population of less than 500,000;

3 (iv) grants are of a sufficient amount
4 such that each deployment community will
5 achieve significant market penetration,
6 particularly into the mainstream consumer
7 market; and

8 (v) the deployment communities are
9 representative of other communities across
10 the United States;

11 (B) is encouraged to select a combination
12 of deployment communities that includes mul-
13 tiple models or approaches for deploying plug-
14 in electric drive vehicles that the Secretary be-
15 lieves are reasonably likely to be effective, in-
16 cluding multiple approaches to the deployment
17 of charging infrastructure;

18 (C) in addition to the criteria described in
19 subparagraph (A), may give preference to appli-
20 cants proposing a greater non-Federal cost
21 share; and

22 (D) when considering deployment commu-
23 nity plans, shall take into account previous De-
24 partment of Energy and other Federal invest-

ments to ensure that the maximum domestic benefit from Federal investments is realized.

(3) CRITERIA.—

(A) IN GENERAL.—Not later than 120 days after the date of enactment of this Act, and not later than 90 days after the date on which any subsequent amounts are appropriated for the Program, the Secretary shall publish criteria for the selection of deployment communities that include requirements that applications be submitted by a State, tribal, or local government entity (or groups of State, tribal, or local government entities).

(B) APPLICATION REQUIREMENTS.—The criteria published by the Secretary under subparagraph (A) shall include application requirements that, at a minimum, include—

(i) achievable goals and methodologies for—

(I) the number of plug-in electric drive vehicles to be deployed in the community;

(II) the expected percentage of light-duty vehicle sales that would be sales of plug-in electric drive vehicles;

1 (III) the adoption of plug-in elec-
2 tric drive vehicles (including medium-
3 or heavy-duty vehicles) in private and
4 public fleets during the 3-year dura-
5 tion of the Program; and

6 (IV) a method to generate rev-
7 enue to maintain the infrastructure
8 investments made by the Program
9 after the termination of the Program;
10 (ii) data that demonstrate that—

11 (I) the public is likely to embrace
12 plug-in electric drive vehicles, which
13 may include—

14 (aa) the quantity of plug-in
15 electric drive vehicles purchased;

16 (bb) the number of individ-
17 uals on a waiting list to purchase
18 a plug-in electric drive vehicle;

19 (cc) projections of the quan-
20 tity of plug-in electric drive vehi-
21 cles supplied to dealers; and

22 (dd) any assessment of the
23 quantity of charging infrastruc-
24 ture installed or for which per-
25 mits have been issued; and

- 1 (II) automobile manufacturers
2 and dealers will be able to provide and
3 service the targeted number of plug-in
4 electric drive vehicles in the commu-
5 nity for the duration of the program;
- 6 (iii) clearly defined geographic bound-
7 aries of the proposed deployment area;
- 8 (iv) a community deployment plan for
9 the deployment of plug-in electric drive ve-
10 hicles, charging infrastructure, and serv-
11 ices in the deployment community;
- 12 (v) assurances that a majority of the
13 vehicle deployments anticipated in the plan
14 will be personal vehicles authorized to trav-
15 el on the United States Federal-aid system
16 of highways, and secondarily, private or
17 public sector plug-in electric drive fleet ve-
18 hicles, but may also include—
- 19 (I) private or public sector plug-
20 in electric drive fleet vehicles;
- 21 (II) medium- and heavy-duty
22 plug-in hybrid vehicles; and
- 23 (III) any other plug-in electric
24 drive vehicle authorized to travel on

1 the United States Federal-aid system
2 of highways; and

3 (vi) any other merit-based criteria, as
4 determined by the Secretary.

5 (4) COMMUNITY DEPLOYMENT PLANS.—Plans
6 for the deployment of plug-in electric drive vehicles
7 shall include—

8 (A) a proposed level of cost sharing in ac-
9 cordance with subsection (d)(2)(C);

10 (B) documentation demonstrating a sub-
11 stantial partnership with relevant stakeholders,
12 including—

13 (i) a list of stakeholders that in-
14 cludes—

15 (I) elected and appointed officials
16 from each of the participating State,
17 local, and tribal governments;

18 (II) all relevant generators and
19 distributors of electricity;

20 (III) State utility regulatory au-
21 thorities;

22 (IV) departments of public works
23 and transportation;

24 (V) owners and operators of
25 property that will be essential to the

- 1 deployment of a sufficient level of
2 publicly available charging infrastruc-
3 ture (including privately owned park-
4 ing lots or structures and commercial
5 entities with public access locations);
- 6 (VI) plug-in electric drive vehicle
7 manufacturers or retailers;
- 8 (VII) third-party providers of
9 residential, workplace, private, and
10 publicly available charging infrastruc-
11 ture or services;
- 12 (VIII) owners of any major fleet
13 that will participate in the program;
- 14 (IX) as appropriate, owners and
15 operators of regional electric power
16 distribution and transmission facili-
17 ties; and
- 18 (X) as appropriate, other existing
19 community coalitions recognized by
20 the Department of Energy;
- 21 (ii) evidence of the commitment of the
22 stakeholders to participate in the partner-
23 ship;
- 24 (iii) a clear description of the role and
25 responsibilities of each stakeholder; and

1 (iv) a plan for continuing the engage-
2 ment and participation of the stakeholders,
3 as appropriate, throughout the implemen-
4 tation of the deployment plan;

5 (C) a description of the number of plug-in
6 electric drive vehicles anticipated to be plug-in
7 electric drive personal vehicles and the number
8 of plug-in electric drive vehicles anticipated to
9 be privately owned fleet or public fleet vehicles;

10 (D) a plan for deploying residential, work-
11 place, private, and publicly available charging
12 infrastructure, including—

13 (i) an assessment of the number of
14 consumers who will have access to private
15 residential charging infrastructure in sin-
16 gle-family or multifamily residences;

17 (ii) options for accommodating plug-in
18 electric drive vehicle owners who are not
19 able to charge vehicles at their place of
20 residence;

21 (iii) an assessment of the number of
22 consumers who will have access to work-
23 place charging infrastructure;

24 (iv) a plan for ensuring that the
25 charging infrastructure or plug-in electric

1 drive vehicle be able to send and receive
2 the information needed to interact with the
3 grid and be compatible with smart grid
4 technologies to the extent feasible;

5 (v) an estimate of the number and
6 distribution of publicly and privately owned
7 charging stations that will be publicly or
8 commercially available;

9 (vi) an estimate of the quantity of
10 charging infrastructure that will be pri-
11 vately funded or located on private prop-
12 erty; and

13 (vii) a description of equipment to be
14 deployed, including assurances that, to the
15 maximum extent practicable, equipment to
16 be deployed will meet open, nonproprietary
17 standards for connecting to plug-in electric
18 drive vehicles that are either—

19 (I) commonly accepted by indus-
20 try at the time the equipment is being
21 acquired; or

