

111TH CONGRESS
2D SESSION

S. 3442

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

IN THE SENATE OF THE UNITED STATES

MAY 27 (legislative day, MAY 26), 2010

Mr. DORGAN (for himself, Mr. ALEXANDER, and Mr. MERKLEY) introduced the following bill; which was read twice and referred to the Committee on Finance

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.**

4 This Act may be cited as the “Electric Vehicle De-
5 ployment Act of 2010”.

6 **SEC. 2. FINDINGS.**

7 Congress finds that—

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

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

4 (3) many of the nations on which the United
5 States relies for petroleum supplies or that signifi-
6 cantly affect the world petroleum market share nei-
7 ther the national interest nor the values of the
8 United States;

9 (4) the United States imports more than 50
10 percent of the petroleum needs of the country each
11 day;

12 (5) in 2008, the net deficit of the United States
13 in petroleum trade amounted to more than
14 \$380,000,000,000, or nearly 60 percent of the total
15 trade deficit;

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

20 (7) the electrification of the light-duty vehicle
21 fleet represents a direct pathway to significant re-
22 duction in petroleum dependence, because passenger
23 cars and light trucks account for more than 60 per-
24 cent of the transportation petroleum demand and

1 more than 40 percent of total petroleum demand in
2 the United States;

3 (8) the electrification of the light-duty vehicle
4 fleet promotes national energy security because the
5 electric power sector uses a diverse range of domes-
6 tic electricity generation sources;

7 (9) electric drive cars, when running on electric
8 power, produce no tailpipe emissions;

9 (10) the deployment of 700,000 plug-in electric
10 drive vehicles would result in a petroleum savings of
11 approximately 10,000,000 barrels per year compared
12 to the annual petroleum consumption as of the date
13 of enactment of this Act;

14 (11) in 2030, the United States could feasibly
15 deploy more than 100,000,000 plug-in electric drive
16 vehicles, which would result in a petroleum savings
17 of more than 1,000,000,000 barrels of petroleum per
18 year and greenhouse gas reductions of over
19 300,000,000 tons of carbon dioxide compared to the
20 annual petroleum consumption and greenhouse gas
21 emissions as of the date of enactment of this Act;
22 and

23 (12) a targeted deployment program for plug-in
24 electric drive vehicles that is focused on competi-
25 tively selected deployment communities—

1 (A) represents the best opportunity to in-
2 troduce plug-in electric drive vehicles to the
3 market; and

4 (B) with the information learned from the
5 deployment communities, will—

6 (i) inform best practices for the wide-
7 scale deployment of plug-in electric drive
8 vehicles; and

9 (ii) substantially reduce the oil con-
10 sumption of the United States.

11 **SEC. 3. DEFINITIONS.**

12 In this Act:

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

16 (2) CHARGING INFRASTRUCTURE.—The term
17 “charging infrastructure” means any property (not
18 including a building or the structural components of
19 a building) if the property is used for the recharging
20 of motor vehicles propelled by electricity, including
21 electrical panel upgrades, wiring, conduit, trenching,
22 pedestals, and related equipment.

23 (3) COMMITTEE.—The term “Committee”
24 means the Plug-in Electric Drive Vehicle Technical
25 Advisory Committee established by section 13.

1 (4) DEPLOYMENT COMMUNITY.—The term “de-
2 ployment community” means a community selected
3 by the Secretary to be part of the targeted plug-in
4 electric drive vehicles deployment communities pro-
5 gram under section 5.

6 (5) ELECTRIC DRIVE VEHICLE.—The term
7 “electric drive vehicle” means a vehicle that—

8 (A)(i) is—

9 (I) a light-duty vehicle (as the term is
10 defined in section 86.1803–01 of title 40,
11 Code of Federal Regulations, as in effect
12 as of the date of enactment of this Act)
13 that draws motive power from a battery
14 with a capacity of at least 4 kilowatt-
15 hours;

16 (II) a heavy-duty vehicle (as the term
17 is defined in section 86.1803–01 of title
18 40, Code of Federal Regulations, as in ef-
19 fect as of the date of enactment of this
20 Act) with a gross vehicle weight rating
21 greater than 8,500 pounds and less than
22 14,000 pounds that draws motive power
23 from a battery with a capacity of at least
24 8 kilowatt-hours;

1 (III) a heavy-duty vehicle (as the term
2 is defined in section 86.1803–01 of title
3 40, Code of Federal Regulations, as in ef-
4 fect as of the date of enactment of this
5 Act) with a gross vehicle weight rating
6 greater than 14,000 pounds and less than
7 33,000 pounds that draws motive power
8 from a battery with a capacity of at least
9 15 kilowatt-hours; or

10 (IV) a heavy-duty vehicle (as the term
11 is defined in section 86.1803–01 of title
12 40, Code of Federal Regulations, as in ef-
13 fect as of the date of enactment of this
14 Act) with a gross vehicle weight rating
15 greater than 33,000 pounds that draws
16 motive power from a battery with a capac-
17 ity of at least 20 kilowatt-hours; and

18 (ii) can be recharged from an external
19 source of electricity for motive power; or

20 (B) is a motor vehicle (as the term is de-
21 fined in section 216 of the Clean Air Act (42
22 U.S.C. 7550)) that draws motive power from a
23 fuel cell (as the term is defined in section 803
24 of the Spark M. Matsunaga Hydrogen Act of
25 2005 (42 U.S.C. 16152)).

1 (6) ELECTRIC UTILITY.—The term “electric
2 utility” has the meaning given the term in section
3 3 of the Public Utility Regulatory Policies Act of
4 1978 (16 U.S.C. 2602).

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

9 (8) PLUG-IN ELECTRIC DRIVE VEHICLE.—

10 (A) IN GENERAL.—The term “plug-in elec-
11 tric drive vehicle” has the meaning given the
12 term in section 131(a)(5) of the Energy Inde-
13 pendence and Security Act of 2007 (42 U.S.C.
14 17011(a)(5)).

15 (B) INCLUSIONS.—The term “plug-in elec-
16 tric drive vehicle” includes—

17 (i) a low speed plug-in electric drive
18 vehicles that meet the Federal Motor Vehi-
19 cle Safety Standards described in section
20 571.500 of title 49, Code of Federal Regu-
21 lations (or successor regulations); and

22 (ii) any other motor vehicles that can
23 be recharged from an external source of
24 motive power and that is authorized to

1 travel on the Federal-aid system of high-
2 ways.

3 (9) PRIZE.—The term “Prize” means the Ad-
4 vanced Batteries for Tomorrow Prize established by
5 section 10.

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

8 (11) TASK FORCE.—The term “Task Force”
9 means the Plug-in Electric Drive Vehicle Inter-
10 agency Task Force established by section 14.

11 **SEC. 4. NATIONAL ELECTRIC DRIVE VEHICLE DEPLOY-**
12 **MENT PROGRAM.**

13 (a) IN GENERAL.—There is established within the
14 Department of Energy a national electric drive vehicle de-
15 ployment program.

16 (b) NATIONAL PLAN.—

17 (1) IN GENERAL.—Not later than 1 year after
18 the date of enactment of this Act, the Secretary
19 shall develop a national plan for electric drive vehicle
20 deployment that includes—

21 (A) an assessment of the maximum fea-
22 sible deployment of plug-in electric drive vehi-
23 cles by 2020 and 2030;

1 (B) the establishment of national goals for
2 market penetration of plug-in electric drive ve-
3 hicles by 2020 and 2030;

4 (C) a plan for using the successes and bar-
5 riers to deployment identified by the deploy-
6 ment communities program established under
7 section 5 to prepare communities across the na-
8 tion for the rapid deployment of plug-in electric
9 drive vehicles that includes—

10 (i) measures that communities not se-
11 lected as deployment communities should
12 implement to prepare for electric drive ve-
13 hicle deployment; and

14 (ii) any recommendations to the Presi-
15 dent or Congress on the manner in which
16 the Federal Government can assist commu-
17 nities not selected as deployment commu-
18 nities in preparing for electric vehicle de-
19 ployment—

20 (I) to support national plug-in
21 electric drive vehicle deployment; and

22 (II) to benefit from the lessons
23 learned by targeted electric drive vehi-
24 cle deployment communities;

1 (D) a plan for providing technical assist-
2 ance to communities across the United States
3 to prepare for plug-in electric drive vehicle de-
4 ployment; and

5 (E) in consultation with the Task Force,
6 any recommendations to the President and to
7 Congress for changes in Federal programs (in-
8 cluding laws, regulations, and guidelines)—

9 (i) to better promote the deployment
10 of plug-in electric drive vehicles; and

11 (ii) to reduce barriers to the deploy-
12 ment of plug-in electric drive vehicles.

13 (2) UPDATES.—The Secretary shall use market
14 data and information from the targeted electric drive
15 vehicle deployment communities program established
16 under section 5 to regularly update the plan to re-
17 flect real world market conditions.

18 (c) TECHNICAL ASSISTANCE.—

19 (1) IN GENERAL.—In carrying out this section,
20 the Secretary shall provide, at the request of the ap-
21 plicable local elected official, technical assistance to
22 communities to assist with the deployment of plug-
23 in electric drive vehicles.

