

107TH CONGRESS  
1ST SESSION

# H. R. 2478

To establish a balanced energy program for the United States that unlocks the potential of renewable energy and energy efficiency, and for other purposes.

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## IN THE HOUSE OF REPRESENTATIVES

JULY 11, 2001

Ms. WOOLSEY (for herself, Mr. FILNER, Mr. SANDERS, Ms. MCKINNEY, Mr. HOEFFEL, Mr. THOMPSON of Mississippi, Mr. PAYNE, Mr. BAIRD, Mr. BACA, Mr. BALDACCI, Ms. RIVERS, Mr. BLUMENAUER, Mr. LANTOS, Mrs. MINK of Hawaii, Mr. WU, Mr. HONDA, and Mr. UDALL of Colorado) introduced the following bill; which was referred to the Committee on Ways and Means, and in addition to the Committees on Science, and Energy and Commerce, 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 establish a balanced energy program for the United States that unlocks the potential of renewable energy and energy efficiency, 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; TABLE OF CONTENTS.**

4 (a) SHORT TITLE.—This Act may be cited as the  
5 “Comprehensive Renewable Energy and Energy Efficiency  
6 Act of 2001”.

## 1 (b) TABLE OF CONTENTS.—

- Sec. 1. Short title; table of contents.
- Sec. 2. Findings.
- Sec. 3. National research and development policy.
- Sec. 4. Definitions.

## TITLE I—RESEARCH, DEVELOPMENT, AND DEMONSTRATION

- Sec. 101. Enhanced renewable energy research, development, and demonstration.
- Sec. 102. Enhanced energy efficiency research, development, and demonstration.
- Sec. 103. Biomass energy and related chemical research, development, and demonstration.
- Sec. 104. Assessment of renewable energy resources.
- Sec. 105. Enhanced aeronautical system energy efficiency research, development, and demonstration.
- Sec. 106. Progress report.
- Sec. 107. National Building Performance Initiative.

## TITLE II—COMMERCIAL APPLICATIONS

- Sec. 201. Study of financing for prototype technologies.
- Sec. 202. Regulatory reviews for new technologies and processes.
- Sec. 203. Commercialization assistance.
- Sec. 204. Education and outreach.
- Sec. 205. Proton exchange membrane demonstration programs.

## TITLE III—REGULATORY PROVISIONS

- Sec. 301. Public Benefits Trust Fund.
- Sec. 302. Net metering.
- Sec. 303. Renewable energy portfolio standards.
- Sec. 304. High performance schools.
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- Sec. 306. Vehicle fuel economy standards.
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- Sec. 309. Environmental disclosure to consumers.

## TITLE IV—FEDERAL GOVERNMENT PROGRAMS

- Sec. 401. Energy savings measures in Capitol.
- Sec. 402. Energy savings performance contracts.
- Sec. 403. Federal purchase requirement.
- Sec. 404. Federal buildings energy efficiency.
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- Sec. 406. Guaranteed energy savings.
- Sec. 407. President's Management Council.
- Sec. 408. Federal use of Energy Star standards.

## TITLE V—TAX PROVISIONS

- Sec. 500. Amendment of 1986 Code.

Subtitle A—Energy-Efficient Property Used in Business

- Sec. 501. Credit for certain energy-efficient property used in business.  
 Sec. 502. Energy-efficient commercial building property deduction.  
 Sec. 503. Business tax credit for the manufacture of energy efficient appliances.

Subtitle B—Residential Energy Systems

- Sec. 511. Credit for construction of new energy-efficient home.  
 Sec. 512. Credit for energy efficiency improvements to existing homes.  
 Sec. 513. Credit for residential solar, wind, and fuel cell energy property.  
 Sec. 514. Credit for purchase of energy star products.

Subtitle C—Electricity Facilities and Production

- Sec. 521. Incentive for distributed generation.  
 Sec. 522. Modifications to credit for electricity produced from renewable and waste products.  
 Sec. 523. Treatment of facilities using bagasse to produce energy as solid waste disposal facilities eligible for tax-exempt financing.  
 Sec. 524. Depreciation of property used in the transmission of electricity.  
 Sec. 525. Credit for investment in additional plant capacity for existing renewable resources facilities producing electricity.

Subtitle D—Hybrid Electric Vehicles

- Sec. 531. Alternative motor vehicle credit.  
 Sec. 532. Modification of credit for qualified electric vehicles.  
 Sec. 533. Credit for retail sale of alternative fuels as motor vehicle fuel.  
 Sec. 534. Extension of deduction for certain refueling property.  
 Sec. 535. Credit for installation of alternative fueling stations.

1 **SEC. 2. FINDINGS.**

2 The Congress finds that—

3 (1) there is a need for a robust renewable en-  
 4 ergy and energy efficiency research and development  
 5 program that provides a basis for the development,  
 6 demonstration, and deployment of new energy tech-  
 7 nologies in partnership with industry;

8 (2) Federal budget authority for renewable en-  
 9 ergy and energy efficiency research and development  
 10 has declined significantly since 1980; and

11 (3) the President's budget request for fiscal  
 12 year 2002 makes even greater reductions in these

1 programs, imperiling promising technologies that  
2 have the potential to reduce energy consumption and  
3 increase energy efficiency.

