

**APPENDIX**

**ALTERNATIVE MOTOR FUELS ACT OF 1988**

Public Law 100-494  
100th Congress

An Act

To amend the Motor Vehicle Information and Cost Savings Act to provide for the appropriate treatment of methanol and ethanol, and for other purposes.

Oct. 14, 1988  
[S. 1518]

*Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled,*

SECTION 1. SHORT TITLE.

This Act may be cited as the "Alternative Motor Fuels Act of 1988".

SEC. 2. FINDINGS.

The Congress finds and declares that—

(1) the achievement of long-term energy security for the United States is essential to the health of the national economy, the well-being of our citizens, and the maintenance of national security;

(2) the displacement of energy derived from imported oil with alternative fuels will help to achieve energy security and improve air quality;

(3) transportation uses account for more than 60 percent of the oil consumption of the Nation;

(4) the Nation's security, economic, and environmental interests require that the Federal Government should assist clean-burning, nonpetroleum transportation fuels to reach a threshold level of commercial application and consumer acceptability at which they can successfully compete with petroleum-based fuels;

(5) methanol, ethanol, and natural gas are proven transportation fuels that burn more cleanly and efficiently than gasoline and diesel fuel;

(6) the production and use as transportation fuels of ethanol, methanol made from natural gas or biomass, and compressed natural gas have been estimated in some studies to release less carbon dioxide than comparable quantities of petroleum-based fuel;

(7) the amount of carbon dioxide released with methanol from a coal-to-methanol industry using currently available technologies has been estimated in some studies to be significantly greater than the amount released with a comparable quantity of petroleum-based fuel;

(8) there exists evidence that manmade pollution—the release of carbon dioxide, chlorofluorocarbons, methane, and other trace gases into the atmosphere—may be producing a long term and substantial increase in the average temperature on Earth, a phenomenon known as global warming through the greenhouse effect; and

Alternative  
Motor Fuels Act  
of 1988.  
Chemicals.  
Energy.  
42 USC 6201  
note.  
42 USC 6374  
note.

(9) ongoing pollution and deforestation may be contributing now to an irreversible process producing unacceptable global climate changes; necessary actions must be identified and implemented in time to protect the climate, including the development of technologies to control increased carbon dioxide emissions that result with methanol from a coal-to-methanol industry.

42 USC 6374  
note.

**SEC. 3. PURPOSE.**

The purpose of this Act is to encourage—

- (1) the development and widespread use of methanol, ethanol, and natural gas as transportation fuels by consumers; and
- (2) the production of methanol, ethanol, and natural gas powered motor vehicles.

**SEC. 4. AMENDMENT OF ENERGY POLICY AND CONSERVATION ACT.**

(a) AMENDMENT.—Title III of the Energy Policy and Conservation Act is amended by adding at the end the following new part:

**“PART J—ENCOURAGING THE USE OF  
ALTERNATIVE FUELS**

42 USC 6374.

**“SEC. 400AA. ALTERNATIVE FUEL USE BY LIGHT DUTY FEDERAL VEHICLES.**

“(a) DEPARTMENT OF ENERGY PROGRAM.—(1) Beginning in the fiscal year ending September 30, 1990, the Secretary shall ensure, with the cooperation of other appropriate agencies and consistent with other Federal law, that the maximum number practicable of the passenger automobiles and light duty trucks acquired annually for use by the Federal Government shall be alcohol powered vehicles, dual energy vehicles, natural gas powered vehicles, or natural gas dual energy vehicles.

“(2) In any determination of whether the acquisition of a vehicle is practicable under paragraph (1), the initial cost of such vehicle to the United States shall not be considered as a factor unless the initial cost of such vehicle exceeds the initial cost of a comparable gasoline or diesel fueled vehicle by at least 5 percent.

“(3) The Secretary shall, to the extent practicable and consistent with this part, ensure that the number of dual energy vehicles acquired under this subsection is at least as great as the number of alcohol powered vehicles acquired under this subsection, and that the number of natural gas dual energy vehicles acquired under this subsection is at least as great as the number of natural gas powered vehicles acquired under this subsection. To the extent practicable, both vehicles capable of operating on alcohol and vehicles capable of operating on natural gas shall be acquired in carrying out this subsection, and such vehicles shall be supplied by original equipment manufacturers.