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

4 (A) communities that—

5 (i) applied to participate in the pro-
6 gram described in section 5 but were not
7 selected to be deployment communities;
8 and

9 (ii) submitted applications that were
10 evaluated as the most worthy of selection
11 based on criteria established by the Sec-
12 retary;

13 (B) communities that have established the
14 most engaged partnerships among stakeholders,
15 including, at a minimum—

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

19 (ii) all relevant generators and dis-
20 tributors of electricity;

21 (iii) public utility commissions;

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

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

1 a sufficient level of publicly available
2 charging infrastructure (including privately
3 owned parking lots or structures);

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

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

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

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

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

16 (C) communities that have best dem-
17 onstrated that the public is likely to embrace
18 plug-in electric drive vehicles.

19 (d) REPORT.—The Secretary shall submit biennially
20 to the appropriate committees of Congress a report on the
21 progress made in implementing the national plan de-
22 scribed in subsection (b) that includes—

23 (1) a description of the progress made by the
24 technical assistance program under subsection (c);
25 and

1 (2) any updated recommendations of the Sec-
 2 retary for changes in Federal programs to promote
 3 the purposes of this section.

4 (e) AUTHORIZATION OF APPROPRIATIONS.—There is
 5 authorized to be appropriated to carry out this section
 6 \$10,000,000 for fiscal years 2011 through 2016.

7 **SEC. 5. TARGETED ELECTRIC DRIVE VEHICLE DEPLOY-**
 8 **MENT COMMUNITIES PROGRAM.**

9 (a) ESTABLISHMENT.—

10 (1) IN GENERAL.—There is established within
 11 the national electric drive deployment program es-
 12 tablished under section 4 a targeted electric drive ve-
 13 hicle deployment communities program (referred to
 14 in this section as the “Program”).

15 (2) PHASE 1.—

16 (A) IN GENERAL.—The Secretary shall es-
 17 tablish a competitive process to select at least
 18 5 and not more than 15 phase 1 deployment
 19 communities for the Program.

20 (B) ELIGIBLE ENTITIES.—In selecting
 21 participants for the Program under paragraph
 22 (1), the Secretary shall only consider applica-
 23 tions submitted by State, tribal, or local govern-
 24 ment entities (or groups of State, tribal, or
 25 local government entities).

1 (C) SELECTION.—Not later than 1 year
2 after the date of enactment of this Act, the Sec-
3 retary shall select the phase 1 deployment com-
4 munities under this paragraph.

5 (D) TERMINATION.—Phase 1 of the Pro-
6 gram shall be carried out for a 5-year period
7 beginning on the date funding under this Act is
8 first provided to the deployment community.

9 (3) PHASE 2.—Not later than 5 years after the
10 date of enactment of this Act, the Secretary shall
11 submit to Congress a report that analyzes the suc-
12 cess of phase I and, if, based on the phase I anal-
13 ysis, the Secretary determines that a phase II pro-
14 gram is warranted, makes recommendations and de-
15 scribes a plan for phase II, including—

16 (A) recommendations regarding—

17 (i) the number of additional deploy-
18 ment communities that should be selected;

19 (ii) the manner in which criteria for
20 selection should be updated;

21 (iii) the manner in which incentive
22 structures for phase 2 deployment should
23 be changed; and

1 (iv) whether other forms of onboard
2 energy storage for electric drive vehicles
3 should be included in phase 2; and

4 (B) a request for appropriations to imple-
5 ment phase 2 of the Program.

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

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

9 (A) the deployment of 700,000 plug-in
10 electric drive vehicles in phase 1 in the deploy-
11 ment communities selected under paragraph
12 (2);

13 (B) the near-term achievement of signifi-
14 cant market penetration in deployment commu-
15 nities; and

16 (C) the achievement of significant market
17 penetration nationally;

18 (2) to establish models for the rapid deployment
19 of plug-in electric drive vehicles nationally, including
20 for the deployment of residential and publicly avail-
21 able charging infrastructure;

22 (3) to increase consumer knowledge and accept-
23 ance of plug-in electric drive vehicles;

1 (4) to encourage the innovation and investment
2 necessary to achieve mass market deployment of
3 plug-in electric drive vehicles;

4 (5) to demonstrate the integration of plug-in
5 electric drive vehicles into electricity distribution sys-
6 tems and the larger electric grid while maintaining
7 grid system performance and reliability;

8 (6) to demonstrate protocols and communica-
9 tion standards that facilitate vehicle integration into
10 the grid and provide seamless charging for con-
11 sumers traveling through multiple utility distribution
12 systems;

13 (7) to investigate differences among deployment
14 communities and to develop best practices for imple-
15 menting vehicle electrification in various commu-
16 nities, including best practices for planning for and
17 facilitating the construction of residential and pub-
18 licly available infrastructure to support plug-in elec-
19 tric drive vehicles;

20 (8) to collect comprehensive data on the pur-
21 chase and use of plug-in electric vehicles to inform
22 best practices for rapidly deploying plug-in electric
23 drive vehicles in other locations, including for the in-
24 stallation of charging infrastructure; and

1 (9) to reduce and displace petroleum use and
2 reduce greenhouse gas emissions by accelerating the
3 deployment of plug-in electric drive vehicles in the
4 United States.

5 (c) PHASE 1 DEPLOYMENT COMMUNITY SELECTION
6 CRITERIA.—

7 (1) IN GENERAL.—The Secretary shall ensure,
8 to the maximum extent practicable, that selected de-
9 ployment communities in phase 1 serve as models of
10 deployment for various communities across the
11 United States.

12 (2) SELECTION.—In selecting communities
13 under this section, the Secretary—

14 (A) shall ensure, to the maximum extent
15 practicable, that—

16 (i) the combination of selected com-
17 munities is diverse in population, demo-
18 graphics, urban and suburban composition,
19 typical commuting patterns, climate, type
20 of utility (including regulated, municipal,
21 cooperative, and vertically integrated utili-
22 ties), and geography;

23 (ii) at least 1 community selected has
24 a population of less than 125,000;

1 (iii) each deployment community will
2 achieve significant market penetration; and

3 (iv) the deployment communities
4 present a strong opportunity for replication
5 in other communities across the United
6 States;

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

14 (C) in addition to the criteria described in
15 subparagraph (A), may give preference to appli-
16 cants proposing a greater non-Federal cost
17 share.

18 (3) CRITERIA.—

19 (A) IN GENERAL.—Not later than 120
20 days after the date of enactment of this Act,
21 the Secretary shall publish criteria for the selec-
22 tion of deployment communities that include re-
23 quirements that applications be submitted by a
24 State, tribal, or local government entity (or

1 groups of State, tribal, or local government en-
2 tities).

3 (B) APPLICATION REQUIREMENTS.—The
4 criteria published by the Secretary under sub-
5 paragraph (A) shall include application require-
6 ments that, at a minimum, include—

7 (i) goals for—

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

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

15 (III) the adoption of plug-in elec-
16 tric drive vehicles (including medium-
17 or heavy-duty vehicles) in private and
18 public fleets during the 5-year dura-
19 tion of the Program;

20 (ii) evidence that—

21 (I) the public is likely to embrace
22 plug-in electric drive vehicles; and

23 (II) automobile manufacturers
24 and dealers will be able to provide and
25 service the targeted number of plug-in

1 electric drive vehicles in the commu-
2 nity for the duration of the program;

3 (iii) clearly defined geographic bound-
4 aries of the proposed deployment area;

5 (iv) a community deployment plan for
6 the deployment of plug-in electric drive ve-
7 hicles, charging infrastructure, and serv-
8 ices in the deployment community;

9 (v) assurances that a majority of the
10 vehicle deployments anticipated in the plan
11 will be for personal vehicles authorized to
12 travel on the United States Federal-aid
13 system of highways, but may also in-
14 clude—

15 (I) private or public sector plug-
16 in electric drive fleet vehicles;

17 (II) medium- and heavy-duty hy-
18 brid vehicles;

19 (III) low speed plug-in electric
20 drive vehicles that meet Federal
21 Motor Vehicle Safety Standards de-
22 scribed in section 571.500 of title 49,
23 Code of Federal Regulations; and

24 (IV) any other plug-in electric
25 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);
- 5 (VI) plug-in electric drive vehicle
6 manufacturers or retailers;
- 7 (VII) third-party providers of
8 charging infrastructure or services;
- 9 (VIII) owners of any major fleet
10 that will participate in the program;
- 11 (IX) as appropriate, owners and
12 operators of regional electric power
13 distribution and transmission facili-
14 ties; and
- 15 (X) as appropriate, other existing
16 community coalitions recognized by
17 the Department of Energy;
- 18 (ii) evidence of the commitment of the
19 stakeholders to participate in the partner-
20 ship;
- 21 (iii) a clear description of the role and
22 responsibilities of each stakeholder; and
- 23 (iv) a plan for continuing the engage-
24 ment and participation of the stakeholders,

1 as appropriate, throughout the implemen-
2 tation of the deployment plan;

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

8 (D) a plan for deploying residential and
9 publicly available charging infrastructure, in-
10 cluding—

11 (i) an assessment of the number of
12 consumers who will have access to private
13 residential charging infrastructure;

