

111TH CONGRESS
1ST SESSION

H. R. 2234

To enhance the energy security of the United States, reduce dependence on imported oil, improve the energy efficiency of the transportation sector, and reduce emissions through the expansion of grid supported transportation.

IN THE HOUSE OF REPRESENTATIVES

MAY 4, 2009

Mr. ENGEL (for himself and Mr. BARTLETT) introduced the following bill; which was referred to the Committee on Energy and Commerce, and in addition to the Committees on Science and Technology 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 enhance the energy security of the United States, reduce dependence on imported oil, improve the energy efficiency of the transportation sector, and reduce emissions through the expansion of grid supported transportation.

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 Transpor-
5 tation Advancement Act of 2009”.

1 **SEC. 2. PURPOSES.**

2 The purposes of this Act are to enhance the energy
3 security of the United States, reduce dependence on im-
4 ported oil, improve the energy efficiency of the transpor-
5 tation sector, and reduce emissions through the expansion
6 of grid supported transportation, through programs to—

7 (1) develop, with industry, research institutions,
8 National Laboratories, and institutions of higher
9 education, projects to foster—

10 (A) the commercialization of plug-in elec-
11 tric drive vehicle technology for various sizes
12 and applications of vehicles; and

13 (B) growth in employment in the United
14 States in electric drive design and manufac-
15 turing of components and vehicles; and

16 (2) optimize the availability of the existing elec-
17 tric infrastructure for use in fueling light duty
18 transportation and other on-road and nonroad vehi-
19 cles to minimize the use of vehicles and equipment
20 that use petroleum.

21 **SEC. 3. NEAR-TERM ELECTRIC TRANSPORTATION.**

22 (a) IN GENERAL.—Paragraph (1) of subsection (c)
23 of section 131 of the Energy Independence and Security
24 Act of 2007 (42 U.S.C. 17011(c)(1)) is amended—

25 (1) by striking “Act” and inserting “para-
26 graph”;

1 (2) by striking “establish a program to provide
2 grants” and inserting “establish or maintain a com-
3 petitive grant and revolving loan program to provide
4 grants and make loans”; and

5 (3) by adding the following new subparagraphs
6 at the end thereof:

7 “(A) GRANT AND LOAN SELECTION.—The
8 Secretary shall select grant and loan recipients
9 based on the overall cost-effectiveness of a pro-
10 posed qualified electric transportation project in
11 reducing emissions of criteria pollutants, emis-
12 sions of greenhouse gases, and petroleum usage.

13 “(B) REVOLVING LOANS.—

14 “(i) CRITERIA.—The Secretary shall
15 establish criteria for the provision of loans
16 under this subsection.

17 “(ii) FUNDING.—Of amounts made
18 available to carry out this subsection, the
19 Secretary shall use amounts not used to
20 provide grants to make loans under this
21 subsection.”.

22 (b) PRIORITY.—Paragraph (2) of subsection (c) of
23 section 131 of the Energy Independence and Security Act
24 of 2007 (42 U.S.C. 17011(c)(2)) is amended by striking
25 “grants under” and inserting “grants and loans under”.

1 **SEC. 4. ELECTRIC TRANSPORTATION INVENTORY.**

2 Section 131 of the Energy Independence and Security
3 Act of 2007 (42 U.S.C. 17011) is amended by adding at
4 the end the following new subsection:

5 “(e) MARKET ASSESSMENT PROGRAM.—The Sec-
6 retary, in consultation with the Administrator and private
7 industry, shall carry out a program—

8 “(1) to inventory and analyze existing electric
9 transportation technologies and hybrid transpor-
10 tation technologies and markets; and

11 “(2) to identify and implement methods of pro-
12 moting existing and emerging applications of electric
13 transportation technologies and hybrid transpor-
14 tation technologies.”.

15 **SEC. 5. ELECTRICITY USAGE PROGRAM AND CERTIFI-**
16 **CATION.**

17 Section 131 of the Energy Independence and Security
18 Act of 2007 (42 U.S.C. 17011), as amended by section
19 4 of this Act, is further amended by adding at the end
20 the following new subsections:

21 “(f) ELECTRICITY USAGE PROGRAM.—

22 “(1) IN GENERAL.—The Secretary, in consulta-
23 tion with the Administrator and private industry,
24 shall carry out a program—

25 “(A) to work with utilities to develop low-
26 cost, simple methods of—

1 “(i) using off-peak electricity; or

2 “(ii) managing on-peak electricity use;

3 “(B) to develop systems and processes—

4 “(i) to enable plug-in electric drive ve-
5 hicles to enhance the availability of emer-
6 gency back-up power for consumers; and

7 “(ii) to work with utilities and other
8 interested stakeholders to study and dem-
9 onstrate the implications of the introduc-
10 tion of plug-in electric drive vehicles and
11 other types of electric transportation tech-
12 nology on the production of electricity from
13 renewable resources; and

14 “(C) to study and demonstrate the poten-
15 tial value to the electric grid to use the energy
16 stored in on-board storage systems of plug-in
17 electric drive vehicles to improve the efficiency
18 and reliability of the grid generation system.

