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(Original Signature of Member)

110TH CONGRESS
1ST SESSION

H. R.

To increase fuel economy standards for automobiles and for other purposes.

IN THE HOUSE OF REPRESENTATIVES

Mr. MARKEY introduced the following bill; which was referred to the
Committee on _____

A BILL

To increase fuel economy standards for automobiles 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 “Fuel Economy Reform
5 Act”.

6 **SEC. 2. FINDINGS.**

7 Congress makes the following findings:

1 (1) United States dependence on oil imports im-
2 poses tremendous burdens on America's economy,
3 foreign policy, and military.

4 (2) According to the Energy Information Ad-
5 ministration, 60 percent of the crude oil and petro-
6 leum products consumed in the United States be-
7 tween April 2005 and March 2006 (12,400,000 bar-
8 rels per day) was imported. At a cost of \$60 per
9 barrel of oil, Americans remit an average of
10 \$500,000 per minute to other countries for petro-
11 leum, money that could have been spent creating do-
12 mestic jobs and strengthening our Nation's economy.

13 (3) A significant percentage of these petroleum
14 imports originate in countries controlled by regimes
15 that are unstable or openly hostile to the interests
16 of the United States. Dependence on production
17 from these countries contributes to the volatility of
18 domestic and global markets and the "risk pre-
19 mium" paid by American consumers.

20 (4) The Energy Information Administration
21 projects that the total petroleum demand in the
22 United States will increase by 23 percent between
23 2006 and 2026, while domestic crude production is
24 expected to decrease by 11 percent, resulting in an
25 anticipated 28 percent increase in petroleum im-

1 ports. Absent significant action, our Nation will be-
2 come more vulnerable to oil price increases, more de-
3 pendent upon foreign oil, and less able to pursue our
4 national interests.

5 (5) It is technically feasible to achieve oil sav-
6 ings of more than 2,500,000 barrels of oil per day
7 by 2017 and 7,000,000 barrels of oil per day by
8 2026. This goal can be achieved by improving the
9 gasoline efficiency of vehicles, replacing oil with cel-
10 lulosic biofuels, and encouraging the use of public
11 transit and other alternative transportation options.

12 (6) Two-thirds of all domestic oil use occurs in
13 the transportation sector, which is 97 percent reliant
14 upon petroleum-based fuels. Passenger vehicles, in-
15 cluding light trucks under 10,000 pounds gross vehi-
16 cle weight, represent over 60 percent of the oil used
17 in the transportation sector.

18 (7) Corporate average fuel economy of all cars
19 and trucks improved by 70 percent between 1975
20 and 1987. Between 1987 and 2006, fuel economy
21 improvements have stagnated and are much worse
22 than the vehicle fuel economy in many developed
23 countries and some developing countries, including
24 China.

1 (8) Significant improvements in engine tech-
2 nology occurred between 1986 and 2006. These ad-
3 vances have been used to make vehicles larger and
4 more powerful, rather than to increase fuel economy.
5 Between 1985 and 2005, average vehicle horsepower
6 nearly doubled, average vehicle weight increased by
7 25 percent, and acceleration times for new vehicles
8 improved by 25 percent. During the same time pe-
9 riod, average vehicle fuel economy decreased by 2
10 percent.

11 (9) According to a 2002 fuel economy report by
12 the National Academies of Science, improvements in
13 automotive technology offer the opportunity to sig-
14 nificantly increase fuel economy while maintaining
15 vehicle size and performance and improving safety.
16 The fleet analyzed by the Academies would be able
17 to improve its fuel economy by 10-15 miles per gal-
18 lon within 10-15 years using technologies that were
19 commercially available in 2002.

20 (10) The 2002 fuel economy study clearly
21 states that fuel economy can be increased without
22 negatively impacting the safety of America's cars
23 and trucks. Some new technologies can increase both
24 safety and fuel economy (such as high strength ma-
25 terials, unibody design, lower bumpers). Design

1 changes related to fuel economy also present oppor-
2 tunities to reduce the incompatibility of tall, stiff,
3 heavy vehicles with the majority of vehicles on the
4 road.

5 (11) A 2004 report by David Greene of Oak
6 Ridge National Labs entitled, “The Effect of Fuel
7 Economy on Automobile Safety: A Reexamination”,
8 demonstrates that fuel economy is not linked with
9 increased fatalities. The report notes that, “higher
10 mpg is significantly correlated with fewer fatalities”.
11 In other words, a thorough analysis of data from
12 1966 to 2002 indicates that vehicle manufacturers
13 can simultaneously increase fuel economy and im-
14 prove vehicle safety.

