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(Original Signature of Member)

111TH CONGRESS  
2D SESSION

**H. R.** \_\_\_\_\_

To establish programs to accelerate, provide incentives for, and examine the challenges and opportunities associated with the deployment of electric drive vehicles, and for other purposes.

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IN THE HOUSE OF REPRESENTATIVES

Mr. MARKEY of Massachusetts (for himself, Mrs. BIGGERT, Mr. MCNERNEY, and Ms. ESHOO) introduced the following bill; which was referred to the Committee on \_\_\_\_\_

\_\_\_\_\_  
**A BILL**

To establish programs to accelerate, provide incentives for, and examine the challenges and opportunities associated with the deployment of 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 Drive Vehicle  
5 Deployment Act of 2010”.

1 **SEC. 2. DEFINITIONS.**

2 In this Act:

3 (1) ADMINISTRATOR.—The term “Adminis-  
4 trator” means the Administrator of the Environ-  
5 mental Protection Agency.

6 (2) DEPLOYMENT COMMUNITY.—The term “de-  
7 ployment community” means an area selected by the  
8 Secretary under the program established under sec-  
9 tion 3(a). Such term may include one or more mu-  
10 nicipalities, transportation corridors that connect  
11 municipalities, or other geographic areas that the  
12 Secretary determines appropriate.

13 (3) ELECTRIC DRIVE VEHICLE.—The term  
14 “electric drive vehicle” means a vehicle that—

15 (A)(i) is—

16 (I) a light-duty vehicle (as that  
17 term is defined in section 86.1803–01  
18 of title 40, Code of Federal Regula-  
19 tions, as in effect as of the date of en-  
20 actment of this Act) that draws mo-  
21 tive power from a battery with a ca-  
22 pacity of at least 4 kilowatt-hours;

23 (II) a heavy-duty vehicle (as that  
24 term is defined in section 86.1803–01  
25 of title 40, Code of Federal Regula-  
26 tions, as in effect as of the date of en-

1 actment of this Act) with a gross vehi-  
2 cle weight rating greater than 8,500  
3 pounds and less than 14,0000 pounds  
4 that draws motive power from a bat-  
5 tery with a capacity of at least 10 kil-  
6 owatt-hours;

7 (III) a heavy-duty vehicle (as  
8 that term is defined in section  
9 86.1803–01 of title 40, Code of Fed-  
10 eral Regulations, as in effect as of the  
11 date of enactment of this Act) with a  
12 gross vehicle weight rating greater  
13 than 14,000 pounds but less than  
14 33,000 pounds that draws motive  
15 power from a battery with a capacity  
16 of at least 15 kilowatt-hours; or

17 (IV) a heavy duty vehicle (as that  
18 term is defined in section 86.1803–01  
19 of title 40, Code of Federal Regula-  
20 tions, as in effect as of the date of en-  
21 actment of this Act) with a gross vehi-  
22 cle weight rating greater than 33,000  
23 pounds that draws motive power from  
24 a battery with a capacity of at least  
25 20 kilowatt-hours; and

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

3 (B) is a motor vehicle (as that term is de-  
4 fined in section 216 of the Clean Air Act (42  
5 U.S.C. 7550)) that draws its motive power from  
6 a fuel cell (as defined in section 803 of the  
7 Spark M. Matsunaga Hydrogen Act of 2005  
8 (42 U.S.C. 16152)).

9 (4) ELECTRIC UTILITY.—The term “electric  
10 utility” has the meaning given such term in section  
11 3(4) of the Public Utility Regulatory Policies Act of  
12 1978 (16 U.S.C. 2602(3)).

13 (5) GROSS VEHICLE WEIGHT RATING.—The  
14 term “gross vehicle weight rating” has the meaning  
15 given such term in section 216(7) of the Clean Air  
16 Act (42 U.S.C. 7550(7)).

17 (6) MUNICIPALITY.—The term “municipality”  
18 has the meaning given such term in section 302(f)  
19 of the Clean Air Act (42 U.S.C. 7602(f)).

20 (7) QUALIFIED ELECTRIC DRIVE VEHICLE COM-  
21 PONENTS.—The term “qualified electric drive vehicle  
22 components” means components the Secretary deter-  
23 mines are uniquely needed to produce electric drive  
24 vehicles.

1           (8) QUALIFIED ELECTRIC DRIVE VEHICLE IN-  
2           FRASTRUCTURE.—The term “qualified electric drive  
3           vehicle infrastructure” means equipment and serv-  
4           ices that—

5                   (A) support the electric refueling needs of  
6           electric drive vehicles and may be located in  
7           public or private locations, including street  
8           parking, parking garages, parking lots, homes,  
9           gas stations, and highway rest stops; and

10                   (B) serve smart grid functions, as defined  
11           in section 1306(d) the Energy Independence  
12           and Security Act of 2007 (42 U.S.C. 17386),  
13           that will optimize the integration of electric  
14           drive vehicles into the electric grid.

15           (9) SECRETARY.—The term “Secretary” means  
16           the Secretary of Energy.

17 **SEC. 3. TARGETED ELECTRIC DRIVE VEHICLES DEPLOY-**  
18 **MENT COMMUNITIES PROGRAM.**

19           (a) IN GENERAL.—

20                   (1) ESTABLISHMENT.—The Secretary shall es-  
21           tablish a competitive program to provide financial  
22           assistance to be used as described under subsection  
23           (d), consistent with the goals under subsection (b),  
24           for purposes of deploying electric drive vehicles in  
25           deployment communities.

