

111<sup>TH</sup> CONGRESS  
1<sup>ST</sup> 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.

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## 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

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## 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 ministrator 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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