19 “(g) PLUG-IN HYBRID ELECTRIC VEHICLE AND
20 ELECTRIC TRANSPORTATION TECHNOLOGY CERTIFI-
21 CATION.—

22 “(1) IN GENERAL.—For the purpose of ena-
23 bling the introduction of plug-in hybrid electric drive
24 vehicles and electric transportation technology into
25 commercial use, the Administrator shall develop, in

1 consultation with industry, the Secretary, and the
2 National Laboratories, a program to certify—

3 “(A) the emissions of criteria pollutants,
4 fuel economy, and petroleum usage of plug-in
5 hybrid electric drive vehicles; and

6 “(B) the emissions reductions, fuel econ-
7 omy improvements, and petroleum usage reduc-
8 tions from other forms of electric transportation
9 technology.

10 “(2) CERTIFICATION.—The certifications made
11 pursuant to paragraph (1) shall include consider-
12 ation of—

13 “(A) the entire vehicle propulsion system,
14 not just the engine;

15 “(B) nightly off-board charging; and

16 “(C) different engine turn-on control strat-
17 egies.

18 “(3) TASK FORCE.—Not later than 6 months
19 after the date of enactment of this subsection, the
20 Administrator shall establish a task force rep-
21 resenting auto manufacturers, truck manufacturers,
22 National Laboratories, public agencies, utilities, and
23 other interested stakeholders to recommend certifi-
24 cation protocols for certifying—

1 “(A) the emissions, fuel economy, and pe-
2 troleum usage of a wide variety of plug-in hy-
3 brid electric drive vehicles; and

4 “(B) the emissions reductions, fuel econ-
5 omy improvements, and petroleum usage reduc-
6 tions from other forms of electric transportation
7 technology.

8 “(4) PUBLIC COMMENT.—Not later than 2
9 years after the date of enactment of this subsection,
10 the Administrator shall publish the certification pro-
11 tocols recommended pursuant to paragraph (3) for
12 public comment.

13 “(5) FINAL PROTOCOLS.—Not later than 3
14 years after the date of enactment of this subsection,
15 the Administrator shall adopt and publish final cer-
16 tification protocols for certifying—

17 “(A) the emissions, fuel economy, and pe-
18 troleum usage of a wide variety of plug-in hy-
19 brid electric drive vehicles; and

20 “(B) the emissions reductions, fuel econ-
21 omy improvements, and petroleum usage reduc-
22 tions from other forms of electric transportation
23 technology.

1 “(6) EVALUATION AND MODIFICATION OF
2 ELECTRIC TRANSPORTATION TECHNOLOGY PROTO-
3 COLS.—

4 “(A) EVALUATION.—Not later than 2
5 years after the adoption of the certification pro-
6 tocols pursuant to paragraph (5), and every 2
7 years thereafter, the Administrator, in consulta-
8 tion with the Secretary, appropriate Federal
9 agencies, and interested stakeholders shall
10 evaluate and modify, as necessary, such certifi-
11 cation protocols to ensure that—

12 “(i) for plug-in hybrid electric drive
13 vehicles, such protocols accurately measure
14 emissions, fuel economy, and petroleum
15 usage of such vehicles; and

16 “(ii) for other forms of electric trans-
17 portation technology, such protocols accu-
18 rately measure emissions reductions, fuel
19 economy improvements, and petroleum
20 usage reductions from such technology.

21 “(B) MODIFICATION.—The Administrator
22 shall modify such certification protocols for
23 such plug-in hybrid electric drive vehicles and
24 electric transportation technologies to realize
25 the full potential of the benefits of such vehicles

1 and technologies, in terms of reduction of emis-
2 sions of criteria pollutants, reduction of energy
3 use, and reduction of petroleum use. In modi-
4 fying such certification protocols, the Adminis-
5 trator shall consider—

6 “(i) the entire vehicle propulsion sys-
7 tem, not just the engine;

8 “(ii) nightly off-board charging, as ap-
9 plicable; and

10 “(iii) different engine turn-on control
11 strategies.

12 “(7) PLUG-IN HYBRID ELECTRIC DRIVE VEHI-
13 CLE.—For purposes of this subsection, the term
14 ‘plug-in hybrid electric drive vehicle’ means a light-
15 duty, medium-duty, or heavy-duty on-road or
16 nonroad vehicle that is propelled by any combination
17 of—

18 “(A) an electric motor and on-board, re-
19 chargeable energy storage system capable of op-
20 erating the vehicle in intermittent or continuous
21 all-electric mode and that is rechargeable using
22 an off-board source of electricity; and

23 “(B) an internal combustion engine or
24 heat engine using any combustible fuel.”.