1           (2) PHASE 1.—The Secretary shall, not later  
2 than 12 months after the date of enactment of this  
3 Act, based upon applications for financial assistance  
4 received pursuant to subsection (c), select 5 deploy-  
5 ment communities for the first phase of the program  
6 established under paragraph (1).

7           (b) GOALS.—The goals of the program established  
8 under subsection (a)(1) shall be—

9           (1) to facilitate the rapid near-term deployment  
10 of electric drive vehicles in deployment communities,  
11 deploying at least 700,000 electric drive vehicles  
12 total in deployment communities not later than 6  
13 years after the date of enactment of this Act;

14           (2) to demonstrate the viability of a vehicle-  
15 based transportation system that reduces depend-  
16 ence on petroleum-based fuel and contributes to re-  
17 ducing emissions of carbon dioxide;

18           (3) to facilitate the integration of advanced ve-  
19 hicle technologies into deployment communities while  
20 optimizing electric grid system performance and reli-  
21 ability;

22           (4) to demonstrate the potential—

23           (A) benefits of coordinated investments in  
24 vehicle electrification and infrastructure on per-  
25 sonal mobility; and

1 (B) reduction of emissions of greenhouse  
2 gases and criteria air pollutants from vehicle  
3 electrification and infrastructure;

4 (5) to demonstrate protocols and standards that  
5 facilitate vehicle integration into the electric grid, in-  
6 cluding demonstration of the use of qualified electric  
7 drive vehicle infrastructure;

8 (6) to increase understanding of the primary re-  
9 gional differences and varying regulatory environ-  
10 ments that impact electric drive vehicle market pene-  
11 tration and establish best practices for addressing  
12 deployment barriers to electric drive vehicles; and

13 (7) to increase understanding of consumers' ve-  
14 hicle charging and other electric drive vehicle infra-  
15 structure needs and establish best practices to meet  
16 such needs.

17 (c) APPLICATIONS.—Any State, Indian tribe, or local  
18 government (or group of State, Indian tribe, or local gov-  
19 ernments) may apply to the Secretary for financial assist-  
20 ance to be used as described in subsection (d) in deploy-  
21 ment communities. Such applications may be jointly spon-  
22 sored by electric utilities, automobile manufacturers, tech-  
23 nology providers, car sharing companies or organizations,  
24 third party electric drive vehicle service providers, or other  
25 persons or entities.

1 (d) USE OF FUNDS.—Pursuant to applications re-  
2 ceived under subsection (c), the Secretary may make fi-  
3 nancial assistance under the program established under  
4 subsection (a) available to any applicant or joint sponsor  
5 of the application to be used for any of the following:

6 (1) Assisting persons located in the deployment  
7 community, consistent with subsections (g) and (h).

8 (2) Supporting the use of electric drive vehicles  
9 by funding projects for any of the following:

10 (A) Planning and deployment of qualified  
11 electric drive vehicle infrastructure.

12 (B) Updating building codes, inspections  
13 related to the installation of electric drive vehi-  
14 cle charging infrastructure, and updating zon-  
15 ing for such infrastructure.

16 (C) Converting government fleets to elec-  
17 tric drive vehicles.

18 (e) PROGRAM REQUIREMENTS.—The Secretary, in  
19 consultation with the Administrator and the Secretary of  
20 Transportation, shall, not later than 6 months after the  
21 date of enactment of this Act, determine the requirements  
22 for the program established under subsection (a), includ-  
23 ing the following:

24 (1) Criteria for evaluating applications sub-  
25 mitted under subsection (c), consistent with sub-

1 section (f), including the anticipated ability of appli-  
2 cants to promote deployment and market penetra-  
3 tion of electric drive vehicles.

4 (2) Data regarding deployment communities,  
5 and the electric drive vehicles and qualified electric  
6 drive vehicle infrastructure in such deployment com-  
7 munities, required for collection, analysis, and eval-  
8 uation of the challenges and opportunities associated  
9 with the widespread deployment of electric drive ve-  
10 hicles.

11 (3) Metrics of success for deployment commu-  
12 nities.

13 (4) Reporting requirements for entities that re-  
14 ceive financial assistance under this section, includ-  
15 ing a comprehensive set of performance data charac-  
16 terizing the results of the program in the deploy-  
17 ment community.

18 (f) CRITERIA FOR EVALUATING APPLICATIONS.—The  
19 Secretary shall require that applications under subsection  
20 (c) include the following:

21 (1) A plan to promote, market, and support the  
22 deployment of electric drive vehicles in a deployment  
23 community, through the deployment of consumer ve-  
24 hicles, and, as appropriate, private or public fleets.

1           (2) The role of each stakeholder participating  
2           in the deployment of electric drive vehicles in the de-  
3           ployment community, and an indication of how the  
4           financial assistance applied for will be used in the  
5           deployment community.

6           (3) The number of electric drive vehicles pro-  
7           jected to be deployed in the deployment community  
8           during the first phase of the program established  
9           under subsection (a).

10          (4) A strategy for developing program partici-  
11          pation among residents of the deployment commu-  
12          nity and a plan that demonstrates high likelihood  
13          that the deployment community will procure and de-  
14          ploy the projected number of electric drive vehicles.

15          (5) A deployment and financing plan for pub-  
16          licly-available electric drive vehicle charging infra-  
17          structure that includes a policy on cost sharing,  
18          methodology for determining the number and place-  
19          ment of such infrastructure, and ensures use of  
20          open, non-proprietary standards that maximize  
21          interoperability with Smart Grid technologies.

22          (6) Verification that building codes within the  
23          proposed deployment community appropriately ac-  
24          commodate electric drive vehicle charging infrastruc-  
25          ture for new construction and major upgrades or

1 evidence of a clear plan to update such codes before  
2 or during the period of financial assistance.