14 (ii) an approach for accommodating
15 residents who are not able to charge vehi-
16 cles at the place of residence;

17 (iii) a plan for ensuring that the
18 charging infrastructure be able to send and
19 receive the information needed to interact
20 with the grid and be compatible with smart
21 grid technologies to the extent appropriate;

22 (iv) an estimate of how many charg-
23 ing stations will be needed and where to lo-
24 cate the stations;

1 (v) a plan for how much publicly
2 available charging infrastructure will be
3 privately funded or located on private
4 property; and

5 (vi) a description of equipment to be
6 deployed, including assurances that, to the
7 maximum extent practicable, equipment to
8 be deployed will meet open, nonproprietary
9 standards for connecting to plug-in electric
10 drive vehicles that are either—

11 (I) commonly accepted by indus-
12 try at the time the equipment is being
13 acquired; or

14 (II) meet the standards developed
15 by the Director of the National Insti-
16 tute of Standards and Technology
17 under section 1305 of the Energy
18 Independence and Security Act of
19 2007 (42 U.S.C. 17385);

20 (E) a plan for effective marketing of plug-
21 in electric drive vehicles, charging services, and
22 infrastructure;

23 (F) descriptions of updated building codes
24 (or a plan to update building codes before or
25 during the grant period) to include charging in-

1 frastructure or dedicated circuits for charging
2 infrastructure, as appropriate, in new construc-
3 tion and major renovations;

4 (G) descriptions of updated construction
5 permitting or inspection processes (or a plan to
6 update construction permitting or inspection
7 processes) to allow for expedited installation of
8 charging infrastructure for purchasers of plug-
9 in electric drive vehicles, including a permitting
10 process that allows a vehicle purchaser to have
11 charging infrastructure installed within 3 busi-
12 ness days;

13 (H) descriptions of updated zoning, park-
14 ing rules, or other local ordinances as are nec-
15 essary to facilitate the installation of publicly
16 available charging infrastructure and to allow
17 for access to publicly available charging infra-
18 structure, as appropriate;

19 (I) additional incentives, beyond those es-
20 tablished by this Act, for the purchasers of
21 plug-in electric drive vehicles, including rebates
22 or reductions in sales taxes or registration fees,
23 preferred parking spaces, and single rider ac-
24 cess to high occupancy vehicle lanes for plug-in
25 electric drive vehicles;

1 (J) additional incentives, beyond those es-
2 tablished by this Act, for the installation of
3 charging infrastructure;

4 (K) a proposed plan for making necessary
5 utility and grid upgrades, including economi-
6 cally sound information technology upgrades
7 and a plan for recovering the cost of the up-
8 grades;

9 (L) a description of utility, grid operator,
10 or third-party charging service provider, policies
11 and plans for accommodating the deployment of
12 plug-in electric drive vehicles, including—

13 (i) rate structures or provisions and
14 billing protocols for the charging of plug-
15 in electric drive vehicles, including, as ap-
16 propriate—

17 (I) accommodation for billing
18 for—

19 (aa) charging at a place of
20 residence and at publicly avail-
21 able charging infrastructure; and

22 (bb) vehicle owners who can-
23 not charge at home by virtue of
24 the nature of their residence; and

- 1 (II) rate structures or provisions
2 that benefit consumers by facili-
3 tating—
- 4 (aa) charging off-peak rates;
 - 5 (bb) load management strat-
6 egies that optimize reliable and
7 economical operation of the grid;
 - 8 (cc) utilities, grid operators,
9 or third-party charging services
10 to draw battery charge for use on
11 the grid; or
 - 12 (dd) the offer of other bene-
13 fits to the utility system or the
14 grid;
 - 15 (ii) analysis of potential impacts to
16 the grid;
 - 17 (iii) plans for using information tech-
18 nology or third-party aggregators to mini-
19 mize the effects of charging on peak loads;
 - 20 (iv) plans for working with smart grid
21 technologies or third-party aggregators for
22 the purposes of smart charging and for al-
23 lowing 2-way communication and elec-
24 tricity movement; and

1 (v) plans for anticipating vehicle-to-
 2 grid applications that will allow batteries
 3 in cars as well as banks of batteries to be
 4 used for grid storage, ancillary services
 5 provision, and backup power;

6 (M) a deployment timeline;

7 (N) a plan for monitoring and evaluating
 8 the implementation of the plan, including
 9 metrics for assessing the success of the deploy-
 10 ment and an approach to updating the plan, as
 11 appropriate; and

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

16 (d) PHASE 1 APPLICATIONS AND GRANTS.—

17 (1) IN GENERAL.—Not later than 120 days
 18 after the date of publication by the Secretary of the
 19 selection criteria described in subsection (c)(3), any
 20 State, tribe, or local government, or group of State,
 21 tribe, or local governments may apply to the Sec-
 22 retary to become a deployment community.

23 (2) GRANTS.—

24 (A) IN GENERAL.—In each application, the
 25 applicant may request up to \$250,000,000 in fi-

1 nancial assistance from the Secretary to fund
2 projects in the deployment community.

3 (B) USE OF FUNDS.—Funds provided
4 through a grant under this paragraph may be
5 used to help implement the plan for the deploy-
6 ment of plug-in electric drive vehicles included
7 in the application, including—

8 (i) planning for and installing charg-
9 ing infrastructure, including offering addi-
10 tional incentives as described in subsection
11 (c)(4)(J);

12 (ii) updating building codes, zoning or
13 parking rules, or permitting or inspection
14 processes as described in subparagraphs
15 (F), (G), and (H) of subsection (c)(4);

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

20 (iv) workforce training, including
21 training of permitting officials;

22 (v) public education described in the
23 proposed marketing plan; and

24 (vi) shifting State, tribal, or local gov-
25 ernment fleets to plug-in electric drive ve-

1 hicles, at a rate in excess of the existing
2 Federal alternative fleet vehicle require-
3 ments.

4 (C) COST-SHARING.—

5 (i) IN GENERAL.—A grant provided
6 under this paragraph shall be subject to a
7 minimum non-Federal cost-sharing re-
8 quirement of 20 percent.

9 (ii) NON-FEDERAL SOURCES.—The
10 Secretary shall—

11 (I) determine the appropriate
12 cost share for each selected applicant;
13 and

14 (II) require that not less than 20
15 percent of the cost of an activity fund-
16 ed by a grant under this paragraph be
17 provided by a non-Federal source.

18 (iii) REDUCTION.—The Secretary may
19 reduce or eliminate the cost-sharing re-
20 quirement described in clause (i), as the
21 Secretary determines to be necessary.

22 (iv) CALCULATION OF AMOUNT.—In
23 calculating the amount of the non-Federal
24 share under this section, the Secretary—

1 (I) may include allowable costs in
2 accordance with the applicable cost
3 principles, including—

4 (aa) cash;

5 (bb) personnel costs;

6 (cc) the value of a service,
7 other resource, or third party in-
8 kind contribution determined in
9 accordance with the applicable
10 circular of the Office of Manage-
11 ment and Budget;

12 (dd) indirect costs or facili-
13 ties and administrative costs; or

14 (ee) any funds received
15 under the power program of the
16 Tennessee Valley Authority or
17 any Power Marketing Adminis-
18 tration (except to the extent that
19 such funds are made available
20 under an annual appropriation
21 Act);

22 (II) shall include contributions
23 made by State, tribal, or local govern-
24 ment entities and private entities; and

25 (III) shall not include—

1 (aa) revenues or royalties
2 from the prospective operation of
3 an activity beyond the time con-
4 sidered in the grant, unless from
5 a qualified electric drive vehicle
6 refueling property bond (as de-
7 fined in section 54G(a) of the In-
8 ternal Revenue Code of 1986);

9 (bb) proceeds from the pro-
10 spective sale of an asset of an ac-
11 tivity; or

12 (cc) other appropriated Fed-
13 eral funds.

14 (v) REPAYMENT OF FEDERAL
15 SHARE.—The Secretary shall not require
16 repayment of the Federal share of a cost-
17 shared activity under this section as a con-
18 dition of providing a grant.

19 (vi) TITLE TO PROPERTY.—The re-
20 ceipt of Federal funds under this section
21 shall not prohibit the purchaser of a vehi-
22 cle, equipment, or other property from re-
23 taining sole, permanent title to the vehicle,
24 equipment, or property at the conclusion of
25 the program.

1 (3) SELECTION.—Not later than 120 days after
2 the application deadline established under paragraph
3 (1), the Secretary shall announce the names of the
4 deployment communities selected under this sub-
5 section.

6 (e) REPORTING REQUIREMENTS.—

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

9 (A) determine what data will be required
10 to be collected by participants in deployment
11 communities and submitted to the Department
12 to allow for analysis of the deployment commu-
13 nities; and

14 (B) develop metrics to determine the suc-
15 cess of the deployment communities.