4 **SEC. 3. NATIONAL RESEARCH AND DEVELOPMENT POLICY.**

5 It shall be the policy of the United States that its  
6 research, development, demonstration, and commercial ap-  
7 plications programs be designed to enable 20 percent of  
8 the energy generated in the United States from stationary  
9 sources to be generated from nonhydropower renewable  
10 energy sources by the year 2020.

11 **SEC. 4. DEFINITIONS.**

12 For purposes of this Act, except as otherwise  
13 provided—

14 (1) the term “biomass” means any organic  
15 matter that is available on a renewable or recurring  
16 basis, including agricultural crops and trees, wood  
17 and wood wastes and residues, plants (including  
18 aquatic plants), grasses, residues, fibers, animal  
19 wastes, and municipal wastes; and

20 (2) the term “renewable energy source”  
21 means—

22 (A) wind;

23 (B) biomass;

24 (C) a geothermal source;

25 (D) a solar source;

1 (E) a photovoltaic source; or

2 (F) additional hydroelectric generation ca-  
3 pacity achieved from increased efficiency at an  
4 existing hydroelectric dam.

5 **TITLE I—RESEARCH, DEVELOP-**  
6 **MENT, AND DEMONSTRATION**

7 **SEC. 101. ENHANCED RENEWABLE ENERGY RESEARCH, DE-**  
8 **VELOPMENT, AND DEMONSTRATION.**

9 (a) GOALS.—In order to achieve the goal stated in  
10 section 3, the United States shall have a balanced energy  
11 research, development, and demonstration program to en-  
12 hance renewable energy with the following goals:

13 (1) For wind power, the program should reduce  
14 the cost of wind electricity by 50 percent by 2006,  
15 compared to the cost as of the date of the enactment  
16 of this Act, so that wind power can be widely com-  
17 petitive with fossil-fuel-based electricity in a restruc-  
18 tured electric industry, with concentration within the  
19 program on a variety of advanced wind turbine con-  
20 cepts and manufacturing technologies.

21 (2) For photovoltaics, the programs should pur-  
22 sue research, development, and demonstration that  
23 would lead to photovoltaic systems prices of \$3,000  
24 per kilowatt by January 1, 2003, and \$1,500 per  
25 kilowatt by January 1, 2006. Program activities

1 should include assisting industry in developing man-  
2 ufacturing technologies, giving greater attention to  
3 balance of system issues, and expanding funda-  
4 mental research on relevant advanced materials.

5 (3) For solar thermal electric systems the pro-  
6 gram should strengthen ongoing research, develop-  
7 ment, and demonstration combining high-efficiency  
8 and high-temperature receivers with advanced ther-  
9 mal storage and power cycles, with the goal of mak-  
10 ing solar-only power (including baseload solar power)  
11 widely competitive with fossil fuel power by 2015.

12 (4) For geothermal energy, the program should  
13 continue work on hydrothermal systems, and reac-  
14 tivate research, development, and demonstration on  
15 advanced concepts, giving top priority to high-grade  
16 hot dry-rock geothermal energy.

17 (5) For hydrogen-based energy systems, the  
18 program should support research, development, and  
19 demonstration on hydrogen-using and hydrogen-pro-  
20 ducing technologies. The program should also co-  
21 ordinate hydrogen-using technology development  
22 with proton exchange membrane fuel cell vehicle de-  
23 velopment activities under the enhanced energy effi-  
24 ciency program described in section 102.



1           (1) For energy efficiency in housing, the pro-  
2           gram should develop technologies, housing compo-  
3           nents, designs, and production methods that will, by  
4           2010—

5                   (A) reduce the time needed to move tech-  
6                   nologies to market by 50 percent, compared to  
7                   the time needed as of the date of the enactment  
8                   of this Act;

9                   (B) reduce the monthly cost of new hous-  
10                  ing by 20 percent, compared to the cost as of  
11                  the date of the enactment of this Act;

12                  (C) cut the environmental impact and en-  
13                  ergy use of new housing by 50 percent, com-  
14                  pared to the impact and use as of the date of  
15                  the enactment of this Act;

16                  (D) ensure that at least 15,000,000 homes  
17                  existing as of the date of the enactment of this  
18                  Act reduce their energy use by 30 percent, com-  
19                  pared to the use as of the date of the enact-  
20                  ment of this Act; and

21                  (E) improve durability and reduce mainte-  
22                  nance costs by 50 percent compared to the du-  
23                  rability and costs as of the date of the enact-  
24                  ment of this Act.



1           (2) For industrial energy efficiency, the pro-  
2           gram should, in cooperation with the affected  
3           industries—

4                   (A) develop a microturbine (40 to 300 kilo-  
5                   watt) that is more than 40 percent efficient by  
6                   2006, compared to the efficiency as of the date  
7                   of the enactment of this Act;

8                   (B) develop a microturbine that is more  
9                   than 50 percent efficient by 2010, compared to  
10                  the efficiency as of the date of the enactment  
11                  of this Act;

12                  (C) develop advanced materials for com-  
13                  bustion systems that reduce emissions of nitro-  
14                  gen oxides by 30 to 50 percent while increasing  
15                  efficiency 5 to 10 percent by 2007, compared to  
16                  such emissions as of the date of the enactment  
17                  of this Act; and

18                  (D) improve the energy intensity of the  
19                  major energy-consuming industries by at least  
20                  25 percent by 2010, compared to the energy in-  
21                  tensity as of the date of the enactment of this  
22                  Act.