3 (7) Verification that zoning, parking rules, or  
4 other local ordinances have been updated or will be  
5 updated as necessary to facilitate the installation of  
6 publicly-available electric drive vehicle charging in-  
7 frastructure, where appropriate.

8 (8) Mechanisms to increase individual consumer  
9 benefits consistent with subsection (h).

10 (9) The extent to which electric utilities in the  
11 deployment community have or plan to update poli-  
12 cies—

13 (A) that—

14 (i) reflect rate structures that benefit  
15 consumers who charge electric drive vehi-  
16 cles off-peak; or

17 (ii) with respect to any deployment  
18 community with a competitive retail regu-  
19 latory regime, will make electric drive vehi-  
20 cle charging services available to con-  
21 sumers;

22 (B) that take into account potential im-  
23 pacts to the local electric distribution system or  
24 the electric grid from the incremental electric  
25 energy used to charge electric drive vehicles;

1 (C) that utilize information technologies to  
2 minimize effects of charging electric drive vehi-  
3 cles on the local electric distribution system or  
4 electric grid;

5 (D) that relate to Smart Grid technologies  
6 for electric drive vehicle charging purposes, in-  
7 cluding those that allow 2-way communication  
8 of electric energy movement (to prepare for ve-  
9 hicle-to-grid applications); and

10 (E) encourage electric energy conservation  
11 and reduction in peak demand by making con-  
12 sumer electric energy or charging service price  
13 and usage information available to consumers.

14 (g) PRIORITY.—The Secretary shall give preference  
15 to applications for financial assistance under subsection  
16 (c) that—

17 (1) are jointly sponsored by entities that share  
18 interest in the deployment of electric drive vehicles;

19 (2) project the greatest reduction in dependency  
20 on petroleum as fuel and carbon dioxide emissions,  
21 in proportion to the amount of petroleum used as  
22 fuel and carbon dioxide emitted by the proposed de-  
23 ployment community;

1           (3) for at least one deployment community, in-  
2           clude a demonstration of the deployment of heavy-  
3           duty electric drive vehicles;

4           (4) include a plan to provide additional State,  
5           Indian tribe, local governmental, or private incen-  
6           tives for the deployment of electric drive vehicles;

7           (5) best demonstrate the ability of the deploy-  
8           ment community to deploy the targeted number of  
9           electric drive vehicles;

10          (6) are most likely to yield information that in-  
11          forms and assists with the large-scale deployment of  
12          electric drive vehicles in different regions and regu-  
13          latory regimes of the United States; and

14          (7) are submitted for deployment communities  
15          that are located in proximity to other areas to which  
16          electric drive vehicle deployment could be expanded.

17          (h) CONSUMER BENEFITS.—As part of the amounts  
18          authorized under subsection (k), the Secretary shall en-  
19          sure that each recipient of financial assistance for a de-  
20          ployment community provides a minimum of \$2,000 in  
21          benefits to each of the first 100,000 consumers who reside  
22          in the deployment community who purchase electric drive  
23          vehicles. Such benefits may not be used to offset the costs  
24          of any other benefit in effect in the deployment community  
25          as of the date of enactment of this Act, and may include—

1           (1) rebates of portions of the costs of pur-  
2 chasing electric drive vehicles;

3           (2) rebates of portions of the costs of permit-  
4 ting, purchasing, or installing home electric drive ve-  
5 hicle charging stations;

6           (3) rebates of State or local sales taxes for pur-  
7 chasing electric drive vehicles;

8           (4) rebates of the incremental electric energy  
9 costs associated with charging electric drive vehicles;

10          (5) rebates of the costs of State or local toll  
11 road access charges;

12          (6) rebates of the costs of parking electric drive  
13 vehicles; and

14          (7) any other benefit that the Secretary deter-  
15 mines is appropriate and likely to incentivize the  
16 purchase of electric drive vehicles.

17       (i) INFORMATION CLEARINGHOUSE.—The Secretary  
18 shall, as part of the program established pursuant to sub-  
19 section (a)(1), collect and, as promptly as practicable,  
20 make available to the public information regarding the  
21 cost, performance, and other technical data regarding the  
22 deployment and integration of electric drive vehicles.

23       (j) REPORTS.—

24           (1) PHASE 1 UPDATE AND PHASE 2 PLAN.—Not  
25 later than 4 years after the date of enactment of

1       this Act, the Secretary shall submit to Congress a  
2       report—

3               (A) describing the status of the deployment  
4       communities for which financial assistance is  
5       provided under the program established under  
6       subsection (a)(1);

7               (B) describing, analyzing, and evaluating  
8       the data collected under the first phase of the  
9       program established under subsection (a)(1);

10              (C) assessing the first phase of the pro-  
11       gram established under subsection (a)(1); and

12              (D) describing a plan for the second phase  
13       of the program established under subsection  
14       (a)(1), including—

15                   (i) how many additional deployment  
16       communities should be selected for further  
17       deployment activities and incentives;

18                   (ii) how criteria for selection of de-  
19       ployment communities should be updated;

20                   (iii) how incentive structures for the  
21       deployment of electric drive vehicles should  
22       be changed; and

23                   (iv) a request for funding to imple-  
24       ment such second phase.

1           (2) PHASE 1 RESULTS.—Not later than 6 years  
2 after the date of enactment of this Act, the Sec-  
3 retary shall submit to Congress a report assessing  
4 the first phase of the program established under  
5 subsection (a)(1).

6           (k) AUTHORIZATION.—There are authorized to be ap-  
7 propriated to carry out this section \$800,000,000 for each  
8 recipient of financial assistance for a deployment commu-  
9 nity, to be expended within 5 years of the date of the re-  
10 ceipt of funds.