“(b) STUDIES.—(1)(A) The Secretary, in cooperation with the Environmental Protection Agency and the National Highway Traffic Safety Administration, shall conduct a study of the vehicles acquired under subsection (a), which shall at a minimum address—

“(i) the performance of such vehicles, including performance in cold weather and at high altitude;

“(ii) the fuel economy, safety, and emissions of such vehicles;  
and

“(iii) a comparison of the operation and maintenance costs of such vehicles to the operation and maintenance costs of other passenger automobiles and light duty trucks.

“(B) The Secretary shall provide a report on the results of the study conducted under subparagraph (A) to the Committees on Commerce, Science, and Transportation and Governmental Affairs of the Senate, and the Committee on Energy and Commerce of the House of Representatives, within one year after the first such vehicles are acquired, and annually thereafter. Reports.

“(2)(A) The Secretary and the Administrator of the General Services Administration shall conduct a study of the advisability, feasibility, and timing of the disposal of vehicles acquired under subsection (a) and any problems of such disposal. Such study shall take into account existing laws governing the sale of Government vehicles and shall specifically focus on when to sell such vehicles and what price to charge, without compromising studies of the use of such vehicles authorized under this part.

“(B) The Secretary and the Administrator of the General Services Administration shall report the results of the study conducted under subparagraph (A) to the Committees on Commerce, Science, and Transportation and Governmental Affairs of the Senate, and the Committee on Energy and Commerce of the House of Representatives, within 12 months after funds are appropriated for carrying out this section. Reports.

“(c) AVAILABILITY TO THE PUBLIC.—To the extent practicable, at locations where vehicles acquired under subsection (a) are supplied with alcohol or natural gas, alcohol or natural gas shall be offered for sale to the public. The head of the Federal agency responsible for such a location shall consider whether such sale is practicable, taking into account, among other factors—

“(1) whether alcohol or natural gas is commercially available for vehicles in the vicinity of such location;

“(2) security and safety considerations;

“(3) whether such sale is in accordance with applicable local, State, and Federal law;

“(4) the ease with which the public can access such location; and

“(5) the cost to the United States of such sale.

“(d) FEDERAL AGENCY USE OF DEMONSTRATION VEHICLES.—(1) Upon the request of the head of any agency of the Federal Government, the Secretary shall ensure that such Federal agency be provided with vehicles acquired under subsection (a) to the maximum extent practicable.

“(2)(A) Funds appropriated under this section for the acquisition of vehicles under subsection (a) shall be applicable only to the portion of the cost of vehicles acquired under subsection (a) which exceeds the cost of comparable gasoline or diesel fueled vehicles.

“(B) The Secretary shall ensure that the cost to any Federal agency receiving a vehicle under paragraph (1) shall not exceed the cost to such agency of a comparable gasoline or diesel fueled vehicle.

“(3) Only one-half of the vehicles acquired under this section by an agency of the Federal Government shall be counted against any limitation under law, Executive order, or executive or agency policy on the number of vehicles which may be acquired by such agency.

“(4) Any Federal agency receiving a vehicle under paragraph (1) shall cooperate with studies undertaken by the Secretary under subsection (b). Safety.

“(e) **DETAIL OF PERSONNEL.**—Upon the request of the Secretary, the head of any Federal agency may detail, on a reimbursable basis, any of the personnel of such agency to the Department of Energy to assist the Secretary in carrying out the Secretary’s duties under this section.

“(f) **EXEMPTIONS.**—(1) Vehicles acquired under this section shall not be counted in any calculation of the average fuel economy of the fleet of passenger automobiles acquired in a fiscal year by the United States.

“(2) The incremental cost of vehicles acquired under this section over the cost of comparable gasoline or diesel fueled vehicles shall not be applied to any calculation with respect to a limitation under law on the maximum cost of individual vehicles which may be acquired by the United States.

“(g) **DEFINITIONS.**—For purposes of this part—

“(1) the term ‘acquired’ means leased for a period of sixty continuous days or more, or purchased;

“(2) the term ‘alcohol’ means a mixture containing 85 percent or more by volume methanol, ethanol, or other alcohols, in any combination;

“(3) the term ‘alcohol powered vehicle’ means a vehicle designed to operate exclusively on alcohol;

“(4) the term ‘dual energy vehicle’ means a vehicle which is capable of operating on alcohol and on gasoline or diesel fuel;

“(5) the term ‘natural gas dual energy vehicle’ means a vehicle which is capable of operating on natural gas and on gasoline or diesel fuel; and

“(6) the term ‘natural gas powered vehicle’ means a vehicle designed to operate exclusively on natural gas.

