

111TH CONGRESS
2^D SESSION

H. R. 5442

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.

IN THE HOUSE OF REPRESENTATIVES

MAY 27, 2010

Mr. MARKEY of Massachusetts (for himself, Mrs. BIGGERT, Mr. MCNERNEY, and Ms. ESHOO) introduced the following bill; which was referred to the Committee on Energy and Commerce, and in addition to the Committees on Oversight and Government Reform, Science and Technology, Ways and Means, and Transportation and Infrastructure, for a period to be subsequently determined by the Speaker, in each case for consideration of such provisions as fall within the jurisdiction of the committee concerned

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 14,000 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.”.

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