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

20 (3) REPORTS.—Not later than 3 years after the
21 date of enactment of this Act and again after the
22 completion of the Program, the Secretary shall sub-
23 mit to Congress a report that contains—

24 (A) a description of the status of—

1 (i) the deployment communities and
2 the implementation of the deployment plan
3 of each deployment community;

4 (ii) the rate of vehicle manufacturing
5 deployment and market penetration of
6 plug-in electric drive vehicles; and

7 (iii) the deployment of residential and
8 publicly available infrastructure;

9 (B) a description of the challenges experi-
10 enced and lessons learned from the program to
11 date, including the activities described in sub-
12 paragraph (A); and

13 (C) an analysis of the data collected under
14 this subsection.

15 (f) INFORMATION CLEARINGHOUSE.—The Secretary
16 shall make available to the public, in a timely manner, in-
17 formation regarding the cost, performance, usage data,
18 and technical data regarding the deployment and integra-
19 tion of plug-in electric drive vehicles in the deployment
20 communities.

21 (g) PROPRIETARY INFORMATION.—The Secretary
22 shall, as appropriate, provide for the protection of propri-
23 etary information and intellectual property rights.

1 (h) AUTHORIZATION OF APPROPRIATIONS.—There is
2 authorized to be appropriated to carry out this section
3 \$2,002,000,000.

4 (i) CONFORMING AMENDMENT.—Section 166(b)(5)
5 of title 23, United States Code, is amended—

6 (1) in subparagraph (A), by striking “Before
7 September 30, 2009, the State” and inserting “The
8 State”; and

9 (2) in subparagraph (B), by striking “Before
10 September 30, 2009, the State” and inserting “The
11 State”.

12 **SEC. 6. TAX CREDITS.**

13 (a) CREDIT FOR NEW QUALIFIED PLUG-IN ELEC-
14 TRIC DRIVE MOTOR VEHICLES.—

15 (1) TRANSFERABILITY.—

16 (A) IN GENERAL.—Subsection (c) of sec-
17 tion 30D of the Internal Revenue Code of 1986
18 is amended by adding at the end the following
19 new paragraph:

20 “(3) REFUNDABLE PERSONAL CREDIT.—

21 “(A) IN GENERAL.—For purposes of this
22 title, in the case of a qualified deployment com-
23 munity taxpayer, the credit allowed under sub-
24 section (a) for any taxable year (determined
25 after application of paragraph (1) and without

1 regard to paragraph (2)(B)) shall be treated as
2 a credit allowable under subpart C for such tax-
3 able year (and not allowed under subsection
4 (a)), and paragraph (2) shall not apply to such
5 credit.

6 “(B) QUALIFIED DEPLOYMENT COMMU-
7 NITY TAXPAYER.—For purposes of subpara-
8 graph (A), the term ‘qualified deployment com-
9 munity taxpayer’ means a taxpayer—

10 “(i) who purchases a new qualified
11 plug-in electric drive motor vehicle to
12 which paragraph (1) does not apply, and

13 “(ii) who resides within, and registers
14 such vehicle in, a deployment community
15 selected by the Secretary under the Tar-
16 geted Electric Vehicles Deployment Com-
17 munities Program established by the ‘Elec-
18 tric Vehicle Deployment Act of 2010’.

19 For purposes of the preceding sentence, such a
20 deployment community shall only be treated as
21 a deployment community after the date on
22 which such community is so selected (without
23 regard to the date on which any funds under
24 such Act are provided with respect to such com-

1 munity) and before the date on which Phase 1
2 of such program terminates.

3 “(C) REFUNDABLE CREDIT MAY BE
4 TRANSFERRED.—

5 “(i) IN GENERAL.—A qualified de-
6 ployment community taxpayer may, in con-
7 nection with the purchase of a new quali-
8 fied plug-in electric drive motor vehicle,
9 transfer any refundable credit described in
10 subparagraph (A)—

11 “(I) to any person who is in the
12 trade or business of selling new quali-
13 fied plug-in electric drive motor vehi-
14 cles and who sold such vehicle to the
15 taxpayer, or

16 “(II) to any person who is in the
17 trade or business of financing the
18 sales of new qualified plug-in electric
19 drive motor vehicles and who financed
20 the taxpayer’s purchase of such vehi-
21 cle.

22 “(ii) DISCLOSURE.—A qualified de-
23 ployment community taxpayer may trans-
24 fer a refundable credit described in sub-
25 paragraph (A) to a person described in

1 clause (i)(I) only if such person clearly dis-
2 closes to such taxpayer, through the use of
3 a window sticker attached to the new
4 qualified plug-in electric drive motor vehi-
5 cle—

6 “(I) the amount of the refund-
7 able credit described in subparagraph
8 (A) with respect to such vehicle, and

9 “(II) a notification that the tax-
10 payer will not be eligible for any cred-
11 it under any other section of this title
12 with respect to such vehicle unless the
13 taxpayer elects not to have this sec-
14 tion apply with respect to such vehi-
15 cle.

16 “(iii) CERTIFICATION.—A transferee
17 of a refundable credit described in sub-
18 paragraph (A) may not claim such credit
19 unless such claim is accompanied by a cer-
20 tification to the Secretary that the trans-
21 feree reduced the price the taxpayer paid
22 or the balance due to the financier, which-
23 ever is applicable, for the new qualified
24 plug-in electric drive motor vehicle by the
25 entire amount of such refundable credit.

1 “(iv) CONSENT REQUIRED FOR REV-
2 OCATION.—Any transfer under clause (i)
3 may be revoked only with the consent of
4 the Secretary.

5 “(v) SPECIAL RULE FOR BULK PUR-
6 CHASERS.—A qualified deployment com-
7 munity taxpayer who purchases 10 or more
8 new qualified plug-in electric drive motor
9 vehicles during the taxable year may trans-
10 fer a refundable credit described in sub-
11 paragraph (A) to any person.

12 “(vi) REGULATIONS.—The Secretary
13 may prescribe such regulations as nec-
14 essary—

15 “(I) to ensure that any refund-
16 able credit described in clause (i) is
17 claimed once and not retransferred by
18 a transferee, and

19 “(II) to provide a mechanism by
20 which the transferee may claim and
21 receive the credit within 3 months of
22 the sale of the new qualified plug-in
23 electric drive motor vehicle.”.

1 (B) DISPLAY OF CREDIT INFORMATION.—
2 Section 32908(b)(1) of title 49, United States
3 Code, is amended—

4 (i) by redesignating subparagraphs
5 (E) and (F) as subparagraphs (F) and
6 (G), and

7 (ii) by inserting after subparagraph
8 (D) the following new subparagraph:

9 “(E) the amount of the new qualified plug-
10 in electric drive motor vehicle credit allowable
11 with respect to the sale of the automobile under
12 section 30D of the Internal Revenue Code of
13 1986 (26 U.S.C. 30D).”.

14 (2) INCREASED CREDIT FOR TAXPAYERS IN DE-
15 PLOYMENT COMMUNITIES.—Subsection (f) of section
16 30D of such Code is amended by adding at the end
17 the following new paragraph:

18 “(8) INCREASED CREDIT FOR TAXPAYERS IN
19 DEPLOYMENT COMMUNITIES.—In the case of a
20 qualified deployment community taxpayer (within
21 the meaning of subsection (c)(3)(B)), subsection
22 (b)(2) shall be applied by substituting ‘\$5,000’ for
23 ‘\$2,500’.”.

24 (3) INCREASED PER MANUFACTURER CAP.—
25 Paragraph (2) of section 30(D)(e) of such Code is

1 amended by striking “200,000” and inserting
2 “300,000”.

3 (4) EXTENSION AND MODIFICATION OF NEW
4 QUALIFIED HYBRID MOTOR VEHICLE CREDIT.—

5 (A) EXTENSION.—Paragraph (3) of sec-
6 tion 30B(k) of such Code is amended by strik-
7 ing “December 31, 2009” and inserting “De-
8 cember 31, 2016”.

9 (B) QUALIFIED INCREMENTAL HYBRID
10 COST.—Clause (iii) of section 30B(d)(2)(B) of
11 such Code is amended by striking “does not ex-
12 ceed—” and all that follows and inserting “does
13 not exceed—

14 “(I) \$15,000, if such vehicle has
15 a gross vehicle weight rating of not
16 more than 14,000 pounds,

17 “(II) \$30,000, if such vehicle has
18 a gross vehicle weight rating of more
19 than 14,000 pounds but not more
20 than 26,000 pounds,

21 “(III) \$60,000, if such vehicle
22 has a gross vehicle weight rating of
23 more than 26,000 pounds but not
24 more than 33,000 pounds, and

1 “(IV) \$100,000, if such vehicle
2 has a gross vehicle weight rating of
3 more than 33,000 pounds.”.

4 (C) APPLICABLE PERCENTAGE FOR HEAVY
5 TRUCKS ACHIEVING 20 PERCENT INCREASE IN
6 CITY FUEL ECONOMY.—Clause (ii) of section
7 30B(d)(2)(B) of such Code is amended by re-
8 designating subclauses (I), (II), and (III) as
9 subclauses (II), (III), and (IV), respectively,
10 and by inserting before subclause (II) (as so re-
11 designated) the following new subclause:

12 “(I) 10 percent in the case of a
13 vehicle to which clause (iii)(IV) ap-
14 plies if such vehicle achieves an in-
15 crease in city fuel economy relative to
16 a comparable vehicle of at least 20
17 percent but less than 30 percent.”.