23           (3) For transportation energy efficiency, the  
24           program should, in cooperation with affected  
25           industries—

1 (A) develop a production prototype pas-  
2 senger automobile that has fuel economy equiv-  
3 alent to 80 miles per gallon of gasoline by  
4 2004;

5 (B) develop class 7 and 8 heavy duty  
6 trucks and buses with ultra low emissions and  
7 the ability to use an alternative fuel that has an  
8 average fuel economy equivalent to—

9 (i) 10 miles per gallon of gasoline by  
10 2007; and

11 (ii) 13 miles per gallon of gasoline by  
12 2010;

13 (C) develop a production prototype of a  
14 passenger automobile with zero equivalent emis-  
15 sions that has an average fuel economy of 100  
16 miles per gallon of gasoline by 2010; and

17 (D) improve, by 2010, the average fuel  
18 economy of trucks—

19 (i) in classes 1 and 2 by 300 percent;

20 and

21 (ii) in classes 3 through 6 by 200 per-

22 cent,

23 compared to the fuel economy as of the date of  
24 the enactment of this Act.

25 (b) DEFINITIONS.—For purposes of this section—

1           (1) the term “alternative fuel” has the meaning  
2           given that term in section 301(2) of the Energy Pol-  
3           icy Act of 1992; and

4           (2) the term “major energy-consuming indus-  
5           tries” means—

6                   (A) the forest product industry;

7                   (B) the steel industry;

8                   (C) the aluminum industry;

9                   (D) the metal casting industry;

10                  (E) the chemical industry;

11                  (F) the petroleum refining industry; and

12                  (G) the glass-making industry.

13           (c) AUTHORIZATION OF APPROPRIATIONS.—There  
14           are authorized to be appropriated to the Secretary of En-  
15           ergy for carrying out activities to achieve the goals de-  
16           scribed in subsection (a), including State and local grants  
17           and the Federal Energy Management Program—

18                   (1) \$900,000,000 for fiscal year 2002;

19                   (2) \$950,000,000 for fiscal year 2003;

20                   (3) \$1,025,000,000 for fiscal year 2004;

21                   (4) \$1,110,000,000 for fiscal year 2005; and

22                   (5) \$1,200,000,000 for fiscal year 2006.

1 **SEC. 103. BIOMASS ENERGY AND RELATED CHEMICAL RE-**  
2 **SEARCH, DEVELOPMENT, AND DEMONSTRA-**  
3 **TION.**

4 (a) GOALS.—In order to achieve the goal stated in  
5 section 3, the United States shall have a balanced energy  
6 research, development, and demonstration program to en-  
7 hance biomass energy and related chemical research, de-  
8 velopment, and demonstration with the following goals:

9 (1) The program should enable the United  
10 States to triple bioenergy use by 2010.

11 (2) For biomass-based power systems, the pro-  
12 gram should enable commercialization, within five  
13 years after the date of the enactment of this Act, of  
14 integrated power-generating technologies that em-  
15 ploy gas turbines and fuel cells integrated with bio-  
16 mass gasifiers.

17 (3) For biofuels, the program should accelerate  
18 research, development, and demonstration on ad-  
19 vanced enzymatic hydrolysis technology for making  
20 ethanol from cellulosic feedstock, with the goal that  
21 between 2010 and 2015 ethanol produced from en-  
22 ergy crops would be fully competitive in terms of  
23 price with gasoline as a neat fuel, in either internal  
24 combustion engines or fuel cell vehicles.

25 (b) AUTHORIZATION OF APPROPRIATIONS.—There  
26 are authorized to be appropriated to the Secretary of En-

1 ergy for carrying out research, development, and dem-  
2 onstration activities on biomass-related technologies, in-  
3 cluding transportation, power, and related chemical pro-  
4 duction technologies, under the Biomass Research and De-  
5 velopment Act of 2000—

6 (1) for biomass transportation—

7 (A) \$54,000,000 for fiscal year 2002;

8 (B) \$65,000,000 for fiscal year 2003;

9 (C) \$78,000,000 for fiscal year 2004;

10 (D) \$94,000,000 for fiscal year 2005; and

11 (E) \$113,000,000 for fiscal year 2006;

12 (2) for biomass power—

13 (A) \$48,000,000 for fiscal year 2002;

14 (B) \$58,000,000 for fiscal year 2003;

15 (C) \$70,000,000 for fiscal year 2004;

16 (D) \$84,000,000 for fiscal year 2005; and

17 (E) \$101,000,000 for fiscal year 2006; and

18 (3) for biomass energy-related industrial  
19 applications—

20 (A) \$53,000,000 for fiscal year 2002;

21 (B) \$58,000,000 for fiscal year 2003;

22 (C) \$63,000,000 for fiscal year 2004;

23 (D) \$68,000,000 for fiscal year 2005; and

24 (E) \$73,000,000 for fiscal year 2006.

1 **SEC. 104. ASSESSMENT OF RENEWABLE ENERGY RE-**  
2 **SOURCES.**

3 (a) **IN GENERAL.**—Not later than one year after the  
4 date of the enactment of this Act, the Secretary of Energy  
5 shall submit to the Congress an assessment of all renew-  
6 able energy resources available for commercial applica-  
7 tions within the United States.