“(i) **FUNDING.**—(1) For the purposes of this section, there are authorized to be appropriated for the fiscal year ending September 30, 1990, \$5,000,000, for the fiscal year ending September 30, 1991, \$3,000,000, for the fiscal year ending September 30, 1992, \$2,000,000, and for the fiscal year ending September 30, 1993, \$2,000,000.

“(2) The authority of the Secretary to obligate amounts to be expended under this section shall be effective for any fiscal year only to such extent or in such amounts as are provided in advance by appropriation Acts.

42 USC 6374a.

“**SEC. 400BB. ALTERNATIVE FUELS TRUCK COMMERCIAL APPLICATION PROGRAM.**

“(a) **ESTABLISHMENT.**—The Secretary, in cooperation with manufacturers of heavy duty engines and with other Federal agencies, shall establish a commercial application program to study the use of alcohol and natural gas in heavy duty trucks and, if appropriate, other heavy duty applications.

“(b) **FUNDING.**—(1) There are authorized to be appropriated for the period encompassing the fiscal years ending September 30, 1990, September 30, 1991, and September 30, 1992, a total of \$2,000,000 for alcohol powered vehicles and dual energy vehicles, and a total of \$2,000,000 for natural gas powered vehicles and natural gas dual energy vehicles, to carry out the purposes of this section.

“(2) The authority of the Secretary to obligate amounts to be expended under this section shall be effective for any fiscal year only to such extent or in such amounts as are provided in advance by appropriation Acts.

**"SEC. 400CC. ALTERNATIVE FUELS BUS PROGRAM**

42 USC 6374b.

**"(a) TESTING.**—The Secretary, in cooperation with the Administrator of the Environmental Protection Agency and the Administrator of the National Highway Traffic Safety Administration, shall, beginning in the fiscal year ending September 30, 1990, assist State and local government agencies in the testing in urban settings of buses capable of operating on alcohol and buses capable of operating on natural gas for the emissions levels, durability, safety, and fuel economy of such buses, comparing the different types with each other and with diesel powered buses, as such buses will be required to operate under Federal safety and environmental standards applicable to such buses for the model year 1991. To the extent practicable, testing assisted under this section shall apply to both buses capable of operating on alcohol and buses capable of operating on natural gas.

State and local  
governments.  
Safety.  
Urban areas.

**"(b) FUNDING.**—There are authorized to be appropriated for the period encompassing the fiscal years ending September 30, 1990, September 30, 1991, and September 30, 1992, a total of \$2,000,000 to carry out the purposes of this section.

**"(c) DEFINITION.**—For purposes of this section, the term 'bus' means a vehicle which is designed to transport 30 individuals or more.

**"SEC. 400DD. INTERAGENCY COMMISSION ON ALTERNATIVE MOTOR FUELS.**

42 USC 6374c.

**"(a) ESTABLISHMENT.**—There is established a Commission to be known as the Interagency Commission on Alternative Motor Fuels.

**"(b) MEMBERSHIP.**—The Commission shall be composed of members as follows:

**"(1)** the Secretary of Energy, or the designee of the Secretary, who shall be the chairperson of the Commission;

**"(2)** the Secretary of Defense or the designee of such Secretary;

**"(3)** the Administrator of the Environmental Protection Agency or the designee of such Administrator;

**"(4)** the Secretary of Transportation or the designee of such Secretary;

**"(5)** the Postmaster General or the designee of the Postmaster General;

**"(6)** the Administrator of the General Services Administration or the designee of such Administrator;

**"(7)** the Administrator of the Occupational Safety and Health Administration or the designee of such Administrator; and

**"(8)** such other officers and employees of the Federal Government as may be appointed to the Commission by the President.

**"(c) OPERATIONS.**—(1) The Commission shall meet regularly as necessary to carry out the purposes of this section. Meetings shall be at the call of the chairperson of the Commission. The Commission shall meet to consider any report of the Commission before such report is submitted to the Congress.

Reports.

**"(2)** The Secretary shall provide the Commission with such staff and office facilities as the Secretary, following consultation with the Commission, considers necessary to permit the Commission to carry out its functions under this section.