18 (D) DOLLAR LIMITATION.—Subparagraph
19 (B) of section 30B(d)(2) of such Code is
20 amended by adding at the end the following
21 new clause:

22 “(vi) LIMITATION.—The amount al-
23 lowed as a credit under subsection (a)(3)
24 with respect to a vehicle by reason of

1 clause (i) of this subparagraph shall not
2 exceed \$24,000.”.

3 (E) HEAVY ELECTRIC VEHICLES.—Para-
4 graph (3) of section 30B(d) of such Code is
5 amended by redesignating subparagraphs (B),
6 (C), and (D) as subparagraphs (C), (D), and
7 (E), respectively, and by inserting after sub-
8 paragraph (A) the following new subparagraph:

9 “(B) HEAVY ELECTRIC VEHICLES.—In the
10 case of a vehicle with a gross vehicle weight rat-
11 ing of not less than 8,500 pounds, the term
12 ‘new qualified hybrid motor vehicle’ includes a
13 motor vehicle—

14 “(i) which draws propulsion energy
15 exclusively from a rechargeable energy
16 storage system, and

17 “(ii) which meets the requirements of
18 clauses (iii), (v), (vi), and (vii) of subpara-
19 graph (A).”.

20 (F) CREDITS MAY BE TRANSFERRED.—
21 Subsection (d) of section 30B of such Code is
22 amended by adding at the end the following
23 new paragraph:

24 “(4) TRANSFERABILITY OF CREDIT.—

1 “(A) IN GENERAL.—A taxpayer who places
2 in service any vehicle may transfer the credit al-
3 lowed under this subsection with respect to
4 such vehicle through an assignment to the seller
5 of such vehicle. Such transfer may be revoked
6 only with the consent of the Secretary.

7 “(B) REGULATIONS.—The Secretary shall
8 prescribe such regulations as necessary to en-
9 sure that any credit transferred under subpara-
10 graph (A) is claimed once and not reassigned
11 by such other person.”.

12 (b) CREDIT FOR ALTERNATIVE FUEL VEHICLE RE-
13 FUELING PROPERTY.—

14 (1) EXTENSION OF INCREASED CREDIT FOR
15 ELECTRICITY.—

16 (A) IN GENERAL.—Paragraph (6) of sec-
17 tion 30C(e) of the Internal Revenue Code of
18 1986 is amended—

19 (i) by striking “DURING 2009 AND
20 2010” in the heading and inserting “DUR-
21 ING CERTAIN TAXABLE YEARS”,

22 (ii) by striking “and before January
23 1, 2011”,

24 (iii) by inserting “, which is placed in
25 service before January 1, 2011 (before

1 January 1, 2017, in the case of property
2 which relates to electricity)” after “hydro-
3 gen” in subparagraph (A), and

4 (iv) by inserting “, which is placed in
5 service before January 1, 2011” after “hy-
6 drogen” in subparagraph (B).

7 (B) EXTENSION OF CREDIT.—Subsection
8 (g) of section 30C of such Code is amended—

9 (i) by striking “and” at the end of
10 paragraph (1),

11 (ii) by redesignating paragraph (2) as
12 paragraph (3), and

13 (iii) by inserting after paragraph (1)
14 the following new paragraph:

15 “(2) in the case of property relating to elec-
16 tricity, after December 31, 2016, and”.

17 (2) MODIFICATION OF COST PROVISIONS.—Sub-
18 section (e) of section 30C of such Code is amended
19 by adding at the end the following new paragraph:

20 “(7) INSTALLATION OF ELECTRICITY PROP-
21 ERTY.—In the case of any qualified alternative fuel
22 vehicle refueling property which relates to electricity,
23 for purposes of subsection (a), the cost of such prop-
24 erty shall include the cost of the original installation
25 of such property.”.

1 (3) TRANSFERABILITY OF CREDIT.—Section
2 30C(e) of such Code, as amended by paragraph (2),
3 is amended by adding at the end the following new
4 paragraph:

5 “(8) TRANSFERABILITY OF CREDIT.—

6 “(A) IN GENERAL.—A person who places
7 any qualified alternative fuel vehicle refueling
8 property in service may transfer the credit
9 under this section through an assignment to
10 any other person. Such transfer may be revoked
11 only with the consent of the Secretary.

12 “(B) CERTIFICATION.—A transferee of a
13 credit described in subparagraph (A) may not
14 claim such credit unless such claim is accom-
15 panied by a certification to the Secretary that
16 the transferee reduced the price the transferor
17 paid for the qualified alternative fuel vehicle re-
18 fueling property by the entire amount of such
19 credit.

20 “(C) REGULATIONS.—The Secretary shall
21 prescribe such regulations as necessary to en-
22 sure that the credit transferred under subpara-
23 graph (A) is claimed once and not reassigned
24 by such other person.”.

1 (c) EFFECTIVE DATE.—The amendments made by
 2 this section shall apply to property placed in service after
 3 the date of the enactment of this Act.

4 **SEC. 7. QUALIFIED PLUG-IN ELECTRIC DRIVE MOTOR VEHI-**
 5 **CLE REFUELING PROPERTY BONDS.**

6 (a) IN GENERAL.—Paragraph (1) of section 54A(d)
 7 of the Internal Revenue Code of 1986 is amended—

8 (1) by striking “or” at the end of subparagraph
 9 (D),

10 (2) by inserting “or” at the end of subpara-
 11 graph (E), and

12 (3) by inserting after subparagraph (E) the fol-
 13 lowing new subparagraph:

14 “(F) a qualified plug-in electric drive
 15 motor vehicle refueling property bond,”.

16 (b) QUALIFIED PURPOSE.—Subparagraph (C) of sec-
 17 tion 54A(d)(2) of the Internal Revenue Code of 1986 is
 18 amended—

19 (1) by striking “and” at the end of clause (iv),

20 (2) by striking the period at the end of clause
 21 (v) and inserting “, and”, and

22 (3) by adding at the end the following new
 23 clause:

24 “(vi) in the case of a qualified plug-
 25 in electric drive motor vehicle refueling

1 property bond, a purpose specified in sec-
2 tion 54G(a)(1).”.

3 (c) BONDS ALLOWED.—Subpart I of part IV of sub-
4 chapter A of chapter 1 of the Internal Revenue Code of
5 1986 is amended by adding at the end the following new
6 section:

7 **“SEC. 54G. QUALIFIED PLUG-IN ELECTRIC DRIVE MOTOR**
8 **VEHICLE REFUELING PROPERTY BONDS.**

9 “(a) QUALIFIED PLUG-IN ELECTRIC DRIVE MOTOR
10 VEHICLE REFUELING PROPERTY BOND.—For purposes
11 of this subpart, the term ‘qualified plug-in electric drive
12 motor vehicle refueling property bond’ means any bond
13 issued as part of an issue if—

14 “(1) 100 percent of the available project pro-
15 ceeds of such issue are to be used for capital expend-
16 itures incurred by a qualified issuer for 1 or more
17 qualified plug-in electric drive motor vehicle refuel-
18 ing properties,

19 “(2) the bond is issued by a qualified issuer,
20 and

21 “(3) the issuer designates such bond for pur-
22 poses of this section.

23 “(b) REDUCED CREDIT AMOUNT.—Notwithstanding
24 paragraph (2) of section 54A(b), the annual credit deter-
25 mined with respect to any qualified plug-in electric drive

1 motor vehicle refueling property bond is 70 percent of the
2 amount which would (but for this subsection) otherwise
3 be determined under such paragraph with respect to such
4 bond.

5 “(c) LIMITATION ON AMOUNT OF BONDS DES-
6 IGNATED.—The maximum aggregate face amount of
7 bonds which may be designated under subsection (a) by
8 any issuer shall not exceed the limitation amount allocated
9 to such issuer under subsection (e).

10 “(d) NATIONAL LIMITATION ON AMOUNT OF BONDS
11 DESIGNATED.—There is a national qualified plug-in elec-
12 tric drive motor vehicle refueling property bond limitation
13 of \$1,000,000,000.

14 “(e) ALLOCATIONS.—The Secretary shall make allo-
15 cations of the amount of the national qualified plug-in
16 electric drive motor vehicle refueling property bond limita-
17 tion described in subsection (d) among purposes described
18 in subsection (a)(1) in such manner as the Secretary de-
19 termines appropriate.

20 “(f) DEFINITIONS.—For purposes of this section—

21 “(1) QUALIFIED PLUG-IN ELECTRIC DRIVE
22 MOTOR VEHICLE REFUELING PROPERTY.—The term
23 ‘qualified plug-in electric drive motor vehicle refuel-
24 ing property’ means any qualified alternative fuel ve-

1 hicle refueling property (within the meaning of sec-
2 tion 30C) which relates to electricity.

3 “(2) QUALIFIED ISSUER.—

4 “(A) IN GENERAL.—The term ‘qualified
5 issuer’ means a public power provider, a cooper-
6 ative electric company, or a governmental body.

7 “(B) DENIAL OF DOUBLE BENEFIT.—With
8 respect to any issue, the term ‘qualified issuer’
9 shall not include any entity to which a credit
10 under section 30C is allowed for the taxable
11 year in which such issue is issued.