8 (b) **RESOURCE ASSESSMENT.**—Such assessment shall  
9 include a detailed inventory describing the available  
10 amount and characteristics of renewable energy sources,  
11 and an estimate of the research, development, demonstra-  
12 tion, and commercial applications efforts necessary to de-  
13 velop each resource. The assessment shall also include  
14 such other information as the Secretary of Energy believes  
15 would be useful in achieving wider commercial applications  
16 of emerging and state-of-the-art renewable energy genera-  
17 tion facilities or devices.

18 (c) **AVAILABILITY.**—The technology development in-  
19 formation and cost estimates in the assessment shall be  
20 updated annually and made available to the public, along  
21 with the data used to create the assessment.

22 (d) **AUTHORIZATION OF APPROPRIATIONS.**—For the  
23 purposes of carrying out this section, there are authorized  
24 to be appropriated to the Secretary of Energy  
25 \$10,000,000 for fiscal year 2002, and such sums as may  
26 be necessary for the fiscal years 2003 through 2020.

1 **SEC. 105. ENHANCED AERONAUTICAL SYSTEM ENERGY EF-**  
2 **FICIENCY RESEARCH, DEVELOPMENT, AND**  
3 **DEMONSTRATION.**

4 (a) GOALS.—For aeronautical system energy effi-  
5 ciency, the National Aeronautics and Space Administra-  
6 tion shall seek to—

7 (1) develop technologies that will enable a 50  
8 percent increase in aircraft engine energy efficiencies  
9 by 2010 as compared to the most energy efficient  
10 engine in the United States commercial aircraft fleet  
11 as of the date of the enactment of this Act; and

12 (2) develop air transportation management  
13 operational concepts and procedures that will enable  
14 a 25 percent increase in the energy efficiency of the  
15 overall air transport system on a per flight basis by  
16 2010 as compared to the efficiency as of the date of  
17 the enactment of this Act.

18 (b) AUTHORIZATION OF APPROPRIATIONS.—There  
19 are authorized to be appropriated to the Administrator of  
20 the National Aeronautics and Space Administration for  
21 carrying out activities to achieve the goals described in  
22 subsection (a)—

23 (1) \$50,000,000 for fiscal year 2002;

24 (2) \$55,000,000 for fiscal year 2003;

25 (3) \$60,000,000 for fiscal year 2004;

26 (4) \$65,000,000 for fiscal year 2005; and

1 (5) \$70,000,000 for fiscal year 2006.

2 **SEC. 106. PROGRESS REPORT.**

3 The Secretary of Energy shall transmit to the Com-  
4 mittee on Science of the House of Representatives and the  
5 Committee on Energy and Natural Resources of the Sen-  
6 ate an annual report assessing the progress made pursu-  
7 ant to this title in achieving the goal set forth in section  
8 3. The first such report shall be transmitted along with  
9 the first annual budget request from the President occur-  
10 ring at least 6 months after the date of the enactment  
11 of this Act.

12 **SEC. 107. NATIONAL BUILDING PERFORMANCE INITIATIVE.**

13 (a) INTERAGENCY GROUP.—Not later than 90 days  
14 after the date of the enactment of this Act, the Director  
15 of the Office of Science and Technology Policy shall estab-  
16 lish an Interagency Group responsible for the development  
17 and implementation of a National Building Performance  
18 Initiative. The Director of the Office of Science and Tech-  
19 nology Policy or the Director's designee shall serve as  
20 Chairperson of the Interagency Group. The membership  
21 of the Interagency Group shall include representatives the  
22 National Institute of Standards and Technology, the De-  
23 partment of Energy, the National Science Foundation, the  
24 Environmental Protection Agency, and other agencies with  
25 jurisdiction over energy conservation research and devel-



1 opment, buildings, construction, or related issues. The  
2 Interagency Group shall work to ensure regular agency co-  
3 ordination and information sharing. The National Insti-  
4 tute of Standards and Technology shall provide necessary  
5 administrative support for the Interagency Group.

6 (b) OBJECTIVE.—The objective of the Interagency  
7 Group shall be to detail the appropriate government role  
8 in reducing the costs, including energy and health and  
9 safety related costs, of using, owning, and operating com-  
10 mercial, institutional, residential, and industrial buildings  
11 by 30 percent by 2020.

12 (c) PLAN.—Not later than 270 days after the date  
13 of the enactment of this Act, the Interagency Group shall  
14 transmit to the Congress a multiyear implementation plan  
15 for achieving the objective stated in subsection (b). The  
16 plan shall address—

17 (1) the appropriate Federal Government role in  
18 achieving the objective, including the elements de-  
19 scribed in subsection (d);

20 (2) research, development, and demonstration  
21 of new or improved technologies, including the ele-  
22 ments described in subsection (e);

23 (3) better understanding of impediments and  
24 disincentives to adoption of best practices;

1           (4) dissemination of information on cost-effective  
2           tive and affordable construction and building operation  
3           technologies and techniques to industry, State  
4           and local governments, homeowners, and the general  
5           public, including the elements described in sub-  
6           section (f); and

7           (5) incentives for the creation of partnerships  
8           between the public and private sectors.

9           The plan shall defer to the private sector and State and  
10          local government for implementation in all appropriate in-  
11          stances.