**"(3)** Subject to applicable law, all expenses of the Commission shall be paid from funds available to the Secretary, except that

salaries of Commission members shall be paid by their home agencies.

**“(d) FUNCTIONS.—**(1) The Commission shall coordinate Federal agency efforts to develop and implement a national alternative motor fuels policy.

**“(2)** The Commission shall ensure the development of a long-term plan for the commercialization of alcohols, natural gas, and other potential alternative motor fuels.

**“(3)** The Commission shall ensure communication among representatives of all Federal agencies that are involved in alternative motor fuels projects or that have an interest in such projects.

**“(4)** The Commission shall provide for the exchange of information among persons working with, or interested in working with, the commercialization of alternative motor fuels.

**“(e) UNITED STATES ALTERNATIVE FUELS COUNCIL.—**(1) The chairperson of the Commission shall, consistent with the Federal Advisory Committee Act, establish a United States Alternative Fuels Council to report to the Commission about matters related to alternative motor fuels.

**“(2)** The Council shall be composed of members as follows:

**“(A)** one Member of the House of Representatives appointed by the Speaker of the House of Representatives;

**“(B)** one Member of the House of Representatives appointed by the Minority Leader of the House of Representatives;

**“(C)** one Member of the Senate appointed by the Majority Leader of the Senate;

**“(D)** one Member of the Senate appointed by the Minority Leader of the Senate; and

**“(E)** 16 persons from the private sector or from State or local government who are knowledgeable about alternative motor fuels and their possible uses and the production of alternative motor fuels and vehicles powered by such fuels, to be appointed by the chairperson of the Commission.

**“(3)** The Council shall meet at the call of the chairperson of the Commission.

**“(f) DETAIL OF FEDERAL PERSONNEL.—**Upon request of the Commission, the head of any Federal agency may detail, on a reimbursable basis, any of the personnel of such agency to the Commission to assist the Commission in carrying out its duties under this section.

**“(g) REPORTS.—**(1) The Commission shall, not later than September 30 of each of the years 1990 and 1991, submit an interim report to the Committees on Commerce, Science, and Transportation and Governmental Affairs of the Senate, and the Committee on Energy and Commerce of the House of Representatives, setting forth the actions taken by the Commission under this section.

**“(2)** The Commission shall, not later than September 30, 1992, submit a final report to the Committees on Commerce, Science, and Transportation and Governmental Affairs of the Senate, and the Committee on Energy and Commerce of the House of Representatives, setting forth the actions taken by the Commission under this section.

**“(h) TERMINATION.—**The Commission and the Council shall terminate upon submission of the final report of the Commission under subsection (g)(2).

**“(i) DEFINITIONS.—**For purposes of this section—

“(1) the term ‘Commission’ means the Interagency Commission on Alternative Motor Fuels established in subsection (a); and

“(2) the term ‘Council’ means the United States Alternative Fuels Council established under subsection (e)(1).

“SEC. 400EE. STUDIES AND REPORTS.

42 USC 6374d.

“(a) METHANOL STUDY.—(1) The Secretary shall study methanol plants, including the costs and practicability of such plants, that are—

“(A) capable of utilizing current domestic supplies of unutilized natural gas;

“(B) relocatable; or

“(C) suitable for natural gas to methanol conversion by natural gas distribution companies.

“(2) For purposes of this subsection, the term ‘unutilized natural gas’ means gas that is available in small remote fields and cannot be economically transported to natural gas pipelines, or gas the quality of which is so poor that extensive and uneconomic pretreatment is required prior to its introduction into the natural gas distribution system.

“(3) The Secretary shall submit a report under this subsection to the Committees on Commerce, Science, and Transportation and Governmental Affairs of the Senate, and the Committee on Energy and Commerce of the House of Representatives, no later than September 30, 1990.

“(b) INDEPENDENT ENVIRONMENTAL STUDY.—(1) The Administrator of the Environmental Protection Agency shall submit to the Committees on Commerce, Science, and Transportation and Governmental Affairs of the Senate, and the Committee on Energy and Commerce of the House of Representatives, in December of 1990, and once every two years thereafter, a report which includes—

“(A) a comprehensive analysis of the air quality, global climate change, and other positive and negative environmental impacts, if any, including fuel displacement effects, associated with the production, storage, distribution, and use of all alternative motor vehicle fuels under the Alternative Motor Fuels Act of 1988, as compared to gasoline and diesel fuels; and

“(B) an extended reasonable forecast of the change, if any, in air quality, global climate change, and other environmental effects of producing, storing, distributing, and using alternative motor vehicle fuels, utilizing such reasonable energy security, policy, economic, and other scenarios as may be appropriate.