22 (II) meet the standards developed
23 by the Director of the National Insti-
24 tute of Standards and Technology
25 under section 1305 of the Energy

1 Independence and Security Act of
2 2007 (42 U.S.C. 17385);

3 (E) a plan for effective marketing of and
4 consumer education relating to plug-in electric
5 drive vehicles, charging services, and infrastruc-
6 ture;

7 (F) descriptions of updated building codes
8 (or a plan to update building codes before or
9 during the grant period) to include charging in-
10 frastructure or dedicated circuits for charging
11 infrastructure, as appropriate, in new construc-
12 tion and major renovations;

13 (G) descriptions of updated construction
14 permitting or inspection processes (or a plan to
15 update construction permitting or inspection
16 processes) to allow for expedited installation of
17 charging infrastructure for purchasers of plug-
18 in electric drive vehicles, including a permitting
19 process that allows a vehicle purchaser to have
20 charging infrastructure installed in a timely
21 manner;

22 (H) descriptions of updated zoning, park-
23 ing rules, or other local ordinances as are nec-
24 essary to facilitate the installation of publicly
25 available charging infrastructure and to allow

1 for access to publicly available charging infra-
2 structure, as appropriate;

3 (I) descriptions of incentives for residents
4 in a deployment community who purchase and
5 register a new plug-in electric drive vehicle, in
6 addition to any Federal incentives, including—

7 (i) a rebate of part of the purchase
8 price of the vehicle;

9 (ii) reductions in sales taxes or reg-
10 istration fees;

11 (iii) rebates or reductions in the costs
12 of permitting, purchasing, or installing
13 home plug-in electric drive vehicle charging
14 infrastructure; and

15 (iv) rebates or reductions in State or
16 local toll road access charges;

17 (J) additional consumer benefits, such as
18 preferred parking spaces or single-rider access
19 to high-occupancy vehicle lanes for plug-in elec-
20 tric drive vehicles;

21 (K) a proposed plan for making necessary
22 utility and grid upgrades, including economi-
23 cally sound and cybersecure information tech-
24 nology upgrades and employee training, and a
25 plan for recovering the cost of the upgrades;

1 (L) a description of utility, grid operator,
2 or third-party charging service provider, policies
3 and plans for accommodating the deployment of
4 plug-in electric drive vehicles, including—

5 (i) rate structures or provisions and
6 billing protocols for the charging of plug-
7 in electric drive vehicles;

8 (ii) analysis of potential impacts to
9 the grid;

10 (iii) plans for using information tech-
11 nology or third-party aggregators—

12 (I) to minimize the effects of
13 charging on peak loads;

14 (II) to enhance reliability; and

15 (III) to provide other grid bene-
16 fits;

17 (iv) plans for working with smart grid
18 technologies or third-party aggregators for
19 the purposes of smart charging and for al-
20 lowing 2-way communication;

21 (M) a deployment timeline;

22 (N) a plan for monitoring and evaluating
23 the implementation of the plan, including
24 metrics for assessing the success of the deploy-

ment and an approach to updating the plan, as appropriate; and

(O) a description of the manner in which any grant funds applied for under subsection (d) will be used and the proposed local cost share for the funds.

(d) APPLICATIONS AND GRANTS.—

(1) APPLICATIONS.—

(A) IN GENERAL.—Not later than 150 days after the date of publication by the Secretary of selection criteria described in subsection (c)(3), any State, tribal, or local government, or group of State, tribal, or local governments may apply to the Secretary to become a deployment community.

(B) JOINT SPONSORSHIP.—

(i) IN GENERAL.—An application submitted under subparagraph (A) may be jointly sponsored by electric utilities, automobile manufacturers, technology providers, carsharing companies or organizations, third-party plug-in electric drive vehicle service providers, or other appropriated entities.

1 (ii) DISBURSEMENT OF GRANTS.—A
 2 grant provided under this subsection shall
 3 only be disbursed to a State, tribal, or
 4 local government, or group of State, tribal,
 5 or local governments, regardless of whether
 6 the application is jointly sponsored under
 7 clause (i).

8 (2) GRANTS.—

9 (A) IN GENERAL.—In each application, the
 10 applicant may request up to \$250,000,000 in fi-
 11 nancial assistance from the Secretary to fund
 12 projects in the deployment community.

13 (B) USE OF FUNDS.—Funds provided
 14 through a grant under this paragraph may be
 15 used to help implement the plan for the deploy-
 16 ment of plug-in electric drive vehicles included
 17 in the application, including—

18 (i) reducing the cost and increasing
 19 the consumer adoption of plug-in electric
 20 drive vehicles through incentives as de-
 21 scribed in subsection (c)(4)(I);

22 (ii) planning for and installing charg-
 23 ing infrastructure, including offering addi-
 24 tional incentives as described in subsection
 25 (c)(4)(I);

1 (iii) updating building codes, zoning
2 or parking rules, or permitting or inspec-
3 tion processes as described in subpara-
4 graphs (F), (G), and (H) of subsection
5 (c)(4);

6 (iv) workforce training, including
7 training of permitting officials;

8 (v) public education and marketing
9 described in the proposed marketing plan;

10 (vi) supplementing (and not sup-
11 planting) the number of plug-in electric
12 drive vehicles that are purchased by State,
13 local, and tribal governments; and

14 (vii) necessary utility and grid up-
15 grades as described in subsection
16 (c)(4)(K).

17 (C) COST-SHARING.—

18 (i) IN GENERAL.—A grant provided
19 under this paragraph shall be subject to a
20 minimum non-Federal cost-sharing re-
21 quirement of 80 percent.

22 (ii) NON-FEDERAL SOURCES.—The
23 Secretary shall—

1 (I) determine the appropriate
2 cost share for each selected applicant;
3 and

4 (II) require that not less than 80
5 percent of the cost of an activity fund-
6 ed by a grant under this paragraph be
7 provided by a non-Federal source.

8 (iii) REDUCTION.—The Secretary may
9 reduce or eliminate the cost-sharing re-
10 quirement described in clause (i), as the
11 Secretary determines to be necessary.

12 (iv) CALCULATION OF AMOUNT.—In
13 calculating the amount of the non-Federal
14 share under this section, the Secretary—

15 (I) may include allowable costs in
16 accordance with the applicable cost
17 principles, including—

18 (aa) cash;

19 (bb) personnel costs;

20 (cc) the value of a service,
21 other resource, or third party in-
22 kind contribution determined in
23 accordance with the applicable
24 circular of the Office of Manage-
25 ment and Budget;

1 (dd) indirect costs or facili-
 2 ties and administrative costs; or

3 (ee) any funds received
 4 under the power program of the
 5 Tennessee Valley Authority or
 6 any Power Marketing Adminis-
 7 tration (except to the extent that
 8 such funds are made available
 9 under an annual appropriation
 10 Act);

11 (II) shall include contributions
 12 made by State, tribal, or local govern-
 13 ment entities and private entities; and

14 (III) shall not include—

15 (aa) revenues or royalties
 16 from the prospective operation of
 17 an activity beyond the time con-
 18 sidered in the grant;

19 (bb) proceeds from the pro-
 20 spective sale of an asset of an ac-
 21 tivity; or

22 (cc) other appropriated Fed-
 23 eral funds.