11 **SEC. 4. MODIFICATION OF CREDIT FOR ALTERNATIVE**  
12 **FUEL VEHICLE REFUELING PROPERTY FOR**  
13 **VEHICLES POWERED BY ELECTRICITY.**

14           (a) SPECIAL RULES FOR PROPERTY PLACED IN  
15 SERVICE BEFORE JANUARY 1, 2017.—Subsection (e) of  
16 section 30C of the Internal Revenue Code of 1986 is  
17 amended by adding at the end the following new para-  
18 graph:

19           “(7) PROPERTY FOR RECHARGING VEHICLES  
20 POWERED BY ELECTRICITY.—In the case of property  
21 placed in service after December 31, 2010, and be-  
22 fore January 1, 2017, which relates to electricity—

23           “(A) subsection (a) shall be applied by  
24 substituting ‘50 percent’ for ‘30 percent’,

1           “(B) subsection (b)(1) shall be applied by  
2           substituting ‘\$50,000’ for ‘\$30,000’, and

3           “(C) subsection (b)(2) shall be applied by  
4           substituting ‘\$2,000’ for ‘\$1,000’.”.

5           (b) **INSTALLATION COSTS.**—Subsection (e) of section  
6 30C of such Code, as amended by subsection (a), is  
7 amended by adding at the end the following:

8           “(8) **INSTALLATION COSTS.**—The cost of any  
9           qualified alternative fuel vehicle refueling property  
10          which relates to electricity shall include the cost of  
11          the original installation of such property.”.

12          (c) **TERMINATION OF CREDIT.**—Subsection (g) of  
13 section 30C of such Code is amended by striking “and”  
14 at the end of paragraph (1), by redesignating paragraph  
15 (2) as paragraph (3), and by inserting after paragraph  
16 (1) the following new paragraph:

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

19          (d) **EFFECTIVE DATE.**—The amendments made by  
20 this section shall apply to property placed in service after  
21 December 31, 2010.

22 **SEC. 5. ELECTRIC VEHICLE REFUELING PROPERTY TAX**  
23 **CREDIT BONDS.**

24          (a) **IN GENERAL.**—Paragraph (1) of section 54A(d)  
25 of the Internal Revenue Code of 1986 is amended by strik-

1 ing “or” at the end of subparagraph (D), by inserting  
2 “or” at the end of subparagraph (E), and by inserting  
3 after subparagraph (E) the following new subparagraph:

4                   “(F) a qualified electric vehicle refueling  
5                   property bond.”

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

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

10                   (2) by striking the period at the end of clause

11                   (v) and inserting “, and”, and

12                   (3) by adding at the end the following new  
13 clause:

14                                   “(vi) in the case of a qualified electric  
15                   vehicle refueling property bond, a purpose  
16                   specified in section 54G(a)(1).”

17           (c) BONDS ALLOWED.—Subpart I of part IV of sub-  
18 chapter A of chapter 1 of the Internal Revenue Code of  
19 1986 is amended by adding at the end the following new  
20 section:

21 **“SEC. 54G. QUALIFIED ELECTRIC VEHICLE REFUELING**  
22 **PROPERTY BONDS.**

23           “(a) QUALIFIED ELECTRIC VEHICLE REFUELING  
24 PROPERTY BOND.—For purposes of this subpart, the

1 term ‘qualified electric vehicle refueling property bond’  
2 means any bond issued as part of an issue if—

3 “(1) 100 percent of the available project pro-  
4 ceeds of such issue are to be used for capital expend-  
5 itures incurred by a qualified issuer for 1 or more  
6 qualified electric vehicle refueling properties,

7 “(2) the bond is issued by a qualified issuer,  
8 and

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

11 “(b) REDUCED CREDIT AMOUNT.—Notwithstanding  
12 paragraph (2) of section 54A(b), the annual credit deter-  
13 mined with respect to any qualified electric vehicle refuel-  
14 ing property bond is 70 percent of the amount which  
15 would (but for this subsection) otherwise be determined  
16 under such paragraph with respect to such bond.

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

22 “(d) NATIONAL LIMITATION ON AMOUNT OF BONDS  
23 DESIGNATED.—There is a national qualified electric vehi-  
24 cle refueling property bond limitation of \$100,000,000.

1           “(e) ALLOCATIONS.—The Secretary shall make allo-  
2 cations of the amount of the national qualified electric ve-  
3 hicle refueling property bond limitation described in sub-  
4 section (d) among purposes described in subsection (a)(1)  
5 in such manner as the Secretary determines appropriate.

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

7               “(1) QUALIFIED ELECTRIC VEHICLE REFUEL-  
8           ING PROPERTY.—The term ‘qualified electric vehicle  
9           refueling property’ means any qualified alternative  
10          fuel vehicle refueling property (within the meaning  
11          of section 30C) which relates to electricity.

12               “(2) QUALIFIED ISSUER.—

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

16                   “(B) GOVERNMENTAL BODY.—The term  
17           ‘governmental body’ means any State or Indian  
18           tribal government, or any political subdivision  
19           thereof.

20                   “(C) PUBLIC POWER PROVIDER.—The  
21           term ‘public power provider’ means a State util-  
22           ity that has a service obligation to end-users or  
23           to a distribution utility (within the meaning of  
24           section 217 of the Federal Power Act, as in ef-

1           fect on the date of the enactment of this sec-  
2           tion).