“(2) In carrying out the study under this subsection, the Administrator of the Environmental Protection Agency shall consult with the Secretaries of Energy and Transportation. Nothing in this paragraph shall be construed to require such Administrator to obtain the approval of the Secretary of Energy or the Secretary of Transportation for any actions taken under this subsection.

“(3) There are authorized to be appropriated to carry out the purposes of this subsection \$500,000.

Appropriation authorization.

“(c) PUBLIC PARTICIPATION.—Adequate opportunity shall be provided for public comment on the reports required by this section before they are submitted to the Congress, and a summary of such comments shall be attached to such reports.”.

42 USC 6374  
note.

(b) **CESSATION OF EFFECT.**—This section, and the amendments made by this section, shall cease to be effective after September 30, 1997.

42 USC 6374  
note.

**SEC. 5. USE OF NONSTANDARD FUELS.**

No guaranty or warranty with respect to any passenger automobile or light-duty truck acquired by the United States after October 1, 1989, shall be voided or reduced in effect by reason of the operation of such vehicle with any fuel for which a currently effective waiver, which includes a limitation regarding Reid vapor pressure with respect to such fuel, has been issued by the Administrator of the Environmental Protection Agency under section 211(f) of the Clean Air Act (42 U.S.C. 7545(f)).

**SEC. 6. AMENDMENT OF THE MOTOR VEHICLE INFORMATION AND COST SAVINGS ACT.**

(a) **FUEL ECONOMY OF ALTERNATIVE FUEL AUTOMOBILES.**—Title V of the Motor Vehicle Information and Cost Savings Act (15 U.S.C. 2001 et seq.) is amended by adding at the end the following new section:

**“MANUFACTURING INCENTIVES FOR AUTOMOBILES**

15 USC 2013.

**“SEC. 513. (a) ALCOHOL POWERED AUTOMOBILE.**—If a manufacturer manufactures any model type of alcohol powered automobile, the fuel economy measured for that model type shall be based on the fuel content of the alcohol used to operate such automobile. For purposes of this section, a gallon of alcohol used to operate such automobile shall be considered to contain 15 one-hundredths of a gallon of fuel.

**“(b) DUAL ENERGY AUTOMOBILE.**—If a manufacturer manufactures any model type of dual energy automobile, the fuel economy measured for that model type shall be measured by the EPA Administrator by dividing 1.0 by the sum of—

“(1) 0.5 divided by the fuel economy as measured under section 503(d) while operating such model type on gasoline or diesel fuel; and

“(2) 0.5 divided by the fuel economy as measured under subsection (a) of this section while operating such model type on alcohol.

**“(c) NATURAL GAS POWERED AUTOMOBILE.**—If a manufacturer manufactures any model type of natural gas powered automobile, the fuel economy measured for that model type shall be based on the fuel content of the natural gas used to operate such automobile. For purposes of this section, 100 cubic feet of natural gas shall be considered to contain 0.823 gallons equivalent of natural gas, and a gallon equivalent of natural gas shall be considered to have a fuel content of 15 one-hundredths of a gallon of fuel.

**“(d) NATURAL GAS DUAL ENERGY AUTOMOBILE.**—If a manufacturer manufactures any model type of natural gas dual energy automobile, the fuel economy measured for that model type shall be measured by the EPA Administrator by dividing 1.0 by the sum of—

“(1) 0.5 divided by the fuel economy as measured under section 503(d) while operating such model type on gasoline or diesel fuel; and

“(2) 0.5 divided by the fuel economy as measured under subsection (c) of this section while operating such model type on natural gas.

“(e) **FUEL ECONOMY CALCULATION.**—The EPA Administrator shall calculate, subject to the provisions of this section, the manufacturer’s average fuel economy under section 503(a) (1) and (2) by including as the denominator of the term for each model type of alcohol powered automobile, dual energy automobile, natural gas powered automobile, or natural gas dual energy automobile, the fuel economy measured pursuant to subsections (a) through (d) of this section.

“(f) **APPLICABILITY.**—

“(1) Except as otherwise provided in this subsection, subsections (b) and (d) shall apply only to automobiles manufactured in model year 1993 through model year 2004. Subsections (a) and (c) shall apply only to automobiles manufactured after model year 1992.