24 (v) REPAYMENT OF FEDERAL
 25 SHARE.—The Secretary shall not require

1 repayment of the Federal share of a cost-
 2 shared activity under this section as a con-
 3 dition of providing a grant.

4 (vi) TITLE TO PROPERTY.—The Sec-
 5 retary may vest title or other property in-
 6 terests acquired under projects funded
 7 under this Act in any entity, including the
 8 United States.

9 (D) OTHER FEDERAL ASSISTANCE.—The
 10 Secretary shall consider the receipt of other
 11 Federal funds received by the applicant in de-
 12 termining the cost share of the applicant.

13 (3) SELECTION.—Not later than 120 days after
 14 an application deadline has been established under
 15 paragraph (1), the Secretary shall announce the
 16 names of the deployment communities selected under
 17 this subsection.

18 (e) REPORTING REQUIREMENTS.—

19 (1) IN GENERAL.—The Secretary, in consulta-
 20 tion with the Committee, shall—

21 (A) determine what data will be required
 22 to be collected by participants in deployment
 23 communities and submitted to the Department
 24 to allow for analysis of the deployment commu-
 25 nities;

1 (B) provide for the protection of consumer
2 privacy, as appropriate; and

3 (C) develop metrics to evaluate the per-
4 formance of the deployment communities.

5 (2) PROVISION OF DATA.—As a condition of
6 participation in the Program, a deployment commu-
7 nity shall provide any data identified by the Sec-
8 retary under paragraph (1).

9 (3) REPORTS.—

10 (A) INTERIM REPORT.—Not later than 3
11 years after the date of enactment of this Act,
12 the Secretary shall submit to Congress an in-
13 terim report that contains—

14 (i) a description of the status of—

15 (I) the deployment communities
16 and the implementation of the deploy-
17 ment plan of each deployment commu-
18 nity;

19 (II) the rate of vehicle manufac-
20 turing deployment and market pene-
21 tration of plug-in electric drive vehi-
22 cles; and

23 (III) the deployment of residen-
24 tial and publicly available infrastruc-
25 ture;

1 (ii) a description of the challenges ex-
2 perienced and lessons learned from the
3 program to date, including the activities
4 described in clause (i); and

5 (iii) an analysis of the data collected
6 under this subsection.

7 (B) FINAL REPORT.—On completion of the
8 Program, the Secretary shall submit to Con-
9 gress a final report that contains—

10 (i) updates on the information de-
11 scribed in subparagraph (A);

12 (ii) a description of the successes and
13 failures of the Program;

14 (iii) recommendations on whether to
15 promote further deployment of electric ve-
16 hicles; and

17 (iv) if additional deployment commu-
18 nities are recommended, information on—

19 (I) the number of additional de-
20 ployment communities that should be
21 selected;

22 (II) the manner in which criteria
23 for selection should be updated;

1 (III) the manner in which incen-
 2 tive structures for deployment should
 3 be changed; and

4 (IV) whether other forms of on-
 5 board energy storage for electric drive
 6 vehicles should be included.

7 (f) PROPRIETARY INFORMATION.—The Secretary
 8 shall, as appropriate, provide for the protection of propri-
 9 etary information and intellectual property rights.

10 (g) AUTHORIZATION OF APPROPRIATIONS.—There is
 11 authorized to be appropriated to carry out this section
 12 \$2,000,000,000.

13 (h) CONFORMING AMENDMENT.—Section 166(b)(5)
 14 of title 23, United States Code, is amended—

15 (1) in subparagraph (A), by striking “Before
 16 September 30, 2009, the State” and inserting “The
 17 State”; and

18 (2) in subparagraph (B), by striking “Before
 19 September 30, 2009, the State” and inserting “The
 20 State”.

21 **SEC. 107. PLUG-IN ELECTRIC DRIVE VEHICLE PRIVATE**
 22 **FLEET UPGRADE PROGRAM.**

23 (a) ESTABLISHMENT.—

24 (1) IN GENERAL.—There is established within
 25 the national plug-in electric drive deployment pro-

1 gram established under section 101 a plug-in electric
2 drive vehicle private fleet upgrade program (referred
3 to in this section as the “Program”).

4 (b) COMPETITIVE GRANTS.—

5 (1) IN GENERAL.—The Secretary shall establish
6 a competitive process to select electric drive vehicle
7 fleets for the Program to receive grants.

8 (2) ELIGIBLE ENTITIES.—In selecting partici-
9 pants for the Program under paragraph (1), the
10 Secretary shall only consider applications (including
11 joint applications) submitted by companies that—

12 (A) are private, nongovernmental entities;

13 (B) are headquartered in the United
14 States; and

15 (C) plan to purchase, or enter into con-
16 tracts for hire, not less than 100 plug-in elec-
17 tric drive vehicles.

18 (3) SELECTION CRITERIA.—Not later than 120
19 days after the date of enactment of this Act, the
20 Secretary shall publish a set of selection criteria for
21 the grants competition that shall include—

22 (A) offering the highest cost-share relative
23 to the value of the Federal grant offered under
24 the Program;

1 (B) to the maximum extent practicable,
 2 serving as models of deployment for other pri-
 3 vate companies across the United States; and

4 (C) meeting other criteria considered ap-
 5 propriate by the Secretary.

6 (4) APPLICATIONS AND GRANTS.—

7 (A) IN GENERAL.—Not later than 120
 8 days after the date of publication by the Sec-
 9 retary of the selection criteria described in
 10 paragraph (3), any company that meets the eli-
 11 gibility criteria described in paragraph (2) may
 12 apply to the Secretary to receive a grant.

13 (B) GRANTS.—

14 (i) IN GENERAL.—In each application,
 15 the applicant may apply for grants of not
 16 more than \$20,000,000.

17 (ii) USE OF FUNDS.—Funds provided
 18 through a grant under this subsection may
 19 be used—

20 (I) to purchase plug-in electric
 21 drive vehicles;

22 (II) to plan for and install charg-
 23 ing infrastructure; and

1 (III) to carry out other activities
2 considered appropriate by the Sec-
3 retary.

4 (iii) COST-SHARING.—

5 (I) IN GENERAL.—A grant pro-
6 vided under this subsection shall be
7 subject to a minimum non-Federal
8 cost-sharing requirement of 80 per-
9 cent.

10 (II) NON-FEDERAL SOURCES.—
11 The Secretary shall—

12 (aa) determine the appro-
13 priate cost share for each se-
14 lected applicant; and

15 (bb) subject to subclause
16 (III), require that not less than
17 80 percent of the cost of an ac-
18 tivity funded by a grant under
19 this subsection be provided from
20 a non-Federal source.