15 (12) A 2002 study entitled, “An Analysis of
16 Traffic Deaths by Vehicle Type and Model”, by
17 Marc Ross and Tom Wenzel from the University of
18 Michigan, demonstrates that large vehicles do not
19 have lower fatality rates than smaller vehicles. Ross
20 and Wenzel analyzed Federal accident data between
21 1995 and 1999 and showed that the Honda Civic
22 and Volkswagen Jetta both had lower fatality rates
23 for the driver than the Ford Explorer, the Dodge
24 Ram, or the Toyota 4Runner. Even the largest vehi-
25 cles, such as the Chevrolet Tahoe and Suburban,

1 had fatality rates that were no better than the Jetta
2 or the Nissan Maxima. In other words, a well-de-
3 signed compact car can be safer than an sport-utility
4 vehicle or a pickup truck. Design, rather than
5 weight, is the key to vehicle safety.

6 (13) Significant change must occur to strength-
7 en the economic competitiveness of the domestic
8 auto industry. According to a recent study by the
9 University of Michigan, a sustained gasoline price of
10 \$2.86 per gallon would lead Detroit's Big 3 auto-
11 makers' profits to shrink by \$7,000,000,000 as they
12 absorb 75 percent of the lost vehicle sales. This
13 would put nearly 300,000 Americans out of work.

14 **SEC. 3. DEFINITION OF AUTOMOBILE.**

15 (a) IN GENERAL.—Section 32901(a)(3) of title 49,
16 United States Code, is amended by striking “rated at—
17 ” and all that follows through the period at the end and
18 inserting “rated at not more than 10,000 pounds gross
19 vehicle weight.”.

20 (b) FUEL ECONOMY INFORMATION.—Section
21 32908(a) of title 49, United States Code, is amended, by
22 striking “section—” and all that follows through “(2)”
23 and inserting “section, the term”.

1 (c) EFFECTIVE DATE.—The amendments made by
2 this section shall apply to model year 2009 and each sub-
3 sequent model year.

4 **SEC. 4. AVERAGE FUEL ECONOMY STANDARDS.**

5 (a) STANDARDS.—Section 32902 of title 49, United
6 States Code, is amended—

7 (1) in subsection (a)—

8 (A) in the header, by inserting “MANUFAC-
9 TURED BEFORE MODEL YEAR 2012” after
10 “NON-PASSENGER AUTOMOBILES”; and

11 (B) by adding at the end the following:
12 “This subsection shall not apply to automobiles
13 manufactured after model year 2011.”;

14 (2) in subsection (b)—

15 (A) in the header, by inserting “MANUFAC-
16 TURED BEFORE MODEL YEAR 2012” after
17 “PASSENGER AUTOMOBILES”;

18 (B) by inserting “and before model year
19 2009” after “1984”; and

20 (C) by adding at the end the following:
21 “Such standard shall be increased by 4 percent
22 per year for model years 2009 through 2011
23 (rounded to the nearest 1/10 mile per gallon)”;

24 (3) by amending subsection (c) to read as fol-
25 lows:

1 “(c) AUTOMOBILES MANUFACTURED AFTER MODEL
2 YEAR 2011.—(1) Not later than 18 months before the be-
3 ginning of each model year after model year 2011, the
4 Secretary of Transportation shall prescribe, by regula-
5 tion—

6 “(A) an average fuel economy standard for
7 automobiles manufactured by a manufacturer in
8 that model year that is the same for each manufac-
9 turer; or

10 “(B) based on 1 or more vehicle attributes that
11 relate to fuel economy—

12 “(i) separate standards for different class-
13 es of automobiles; or

14 “(ii) standards expressed in the form of a
15 mathematical function.

16 Any standards prescribed under subparagraph (B)
17 shall apply equally to all manufacturers.

18 “(2)(A) Except as provided under paragraph (3) and
19 subsection (d), standards under paragraph (1) shall at-
20 tain—

21 “(i) a projected level of average fuel economy of
22 at least 27.5 miles per gallon for automobiles manu-
23 factured by a manufacturer for model year 2012;
24 and

1 “(ii) a projected level of average fuel economy
2 of at least 35 miles per gallon for automobiles man-
3 ufactured by a manufacturer for model year 2018.

4 “(B)(i) The projected level of average fuel economy
5 for automobiles manufactured by a manufacturer for
6 model year 2013 and each succeeding model year shall be
7 increased by not less than 4 percent from the level for
8 the prior model year (rounded to the nearest 1/10 mile
9 per gallon).