12          (d) FEDERAL ROLE.—The plan required under sub-  
13          section (c) shall include—

14               (1) a statement of research, development, and  
15               demonstration goals and priorities;

16               (2) the establishment, consistent with this Act,  
17               of goals, priorities, and target dates for implementa-  
18               tion of the plan;

19               (3) assignment of responsibilities with respect  
20               to each element of the plan, avoiding duplication  
21               whenever possible and assigning responsibilities to  
22               Federal agencies with existing expertise;

23               (4) a description of resources, including staff-  
24               ing, needed to carry out the plan; and

1           (5) a description of plans for cooperation and  
2           coordination in all phases described in the plan with  
3           interested governmental entities in the States.

4           (e) RESEARCH, DEVELOPMENT, AND DEMONSTRA-  
5           TION ELEMENTS.—The research, development, and dem-  
6           onstration elements of the plan shall include—

7           (1) peer-reviewed research and development on  
8           and demonstration of systems and materials for new  
9           construction and retrofit, including composite mate-  
10          rials; building envelope components, including win-  
11          dows, doors, and roofs; structural design; and design  
12          and construction techniques, through physical test-  
13          ing and through computer simulation when appro-  
14          priate, taking into consideration cost-effectiveness,  
15          affordability, and regional climate differences and  
16          susceptibility to natural hazards;

17          (2) development of mechanisms for collecting  
18          information on building systems and materials per-  
19          formance and other pertinent information from  
20          sources such as the construction industry, insurance  
21          companies, and building officials; and

22          (3) development of updatable, cost-effective,  
23          and affordable systems, both for new construction  
24          and for retrofitting, and for inventorying informa-

1       tion on components and materials and their inter-  
2       action.

3       (f) TECHNOLOGY TRANSFER.—The technology trans-  
4       fer elements of the plan shall include—

5           (1) the collection, classification, presentation,  
6           and dissemination in a usable form to Federal,  
7           State, and local officials, community leaders, the de-  
8           sign and construction industry, contractors, home  
9           owners, and the general public, of research results  
10          and other pertinent information;

11          (2) in coordination with the private sector, aca-  
12          demia, and the States, curriculum development and  
13          related measures to facilitate the education or train-  
14          ing of employees of the design and construction in-  
15          dustry, the insurance industry, and State and local  
16          governments, and other persons as appropriate; and

17          (3) efforts to increase public awareness and in-  
18          formation.

19       (g) ADDITIONAL FUNCTIONS.—The Interagency  
20       Group established under subsection (a) shall—

21           (1) refine, in conjunction with appropriate rep-  
22           resentatives of State and local units of government  
23           and private sector organizations, the objective stated  
24           in subsection (b) as necessary; and

1           (2) develop measurements related to the objec-  
2           tive, including emphasis on cost-effectiveness and af-  
3           fordability.

4           (h) NATIONAL BUILDING PERFORMANCE ADVISORY  
5   COMMITTEE.—A National Building Performance Advisory  
6   Committee shall be established to advise on creation of  
7   the plan, review progress made under the plan, advise on  
8   any improvements that should be made to the plan, and  
9   report to the Congress on actions that have been taken  
10   to advance the Nation’s capability to meet the objective  
11   described in subsection (b). The Advisory Committee shall  
12   be composed of 21 members to be appointed by the Presi-  
13   dent, one of whom shall be designated by the President  
14   as chair. The members shall include representatives of a  
15   broad cross-section of interests such as the research, tech-  
16   nology transfer, architectural, engineering, and financial  
17   communities; materials and systems suppliers; State,  
18   county, and local governments; the residential, multi-  
19   family, and commercial sectors of the construction indus-  
20   try; and the insurance industry. The Advisory Committee  
21   shall coordinate with existing advisory committees of the  
22   Federal Government and of the National Academies of  
23   Sciences and Engineering. As appropriate, the work and  
24   reports of the Advisory Committee may be done in con-  
25   junction with or replace the work of other advisory com-

1 mittees. The Advisory Committee shall not be subject to  
2 section 14 of the Federal Advisory Committee Act.

3 (i) REPORT.—The Interagency Group shall, within  
4 90 days after the end of each fiscal year, transmit a report  
5 to the Congress describing progress achieved during the  
6 preceding fiscal year by government at all levels and by  
7 the private sector, toward achieving the objective described  
8 in subsection (b) and implementing the plan developed  
9 under subsection (c), and including any amendments to  
10 the plan. Each such report shall include any recommenda-  
11 tions for legislative and other action the Interagency  
12 Group considers necessary and appropriate.

## 13 **TITLE II—COMMERCIAL** 14 **APPLICATIONS**

### 15 **SEC. 201. STUDY OF FINANCING FOR PROTOTYPE TECH-** 16 **NOLOGIES.**

17 (a) INDEPENDENT ASSESSMENT.—The Secretary of  
18 Energy shall commission an independent assessment of in-  
19 novative financing techniques to facilitate construction of  
20 new renewable energy and energy efficiency facilities that  
21 might not otherwise be built in a competitive market.

22 (b) CONDUCT OF THE ASSESSMENT.—The Secretary  
23 of Energy shall retain an independent contractor with  
24 proven expertise in financing large capital projects or in

1 financial services consulting to conduct the assessment  
2 under this section.