“(2)(A) Not later than September 30, 2000, the Secretary, in consultation with the Secretary of Energy and the EPA Administrator, shall complete and submit to the Committees on Commerce, Science, and Transportation and Governmental Affairs of the Senate, and the Committee on Energy and Commerce of the House of Representatives, a report containing the results of a study of the success of the policy contained in subsections (b) and (d), along with preliminary conclusions as to whether the application of such subsections should be extended for up to four additional model years. Such study and conclusions shall be prepared taking into consideration—

Reports.

“(i) the availability to the public of alcohol powered automobiles, natural gas powered automobiles, and alternative fuels;

“(ii) energy conservation and security;

“(iii) environmental considerations; and

“(iv) other relevant factors.

“(B) The Secretary shall—

“(i) promulgate a rule to extend the applicability of subsections (b) and (d) for 4 or fewer consecutive model years immediately after model year 2004; or

“(ii) publish a notice explaining the reasons for not promulgating such rule. Such rule or notice shall be promulgated before January 1, 2002.

Any such promulgated rule shall explain the basis on which any such extension has been granted.

“(g) **MAXIMUM INCREASE.**—

“(1)(A) For each of the model years 1993 through 2004, for each category of automobiles the maximum increase in average fuel economy for a manufacturer attributable to dual energy automobiles and natural gas dual energy automobiles shall be 1.2 miles per gallon.

“(B) If the application of subsections (b) and (d) is extended under subsection (f)(2), for each category of automobiles the maximum increase in average fuel economy for a manufacturer for each of the model years 2005 through 2008 attributable to dual energy automobiles and natural gas dual energy automobiles shall be 0.9 miles per gallon.

“(C) For purposes of applying subparagraph (A) or (B), the EPA Administrator shall compute the increase in a manufacturer’s average fuel economy attributable to dual energy automobiles and natural gas dual energy automobiles by subtracting from the manufacturer’s average fuel economy calculated under subsection (e) the number equal to what the manufacturer’s

average fuel economy would be if it were calculated by the formula in section 503(a) (1) and (2) by including as the denominator for each model type of dual energy automobile or natural gas dual energy automobile the fuel economy when such automobiles are operated on gasoline or diesel fuel. If the increase attributable to dual energy automobiles and natural gas dual energy automobiles for any model year described in subparagraph (A) is more than 1.2 miles per gallon, the limitation in subparagraph (A) shall apply, and if the increase attributable to such automobiles for any model year described in subparagraph (B) is more than 0.9 miles per gallon, the limitation in subparagraph (B) shall apply.

“(2)(A) Notwithstanding any other provision of this section, if the Secretary reduces the average fuel economy standard applicable to passenger automobiles for any model year below 27.5 miles per gallon, any increase in average fuel economy for passenger automobiles of more than 0.7 miles per gallon to which a manufacturer of dual energy passenger automobiles or natural gas dual energy passenger automobiles would otherwise be entitled in that year under this section shall be reduced by an amount equal to the amount of such reduction in the standard, except that such increase shall not be reduced to less than 0.7 miles per gallon.

“(B) In carrying out section 502 (a)(4) and (f), the Secretary shall not consider the fuel economy of alcohol powered automobiles or natural gas powered automobiles, and the Secretary shall consider dual energy automobiles and natural gas dual energy automobiles to be operated exclusively on gasoline or diesel fuel.

“(h) DEFINITIONS.—(1) For purposes of this title—

“(A) the term ‘alcohol’ means a mixture containing 85 percent or more by volume methanol, ethanol, or other alcohols, in any combination;

“(B) the term ‘alcohol powered automobile’ means an automobile designed to operate exclusively on alcohol;

“(C) the term ‘dual energy automobile’ means an automobile—

“(i) which is capable of operating on alcohol and on gasoline or diesel fuel;

“(ii) which provides equal or superior energy efficiency, as calculated for the applicable model year during fuel economy testing for the Federal Government, while operating on alcohol as it does while operating on gasoline or diesel fuel;

“(iii) which, for model years 1993 through 1995, and, if the Administrator of the Environmental Protection Agency determines that an extension of this clause is warranted, for an additional period ending not later than the end of the last model year for which section 513 (b) and (d) applies, provides equal or superior energy efficiency, as calculated for the applicable model year during fuel economy testing for the Federal Government, while operating on a mixture of alcohol and gasoline or diesel fuel containing exactly 50 percent gasoline or diesel fuel as it does while operating on gasoline or diesel fuel; and