1 **SEC. 6. CITY CARS.**

2 Section 131 of the Energy Independence and Security
3 Act of 2007 (42 U.S.C. 17011), as amended by sections
4 4 and 5 of this Act, is further amended by adding at the
5 end the following new subsection:

6 “(h) CITY CARS.—

7 “(1) IN GENERAL.—Not later than 1 year after
8 the date of enactment of this subsection, the Sec-
9 retary of Transportation in consultation with the
10 Secretary, appropriate Federal agencies, and inter-
11 ested stakeholders in the public, private, and non-
12 profit sectors, shall study, and submit a report to
13 Congress on the benefits, including the petroleum
14 savings of, and barriers to, the widespread deploy-
15 ment of a potential new class of vehicles known as
16 City Cars with performance capability that exceeds
17 that of low speed vehicles but is less than that of
18 passenger vehicles, and that may be battery electric,
19 fuel cell electric, or plug-in hybrid electric drive vehi-
20 cles. Such study shall examine, and such report shall
21 recommend, appropriate safety requirements for
22 such vehicles based on patterns of usage. Such study
23 shall examine the benefits and issues associated with
24 limiting City Cars to a maximum speed of 35 mph,
25 45 mph, 55 mph, or any other maximum speed, and

1 such report shall make a recommendation regarding
2 the maximum speed of such City Cars.

3 “(2) AUTHORIZATION OF APPROPRIATIONS.—

4 There are authorized to be appropriated such sums
5 as may be necessary to carry out this subsection.”.

6 **SEC. 7. TRANSITION TO FUEL NEUTRAL EPA REGULATIONS.**

7 Section 131 of the Energy Independence and Security
8 Act of 2007 (42 U.S.C. 17011), as amended by sections
9 4, 5, and 6 of this Act, is further amended by adding at
10 the end the following new subsection:

11 “(i) TRANSITION TO FUEL AND TECHNOLOGY NEU-
12 TRAL REGULATIONS.—

13 “(1) FINDINGS.—The Congress finds the fol-
14 lowing:

15 “(A) In light of advances in automotive en-
16 gine technologies since the passage of the Clean
17 Air Act (42 U.S.C. 7401 et seq.), it is nec-
18 essary to modify the control of mobile source
19 emissions pursuant to such Act to establish fuel
20 and technology neutral mobile source emissions
21 control programs.

22 “(B) Replacement of current emissions
23 control requirements with a new fuel and tech-
24 nology neutral program that encourages use of
25 the most fuel efficient and environmentally be-

1 nign vehicles could include all vehicle tech-
2 nologies, including vehicles with spark-ignited
3 engines, compression-ignited engines, and other
4 engine types, dual fueled vehicles, flexible fuel
5 vehicles, fuel cell electric vehicles, battery elec-
6 tric vehicles, plug-in hybrid electric vehicles,
7 corded electric vehicle equipment, and other
8 electric propulsion technologies.

9 “(2) REPORTS.—

10 “(A) Not later than 1 year after the date
11 of enactment of this subsection, the Adminis-
12 trator shall submit a report to Congress de-
13 scribing all of the fuel definitions and tech-
14 nology definitions specific to vehicles in Federal
15 law and regulation and recommend how such
16 definitions may be changed to be fuel and tech-
17 nology neutral.

18 “(B) Not later than 18 months after the
19 date of enactment of this subsection, the Ad-
20 ministrators shall submit a report to Congress
21 describing how petroleum reductions, emissions
22 reductions, and reductions in full fuel cycle cri-
23 teria pollutants may be incorporated into the
24 fuel and technology neutral emissions reduction
25 program required under paragraph (3), includ-

1 ing any changes needed to existing law to
2 achieve the purposes of the Electric Transpor-
3 tation Advancement Act of 2009.

4 “(3) RULEMAKING.—Not later than 2 years
5 after the submission of the report required under
6 paragraph (2)(B), the Administrator shall adopt
7 final rules to implement a fuel and technology neu-
8 tral program to reduce tailpipe and evaporative
9 emissions of criteria pollutants from mobile sources.
10 Such program shall take effect not later than 10
11 years after the date of enactment of this subsection.

12 “(4) FUEL AND TECHNOLOGY NEUTRAL MO-
13 BILE SOURCE EMISSION CONTROL PROGRAM.—In
14 this subsection, the term ‘fuel and technology neu-
15 tral mobile source emissions control program’ means
16 a fuel and technology neutral program described
17 under paragraph (1)(B) that contains emissions con-
18 trols for criteria pollutants from mobile sources and
19 a credit-based compliance mechanism for manufac-
20 turers of mobile source technologies that is at least
21 as protective of public health as the previous appli-
22 cable emissions control program.

23 “(5) AUTHORIZATION OF APPROPRIATIONS.—
24 There are authorized to be appropriated such sums
25 as may be necessary to carry out this subsection.”.

1 **SEC. 8. RESEARCH AND DEVELOPMENT DIVERSIFICATION.**

2 Subsection (m) of section 641 of the Energy Inde-
3 pendance and Security Act of 2007 (42 U.S.C. 17231(m))
4 is amended by adding at the end the following new sen-
5 tence: “Of amounts made available to carry out the pro-
6 grams established under subsections (i), (j), and (k), not
7 more than 30 percent shall be awarded to the National
8 Laboratories.”.

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