3 (c) CONTENT OF THE ASSESSMENT.—The assess-  
4 ment shall include a comprehensive examination of all  
5 available techniques to safeguard private investors against  
6 risks (including both market-based and government-im-  
7 posed risks) that are beyond the control of the investors.  
8 Such techniques may include Federal loan guarantees,  
9 Federal price guarantees, special tax considerations, and  
10 direct Federal investment.

11 (d) REPORT.—The Secretary of Energy shall submit  
12 the results of the independent assessment to the Congress  
13 not later than 9 months after the date of enactment of  
14 this section.

15 **SEC. 202. REGULATORY REVIEWS FOR NEW TECHNOLOGIES**  
16 **AND PROCESSES.**

17 (a) REGULATORY REVIEWS.—Not later than one year  
18 after the date of the enactment of this Act, and every five  
19 years thereafter, the Director of the Office of Science and  
20 Technology Policy shall oversee a review of each Federal  
21 agency's regulations and policies to identify—

22 (1) existing regulations and policies that act as  
23 barriers to the development and commercialization of  
24 emerging renewable energy and energy efficiency  
25 technologies and processes (including fuel cells, com-

1 bined heat and power, distributed generation, and  
2 small-scale renewable energy); and

3 (2) actions the agency is taking or could take  
4 to—

5 (A) remove barriers to market entry for  
6 emerging renewable energy and energy effi-  
7 ciency technologies;

8 (B) increase energy efficiency; or

9 (C) encourage the use of new processes to  
10 meet energy and environmental goals.

11 (b) REPORTS TO CONGRESS.—Not later than 18  
12 months after the date of the enactment of this Act, and  
13 every five years thereafter, the Director of the Office of  
14 Science and Technology Policy shall report to the Con-  
15 gress on the results of the agency reviews conducted under  
16 subsection (a).

17 (c) CONTENTS OF THE REPORTS.—The reports re-  
18 quired under subsection (b) shall—

19 (1) identify all regulatory and policy barriers to  
20 the development and commercialization of emerging  
21 renewable energy and energy efficiency technologies  
22 and processes;

23 (2) actions taken, or proposed to be taken, that  
24 are identified under subsection (a)(2); and



1           (3) recommendations for changes in laws or  
2 regulations that may be needed to—

3           (A) expedite the siting and development of  
4 energy production and distribution facilities;  
5 and

6           (B) encourage the adoption of energy effi-  
7 ciency and process improvements.

8 **SEC. 203. COMMERCIALIZATION ASSISTANCE.**

9           (a) **AUTHORITY.**—The Secretary of Energy shall pro-  
10 vide, through a competitive review process, assistance to  
11 private sector entities for the commercial application of  
12 renewable energy and energy efficiency technologies.

13           (b) **APPLICATIONS.**—The Secretary of Energy shall  
14 establish requirements for applications for assistance  
15 under this section. Such applications shall contain a com-  
16 mercial application plan, including a description of the fi-  
17 nancial, business, and technical support (including sup-  
18 port from universities and national laboratories) the appli-  
19 cant anticipates in its commercial application effort.

20           (c) **SELECTION.**—The Secretary of Energy shall se-  
21 lect applicants to receive assistance under this section on  
22 the basis of which applications are the most likely to result  
23 in commercial application of renewable energy and energy  
24 efficiency technologies. The Secretary shall ensure that at

1 least 50 percent of the funds provided under this section  
2 are provided to small businesses or startup companies.

3 (d) AUTHORIZATION OF APPROPRIATIONS.—There  
4 are authorized to be appropriated to the Secretary of En-  
5 ergy for carrying out this section \$200,000,000 for each  
6 of the fiscal years 2002 through 2006, and such sums as  
7 may be necessary for each of the fiscal years 2007 through  
8 2020.

9 **SEC. 204. EDUCATION AND OUTREACH.**

10 (a) PROGRAM.—The Secretary of Energy shall estab-  
11 lish a program education and outreach, including innova-  
12 tive education and outreach techniques, on renewable en-  
13 ergy and energy efficiency technologies to manufacturers,  
14 consumers, engineers, architects, builders, energy service  
15 companies, universities, facility planners and managers,  
16 State and local governments, and other appropriate enti-  
17 ties.

18 (b) AUTHORIZATION OF APPROPRIATIONS.—There  
19 are authorized to be appropriated to the Secretary of En-  
20 ergy for carrying out this section \$100,000,000 for each  
21 of the fiscal years 2002 through 2006, and such sums as  
22 may be necessary for each of the fiscal years 2007 through  
23 2020.

1 **SEC. 205. PROTON EXCHANGE MEMBRANE DEMONSTRATION PROGRAMS.**  
2

3 (a) IN GENERAL.—

4 (1) ESTABLISHMENT.—The Secretary of En-  
5 ergy, in consultation with the Secretary of Transpor-  
6 tation, the Secretary of Defense, and the Secretary  
7 of Housing and Urban Development, shall establish  
8 a program for the demonstration of fuel cell tech-  
9 nologies, including fuel cell proton exchange mem-  
10 brane technology, for commercial, residential, and  
11 transportation applications, including buses. Such  
12 program shall specifically focus on promoting the ap-  
13 plication of and improved manufacturing production  
14 and processes for fuel cell technologies.