10 “(ii)(I) Notwithstanding clause (i), the Secretary of
11 Transportation may increase the projected level of average
12 fuel economy for automobiles manufactured by a manufac-
13 turer by less than 4 percent from the level for the prior
14 model year for 1 or more model years if the Secretary of
15 Transportation, in consultation with the Secretary of En-
16 ergy, determines that—

17 “(aa) the minimum increase required under
18 clause (i) for each model year—

19 “(AA) is technologically unachievable; or

20 “(BB) is shown, by clear and convincing
21 evidence, not to be cost effective (as determined
22 under paragraph (4)); and

23 “(bb) an increase of less than the minimum in-
24 crease required under clause (i) for a model year will
25 not result in a failure to attain the projected levels

1 of average fuel economy required under subpara-
2 graph (A).

3 “(II) If a lower increase is prescribed for a model
4 year under subclause (I), such increase shall be the max-
5 imum increase that—

6 “(aa) is technologically achievable; and

7 “(bb) is cost effective.

8 “(C) Notwithstanding subparagraphs (A) and (B),
9 the fleetwide average fuel economy standard for auto-
10 mobiles manufactured by a manufacturer in a model year
11 for that manufacturer’s domestic fleet and for its foreign
12 fleet as calculated under section 32904 as in effect before
13 the date of enactment of the Fuel Economy Reform Act
14 shall not be less than 92 percent of the average fuel econ-
15 omy projected by the Secretary for the combined domestic
16 and foreign fleets manufactured by that manufacturer in
17 that model year.

18 “(3)(A) In determining cost effectiveness under para-
19 graph (2)(B)(ii), the Secretary of Transportation shall
20 take into account the total value to the Nation of reduced
21 petroleum use, including the value of reducing external
22 costs of petroleum use, using—

23 “(i) a value for such external costs equal to 50
24 percent of the value of a gallon of gasoline saved; or

1 “(ii) the amount determined in an analysis of
2 the external costs of petroleum use that considers—
3 “(I) value to consumers;
4 “(II) economic security;
5 “(III) national security;
6 “(IV) foreign policy;
7 “(V) the impact of oil use—
8 “(aa) on sustained cartel rents paid to
9 foreign suppliers;
10 “(bb) on long-run potential gross do-
11 mestic product due to higher normal-mar-
12 ket oil price levels, including inflationary
13 impacts;
14 “(cc) on import costs, wealth trans-
15 fers, and potential gross domestic product
16 due to increased trade imbalances;
17 “(dd) on import costs and wealth
18 transfers during oil shocks;
19 “(ee) on macroeconomic dislocation
20 and adjustment costs during oil shocks;
21 “(ff) on the cost of existing energy se-
22 curity policies, including the management
23 of the Strategic Petroleum Reserve;
24 “(gg) on the timing and severity of
25 the oil peaking problem;

1 “(hh) on the risk, probability, size,
2 and duration of oil supply disruptions;

3 “(ii) on OPEC strategic behavior and
4 long-run oil pricing;

5 “(jj) on the short term elasticity of
6 energy demand and the magnitude of price
7 increases resulting from a supply shock;

8 “(kk) on oil imports, military costs,
9 and related security costs, including intel-
10 ligence, homeland security, sea lane secu-
11 rity and infrastructure, and other military
12 activities;

13 “(ll) on oil imports, diplomatic and
14 foreign policy flexibility, and connections to
15 geopolitical strife, terrorism, and inter-
16 national development activities;

17 “(mm) all relevant environmental haz-
18 ards under the jurisdiction of the Environ-
19 mental Protection Agency; and

20 “(nn) on well-to-wheels urban and
21 local air emissions of ‘pollutants’ and their
22 uninternalized costs;

23 “(VI) the impact of the oil or energy inten-
24 sity of the United States economy on the sensi-
25 tivity of the economy to oil price changes, in-

1 including the magnitude of gross domestic prod-
2 uct losses in response to short term price
3 shocks or long term price increases;

4 “(VII) the impact of United States pay-
5 ments for oil imports on political, economic, and
6 military developments in unstable or unfriendly
7 oil exporting countries;

8 “(VIII) the uninternalized costs of pipeline
9 and storage oil seepage, and for risk of oil spills
10 from production, handling, and transport, and
11 related landscape damage; and

12 “(IX) additional relevant factors, as deter-
13 mined by the Secretary.

14 “(B) When considering the value to consumers of a
15 gallon of gasoline saved, the Secretary of Transportation
16 may not use a value less than the greatest of—

17 “(i) the average national cost of a gallon of gas-
18 oline sold in the United States during the 12-month
19 period ending on the date on which the new fuel
20 economy standard is proposed;

21 “(ii) the most recent weekly estimate by the
22 Energy Information Administration of the Depart-
23 ment of Energy of the average national cost of a
24 gallon of gasoline (all grades) sold in the United
25 States; or

1 “(iii) the gasoline prices projected by the En-
2 ergy Information Administration for the 20-year pe-
3 riod beginning in the year following the year in
4 which the standards are established.