21 (III) REDUCTION.—The Sec-
22 retary may reduce or eliminate the
23 cost-sharing requirement described in
24 subclause (I), as the Secretary deter-
25 mines to be necessary.

1 (IV) REPAYMENT OF FEDERAL
 2 SHARE.—The Secretary shall not re-
 3 quire repayment of the Federal share
 4 of a cost-shared activity under this
 5 section as a condition of providing a
 6 grant.

7 (V) TITLE TO PROPERTY.—The
 8 receipt of Federal funds under this
 9 section shall not prohibit the pur-
 10 chaser of a vehicle, equipment, or
 11 other property from retaining sole,
 12 permanent title to the vehicle, equip-
 13 ment, or property at the conclusion of
 14 the Program.

15 (iv) OTHER FEDERAL ASSISTANCE.—
 16 The Secretary shall consider the receipt of
 17 other Federal funds by the applicant in de-
 18 termining the cost share of the applicant.

19 (C) SELECTION.—Not later than 120 days
 20 after the application deadline established under
 21 subparagraph (A), the Secretary shall announce
 22 the names of the applicants selected to receive
 23 grants under this section.

24 (5) REPORTING REQUIREMENTS.—

25 (A) IN GENERAL.—The Secretary shall—

1 (i) determine what data will be re-
2 quired to be collected by participants in
3 the Program and submitted to the Sec-
4 retary to permit analysis of the Program;
5 and

6 (ii) develop metrics to determine the
7 success of the deployment communities.

8 (B) PROVISION OF DATA.—As a condition
9 of participation in the Program, an applicant
10 shall provide any data determined by the Sec-
11 retary under subparagraph (A).

12 (C) PROPRIETARY INFORMATION.—In car-
13 rying out this paragraph, the Secretary shall, as
14 appropriate, provide for the protection of pro-
15 prietary information and intellectual property
16 rights.

17 (c) LOAN GUARANTEES.—Section 1703(b) of the En-
18 ergy Policy Act of 2005 (42 U.S.C. 16513(b)) is amended
19 by adding at the end the following:

20 “(11) Plug-in electric drive vehicle fleets.”.

21 (d) AUTHORIZATION OF APPROPRIATIONS.—There is
22 authorized to be appropriated to carry out this section
23 \$300,000,000.

1 **TITLE II—RESEARCH AND**
2 **DEVELOPMENT**

3 **SEC. 201. RESEARCH AND DEVELOPMENT PROGRAM.**

4 (a) RESEARCH AND DEVELOPMENT PROGRAM.—

5 (1) IN GENERAL.—The Secretary, in consulta-
6 tion with the Committee, shall establish a program
7 to fund research and development in advanced bat-
8 teries, plug-in electric drive vehicle components,
9 plug-in electric drive infrastructure, and other tech-
10 nologies supporting the development, manufacture,
11 and deployment of plug-in electric drive vehicles and
12 charging infrastructure.

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

15 (A) the development of low-cost, smart-
16 charging and vehicle-to-grid connectivity tech-
17 nology;

18 (B) the benchmarking and assessment of
19 open software systems using nationally estab-
20 lished evaluation criteria; and

21 (C) new technologies in electricity storage
22 or electric drive components for vehicles.

23 (3) REPORT.—Not later than 4 years after the
24 date of enactment of this Act, the Secretary shall

1 submit to Congress a report describing the status of
2 the program described in paragraph (1).

3 (4) SUPPLEMENTAL FUNDING.—Funds pro-
4 vided under this section shall supplement (and not
5 supplant) funds made available for research and de-
6 velopment under the Vehicles Technology Program
7 of the Department of Energy.

8 (b) SECONDARY USE APPLICATIONS PROGRAM.—

9 (1) IN GENERAL.—The Secretary, in consulta-
10 tion with the Committee, shall carry out a research,
11 development, and demonstration program that builds
12 upon any work carried out under section 915 of the
13 Energy Policy Act of 2005 (42 U.S.C. 16195) and—

14 (A) identifies possible uses of a vehicle bat-
15 tery after the useful life of the battery in a ve-
16 hicle has been exhausted;

17 (B) assesses the potential for markets for
18 uses described in subparagraph (A) to develop,
19 as well as any barriers to the development of
20 the markets;

21 (C) identifies the infrastructure, tech-
22 nology, and equipment needed to manage the
23 charging activity of the batteries used in sta-
24 tionary sources; and

1 (D) identifies the potential uses of a vehi-
2 cle battery—

3 (i) with the most promise for market
4 development; and

5 (ii) for which market development
6 would be aided by a demonstration project.

7 (2) REPORT.—Not later than 2 years after the
8 date of enactment of this Act, the Secretary shall
9 submit to the appropriate committees of Congress
10 an initial report on the findings of the program de-
11 scribed in paragraph (1), including recommendations
12 for stationary energy storage and other potential ap-
13 plications for batteries used in plug-in electric drive
14 vehicles.

15 (c) SECONDARY USE DEMONSTRATION PROJECTS.—

16 (1) IN GENERAL.—Based on the results of the
17 program described in subsection (b), the Secretary,
18 in consultation with the Committee, shall develop
19 guidelines for projects that demonstrate the sec-
20 ondary uses of vehicle batteries.

21 (2) PUBLICATION OF GUIDELINES.—Not later
22 than 30 months after the date of enactment of this
23 Act, the Secretary shall—

24 (A) publish the guidelines described in
25 paragraph (1); and

1 (B) solicit applications for funding for
2 demonstration projects.

3 (3) GRANT PROGRAM.—Not later than 38
4 months after the date of enactment of this Act, the
5 Secretary shall select proposals for grant funding
6 under this section, based on an assessment of which
7 proposals are mostly likely to contribute to the devel-
8 opment of a secondary market for batteries.

9 (d) MATERIALS RECYCLING STUDY.—

10 (1) IN GENERAL.—The Secretary, in consulta-
11 tion with the Committee, shall carry out a study on
12 the recycling of materials from plug-in electric drive
13 vehicles and the batteries used in plug-in electric
14 drive vehicles.

15 (2) REPORT.—Not later than 2 years after the
16 date of enactment of this Act, the Secretary shall
17 submit to the appropriate committees of Congress a
18 report on the findings of the study described in
19 paragraph (1).

20 (e) ARPA-E PLUG-IN ELECTRIC DRIVE VEHICLE
21 RESEARCH AND DEVELOPMENT PROGRAMS.—Funds
22 made available under this section shall be used—

23 (1) by the Advanced Research Projects Agen-
24 cy—Energy established by section 5012(b) of the
25 America COMPETES Act (42 U.S.C. 16538(b))

1 (referred to in this subsection as “ARPA-E”) to
2 fund high-risk, high-reward research and develop-
3 ment programs supporting the development, manu-
4 facture, and deployment of plug-in electric drive ve-
5 hicles and charging infrastructure, including ad-
6 vanced batteries, plug-in electric drive components,
7 and plug-in electric drive infrastructure; and

8 (2) to supplement (and not supplant) funds
9 made available for ARPA-E.