3                   “(D) COOPERATIVE ELECTRIC COMPANY.—  
4           The term ‘cooperative electric company’ means  
5           a mutual or cooperative electric company de-  
6           scribed in section 501(c)(12) or an organization  
7           described in section 1381(a)(2)(C).”.

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

          “Sec. 54G. Qualified electric vehicle refueling property bonds.”.

12          (e) EFFECTIVE DATE.—The amendments made by  
13          this section shall apply to obligations issued after the date  
14          of the enactment of this Act.

15   **SEC. 6. ELECTRIC DRIVE VEHICLE INFRASTRUCTURE**  
16                   **PLANNING.**

17          (a) AMENDMENT OF PURPA.—Section 111(d) of the  
18          Public Utility Regulatory Policies Act of 1978 (16 U.S.C.  
19          2621(d)) is amended by adding at the end the following:

20                   “(20) ELECTRIC DRIVE VEHICLE INFRASTRUC-  
21          TURE.—

22                   “(A) UTILITY PLAN FOR INFRASTRUC-  
23          TURE.—Each electric utility shall develop a  
24          plan to support the use of electric drive vehi-  
25          cles, including heavy-duty electric drive vehicles.

1           Each such plan shall provide for the deploy-  
2           ment of the charging infrastructure or other in-  
3           frastructure necessary to adequately support  
4           the use of electric drive vehicles, and shall pro-  
5           vide for, as appropriate, the support needed to  
6           enable the competitive installation, operation, or  
7           provision of electric drive vehicle charging serv-  
8           ices. The plan may provide for deployment of  
9           electric drive vehicle charging stations in public  
10          or private locations, including street parking,  
11          parking garages, parking lots, homes, gas sta-  
12          tions, and highway rest stops. Any such plan  
13          may also include—

14                   “(i) rapid charging infrastructure, in-  
15                   cluding fast charging and battery ex-  
16                   change, and other services;

17                   “(ii) triggers for charging infrastruc-  
18                   ture deployment based upon market pene-  
19                   tration of electric drive vehicles;

20                   “(iii) distribution system upgrades to  
21                   accommodate requirements of electric drive  
22                   vehicle charging; and

23                   “(iv) such other elements as the State  
24                   regulatory authority (in the case of each  
25                   electric utility for which is has ratemaking

1 authority) or utility (in the case of a non-  
2 regulated utility) determines necessary to  
3 support electric drive vehicles.

4 “(B) SUPPORT REQUIREMENTS.—Each  
5 State regulatory authority (in the case of each  
6 electric utility for which it has ratemaking au-  
7 thority) and each utility (in the case of a non-  
8 regulated utility) shall—

9 “(i) require that electric drive vehicle  
10 charging infrastructure deployed complies  
11 with any applicable Federal standard and  
12 is interoperable with the applicable prod-  
13 ucts of all auto manufacturers, to the ex-  
14 tent possible;

15 “(ii) consider adopting minimum re-  
16 quirements for deployment of electric drive  
17 vehicle charging infrastructure and other  
18 appropriate requirements necessary to sup-  
19 port the use of electric drive vehicles;

20 “(iii) consider adopting requirements  
21 to ensure the ability of each electric drive  
22 vehicle to be identified and billed for elec-  
23 tric charging costs individually; and

24 “(iv) assess the system benefits of  
25 widespread deployment of electric drive ve-

1           hicles associated with predominantly off-  
2           peak electric drive vehicle charging.

3           “(C) COST RECOVERY.—Each State regu-  
4           latory authority (in the case of each electric  
5           utility for which it has ratemaking authority)  
6           and each utility (in the case of a nonregulated  
7           utility) shall consider whether, and to what ex-  
8           tent, to allow cost recovery for plans under sub-  
9           paragraph (A) and implementation of such  
10          plans.

11          “(D) SMART GRID INTEGRATION.—Each  
12          State regulatory authority (in the case of each  
13          electric utility for which it has ratemaking au-  
14          thority) and each utility (in the case of a non-  
15          regulated utility) shall, in accordance with ac-  
16          tions taken by the Commission pursuant to sec-  
17          tion 1305(d) of the Energy Independence and  
18          Security Act of 2007—

19                 “(i) establish any appropriate proto-  
20                 cols and standards for integrating electric  
21                 drive vehicles into an electric distribution  
22                 system, including smart grid systems and  
23                 devices as described in title XIII of the  
24                 Energy Independence and Security Act of  
25                 2007;

1           “(ii) provide for, to the extent fea-  
2           sible, the ability for each electric drive ve-  
3           hicle to be identified individually and to be  
4           associated with its owner’s electric utility  
5           account, regardless of the location that the  
6           vehicle is plugged in, for purposes of ap-  
7           propriate billing for any electric energy re-  
8           quired to charge the vehicle’s batteries as  
9           well as any crediting for electric energy  
10          provided to the electric utility from the ve-  
11          hicle’s batteries; and

12           “(iii) review the determination made  
13          in response to paragraph (14) of this sub-  
14          section in light of this paragraph, including  
15          whether time-of-use pricing should be em-  
16          ployed to enable the use of electric drive  
17          vehicles to contribute to meeting peak-load  
18          and ancillary service power needs.

19           “(E) DEFINITION OF ‘ELECTRIC DRIVE VE-  
20          HICLE’.—For purposes of this paragraph, the  
21          term ‘electric drive vehicle’ has the meaning  
22          given such term in section 2(3) of the Electric  
23          Drive Vehicle Deployment Act of 2010.”.