12 “(C) GOVERNMENTAL BODY.—The term
13 ‘governmental body’ means any State or Indian
14 tribal government, or any political subdivision
15 thereof.

16 “(D) PUBLIC POWER PROVIDER.—The
17 term ‘public power provider’ means a State util-
18 ity that has a service obligation to end-users or
19 to a distribution utility (within the meaning of
20 section 217 of the Federal Power Act, as in ef-
21 fect on the date of the enactment of this sec-
22 tion).

23 “(E) COOPERATIVE ELECTRIC COMPANY.—
24 The term ‘cooperative electric company’ means
25 a mutual or cooperative electric company de-

1 scribed in section 501(c)(12) or an organization
2 described in section 1381(a)(2)(C).”.

3 (d) CLERICAL AMENDMENT.—The table of sections
4 for subpart I of part IV of subchapter A of chapter 1 of
5 the Internal Revenue Code of 1986 is amended by adding
6 at the end the following new item:

“Sec. 54G. Qualified plug-in electric drive motor vehicle refueling property
bonds.”.

7 (e) EFFECTIVE DATE.—The amendments made by
8 subsections (a), (b), (c), and (d) shall apply to obligations
9 issued after the date of the enactment of this Act.

10 (f) LOAN GUARANTEES.—

11 (1) IN GENERAL.—Section 1705 of the Energy
12 Policy Act of 2005 (42 U.S.C. 16516) is amended—

13 (A) in subsection (a), by adding at the end
14 the following:

15 “(4) Charging infrastructure and networks of
16 charging infrastructure for plug-in drive electric ve-
17 hicles, if such charging infrastructure will be oper-
18 ational prior to December 31, 2016.”; and

19 (B) by striking subsection (e) and insert-
20 ing the following:

21 “(e) SUNSET.—The authority to enter into guaran-
22 tees under this section shall expire on September 30,
23 2011, except that for projects described in subsection

1 (a)(4), the authority to enter into guarantees shall expire
 2 on December 31, 2016.”.

3 **SEC. 8. UTILITY PLANNING FOR PLUG-IN ELECTRIC DRIVE**
 4 **VEHICLES.**

5 The Public Utility Regulatory Policies Act of 1978
 6 (16 U.S.C. 2601 et seq.) is amended—

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

9 “(20) PLUG-IN ELECTRIC DRIVE VEHICLE
 10 PLANNING.—

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

13 “(i) IN GENERAL.—Not later than 2
 14 years after the date of enactment of this
 15 paragraph, each electric utility shall de-
 16 velop a plan to support the use of plug-in
 17 electric drive vehicles, including medium
 18 and heavy-duty hybrid electric vehicles in
 19 the service area of the electric utility.

20 “(ii) REQUIREMENTS.—A plan under
 21 clause (i) shall investigate—

22 “(I) various levels of potential
 23 penetration of plug-in electric drive
 24 vehicles in the utility service area;

1 “(II) the potential impacts that
2 the various levels would have on dis-
3 tribution infrastructure and on the
4 operation of the transmission grid;
5 and

6 “(III) the role of third parties in
7 providing reliable and economical
8 charging services.

9 “(iii) WAIVER.—An electric utility
10 that determines that the electric utility will
11 have no meaningful penetration of plug-in
12 electric drive vehicles during the 5-year pe-
13 riod beginning on the date of enactment of
14 this paragraph may petition the Secretary
15 to waive clause (i) for 5 years.

16 “(iv) UPDATES.—

17 “(I) IN GENERAL.—Each electric
18 utility shall update the plan of the
19 electric utility every 5 years.

20 “(II) RESUBMISSION OF WAIV-
21 ER.—An electric utility that received a
22 waiver under clause (iii) and wants
23 the waiver to continue after the expi-
24 ration of the waiver shall be required
25 to resubmit the waiver.

1 “(v) EXEMPTION.—If the Secretary
2 determines that a plan required by a State
3 regulatory authority meets the require-
4 ments of this paragraph, the Secretary
5 may accept that plan and exempt the elec-
6 tric utility submitting the plan from the re-
7 quirements of clause (i).

8 “(B) SUPPORT REQUIREMENTS.—Each
9 State regulatory authority (in the case of each
10 electric utility for which the authority has rate-
11 making authority) and each municipal and co-
12 operative utility shall—

13 “(i) participate in any local plan for
14 the deployment of recharging infrastruc-
15 ture in communities located in the foot-
16 print of the authority or utility;

17 “(ii) require that charging infrastruc-
18 ture deployed is interoperable with prod-
19 ucts of all auto manufacturers to the max-
20 imum extent practicable; and

21 “(iii) consider adopting minimum re-
22 quirements for deployment of electrical
23 charging infrastructure and other appro-
24 priate requirements necessary to support
25 the use of plug-in electric drive vehicles.

1 “(C) COST RECOVERY.—Each State regu-
2 latory authority (in the case of each electric
3 utility for which the authority has ratemaking
4 authority) and each municipal and cooperative
5 utility may consider whether, and to what ex-
6 tent, to allow cost recovery for plans and imple-
7 mentation of plans.

8 “(D) SMART GRID INTEGRATION.—The
9 State regulatory authority (in the case of each
10 electric utility for which the authority has rate-
11 making authority) and each municipal and co-
12 operative utility, in accordance with regulations
13 issued by the Federal Energy Regulatory Com-
14 mission under section 1305(d) of the Energy
15 Independence and Security Act of 2007 (42
16 U.S.C. 17385), shall—

17 “(i) establish any appropriate proto-
18 cols and standards for integrating plug-in
19 electric drive vehicles into an electrical dis-
20 tribution system, including Smart Grid
21 systems and devices as described in title
22 XIII of the Energy Independence and Se-
23 curity Act of 2007 (42 U.S.C. 17381 et
24 seq.);

1 “(ii) develop, to the maximum extent
2 practicable, the means and methods for ap-
3 propriate billing settlements between utili-
4 ties, consumers, and third parties in and
5 across utility territories;

6 “(iii) identify the smart grid infra-
7 structure and information technology that
8 would likely need to be installed to most
9 efficiently manage plug-in electric vehicles;
10 and

11 “(iv) in consideration of this section,
12 review the determination made under sub-
13 section (a), including whether time-of-use
14 pricing should be employed to enable the
15 use of plug-in electric drive vehicles to con-
16 tribute to meeting peak-load and ancillary
17 service power needs.

18 “(E) DETERMINATION.—Not later than 3
19 years after the date of enactment of this para-
20 graph, each State regulatory authority (with re-
21 spect to each electric utility for which the au-
22 thority has ratemaking authority), and each
23 municipal and cooperative electric utility, shall
24 complete the consideration, and shall make the
25 determination, referred to in subsection (a) with

1 respect to the standard established by this
2 paragraph.”

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

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

6 “(1) IN GENERAL.—Each State”;

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

9 “(2) SPECIFIC STANDARDS.—

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

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

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

16 (D) in the fourth sentence—

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

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

20 and

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

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

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

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

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

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

16 **SEC. 9. FEDERAL FLEETS.**

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

19 (1) is an alternative fuel (as defined in section
20 301 of the Energy Policy Act of 1992 (42 U.S.C.
21 13218)); and

22 (2) shall be accounted for under Federal fleet
23 management reporting requirements, not under Fed-
24 eral building management reporting requirements.

1 (b) ASSESSMENT AND REPORT.—Not later than 180
2 days after the date of enactment of this Act and at the
3 completion of the Program, the Federal Energy Manage-
4 ment Program and the General Services Administration,
5 in consultation with the Task Force, shall complete an as-
6 sessment of Federal Government fleets, including the
7 Postal Service and the Department of Defense, and sub-
8 mit a report to Congress that describes—

9 (1) for each Federal agency, which types of ve-
10 hicles the agency uses that would or would not be
11 suitable for near-term and medium-term conversion
12 to plug-in electric drive vehicles, taking into account
13 the types of vehicles for which plug-in electric drive
14 vehicles could provide comparable functionality and
15 lifecycle costs;

16 (2) how many plug-in electric drive vehicles
17 could be deployed by the Federal Government in 5
18 years and in 10 years, assuming that plug-in electric
19 drive vehicles are available and are purchased when
20 new vehicles are needed or existing vehicles are re-
21 placed; and

22 (3) the estimated cost to the Federal Govern-
23 ment for vehicle purchases under paragraph (2) for
24 each fiscal year.

25 (c) INVENTORY AND DATA COLLECTION.—

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

5 (A) develop an information request for
6 each agency that operates a fleet of at least 20
7 motor vehicles; and

8 (B) establish guidelines for each agency to
9 use in developing a plan to deploy plug-in elec-
10 tric drive vehicles.

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

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

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

18 (3) ANALYSIS OF RESPONSES.—The Federal
19 Energy Management Program shall—

20 (A) analyze the information submitted by
21 each agency under paragraph (2);

22 (B) approve or suggest amendments to the
23 plan of each agency to ensure that the plan is
24 consistent with the goals and requirements of
25 this Act; and

1 (C) submit a plan to Congress and the
2 General Services Administration to be used in
3 developing the pilot program described in sub-
4 section (e).