10 (f) AUTHORIZATION OF APPROPRIATIONS.—There is
11 authorized to be appropriated to carry out this section
12 \$235,000,000, including—

13 (1) \$10,000,000 for use in conducting the pro-
14 gram described in subsection (a) for fiscal years
15 2011 through 2016;

16 (2) \$5,000,000 for use in conducting the pro-
17 gram described in subsection (b) for fiscal years
18 2011 through 2016;

19 (3) \$15,000,000 for use in providing grants de-
20 scribed in subsection (c) for fiscal years 2011
21 through 2016;

22 (4) \$5,000,000 for use in conducting the study
23 described in subsection (d) for fiscal years 2011
24 through 2013; and

1 (5) \$200,000,000 for use in conducting the pro-
2 gram described in subsection (e) for fiscal years
3 2011 through 2020.

4 **SEC. 202. ADVANCED BATTERIES FOR TOMORROW PRIZE.**

5 (a) IN GENERAL.—Not later than 1 year after the
6 date of enactment of this Act, as part of the program de-
7 scribed in section 1008 of the Energy Policy Act of 2005
8 (42 U.S.C. 16396), the Secretary shall establish the Ad-
9 vanced Batteries for Tomorrow Prize to competitively
10 award cash prizes in accordance with this section to ad-
11 vance the research, development, demonstration, and com-
12 mercial application of a 500-mile vehicle battery.

13 (b) BATTERY SPECIFICATIONS.—

14 (1) IN GENERAL.—To be eligible for the Prize,
15 a battery submitted by an entrant shall be—

16 (A) able to power a plug-in electric drive
17 vehicle authorized to travel on the United
18 States Federal-aid system of highways for at
19 least 500 miles before recharging;

20 (B) of a size that would not be cost-prohib-
21 itive or create space constraints, if mass-pro-
22 duced; and

23 (C) cost-effective (measured in cost per kil-
24 owatt hour), if mass-produced.

1 (2) ADDITIONAL REQUIREMENTS.—The Sec-
2 retary, in consultation with the Committee, shall es-
3 tablish any additional battery specifications that the
4 Secretary and the Committee determine to be nec-
5 essary.

6 (c) PRIVATE FUNDS.—

7 (1) IN GENERAL.—Subject to paragraph (2)
8 and notwithstanding section 3302 of title 31, United
9 States Code, the Secretary may accept, retain, and
10 use funds contributed by any person, government
11 entity, or organization for purposes of carrying out
12 this subsection—

13 (A) without further appropriation; and

14 (B) without fiscal year limitation.

15 (2) RESTRICTION ON PARTICIPATION.—An enti-
16 ty providing private funds for the Prize may not
17 participate in the competition for the Prize.

18 (d) TECHNICAL REVIEW.—The Secretary, in con-
19 sultation with the Committee, shall establish a technical
20 review committee composed of non-Federal officers to re-
21 view data submitted by Prize entrants under this section
22 and determine whether the data meets the prize specifica-
23 tions described in subsection (b).

1 (e) THIRD PARTY ADMINISTRATION.—The Secretary
2 may select, on a competitive basis, a third party to admin-
3 ister awards provided under this section.

4 (f) ELIGIBILITY.—To be eligible for an award under
5 this section—

6 (1) in the case of a private entity, the entity
7 shall be incorporated in and maintain a primary
8 place of business in the United States; and

9 (2) in the case of an individual (whether par-
10 ticipating as a single individual or in a group), the
11 individual shall be a citizen or lawful permanent
12 resident of the United States.

13 (g) AWARD AMOUNTS.—

14 (1) IN GENERAL.—Subject to the availability of
15 funds to carry out this section, the amount of the
16 Prize shall be \$10,000,000.

17 (2) BREAKTHROUGH ACHIEVEMENT AWARDS.—
18 In addition to the award described in paragraph (1),
19 the Secretary, in consultation with the technical re-
20 view committee established under subsection (d),
21 may award cash prizes, in amounts determined by
22 the Secretary, in recognition of breakthrough
23 achievements in research, development, demonstra-
24 tion, and commercial application of—

1 (A) activities described in subsection (b);

2 or

3 (B) advances in battery durability, energy
4 density, and power density.

5 (h) 500-MILE BATTERY AWARD FUND.—

6 (1) ESTABLISHMENT.—There is established in
7 the Treasury of the United States a fund to be
8 known as the “500-mile Battery Fund” (referred to
9 in this section as the “Fund”), to be administered
10 by the Secretary, to be available without fiscal year
11 limitation and subject to appropriation, to award
12 amounts under this section.

13 (2) TRANSFERS TO FUND.—The Fund shall
14 consist of—

15 (A) such amounts as are appropriated to
16 the Fund under subsection (i); and

17 (B) such amounts as are described in sub-
18 section (c) and that are provided for the Fund.

19 (3) PROHIBITION.—Amounts in the Fund may
20 not be made available for any purpose other than a
21 purposes described in subsection (a).

22 (4) ANNUAL REPORTS.—

23 (A) IN GENERAL.—Not later than 60 days
24 after the end of each fiscal year beginning with
25 fiscal year 2012, the Secretary shall submit a

1 report on the operation of the Fund during the
2 fiscal year to—

3 (i) the Committees on Appropriations
4 of the House of Representatives and of the
5 Senate;

6 (ii) the Committee on Energy and
7 Natural Resources of the Senate; and

8 (iii) the Committee on Energy and
9 Commerce of the House of Representa-
10 tives.

11 (B) CONTENTS.—Each report shall in-
12 clude, for the fiscal year covered by the report,
13 the following:

14 (i) A statement of the amounts depos-
15 ited into the Fund.

16 (ii) A description of the expenditures
17 made from the Fund for the fiscal year, in-
18 cluding the purpose of the expenditures.

19 (iii) Recommendations for additional
20 authorities to fulfill the purpose of the
21 Fund.

22 (iv) A statement of the balance re-
23 maining in the Fund at the end of the fis-
24 cal year.

1 (5) SEPARATE APPROPRIATIONS ACCOUNT.—
 2 Section 1105(a) of title 31, United States Code, is
 3 amended—

4 (A) by redesignating paragraphs (35) and
 5 (36) as paragraphs (36) and (37), respectively;

6 (B) by redesignating the second paragraph
 7 (33) (relating to obligational authority and out-
 8 lays requested for homeland security) as para-
 9 graph (35); and

10 (C) by adding at the end the following:

11 “(38) a separate statement for the 500-mile
 12 Battery Fund established under section 8(h) of the
 13 ‘Promoting Electric Vehicles Act of 2011’, which
 14 shall include the estimated amount of deposits into
 15 the Fund, obligations, and outlays from the Fund.”.