15 (2) AUTHORIZATION OF APPROPRIATIONS.—For  
16 the purpose of carrying out this subsection, there  
17 are authorized to be appropriated \$140,000,000 for  
18 the period encompassing fiscal years 2002 through  
19 2006.

20 (b) BUS DEMONSTRATION PROGRAM.—

21 (1) ESTABLISHMENT.—The Secretary of En-  
22 ergy, in consultation with the Secretary of Transpor-  
23 tation, shall establish a comprehensive fuel cell bus  
24 demonstration program to address hydrogen produc-  
25 tion, storage, and use in transit bus applications.  
26 Such program shall cover all aspects of the introduc-

1 tion of this new technology, and shall include the fol-  
2 lowing components:

3 (A) Development, installation, and oper-  
4 ation of a hydrogen delivery system located on-  
5 site at transit bus terminals.

6 (B) Development, installation, and oper-  
7 ation of on-site storage associated with the hy-  
8 drogen delivery systems as well as storage tank  
9 systems incorporated into the bus itself.

10 (C) Demonstration of use of hydrogen as a  
11 practical, safe, renewable energy source in a  
12 highly efficient, zero-emission power system for  
13 buses.

14 (D) Development of fuel cell power systems  
15 that are confirmed and verified as being com-  
16 patible with transit bus application require-  
17 ments.

18 (E) Durability testing of the fuel cell bus  
19 at a national testing facility.

20 (F) Identification and implementation of  
21 necessary codes and standards for the safe use  
22 of hydrogen as a fuel suitable for bus applica-  
23 tion, including the fuel cell power system and  
24 related operational facilities.

1 (G) Identification and implementation of  
2 maintenance and overhaul requirements for fuel  
3 cell transit buses.

4 (H) Completion of fleet vehicle evaluation  
5 program by bus operators along normal transit  
6 routes, providing equipment manufacturers and  
7 transit operators with the necessary analyses to  
8 enable operation of fuel cell buses under a  
9 range of operating environments.

10 (2) DOMESTIC ASSEMBLY.—All fuel cell systems  
11 and fuel cell stacks in power plants acquired, or  
12 from which power is acquired, under paragraph (1)  
13 shall be assembled in the United States.

14 (3) AUTHORIZATION OF APPROPRIATIONS.—For  
15 the purpose of carrying out this subsection, there  
16 are authorized to be appropriated \$150,000,000 for  
17 the period encompassing fiscal years 2002 through  
18 2006.

19 **TITLE III—REGULATORY**  
20 **PROVISIONS**

21 **SEC. 301. PUBLIC BENEFITS TRUST FUND.**

22 (a) BOARD.—

23 (1) ESTABLISHMENT.—The Secretary shall es-  
24 tablish a National Electric System Public Benefits

1 Board to carry out the functions and responsibilities  
2 described in this section.

3 (2) MEMBERSHIP.—The Board shall be com-  
4 posed of—

5 (A) 1 representative of the Federal Energy  
6 Regulatory Commission appointed by the Fed-  
7 eral Energy Regulatory Commission;

8 (B) 2 representatives of the Secretary of  
9 Energy appointed by the Secretary of Energy;

10 (C) 2 persons nominated by the National  
11 Association of Regulatory Utility Commis-  
12 sioners and appointed by the Secretary;

13 (D) 1 person nominated by the National  
14 Association of State Utility Consumer Advo-  
15 cates and appointed by the Secretary;

16 (E) 1 person nominated by the National  
17 Association of State Energy Officials and ap-  
18 pointed by the Secretary;

19 (F) 1 person nominated by the National  
20 Energy Assistance Directors Association and  
21 appointed by the Secretary; and

22 (G) 1 representative of the Environmental  
23 Protection Agency appointed by the Adminis-  
24 trator.

1           (3) CHAIRPERSON.—The Secretary shall select  
2 a member of the Board to serve as Chairperson of  
3 the Board.

4           (b) ESTABLISHMENT OF FUND.—

5           (1) IN GENERAL.—The Board shall establish an  
6 account or accounts at one or more financial institu-  
7 tions, which account or accounts shall be known as  
8 the National Electric System Public Benefits Fund  
9 (in this section referred to as the “Fund”), con-  
10 sisting of amounts deposited in the fund under sub-  
11 section (d).

12           (2) STATUS OF FUND.—Amounts collected  
13 under subsection (d) and deposited in the Fund—

14           (A) shall not constitute funds of the  
15 United States;

16           (B) shall be held in trust by the Board  
17 solely for the purposes stated in subsection (c);  
18 and

19           (C) shall not be available to meet any obli-  
20 gations of the United States.

21           (c) USE OF FUND.—

22           (1) FUNDING OF PUBLIC BENEFITS PRO-  
23 GRAMS.—Amounts in the Fund shall be used by the  
24 Board to provide matching funds to States and In-

1       dian tribes for the support of State or tribal public  
2       benefits programs relating to—

3               (A) renewable energy sources;

4               (B) universal electric service;

5               (C) affordable electric service;

6               (D) energy conservation and efficiency;

7               (E) research and development in areas de-  
8       scribed in subparagraphs (A) through (D); or

9               (F) disconnections during periods of ex-  
10       treme cold or heat.