“(iv) which, in the case of passenger automobiles, meets or exceeds the minimum driving range established pursuant to paragraph (2);

“(D) the term ‘natural gas dual energy automobile’ means an automobile—

“(i) which is capable of operating on natural gas and on gasoline or diesel fuel;

“(ii) which provides equal or superior energy efficiency, as calculated for the applicable model year during fuel economy testing for the Federal Government, while operating on natural gas as it does while operating on gasoline or diesel fuel; and

“(iii) which, in the case of passenger automobiles, meets or exceeds the minimum driving range established pursuant to paragraph (2); and

“(E) the term ‘natural gas powered automobile’ means an automobile designed to operate exclusively on natural gas.

“(2)(A) For purposes of the definitions in paragraphs (1) (C) and (D), the Secretary shall, within 18 months after the date of enactment of this section, establish by rule of general applicability for all manufacturers a minimum driving range which must be met by dual energy automobiles when operating on alcohol, and by natural gas dual energy automobiles when operating on natural gas, if such automobiles are to be considered dual energy automobiles or natural gas dual energy automobiles under this section. Subject to the provisions of this paragraph, the rule may be amended from time to time. Any determination of whether dual energy automobiles or natural gas dual energy automobiles meet the minimum driving range requirement under this paragraph shall be based on the combined EPA city/highway fuel economy as determined for average fuel economy purposes for such automobiles. The rule issued under this subparagraph shall apply only to dual energy automobiles and natural gas dual energy automobiles that are passenger automobiles.

“(B)(i) The general rule established under subparagraph (A) shall allow the Secretary to determine that a specific model type or types may have a lower range than that established by the general rule, and shall allow a manufacturer to petition for a specific model type or types to have a lower range than that established by the general rule.

“(ii) If, with respect to dual energy automobiles, the Secretary establishes under subparagraph (A) 200 miles as the generally applicable minimum driving range under this paragraph, clause (i) shall not apply to dual energy automobiles.

“(C) Under no circumstances shall the general rule established under subparagraph (A) establish a minimum driving range of less than 200 miles for dual energy automobiles, nor shall the Secretary approve under the procedure referred to in subparagraph (B) a minimum driving range of less than 200 miles for dual energy automobiles.

“(D) In establishing the general rule under subparagraph (A), and in taking any action under the procedure referred to in subparagraph (B), the Secretary shall take into account the purposes of the Alternative Motor Fuels Act of 1988, consumer acceptability, economic practicability, technology, environmental impact, safety, driveability, performance, and any other factors the Secretary considers relevant.”

(b) **DEFINITION OF AUTOMOBILE.**—Section 501(1) of the Motor Vehicle Information and Cost Savings Act (15 U.S.C. 2001(1)) is amended by inserting “, or by alcohol or natural gas,” after “fuel” the first time it appears.

(c) **CONFORMING AMENDMENT.**—Section 502(e) of the Motor Vehicle Information and Cost Savings Act (15 U.S.C. 2002(e)) is amended by adding at the end the following: “For purposes of this subsection, the Secretary shall not consider the fuel economy of alcohol powered automobiles or natural gas powered automobiles, and the Secretary shall consider dual energy automobiles and natural gas dual energy automobiles to be operated exclusively on gasoline or diesel fuel.”.

15 USC 2512  
note.

#### SEC. 7. ELECTRIC VEHICLES.

(a) **STUDY.**—The Secretary of Transportation, in consultation with the Secretary of Energy, shall conduct a comprehensive study and investigation regarding whether regulations in effect on the date of enactment of this Act should be amended or additional regulations should be promulgated to stimulate the production and introduction of electric vehicles into commerce. The Secretary of Transportation, in consultation with the Administrator of the Environmental Protection Agency, shall include as part of the comprehensive study, information regarding the effect of electric vehicles on air quality. Such study shall also consider the feasibility and desirability of regulations to stimulate the production and introduction of solar powered vehicles into commerce. The Secretary of Transportation shall transmit the results of such study to the Committees on Commerce, Science, and Transportation and Governmental Affairs of the Senate, and the Committee on Energy and Commerce of the House of Representatives, not later than one year after the date of enactment of this Act.