16 (i) AUTHORIZATION OF APPROPRIATIONS.—There is
 17 authorized to be appropriated—

18 (1) \$10,000,000 to carry out subsection (g)(1);

19 and

20 (2) \$1,000,000 to carry out subsection (g)(2).

21 **SEC. 203. STUDY ON THE SUPPLY OF RAW MATERIALS.**

22 (a) IN GENERAL.—The Secretary of the Interior, in
 23 consultation with the Secretary and the Task Force, shall
 24 conduct a study that—

1 (1) identifies the raw materials needed for the
2 manufacture of plug-in electric drive vehicles, bat-
3 teries, and other components for plug-in electric
4 drive vehicles, and for the infrastructure needed to
5 support plug-in electric drive vehicles;

6 (2) describes the primary or original sources
7 and known reserves and resources of those raw ma-
8 terials;

9 (3) assesses, in consultation with an inde-
10 pendent analysis entity designated by the Secretary,
11 the degree of risk to the manufacture, maintenance,
12 deployment, and use of plug-in electric drive vehicles
13 associated with the supply of those raw materials;
14 and

15 (4) identifies pathways to securing reliable and
16 resilient supplies of those raw materials.

17 (b) REPORT.—Not later than 3 years after the date
18 of enactment of this Act, the Secretary of the Interior
19 shall submit to Congress a report that describes the re-
20 sults of the study.

21 (c) AUTHORIZATION OF APPROPRIATIONS.—There is
22 authorized to be appropriated to carry out this subsection
23 \$1,500,000.

1 **SEC. 204. STUDY ON THE COLLECTION AND PRESERVATION**
2 **OF DATA COLLECTED FROM PLUG-IN ELEC-**
3 **TRIC DRIVE VEHICLES.**

4 (a) IN GENERAL.—Not later than 180 days after the
5 date of enactment of this Act, the Secretary, in consulta-
6 tion with the Committee, shall enter into an agreement
7 with the National Academy of Sciences under which the
8 Academy shall conduct a study that—

9 (1) identifies—

10 (A) the data that may be collected from
11 plug-in electric drive vehicles, including data on
12 the location, charging patterns, and usage of
13 plug-in electric drive vehicles;

14 (B) the scientific, economic, commercial,
15 security, and historic potential of the data de-
16 scribed in subparagraph (A); and

17 (C) any laws or regulations that relate to
18 the data described in subparagraph (A); and

19 (2) analyzes and provides recommendations on
20 matters that include procedures, technologies, and
21 rules relating to the collection, storage, and preser-
22 vation of the data described in paragraph (1)(A).

23 (b) REPORT.—Not later than 15 months after the
24 date of an agreement between the Secretary and the Acad-
25 emy under subsection (a), the National Academy of
26 Sciences shall submit to the appropriate committees of

1 Congress a report that describes the results of the study
2 under subsection (a).

3 (c) AUTHORIZATION OF APPROPRIATIONS.—There is
4 authorized to be appropriated to carry out this section
5 \$1,000,000.

6 **TITLE III—MISCELLANEOUS**

7 **SEC. 301. UTILITY PLANNING FOR PLUG-IN ELECTRIC** 8 **DRIVE VEHICLES.**

9 (a) IN GENERAL.—The Public Utility Regulatory
10 Policies Act of 1978 (16 U.S.C. 2601 et seq.) is amend-
11 ed—

12 (1) in section 111(d) (16 U.S.C. 2621(d)), by
13 adding at the end the following:

14 “(20) PLUG-IN ELECTRIC DRIVE VEHICLE
15 PLANNING.—

16 “(A) UTILITY PLAN FOR PLUG-IN ELEC-
17 TRIC DRIVE VEHICLES.—

18 “(i) IN GENERAL.—Not later than 2
19 years after the date of enactment of this
20 paragraph, each electric utility shall de-
21 velop a plan to support the use of plug-in
22 electric drive vehicles in the service area of
23 the electric utility.

24 “(ii) REQUIREMENTS.—A plan under
25 clause (i) shall investigate—

1 “(I) various levels of potential
2 penetration of plug-in electric drive
3 vehicles in the utility service area;

4 “(II) the potential impacts that
5 the various levels of penetration and
6 charging scenarios (including charging
7 rates and daily hours of charging)
8 would have on generation, distribution
9 infrastructure, and the operation of
10 the transmission grid; and

11 “(III) the role of third parties in
12 providing reliable and economical
13 charging services.

14 “(iii) WAIVER.—

15 “(I) IN GENERAL.—An electric
16 utility that determines that the elec-
17 tric utility will not be impacted by
18 plug-in electric drive vehicles during
19 the 5-year period beginning on the
20 date of enactment of this paragraph
21 may petition the Secretary to waive
22 clause (i) for 5 years.

23 “(II) APPROVAL.—Approval of a
24 waiver under subclause (I) shall be in
25 the sole discretion of the Secretary.

1 “(iv) UPDATES.—

2 “(I) IN GENERAL.—Each electric
3 utility shall update the plan of the
4 electric utility every 2 years.

5 “(II) RESUBMISSION OF WAIV-
6 ER.—An electric utility that received a
7 waiver under clause (iii) and wants
8 the waiver to continue after the expi-
9 ration of the waiver shall be required
10 to resubmit the waiver.

11 “(v) EXEMPTION.—If the Secretary
12 determines that a plan required by a State
13 regulatory authority meets the require-
14 ments of this paragraph, the Secretary
15 may accept that plan and exempt the elec-
16 tric utility submitting the plan from the re-
17 quirements of clause (i).

18 “(B) SUPPORT REQUIREMENTS.—Each
19 State regulatory authority (in the case of each
20 electric utility for which the authority has rate-
21 making authority) and each publicly owned util-
22 ity and cooperative utility shall—

23 “(i) participate in any local plan for
24 the deployment of recharging infrastruc-

ture in communities located in the footprint of the authority or utility;

“(ii) require that charging infrastructure deployed is interoperable with products of all auto manufacturers to the maximum extent practicable; and

“(iii) consider adopting minimum requirements for deployment of electrical charging infrastructure and other appropriate requirements necessary to support the use of plug-in electric drive vehicles.

“(C) COST RECOVERY.—Each State regulatory authority (in the case of each electric utility for which the authority has ratemaking authority) and each publicly owned utility and cooperative utility may consider whether, and to what extent, to allow cost recovery for plans and implementation of plans.