24          (b) COMPLIANCE.—

1           (1) TIME LIMITATIONS.—Section 112(b) of the  
2           Public Utility Regulatory Policies Act of 1978 (16  
3           U.S.C. 2622(b)) is amended by adding the following  
4           at the end thereof:

5           “(7)(A) Not later than 3 years after the date  
6           of enactment of this paragraph, each State regu-  
7           latory authority (with respect to each electric utility  
8           for which it has ratemaking authority) and each  
9           nonregulated utility shall commence the consider-  
10          ation referred to in section 111, or set a hearing  
11          date for consideration, with respect to the standards  
12          established by paragraph (20) of section 111(d).

13          “(B) Not later than 4 years after the date of  
14          enactment of the this paragraph, each State regu-  
15          latory authority (with respect to each electric utility  
16          for which it has ratemaking authority), and each  
17          nonregulated electric utility, shall complete the con-  
18          sideration, and shall make the determination, re-  
19          ferred to in section 111 with respect to the stand-  
20          ards established by paragraph (20) of section  
21          111(d).”.

22          (2) FAILURE TO COMPLY.—Section 112(c) of  
23          the Public Utility Regulatory Policies Act of 1978  
24          (16 U.S.C. 2622(c)) is amended by adding the fol-  
25          lowing at the end: “In the case of the standards es-

1        tablished by paragraph (20) of section 111(d), the  
2        reference contained in this subsection to the date of  
3        enactment of this Act shall be deemed to be a ref-  
4        erence to the date of enactment of such paragraph.”.

5            (3) PRIOR STATE ACTIONS.—Section 112(d) of  
6        the Public Utility Regulatory Policies Act of 1978  
7        (16 U.S.C. 2622(d)) is amended by striking “(19)”  
8        and inserting “(20)” before “of section 111(d)”.

9        **SEC. 7. TECHNOLOGY DEVELOPMENT.**

10        (a) SECONDARY USE APPLICATIONS AND RECYCLING  
11        STUDY.—

12            (1) IN GENERAL.—The Secretary shall conduct  
13        a study on secondary use applications of electric  
14        drive vehicle batteries. Such study shall include—

15            (A) a survey of the uses, challenges, costs,  
16            and benefits associated with secondary uses of  
17            batteries no longer suitable for use in electric  
18            drive vehicles (such as utility regulation services  
19            and home storage); and

20            (B) a survey of technologies, challenges,  
21            costs, and benefits associated with the recycling  
22            of electric drive vehicle batteries.

23            (2) REPORT.—Not later than 2 years after the  
24        date of enactment of this Act, the Secretary shall

1 submit to Congress a report describing the results of  
2 the study conducted pursuant to paragraph (1).

3 (b) RESEARCH AND DEVELOPMENT PROGRAM.—

4 (1) ESTABLISHMENT.—The Secretary shall es-  
5 tablish a competitively awarded, peer reviewed grant  
6 program of research, development, demonstration,  
7 and commercial application of advanced batteries  
8 with vehicle applications, qualified electric drive vehi-  
9 cle components, and qualified electric drive infra-  
10 structure.

11 (2) COORDINATION.—The Secretary shall en-  
12 sure that the program established under paragraph  
13 (1) is coordinated with other applicable advanced  
14 battery, qualified electric drive component, and  
15 qualified electric drive infrastructure research and  
16 development activities conducted by the Department  
17 of Energy, with efforts to minimize duplication of  
18 such activities.

19 (3) ELIGIBLE ENTITIES.—The Secretary may  
20 award grants to carry out the program established  
21 under paragraph (1) to institutions of higher edu-  
22 cation, national laboratories, and other entities the  
23 Secretary determines appropriate.

24 (4) AUTHORIZATION OF APPROPRIATIONS.—  
25 There are authorized to be appropriated to carry out

1       this subsection \$167,000,000 for each of fiscal years  
2       2011 through 2016.

3   **SEC. 8. STUDY ON SUPPLY OF RAW MATERIALS.**

4       (a) **STUDY.**—The Secretary of the Interior, in con-  
5 sultation with the Secretary, shall conduct a study to—

6           (1) identify the raw materials needed for the  
7       manufacture of electric drive vehicles, qualified elec-  
8       tric drive vehicle components, and qualified electric  
9       drive vehicle infrastructure;

10          (2) describe the primary or original sources of  
11       raw materials described in paragraph (1) in the  
12       United States, as of the date of enactment of this  
13       Act, and known reserves and resources of such ma-  
14       terials; and

15          (3) assess the ability of the United States to se-  
16       cure reliable and resilient supplies of raw materials  
17       described in paragraph (1) to manufacture, deploy,  
18       and maintain a fleet of electric drive vehicles.

19       (b) **REPORT.**—Not later than 2 years after the date  
20 of enactment of this Act, the Secretary of the Interior  
21 shall submit to Congress a report describing the results  
22 of the study conducted pursuant to subsection (a).

1 **SEC. 9. FEDERAL FLEETS.**

2 (a) IN GENERAL.—For purposes of this section, elec-  
3 tric energy consumed by agencies of the Federal Govern-  
4 ment to fuel electric drive vehicles—

5 (1) is alternative fuel (as defined in section 301  
6 of the Energy Policy Act of 1992 (42 U.S.C.  
7 13211)); and

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

11 (b) ASSESSMENT AND REPORT.—Not later than 180  
12 days after the date of enactment of this Act and at the  
13 completion of phase I of the program established under  
14 section 3(a)(1), the Federal Energy Management Program  
15 and the General Services Administration shall complete an  
16 assessment of motor vehicle fleets operated by agencies of  
17 the Federal Government and submit a report to Congress  
18 that describes—

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

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

7           (3) the estimated cost to the Federal Govern-  
8           ment for vehicle purchases pursuant to paragraph  
9           (2) for each fiscal year.