5 “(4) In prescribing standards under this subsection,
6 the Secretary may prescribe standards for 1 or more
7 model years.

8 “(5)(A) Not later than December 31, 2009, the Sec-
9 retary of Transportation, the Secretary of Energy, and the
10 Administrator of the Environmental Protection Agency
11 shall submit a joint report to Congress on the state of
12 global automotive efficiency technology development, and
13 on the accuracy of tests used to measure fuel economy
14 of automobiles under section 32904(c), utilizing the study
15 and assessment of the National Academy of Sciences re-
16 ferred to in subparagraph (B).

17 “(B) The Secretary shall enter into appropriate ar-
18 rangements with the National Academy of Sciences to con-
19 duct a comprehensive study of the technological opportuni-
20 ties to enhance fuel economy and an analysis and assess-
21 ment of the accuracy of fuel economy tests used by the
22 Administrator of the Environmental Protection Agency to
23 measure fuel economy for each model under section
24 32904(c). Such analysis and assessment shall identify any
25 additional factors or methods that should be included in

1 tests to measure fuel economy for each model to more ac-
2 curately reflect actual fuel economy of automobiles. The
3 Secretary and the Administrator of the Environmental
4 Protection Agency shall furnish, at the request of the
5 Academy, any information which the Academy determines
6 to be necessary to conduct the study, analysis, and assess-
7 ment under this subparagraph.

8 “(C) The report submitted under subparagraph (A)
9 shall include—

10 “(i) the study of the National Academy of
11 Sciences referred to in subparagraph (B); and

12 “(ii) an assessment by the Secretary of techno-
13 logical opportunities to enhance fuel economy and
14 opportunities to increase overall fleet safety.

15 “(D) The report submitted under subparagraph (A)
16 shall identify and examine additional opportunities to re-
17 form the regulatory structure under this chapter, includ-
18 ing approaches that seek to merge vehicle and fuel require-
19 ments into a single system that achieves equal or greater
20 reduction in petroleum use and environmental benefits.

21 “(E) The report submitted under subparagraph (A)
22 shall—

23 “(i) include conclusions reached by the Admin-
24 istrator of the Environmental Protection Agency, as

1 a result of detailed analysis and public comment, on
2 the accuracy of current fuel economy tests;

3 “(ii) identify any additional factors that the Ad-
4 ministrator determines should be included in tests to
5 measure fuel economy for each model to more accu-
6 rately reflect actual fuel economy of automobiles;
7 and

8 “(iii) include a description of options, formu-
9 lated by the Secretary and the Administrator, to in-
10 corporate such additional factors in fuel economy
11 tests in a manner that will not effectively increase
12 or decrease average fuel economy for any automobile
13 manufacturer.

14 “(F) There is authorized to be appropriated to the
15 Secretary such amounts as are required to carry out the
16 study, analysis, and assessment required by subparagraph
17 (B).”; and

18 (4) in subsection (g)(2), by striking “(and sub-
19 mit the amendment to Congress when required
20 under subsection (c)(2) of this section)”.

21 (b) CONFORMING AMENDMENTS.—

22 (1) IN GENERAL.—Chapter 329 of title 49,
23 United States Code, is amended—

24 (A) in section 32903—

1 (i) by striking “passenger” each place
2 it appears;

3 (ii) by striking “section 32902(b)–(d)
4 of this title” each place it appears and in-
5 serting “subsection (e) or (d) of section
6 32902”;

7 (iii) by striking subsection (e); and

8 (iv) by redesignating subsection (f) as
9 subsection (e); and
10 (B) in section 32904(a)—

11 (i) by striking “passenger” each place
12 it appears; and

13 (ii) in paragraph (1), by striking
14 “subject to” and all that follows through
15 “section 32902(b)–(d) of this title” and in-
16 serting “subsection (e) or (d) of section
17 32902”.

18 (2) EFFECTIVE DATE.—The amendments made
19 by paragraph (1) shall apply to automobiles manu-
20 factured after model year 2011.

21 **SEC. 5. AUTOMOBILE SAFETY.**

22 Nothing in this Act shall be construed to limit, con-
23 strain, supercede, or expand the authority of the Secretary
24 of Transportation to prescribe motor vehicle safety stand-
25 ards to reduce traffic accidents and deaths and injuries

1 resulting from traffic accidents conferred by chapter 301
2 of title 49, United States Code.