5 (d) BUDGET REQUEST.—Each agency of the Federal
6 Government shall include plug-in electric drive vehicle pur-
7 chases identified in the report under subsection (b) in the
8 budget of the agency to be included in the budget of the
9 United States Government submitted by the President
10 under section 1105 of title 31, United States Code.

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

13 (1) IN GENERAL.—The Administrator of Gen-
14 eral Services shall acquire plug-in electric drive vehi-
15 cles and the requisite charging infrastructure to be
16 deployed in a range of locations in the Federal fleet
17 during the 5-year period beginning on the date of
18 enactment of this Act.

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

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

23 (B) the deployment and integration of
24 plug-in electric drive vehicles in the Federal
25 fleet; and

1 (C) the contribution of plug-in electric
2 drive vehicles in the Federal fleet toward reduc-
3 ing the use of fossil fuels and greenhouse gas
4 emissions.

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

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

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

13 (4) PUBLIC WEBSITE.—The Federal Energy
14 Management Program shall maintain and regularly
15 update a publicly available website that provides in-
16 formation on the status of plug-in electric vehicles in
17 the Federal fleet.

18 (f) AUTHORIZATION OF APPROPRIATIONS.—There is
19 authorized to be appropriated for the Federal Government
20 to pay for incremental costs to purchase or lease plug-
21 in electric drive vehicles and the requisite charging infra-
22 structure for Federal fleets \$25,000,000.

23 **SEC. 10. ADVANCED BATTERIES FOR TOMORROW PRIZE.**

24 (a) IN GENERAL.—Not later than 1 year after the
25 date of enactment of this Act, as part of the program de-

1 scribed in section 1008 of the Energy Policy Act of 2005
2 (42 U.S.C. 16396), the Secretary shall establish the Ad-
3 vanced Batteries for Tomorrow Prize to competitively
4 award cash prizes in accordance with this section to ad-
5 vance the research, development, demonstration, and com-
6 mercial application of a 500-mile vehicle battery.

7 (b) BATTERY SPECIFICATIONS.—

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

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

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

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

19 (2) ADDITIONAL REQUIREMENTS.—The Sec-
20 retary, in consultation with the Committee, shall es-
21 tablish any additional battery specifications that the
22 Secretary and the Committee determine to be nec-
23 essary.

24 (c) PRIVATE FUNDS.—

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

7 (A) without further appropriation; and

8 (B) without fiscal year limitation.

9 (2) RESTRICTION ON PARTICIPATION.—An enti-
10 ty providing private funds for the Prize may not
11 participate in the competition for the Prize.

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

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

21 (f) ELIGIBILITY.—To be eligible for an award under
22 this section—

23 (1) in the case of a private entity, the entity
24 shall be incorporated in and maintain a primary
25 place of business in the United States; and

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

5 (g) AWARD AMOUNTS.—

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

9 (2) BREAKTHROUGH ACHIEVEMENT AWARDS.—

10 In addition to the award described in paragraph (1),
11 the Secretary, in consultation with the technical re-
12 view committee established under subsection (d),
13 may award cash prizes in recognition of break-
14 through achievements in research, development,
15 demonstration, and commercial application of activi-
16 ties described in subsection (b).

17 (h) 500-MILE BATTERY AWARD FUND.—

18 (1) ESTABLISHMENT.—There is established in
19 the Treasury of the United States a fund to be
20 known as the “500-mile Battery Fund” (referred to
21 in this section as the “Fund”), to be administered
22 by the Secretary, to be available without fiscal year
23 limitation and subject to appropriation, to award
24 amounts under this section.

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

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

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

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

10 (4) ANNUAL REPORTS.—

11 (A) IN GENERAL.—Not later than 60 days
12 after the end of each fiscal year beginning with
13 fiscal year 2012, the Secretary shall submit a
14 report on the operation of the Fund during the
15 fiscal year to—

16 (i) the Committees on Appropriations
17 of the House of Representatives and of the
18 Senate;

19 (ii) the Committee on Energy and
20 Natural Resources of the Senate; and

21 (iii) the Committee on Energy and
22 Commerce of the House of Representa-
23 tives.

1 (B) CONTENTS.—Each report shall in-
2 clude, for the fiscal year covered by the report,
3 the following:

4 (i) A statement of the amounts depos-
5 ited into the Fund.

6 (ii) A description of the expenditures
7 made from the Fund for the fiscal year, in-
8 cluding the purpose of the expenditures.

9 (iii) Recommendations for additional
10 authorities to fulfill the purpose of the
11 Fund.

12 (iv) A statement of the balance re-
13 maining in the Fund at the end of the fis-
14 cal year.

15 (5) SEPARATE APPROPRIATIONS ACCOUNT.—
16 Section 1105(a) of title 31, United States Code, is
17 amended—

18 (A) by redesignating paragraphs (35) and
19 (36) as paragraphs (36) and (37), respectively;

20 (B) by redesignating the second paragraph
21 (33) (relating to obligational authority and out-
22 lays requested for homeland security) as para-
23 graph (35); and

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

1 “(38) a separate statement for the 500-
2 mile Battery Fund established under section
3 8(h) of the ‘Electric Vehicle Deployment Act of
4 2010’, which shall include the estimated
5 amount of deposits into the Fund, obligations,
6 and outlays from the Fund.”.

7 (i) AUTHORIZATION OF APPROPRIATIONS.—There is
8 authorized to be appropriated to carry out this section
9 \$10,000,000.

10 **SEC. 11. RESEARCH AND DEVELOPMENT PROGRAM.**

11 (a) RESEARCH AND DEVELOPMENT PROGRAM.—

12 (1) IN GENERAL.—The Secretary, in consulta-
13 tion with the Committee, shall establish a program
14 to fund research and development in advanced bat-
15 teries, electric drive vehicle components, electric
16 drive infrastructure, and other technologies sup-
17 porting the development, manufacture, and deploy-
18 ment of electric drive vehicles and charging infra-
19 structure.

20 (2) USE OF FUNDS.—The program may include
21 funding for—

22 (A) the development of low-cost, smart-
23 charging and vehicle-to-grid connectivity tech-
24 nology;

1 (B) the benchmarking and assessment of
2 open software systems using nationally estab-
3 lished evaluation criteria; and

4 (C) new technologies in electricity storage
5 for vehicles.

6 (3) REPORT.—Not later than 4 years after the
7 date of enactment of this Act, the Secretary shall
8 submit to Congress a report describing the status of
9 the program described in paragraph (1).

10 (b) SECONDARY USE APPLICATIONS PROGRAM.—

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

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

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

23 (C) identifies the potential uses of a vehicle
24 battery—

1 (i) with the most promise for market
2 development; and

3 (ii) for which market development
4 would be aided by a demonstration project.

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

13 (c) DEMONSTRATION PROJECTS.—

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

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

22 (A) publish the guidelines described in
23 paragraph (1); and

24 (B) solicit applications for funding for
25 demonstration projects.

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

7 (d) MATERIALS RECYCLING STUDY.—

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

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

18 (e) AUTHORIZATION OF APPROPRIATIONS.—There is
19 authorized to be appropriated to carry out this section
20 \$1,530,000,000, including—

21 (1) \$1,500,000,000 for use in conducting the
22 program described in subsection (a) for fiscal years
23 2011 through 2020;

1 (2) \$5,000,000 for use in conducting the pro-
2 gram described in subsection (b) for fiscal years
3 2011 through 2016; and

4 (3) \$25,000,000 for use in providing grants de-
5 scribed in subsection (c) for fiscal years 2011
6 through 2020.

7 **SEC. 12. STUDY ON THE SUPPLY OF RAW MATERIALS.**

8 (a) IN GENERAL.—The Secretary of the Interior, in
9 consultation with the Secretary and the Task Force, shall
10 conduct a study that—

11 (1) identifies the raw materials needed for the
12 manufacture of plug-in electric drive vehicles, bat-
13 teries, and other components for plug-in electric
14 drive vehicles, and for the infrastructure needed to
15 support plug-in electric drive vehicles;

16 (2) describes the primary or original sources
17 and known reserves and resources of those raw ma-
18 terials;

19 (3) assesses, in consultation with the National
20 Academy of Sciences, the degree of risk to the man-
21 ufacture, maintenance, deployment, and use of plug-
22 in electric drive vehicles associated with the supply
23 of those raw materials; and

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

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

5 (c) AUTHORIZATION OF APPROPRIATIONS.—There is
6 authorized to be appropriated to carry out this subsection
7 \$1,500,000.

8 **SEC. 13. PLUG-IN ELECTRIC DRIVE VEHICLE TECHNICAL**
9 **ADVISORY COMMITTEE.**

10 (a) IN GENERAL.—There is established the Plug-in
11 Electric Drive Vehicle Technical Advisory Committee to
12 advise the Secretary on the programs and activities under
13 this Act.

14 (b) MISSION.—The mission of the Committee shall
15 be to advise the Secretary on technical matters, includ-
16 ing—

17 (1) the priorities for research and development;

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

21 (3) the development and deployment of charg-
22 ing infrastructure;

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

1 (5) reporting on the competitiveness of the
2 United States in plug-in electric drive vehicle and in-
3 frastructure research, manufacturing, and deploy-
4 ment.