10          (c) BUDGET REQUEST.—For each fiscal year that be-  
11         gins after one year after the date of enactment of this  
12         Act, each agency of the Federal Government shall include  
13         electric drive vehicle purchases identified in the report  
14         under subsection (b) in the budget of the agency to be  
15         included in the budget of the United States Government  
16         submitted by the President under section 1105 of title 31,  
17         United States Code.

18          (d) PILOT PROGRAM TO DEPLOY ELECTRIC DRIVE  
19         VEHICLES IN THE FEDERAL FLEET.—

20                 (1) IN GENERAL.—Not later than 3 years after  
21                 the date of enactment of this Act, the Administrator  
22                 of General Services shall acquire 1,000 electric drive  
23                 vehicles to be deployed in a range of locations in  
24                 motor vehicle fleets operated by Federal agencies.

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

3                   (A) the cost, performance, and use of elec-  
4                   tric drive vehicles in motor vehicle fleets oper-  
5                   ated by Federal agencies;

6                   (B) the deployment and integration of elec-  
7                   tric drive vehicles in motor vehicle fleets oper-  
8                   ated by Federal agencies; and

9                   (C) the contribution of electric drive vehi-  
10                  cles in motor vehicle fleets operated by Federal  
11                  agencies toward reducing the use of fossil fuels  
12                  and greenhouse gas emissions.

13           (3) REPORT.—Not later than 5 years after the  
14           date of enactment of this Act, the Administrator of  
15           General Services shall submit to Congress a report  
16           that—

17                   (A) describes the status of electric drive  
18                   vehicles in motor vehicle fleets operated by Fed-  
19                   eral agencies; and

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

22   **SEC. 10. ELECTRIC DRIVE COMPONENT AND INFRASTRUC-**  
23                   **TURE MANUFACTURING LOAN PROGRAM.**

24           (a) DIRECT LOAN PROGRAM.—

1           (1) IN GENERAL.—Not later than 1 year after  
2           the date of enactment of this Act, and subject to the  
3           availability of appropriated funds, the Secretary  
4           shall carry out a program to provide a total of not  
5           more than \$5,000,000,000 in loans to eligible indi-  
6           viduals and entities (as determined by the Secretary  
7           and including qualified electric drive vehicle compo-  
8           nent suppliers and qualified electric drive vehicle in-  
9           frastructure suppliers) for the costs of activities de-  
10          scribed in subsection (b). The loans shall be made  
11          through the Federal Financing Bank, with the full  
12          faith and credit of the United States Government on  
13          the principal and interest. The full credit subsidy  
14          shall be paid by the Secretary using appropriated  
15          funds.

16          (2) APPLICATION.—An applicant for a loan  
17          under this subsection shall submit to the Secretary  
18          an application at such time, in such manner, and  
19          containing such information as the Secretary may  
20          require, including a written assurance that—

21                 (A) all laborers and mechanics employed  
22                 by contractors or subcontractors during con-  
23                 struction, alteration, or repair that is financed,  
24                 in whole or in part, by a loan under this section  
25                 shall be paid wages at rates not less than those

1 prevailing on similar construction in the local-  
2 ity, as determined by the Secretary of Labor in  
3 accordance with sections 3141 through 3144,  
4 3146, and 3147 of title 40, United States Code;  
5 and

6 (B) the Secretary of Labor shall, with re-  
7 spect to the labor standards described in this  
8 paragraph, have the authority and functions set  
9 forth in Reorganization Plan Numbered 14 of  
10 1950 (5 U.S.C. App.) and section 3145 of title  
11 40, United States Code.

12 (3) SELECTION OF ELIGIBLE PROJECTS.—The  
13 Secretary shall select eligible projects to receive  
14 loans under this subsection in cases in which, as de-  
15 termined by the Secretary, the loan recipient—

16 (A) is financially viable without the receipt  
17 of additional Federal funding associated with  
18 the proposed project;

19 (B) will provide sufficient information to  
20 the Secretary for the Secretary to ensure that  
21 the funds are expended efficiently and effec-  
22 tively; and

23 (C) has met such other criteria as may be  
24 established and published by the Secretary.

1           (4) RATES, TERMS, AND REPAYMENT OF  
2           LOANS.—A loan provided under this subsection—

3                   (A) shall have an interest rate that, as of  
4                   the date on which the loan is made, is equal to  
5                   the cost of funds to the Department of the  
6                   Treasury for obligations of comparable matu-  
7                   rity;

8                   (B) shall have a term equal to the lesser  
9                   of—

10                           (i) the projected life, in years, of the  
11                           eligible project to be carried out using  
12                           funds from the loan, as determined by the  
13                           Secretary; or

14                           (ii) 25 years;

15                   (C) may be subject to a deferral in repay-  
16                   ment for not more than 5 years after the date  
17                   on which the eligible project carried out using  
18                   funds from the loan first begins operations, as  
19                   determined by the Secretary; and

20                   (D) shall be made by the Federal Financ-  
21                   ing Bank.

22           (b) USE OF FUNDS.—A loan provided under sub-  
23           section (a) may be used by the loan recipient to pay the  
24           costs of—

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

4                   (A) qualified electric drive vehicle infra-  
5                   structure; or

6                   (B) qualified electric drive vehicle compo-  
7                   nents; and

8           (2) engineering integration performed in the  
9           United States of qualified electric drive vehicle com-  
10          ponents.

11          (c) FEES.—Administrative costs shall be no more  
12          than \$100,000 or 10 basis points of the loan.

13          (d) PRIORITY.—

14               (1) CRITERIA.—In selecting loan recipients  
15               from among eligible applicants, the Secretary shall  
16               give preference to proposals that—

17                   (A) are most likely to be successful; and

18                   (B) are located in local markets that have  
19               the greatest need for the manufacturing facility.