“(D) DETERMINATION.—Not later than 3 years after the date of enactment of this paragraph, each State regulatory authority (with respect to each electric utility for which the authority has ratemaking authority), and each publicly owned utility and cooperative electric utility, shall complete the consideration, and

1 shall make the determination, referred to in
 2 subsection (a) with respect to the standard es-
 3 tablished by this paragraph.”;

4 (2) in section 112(c) (16 U.S.C. 2622(c))—

5 (A) in the first sentence, by striking “Each
 6 State” and inserting the following:

7 “(1) IN GENERAL.—Each State”;

8 (B) in the second sentence, by striking “In
 9 the case” and inserting the following:

10 “(2) SPECIFIC STANDARDS.—

11 “(A) NET METERING AND FOSSIL FUEL
 12 GENERATION EFFICIENCY.—In the case”;

13 (C) in the third sentence, by striking “In
 14 the case” and inserting the following:

15 “(B) TIME-BASED METERING AND COMMU-
 16 NICATIONS.—In the case”;

17 (D) in the fourth sentence—

18 (i) by striking “In the case” and in-
 19 serting the following:

20 “(C) INTERCONNECTION.—In the case”;

21 and

22 (ii) by striking “paragraph (15)” and
 23 inserting “paragraph (15) of section
 24 111(d)”;

1 (E) in the fifth sentence, by striking “In
2 the case” and inserting the following:

3 “(D) INTEGRATED RESOURCE PLANNING,
4 RATE DESIGN MODIFICATIONS, SMART GRID IN-
5 VESTMENTS, SMART GRID INFORMATION.—In
6 the case”; and

7 (F) by adding at the end the following:

8 “(E) PLUG-IN ELECTRIC DRIVE VEHICLE
9 PLANNING.—In the case of the standards estab-
10 lished by paragraph (20) of section 111(d), the
11 reference contained in this subsection to the
12 date of enactment of this Act shall be deemed
13 to be a reference to the date of enactment of
14 that paragraph.”; and

15 (3) in section 112(d) (16 U.S.C. 2622(d)), in
16 the matter preceding paragraph (1), by striking
17 “(19)” and inserting “(20)”.

18 (b) REPORT.—

19 (1) IN GENERAL.—The Secretary, in consulta-
20 tion with the Technical Advisory Committee, shall
21 convene a group of utility stakeholders, charging in-
22 frastructure providers, third party aggregators, and
23 others, as appropriate, to discuss and determine the
24 potential models for the technically and logistically

1 challenging issues involved in using electricity as a
2 fuel for vehicles, including—

3 (A) accommodation for billing for charging
4 a plug-in electric drive vehicle, both at home
5 and at publicly available charging infrastruc-
6 ture;

7 (B) plans for anticipating vehicle to grid
8 applications that will allow batteries in cars as
9 well as banks of batteries to be used for grid
10 storage, ancillary services provision, and backup
11 power;

12 (C) integration of plug-in electric drive ve-
13 hicles with smart grid, including protocols and
14 standards, necessary equipment, and informa-
15 tion technology systems; and

16 (D) any other barriers to installing suffi-
17 cient and appropriate charging infrastructure.

18 (2) REPORT.—Not later than 2 years after the
19 date of enactment of this Act and biennially there-
20 after, the Secretary shall submit to the appropriate
21 committees of Congress a report that includes—

22 (A) the issues and model solutions de-
23 scribed in paragraph (1); and

24 (B) any other issues that the Task Force
25 and Secretary determine to be appropriate.

1 **SEC. 302. LOAN GUARANTEES.**

2 (a) LOAN GUARANTEES FOR ADVANCED BATTERY
 3 PURCHASES FOR USE IN STATIONARY APPLICATIONS.—
 4 Subtitle B of title I of the Energy Independence and Secu-
 5 rity Act of 2007 (42 U.S.C. 17011 et seq.) is amended
 6 by adding at the end the following:

7 **“SEC. 137. LOAN GUARANTEES FOR ADVANCED BATTERY**
 8 **PURCHASES.**

9 “(a) DEFINITIONS.—In this section:

10 “(1) QUALIFIED AUTOMOTIVE BATTERY.—The
 11 term ‘qualified automotive battery’ means a battery
 12 that—

13 “(A) has at least 4 kilowatt hours of bat-
 14 tery capacity; and

15 “(B) is designed for use in qualified plug-
 16 in electric drive motor vehicles but is purchased
 17 for nonautomotive applications.

18 “(2) ELIGIBLE ENTITY.—The term ‘eligible en-
 19 tity’ means—

20 “(A) an original equipment manufacturer;

21 “(B) an electric utility;

22 “(C) any provider of range extension infra-
 23 structure; or

24 “(D) any other qualified entity, as deter-
 25 mined by the Secretary.

26 “(b) LOAN GUARANTEES.—

1 “(1) IN GENERAL.—The Secretary shall guar-
2 antee loans made to eligible entities for the aggre-
3 gate purchase of not less than 200 qualified auto-
4 motive batteries in a calendar year that have a total
5 minimum power rating of 1 megawatt and use ad-
6 vanced battery technology.

7 “(2) RESTRICTION.—As a condition of receiving
8 a loan guarantee under this section, an entity pur-
9 chasing qualified automotive batteries with loan
10 funds guaranteed under this section shall comply
11 with the provisions of the Buy American Act (41
12 U.S.C. 10a et seq.).

13 “(c) REGULATIONS.—The Secretary shall promulgate
14 such regulations as are necessary to carry out this section.

15 “(d) AUTHORIZATION OF APPROPRIATIONS.—There
16 is authorized to be appropriated to carry out this section
17 \$50,000,000.”.

18 (b) LOAN GUARANTEES FOR CHARGING INFRA-
19 STRUCTURE.—Section 1705(a) of the Energy Policy Act
20 of 2005 (42 U.S.C. 16516(a)) is amended by adding at
21 the end the following:

22 “(4) Charging infrastructure and networks of
23 charging infrastructure for plug-in drive electric ve-
24 hicles, if the charging infrastructure will be oper-
25 ational prior to December 31, 2016.”.

1 **SEC. 303. PROHIBITION ON DISPOSING OF ADVANCED BAT-**
2 **TERIES IN LANDFILLS.**

3 (a) DEFINITION OF ADVANCED BATTERY.—

4 (1) IN GENERAL.—In this section, the term
5 “advanced battery” means a battery that is a sec-
6 ondary (rechargeable) electrochemical energy storage
7 device that has enhanced energy capacity.

8 (2) EXCLUSIONS.—The term “advanced bat-
9 tery” does not include—

10 (A) a primary nonrechargeable battery; or

11 (B) a lead-acid battery that is used to
12 start or serve as the principal electrical power
13 source for a plug-in electric drive vehicle.

14 (b) REQUIREMENT.—An advanced battery from a
15 plug-in electric drive vehicle shall be disposed of in accord-
16 ance with the Solid Waste Disposal Act (42 U.S.C. 6901
17 et seq.) (commonly known as the “Resource Conservation
18 and Recovery Act of 1976”).

19 **SEC. 304. PLUG-IN ELECTRIC DRIVE VEHICLE TECHNICAL**
20 **ADVISORY COMMITTEE.**

21 (a) IN GENERAL.—There is established the Plug-in
22 Electric Drive Vehicle Technical Advisory Committee to
23 advise the Secretary on the programs and activities under
24 this Act.