5 (c) MEMBERSHIP.—

6 (1) MEMBERS.—

7 (A) IN GENERAL.—The Committee shall
8 consist of not less than 12, but not more than
9 25, members.

10 (B) REPRESENTATION.—The Secretary
11 shall appoint the members to Committee from
12 among representatives of—

13 (i) domestic industry;

14 (ii) institutions of higher education;

15 (iii) professional societies;

16 (iv) Federal, State, and local govern-
17 mental agencies (including the National
18 Laboratories); and

19 (v) financial, transportation, labor, en-
20 vironmental, or other appropriate organiza-
21 tions, as the Secretary determines to be
22 necessary.

23 (2) TERMS.—

24 (A) IN GENERAL.—The term of a Com-
25 mittee member shall not be longer than 3 years.

1 (B) STAGGERED TERMS.—The Secretary
2 may appoint members to the Committee for dif-
3 fering term lengths to ensure continuity in the
4 functioning of the Committee.

5 (C) REAPPOINTMENTS.—A member of the
6 Committee whose term is expiring may be re-
7 appointed.

8 (3) CHAIRPERSON.—The Committee shall have
9 a chairperson, who shall be elected by and from the
10 members.

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

14 (e) RESPONSE.—

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

18 (2) BIENNIAL REPORT.—

19 (A) IN GENERAL.—Not later than 2 years
20 after the date of enactment of this Act and
21 every 2 years thereafter, the Secretary shall
22 submit to the appropriate committees of Con-
23 gress a report describing any new recommenda-
24 tions of the Committee.

1 (B) CONTENTS.—The report shall in-
2 clude—

3 (i) a description of the manner in
4 which the Secretary has implemented or
5 plans to implement the recommendations
6 of the Committee; or

7 (ii) an explanation of the reason that
8 a recommendation of the Committee has
9 not been implemented.

10 (C) TIMING.—The report described in this
11 paragraph shall be submitted by the Secretary
12 at the same time the President submits the
13 budget proposal for the Department of Energy
14 to Congress.

15 (f) COORDINATION.—The Committee shall hold joint
16 annual meetings with the Hydrogen and Fuel Cell Tech-
17 nical Advisory Committee established by section 807 of the
18 Energy Policy Act of 2005 (42 U.S.C. 16156) to help co-
19 ordinate the work and recommendations of the Commit-
20 tees.

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

1 **SEC. 14. PLUG-IN ELECTRIC DRIVE VEHICLE INTERAGENCY**

2 **TASK FORCE.**

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

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

9 (2) the Council on Environmental Quality;

10 (3) the Department of Energy;

11 (4) the Department of Transportation;

12 (5) the Department of Defense;

13 (6) the Department of Commerce (including the
14 National Institute of Standards and Technology);

15 (7) the Environmental Protection Agency;

16 (8) the General Services Administration; and

17 (9) any other Federal agencies that the Presi-
18 dent determines to be appropriate.

19 (b) **MISSION.**—The mission of the Task Force shall
20 be to ensure awareness, coordination, and integration of
21 the activities of the Federal Government relating to elec-
22 tric drive vehicles, including—

23 (1) plug-in electric drive vehicle research and
24 development (including necessary components);

1 (2) the development of widely accepted smart-
2 grid standards and protocols for charging infrastruc-
3 ture;

4 (3) the relationship of plug-in electric drive ve-
5 hicle charging practices to electric utility regulation;

6 (4) the relationship of plug-in electric drive ve-
7 hicle deployment to system reliability and security;

8 (5) the general deployment of plug-in electric
9 drive vehicles in the Federal, State, and local gov-
10 ernments and for private use;

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

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

16 (c) ACTIVITIES.—

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

19 (A) organize workshops and conferences;

20 (B) issue publications; and

21 (C) create databases.

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

24 (A) foster the exchange of generic, non-
25 proprietary information and technology among

1 industry, academia, and the Federal Govern-
2 ment;

3 (B) integrate and disseminate technical
4 and other information made available as a re-
5 sult of the programs and activities under this
6 Act;

7 (C) support education about plug-in elec-
8 tric drive vehicles;

9 (D) monitor, analyze, and report on the ef-
10 fects of plug-in electric drive vehicle deployment
11 on the environment and public health, including
12 air emissions from vehicles and electricity gen-
13 erating units; and

14 (E) review and report on—

15 (i) opportunities to use Federal pro-
16 grams (including laws, regulations, and
17 guidelines) to promote the deployment of
18 plug-in electric drive vehicles; and

19 (ii) any barriers to the deployment of
20 plug-in electric drive vehicles, including
21 barriers that are attributable to Federal
22 programs (including laws, regulations, and
23 guidelines).

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

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

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

5 **SEC. 15. PROHIBITION ON DISPOSING OF ADVANCED BAT-**
6 **TERIES IN LANDFILLS.**

7 An advanced battery from a plug-in electric drive ve-
8 hicle shall be disposed of in accordance with the Mercury-
9 Containing and Rechargeable Battery Management Act
10 (42 U.S.C. 14301 et seq.).

11 **SEC. 16. LOAN GUARANTEES FOR ADVANCED BATTERY**
12 **PURCHASES FOR USE IN STATIONARY APPLI-**
13 **CATIONS.**

14 Subtitle B of title I of the Energy Independence and
15 Security Act of 2007 (42 U.S.C. 17011 et seq.) is amend-
16 ed by adding at the end the following:

17 **“SEC. 137. LOAN GUARANTEES FOR ADVANCED BATTERY**
18 **PURCHASES.**

19 “(a) DEFINITIONS.—In this section:

20 “(1) QUALIFIED AUTOMOTIVE BATTERY.—The
21 term ‘qualified automotive battery’ means a battery
22 that—

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

1 “(B) is designed for use in qualified plug-
2 in electric drive motor vehicles but is purchased
3 for nonautomotive applications.

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

6 “(A) an original equipment manufacturer;

7 “(B) an electric utility;

8 “(C) any provider of range extension infra-
9 structure; or

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

12 “(b) LOAN GUARANTEES.—

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

19 “(2) RESTRICTION.—As a condition of receiving
20 a loan guarantee under this section, an entity pur-
21 chasing qualified automotive batteries with loan
22 funds guaranteed under this section shall comply
23 with the provisions of the Buy American Act (41
24 U.S.C. 10a et seq.).

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

3 “(d) AUTHORIZATION OF APPROPRIATIONS.—There
4 is authorized to be appropriated to carry out this section
5 \$50,000,000.”.

6 **SEC. 17. MODEL UPDATING BUILDING CODES, PERMITTING**
7 **AND INSPECTION PROCESSES, AND ZONING**
8 **OR PARKING RULES.**

9 (a) IN GENERAL.—Not later than 180 days after the
10 date of enactment of this Act, the Secretary shall develop
11 and publish—

12 (1) model building codes for the inclusion of
13 separate circuits for charging infrastructure, as ap-
14 propriate, in new construction and major renova-
15 tions of private residences, buildings, or other struc-
16 tures that could provide publicly available charging
17 infrastructure;

18 (2) model construction permitting or inspection
19 processes that allow for the expedited installation of
20 charging infrastructure for purchasers of electric
21 drive vehicles (including a permitting process that
22 allows a vehicle purchaser to have charging infra-
23 structure installed the same day a vehicle is pur-
24 chased); and

1 (3) model zoning, parking rules, or other local
2 ordinances that—

3 (A) facilitate the installation of publicly
4 available charging infrastructure; and

5 (B) allow for access to publicly available
6 charging infrastructure.

7 (b) **OPTIONAL ADOPTION.**—An applicant for selec-
8 tion as a deployment community under section 4 shall not
9 be required to use the model building codes, permitting
10 and inspection processes, or zoning, parking rules, or
11 other ordinances described in the report published under
12 subsection (a).

13 (c) **SMART GRID INTEGRATION.**—In developing the
14 model codes or ordinances described in subsection (a), the
15 Secretary shall take into account smart grid integration.

16 (d) **AUTHORIZATION OF APPROPRIATIONS.**—There is
17 authorized to be appropriated to carry out this section
18 \$1,000,000.

19 **SEC. 18. WORKFORCE TRAINING.**

20 (a) **MAINTENANCE AND SUPPORT.**—

21 (1) **IN GENERAL.**—The Secretary, in consulta-
22 tion with the Committee and the Task Force, shall
23 award grants to institutions of higher education and
24 other qualified training and education institutions
25 for the establishment of programs to provide train-

1 ing and education for vocational workforce develop-
2 ment through centers of excellence.

3 (2) PURPOSE.—Training funded under this
4 subsection shall be intended to ensure that the work-
5 force has the necessary skills needed to maintain
6 plug-in electric drive vehicles and the infrastructure
7 required to support plug-in electric drive vehicles.

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) REPORT.—Not later than 1 year after the date
24 of enactment of this Act, the Secretary shall submit to

1 Congress a report on the implementation of the training
2 programs under this section.

3 (d) AUTHORIZATION OF APPROPRIATIONS.—There
4 are authorized to be appropriated \$250,000,000 to carry
5 out this section.

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