

112TH CONGRESS  
1ST SESSION

**S.** \_\_\_\_\_

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

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IN THE SENATE OF THE UNITED STATES

Mr. MERKLEY introduced the following bill; which was read twice and referred to the Committee on \_\_\_\_\_

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**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.

## 2

- 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 redesignig-  
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           merchial 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-

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

3           (3) CRITERIA.—

4                   (A) IN GENERAL.—Not later than 120  
5           days after the date of enactment of this Act,  
6           and not later than 90 days after the date on  
7           which any subsequent amounts are appro-  
8           priated for the Program, the Secretary shall  
9           publish criteria for the selection of deployment  
10          communities that include requirements that ap-  
11          plications be submitted by a State, tribal, or  
12          local government entity (or groups of State,  
13          tribal, or local government entities).

14                   (B) APPLICATION REQUIREMENTS.—The  
15          criteria published by the Secretary under sub-  
16          paragraph (A) shall include application require-  
17          ments that, at a minimum, include—

18                           (i) achievable goals and methodologies  
19                   for—

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

23                                   (II) the expected percentage of  
24                                   light-duty vehicle sales that would be  
25                                   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-

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

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

7           (d) APPLICATIONS AND GRANTS.—

8           (1) APPLICATIONS.—

9           (A) IN GENERAL.—Not later than 150  
10          days after the date of publication by the Sec-  
11          retary of selection criteria described in sub-  
12          section (c)(3), any State, tribal, or local govern-  
13          ment, or group of State, tribal, or local govern-  
14          ments may apply to the Secretary to become a  
15          deployment community.

16          (B) JOINT SPONSORSHIP.—

17          (i) IN GENERAL.—An application sub-  
18          mitted under subparagraph (A) may be  
19          jointly sponsored by electric utilities, auto-  
20          mobile manufacturers, technology pro-  
21          viders, carsharing companies or organiza-  
22          tions, third-party plug-in electric drive ve-  
23          hicle service providers, or other appro-  
24          priated 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 perience 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) (re-

1       ferred to in this subsection as “ARPA-E”) to fund  
2       high-risk, high-reward research and development  
3       programs supporting the development, manufacture,  
4       and deployment of plug-in electric drive vehicles and  
5       charging infrastructure, including advanced bat-  
6       teries, plug-in electric drive components, and plug-in  
7       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 (e) 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-

1           ture in communities located in the foot-  
2           print of the authority or utility;

3           “(ii) require that charging infrastruc-  
4           ture deployed is interoperable with prod-  
5           ucts of all auto manufacturers to the max-  
6           imum extent practicable; and

7           “(iii) consider adopting minimum re-  
8           quirements for deployment of electrical  
9           charging infrastructure and other appro-  
10          priate requirements necessary to support  
11          the use of plug-in electric drive vehicles.

12          “(C) COST RECOVERY.—Each State regu-  
13          latory authority (in the case of each electric  
14          utility for which the authority has ratemaking  
15          authority) and each publicly owned utility and  
16          cooperative utility may consider whether, and to  
17          what extent, to allow cost recovery for plans  
18          and implementation of plans.

19          “(D) DETERMINATION.—Not later than 3  
20          years after the date of enactment of this para-  
21          graph, each State regulatory authority (with re-  
22          spect to each electric utility for which the au-  
23          thority has ratemaking authority), and each  
24          publicly owned utility and cooperative electric  
25          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;

1           (6) the development of uniform codes, stand-  
2           ards, and safety protocols for plug-in electric drive  
3           vehicles and charging infrastructure; and

4           (7) the alignment of international plug-in elec-  
5           tric drive vehicle standards.

6           (c) ACTIVITIES.—

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

9                   (A) organize workshops and conferences;

10                   (B) issue publications; and

11                   (C) create databases.

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

14                   (A) foster the exchange of generic, non-  
15                   proprietary information and technology among  
16                   industry, academia, and the Federal Govern-  
17                   ment;

18                   (B) integrate and disseminate technical  
19                   and other information made available as a re-  
20                   sult of the programs and activities under this  
21                   Act;

22                   (C) support education about plug-in elec-  
23                   tric drive vehicles;

24                   (D) monitor, analyze, and report on the ef-  
25                   fects 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).