1 (b) MISSION.—The mission of the Committee shall
2 be to advise the Secretary on technical matters, includ-
3 ing—

4 (1) the priorities for research and development;

5 (2) means of accelerating the deployment of
6 safe, economical, and efficient plug-in electric drive
7 vehicles for mass market adoption;

8 (3) the development and deployment of charg-
9 ing infrastructure;

10 (4) the development of uniform codes, stand-
11 ards, and safety protocols for plug-in electric drive
12 vehicles and charging infrastructure; and

13 (5) reporting on the competitiveness of the
14 United States in plug-in electric drive vehicle and in-
15 frastructure research, manufacturing, and deploy-
16 ment.

17 (c) MEMBERSHIP.—

18 (1) MEMBERS.—

19 (A) IN GENERAL.—The Committee shall
20 consist of not less than 12, but not more than
21 25, members.

22 (B) REPRESENTATION.—The Secretary
23 shall appoint the members to Committee from
24 among representatives of—

25 (i) domestic industry;

- 1 (ii) institutions of higher education;
- 2 (iii) professional societies;
- 3 (iv) Federal, State, and local govern-
- 4 mental agencies (including the National
- 5 Laboratories); and
- 6 (v) financial, transportation, labor, en-
- 7 vironmental, electric utility, or other ap-
- 8 propriate organizations or individuals with
- 9 direct experience in deploying and mar-
- 10 keting plug-in electric drive vehicles, as the
- 11 Secretary determines to be necessary.

12 (2) TERMS.—

13 (A) IN GENERAL.—The term of a Com-

14 mittee member shall not be longer than 3 years.

15 (B) STAGGERED TERMS.—The Secretary

16 may appoint members to the Committee for dif-

17 fering term lengths to ensure continuity in the

18 functioning of the Committee.

19 (C) REAPPOINTMENTS.—A member of the

20 Committee whose term is expiring may be re-

21 appointed.

22 (3) CHAIRPERSON.—The Committee shall have

23 a chairperson, who shall be elected by and from the

24 members.

1 (d) REVIEW.—The Committee shall review and make
2 recommendations to the Secretary on the implementation
3 of programs and activities under this Act.

4 (e) RESPONSE.—

5 (1) IN GENERAL.—The Secretary shall consider
6 and may adopt any recommendation of the Com-
7 mittee under subsection (c).

8 (2) BIENNIAL REPORT.—

9 (A) IN GENERAL.—Not later than 2 years
10 after the date of enactment of this Act and
11 every 2 years thereafter, the Secretary shall
12 submit to the appropriate committees of Con-
13 gress a report describing any new recommenda-
14 tions of the Committee.

15 (B) CONTENTS.—The report shall in-
16 clude—

17 (i) a description of the manner in
18 which the Secretary has implemented or
19 plans to implement the recommendations
20 of the Committee; or

21 (ii) an explanation of the reason that
22 a recommendation of the Committee has
23 not been implemented.

24 (C) TIMING.—The report described in this
25 paragraph shall be submitted by the Secretary

1 at the same time the President submits the
 2 budget proposal for the Department of Energy
 3 to Congress.

4 (f) COORDINATION.—The Committee shall—

5 (1) hold joint annual meetings with the Hydro-
 6 gen and Fuel Cell Technical Advisory Committee es-
 7 tablished by section 807 of the Energy Policy Act of
 8 2005 (42 U.S.C. 16156) to help coordinate the work
 9 and recommendations of the Committees; and

10 (2) coordinate efforts, to the maximum extent
 11 practicable, with all existing independent, depart-
 12 mental, and other advisory Committees, as deter-
 13 mined to be appropriate by the Secretary.

14 (g) SUPPORT.—The Secretary shall provide to the
 15 Committee the resources necessary to carry out this sec-
 16 tion, as determined to be necessary by the Secretary.

17 **SEC. 305. PLUG-IN ELECTRIC DRIVE VEHICLE INTER-**
 18 **AGENCY TASK FORCE.**

19 (a) IN GENERAL.—Not later than 120 days after the
 20 date of enactment of this Act, the President shall establish
 21 the Plug-in Electric Drive Vehicle Interagency Task
 22 Force, to be chaired by the Secretary and which shall con-
 23 sist of at least 1 representative from each of—

24 (1) the Office of Science and Technology Policy;

25 (2) the Council on Environmental Quality;

- 1 (3) the Department of Energy;
- 2 (4) the Department of Transportation;
- 3 (5) the Department of Defense;
- 4 (6) the Department of Commerce (including the
- 5 National Institute of Standards and Technology);
- 6 (7) the Environmental Protection Agency;
- 7 (8) the General Services Administration; and
- 8 (9) any other Federal agencies that the Presi-
- 9 dent determines to be appropriate.

10 (b) MISSION.—The mission of the Task Force shall
11 be to ensure awareness, coordination, and integration of
12 the activities of the Federal Government relating to plug-
13 in electric drive vehicles, including—

- 14 (1) plug-in electric drive vehicle research and
- 15 development (including necessary components);
- 16 (2) the development of widely accepted smart-
- 17 grid standards and protocols for charging infrastruc-
- 18 ture;
- 19 (3) the relationship of plug-in electric drive ve-
- 20 hicle charging practices to electric utility regulation;
- 21 (4) the relationship of plug-in electric drive ve-
- 22 hicle deployment to system reliability and security;
- 23 (5) the general deployment of plug-in electric
- 24 drive vehicles in the Federal, State, and local gov-
- 25 ernments and for private use;

(6) the development of uniform codes, standards, and safety protocols for plug-in electric drive vehicles and charging infrastructure; and

(7) the alignment of international plug-in electric drive vehicle standards.

(c) ACTIVITIES.—

(1) IN GENERAL.—In carrying out this section, the Task Force may—

(A) organize workshops and conferences;

(B) issue publications; and

(C) create databases.

(2) MANDATORY ACTIVITIES.—In carrying out this section, the Task Force shall—

(A) foster the exchange of generic, non-proprietary information and technology among industry, academia, and the Federal Government;

(B) integrate and disseminate technical and other information made available as a result of the programs and activities under this Act;

(C) support education about plug-in electric drive vehicles;

(D) monitor, analyze, and report on the effects of plug-in electric drive vehicle deployment

1 on the environment and public health, including
 2 air emissions from vehicles and electricity gen-
 3 erating units; and

4 (E) review and report on—

5 (i) opportunities to use Federal pro-
 6 grams (including laws, regulations, and
 7 guidelines) to promote the deployment of
 8 plug-in electric drive vehicles; and

9 (ii) any barriers to the deployment of
 10 plug-in electric drive vehicles, including
 11 barriers that are attributable to Federal
 12 programs (including laws, regulations, and
 13 guidelines).

14 (d) AGENCY COOPERATION.—A Federal agency—

15 (1) shall cooperate with the Task Force; and

16 (2) provide, on request of the Task Force, ap-
 17 propriate assistance in carrying out this section, in
 18 accordance with applicable Federal laws (including
 19 regulations).

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