(b) **REGULATIONS.**—If, as a result of the study conducted under subsection (a), the Secretary of Transportation, the Secretary of Energy, or the Administrator of the Environmental Protection Agency determines that regulations under their respective jurisdictions should be amended, or that additional regulations should be promulgated, such Secretary or Administrator shall, if so authorized, commence a rulemaking proceeding for such purpose.

#### SEC. 8. AUTOMOBILE LABELING.

(a) **AMENDMENTS.**—(1) Section 506(a) of the Motor Vehicle Information and Cost Savings Act (15 U.S.C. 2006(a)) is amended by adding at the end the following new paragraph:

“(4)(A) In the case of alcohol powered automobiles or natural gas powered automobiles, the fuel economy of such automobiles for purposes of paragraph (1)(A)(i) shall be the fuel economy for such automobiles when operated on alcohol or natural gas, as the case may be, measured under section 513 (a) or (c), multiplied by 0.15.

“(B) In the case of dual energy automobiles or natural gas dual energy automobiles, each label required under paragraph (1) shall—

“(i) indicate the fuel economy of such automobile when operated on gasoline or diesel fuel;

“(ii) clearly identify such automobile as a dual energy automobile or natural gas dual energy automobile, as the case may be;

“(iii) clearly identify the fuels on which such automobile may be operated; and

Public  
information.  
Consumer  
protection.

“(iv) contain a statement informing the consumer that the additional information required by subsection (b)(3) is published and distributed by the Department of Energy.”.

(2) Section 506(b) of such Act (15 U.S.C. 2006(b)) is amended by adding at the end the following new paragraph:

“(3)(A) In the case of dual energy automobiles and natural gas dual energy automobiles, additional information shall be contained in the booklet published under paragraph (1) indicating—

“(i) the energy efficiency and cost of operation of such automobiles when operated on gasoline or diesel fuel as compared to such automobiles when operated on alcohol or natural gas, as the case may be; and

“(ii) the driving range of such automobiles when operated on gasoline or diesel fuel as compared to such automobiles when operated on alcohol or natural gas, as the case may be.

“(B) In the case of dual energy automobiles, the booklet published under paragraph (1) shall also contain—

“(i) information regarding the miles per gallon achieved by such automobiles when operated on alcohol; and

“(ii) a statement of explanation of how the information made available pursuant to this paragraph can be expected to change when such automobile is operated on mixtures of alcohol and gasoline or diesel fuel.”.

(b) **EFFECTIVE DATE.**—The amendments made by subsection (a) shall not apply with respect to any model year, as such term is defined in section 501(12) of the Motor Vehicle Information and Cost Savings Act (15 U.S.C. 2001(12)), before model year 1993.

15 USC 2006  
note.

#### SEC. 9. STUDY ON RESIDENTIAL ENERGY PRICING.

The Secretary of Energy, in consultation with the Secretary of Transportation, shall study and report to the Committees on Commerce, Science, and Transportation and Governmental Affairs of the Senate, and the Committee on Energy and Commerce of the House of Representatives, not later than December 1, 1989, on whether calculating the average fuel economy of vehicles as provided in this Act and the amendments made by this Act is likely to result in a significant increase in the average price of home heating to residential consumers. Such report shall be updated and submitted to the Committees on Commerce, Science, and Transportation and Governmental Affairs of the Senate, and the Committee on Energy and Commerce of the House of Representatives, not later than December 1, 1994.

Reports.  
15 USC 2013  
note.

Approved October 14, 1988.

#### LEGISLATIVE HISTORY—S. 1518 (See H.R. 3399):

HOUSE REPORTS: No. 100-476 accompanying H.R. 3399 (Comm. on Energy and Commerce) and No. 100-929 (Comm. of Conference).

SENATE REPORTS: No. 100-271 (Comm. on Commerce, Science, and Transportation).

#### CONGRESSIONAL RECORD:

Vol. 133 (1987): Dec. 14, H.R. 3399 considered and passed House.

Vol. 134 (1988): Apr. 15, S. 1518 considered and passed Senate.

June 28, considered and passed House, amended.

Sept. 20, Senate agreed to conference report.

Sept. 23, House agreed to conference report.

WEEKLY COMPILATION OF PRESIDENTIAL DOCUMENTS, Vol. 24 (1988):

Oct. 14, Presidential remarks.