20               (2) EXISTING FACILITIES.—The Secretary  
21               shall, in making loans to manufacturers that have  
22               existing facilities, give priority to those facilities that  
23               are oldest or have been in existence for at least 20  
24               years. Such facilities may currently be sitting idle.

1 (e) SET ASIDE FOR SMALL MANUFACTURERS AND  
2 COMPONENT SUPPLIERS.—

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

6 (A) employs less than 500 individuals; and

7 (B) manufactures qualified electric drive  
8 vehicle infrastructure or qualified electric drive  
9 vehicle components.

10 (2) SET ASIDE.—Of the amount of funds that  
11 are used to make loans for each fiscal year under  
12 subsection (a), the Secretary shall use not less than  
13 25 percent to make loans to covered firms or con-  
14 sortia led by a covered firm.

15 (f) APPOINTMENT AND PAY OF PERSONNEL.—

16 (1) The Secretary may use direct hiring author-  
17 ity pursuant to section 3304(a)(3) of title 5, United  
18 States Code, to appoint such professional and ad-  
19 ministrative personnel as the Secretary determines  
20 necessary to the discharge of the Secretary’s func-  
21 tions under this section.

22 (2) The rate of pay for a person appointed pur-  
23 suant to paragraph (1) shall not exceed the max-  
24 imum rate payable for GS–15 of the General Sched-  
25 ule under chapter 53 of such title.

1 (g) AUTHORIZATION OF APPROPRIATIONS.—There  
2 are authorized to be appropriated such sums as are nec-  
3 essary to carry out this section for each of fiscal years  
4 2011 through 2016.

5 **SEC. 11. LOAN GUARANTEES FOR ADVANCED BATTERY**  
6 **PURCHASES FOR USE IN STATIONARY APPLI-**  
7 **CATIONS.**

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

11 **“SEC. 137. LOAN GUARANTEES FOR ADVANCED BATTERY**  
12 **PURCHASES.**

13 “(a) DEFINITIONS.—In this section:

14 “(1) QUALIFIED AUTOMOTIVE BATTERY.—The  
15 term ‘qualified automotive battery’ means a battery  
16 that—

17 “(A) has at least 5 kilowatt-hours of trac-  
18 tion battery capacity; and

19 “(B) is designed for use in electric drive  
20 vehicles but is purchased for nonautomotive and  
21 dual-purpose applications.

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

24 “(A) an original equipment manufacturer;

25 “(B) an electric utility;

1           “(C) any provider of qualified electric drive  
2           vehicle infrastructure (as such term is defined  
3           in section 2(8) of the Electric Drive Vehicle De-  
4           ployment Act of 2010); or

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

7           “(b) LOAN GUARANTEES.—The Secretary shall es-  
8           tablish a program to provide guarantees of loans made to  
9           eligible entities by private institutions for the purchase,  
10          by such an eligible entity, of at least 500 qualified auto-  
11          motive batteries in a calendar year that use advanced bat-  
12          tery technology.

13          “(c) REQUIREMENTS.—The Secretary may provide a  
14          loan guarantee under subsection (b) to an applicant if—

15                 “(1) without a loan guarantee, credit is not  
16                 available to the applicant under reasonable terms or  
17                 conditions sufficient to finance the purchase of  
18                 qualified automotive batteries described in sub-  
19                 section (b);

20                 “(2) the prospective earning power of the appli-  
21                 cant and the character and value of the security  
22                 pledged provide a reasonable assurance of repayment  
23                 of the loan to be guaranteed in accordance with the  
24                 terms of the loan; and

1           “(3) the loan bears interest at a rate deter-  
2           mined by the Secretary to be reasonable, taking into  
3           account the current average yield on outstanding ob-  
4           ligations of the United States with remaining peri-  
5           ods of maturity comparable to the maturity of the  
6           loan.

7           “(d) MATURITY.—A loan guaranteed under sub-  
8           section (b) shall have a maturity of not more than 20  
9           years.

10          “(e) TERMS AND CONDITIONS.—The loan agreement  
11          for a loan guaranteed under subsection (b) shall provide  
12          that no provision of the loan agreement may be amended  
13          or waived without the consent of the Secretary.

14          “(f) ASSURANCE OF REPAYMENT.—The Secretary  
15          shall require that an applicant for a loan guarantee under  
16          subsection (b) provide an assurance of repayment in the  
17          form of a performance bond, insurance, collateral, or other  
18          means acceptable to the Secretary in an amount equal to  
19          not less than 20 percent of the amount of the loan.

20          “(g) GUARANTEE FEE.—The recipient of a loan  
21          guarantee under subsection (b) shall pay the Secretary an  
22          amount determined by the Secretary to be sufficient to  
23          cover the administrative costs of the Secretary relating to  
24          the loan guarantee.

1           “(h) FULL FAITH AND CREDIT.— The full faith and  
2 credit of the United States is pledged to the payment of  
3 all guarantees made under this section. Any such guar-  
4 antee made by the Secretary shall be conclusive evidence  
5 of the eligibility of the loan for the guarantee with respect  
6 to principal and interest. The validity of the guarantee  
7 shall be incontestable in the hands of a holder of the guar-  
8 anteed loan.

9           “(i) REGULATIONS.—The Secretary shall promulgate  
10 such regulations as are necessary to carry out this section.

11           “(j) AUTHORIZATION OF APPROPRIATIONS.—There  
12 are authorized to be appropriated to carry out this section  
13 \$300,000,000 for fiscal years 2011 through 2016.”.