11       (2) DISTRIBUTION.—

12               (A) IN GENERAL.—Except for amounts  
13       needed to pay costs of the Board in carrying  
14       out its duties under this section, the Board  
15       shall distribute all amounts in the Fund to  
16       States or Indian tribes to fund public benefits  
17       programs under paragraph (1).

18               (B) FUND SHARE.—

19                       (i) IN GENERAL.—Except as otherwise  
20       provided in this subparagraph, the Fund  
21       share of a public benefits program funded  
22       under paragraph (1) shall not exceed 50  
23       percent.

24                       (ii) PROPORTIONATE REDUCTION.—

25       To the extent that the amount of matching



1 funds requested by States and Indian  
2 tribes exceeds the maximum projected rev-  
3 enues of the Fund, the matching funds dis-  
4 tributed to the States and Indian tribes  
5 shall be reduced proportionately.

6 (iii) ADDITIONAL FUNDING.—A State  
7 or Indian tribe may apply funds to public  
8 benefits programs in addition to the  
9 amount of funds applied for the purpose of  
10 matching the Fund share.

11 (3) APPLICATION.—Not later than August 1 of  
12 each year beginning in 2002, a State or Indian tribe  
13 seeking matching funds for the following fiscal year  
14 shall file with the Board, in such form as the Board  
15 may require, an application—

16 (A) certifying that the funds will be used  
17 for an eligible public benefits program; and

18 (B) stating the amount of State or Indian  
19 tribe funds earmarked for the program.

20 (d) PUBLIC BENEFITS CHARGE.—

21 (1) AMOUNT OF CHARGE.—As a condition of  
22 interconnection with facilities of any transmitting  
23 utility, the owner of an electric generating facility  
24 whose nameplate capacity exceeds five megawatts  
25 shall pay the transmitting utility a public benefits

1 charge equal to one mill per kilowatt-hour on electric  
2 energy generated by such electric generating facility.

3 (2) AFFILIATES.—The owner of an electric gen-  
4 erating facility subject to the charge under para-  
5 graph (1) shall pay the charge even if the generation  
6 facility and the transmitting facility are under com-  
7 mon ownership or are otherwise affiliated.

8 (3) IMPORTED ELECTRICITY.—Each importer  
9 of electric energy, as a condition of interconnection  
10 with facilities of any transmitting utility in the  
11 United States, shall pay the charge required under  
12 paragraph (1) for imported electric energy.

13 (4) PAYMENT OF THE CHARGE.—The transmit-  
14 ting utility shall pay the amounts collected under  
15 this subsection to the Board at the close of each  
16 month, and the Board shall deposit the amounts into  
17 the Fund.

18 (e) REPORT.—One year before the date of expiration  
19 of this section, the Secretary of Energy shall report to  
20 Congress whether a public benefits fund should continue  
21 to exist.

22 (f) EXPIRATION.—This section expires after Decem-  
23 ber 31, 2020.

1 **SEC. 302. NET METERING.**

2 Title VI of the Public Utility Regulatory Policies Act  
3 of 1978 is amended by adding at the end the following:

4 **“SEC. 605. NET METERING FOR RENEWABLE ENERGY AND**  
5 **FUEL CELLS.**

6 “(a) DEFINITIONS.—For purposes of this section:

7 “(1) The term ‘eligible on-site generating facil-  
8 ity’ means—

9 “(A) a facility on the site of a residential  
10 electric consumer with a maximum generating  
11 capacity of 100 kilowatts or less that is fueled  
12 by solar or wind energy; or

13 “(B) a facility on the site of a commercial  
14 electric consumer with a maximum generating  
15 capacity of 250 kilowatts or less that is fueled  
16 solely by a renewable energy resource.

17 “(2) The term ‘renewable energy resource’  
18 means solar energy, wind energy, biomass, geo-  
19 thermal energy, or fuel cells.

20 “(3) The term ‘net metering service’ means  
21 service to an electric consumer under which elec-  
22 tricity generated by that consumer from an eligible  
23 on-site generating facility and delivered to the dis-  
24 tribution system through the same meter through  
25 which purchased electricity is received may be used  
26 to offset electricity provided by the retail electric

1 supplier to the electric consumer during the applica-  
2 ble billing period so that an electric consumer is  
3 billed only for the net electricity consumed during  
4 the billing period.

5 “(b) REQUIREMENT TO PROVIDE NET METERING  
6 SERVICE.—Each retail electric supplier shall make avail-  
7 able upon request net metering service to any retail elec-  
8 tric consumer that the supplier currently serves or solicits  
9 for service.

10 “(c) RATES AND CHARGES.—

11 “(1) IDENTICAL CHARGES.—A retail electric  
12 supplier—

13 “(A) shall charge the owner or operator of  
14 an on-site generating facility rates and charges  
15 that are identical to those that would be  
16 charged other retail electric customers of the  
17 electric company in the same rate class; and

18 “(B) shall not charge the owner or oper-  
19 ator of an on-site generating facility any addi-  
20 tional standby, capacity, interconnection, or  
21 other rate or charge.

22 “(2) MEASUREMENT.—A retail electric supplier  
23 that supplies electricity to the owner or operator of  
24 an on-site generating facility shall measure the  
25 quantity of electricity produced by the on-site facility

1 and the quantity of electricity consumed by the  
2 owner or operator of an on-site generating facility  
3 during a billing period in accordance with normal  
4 metering practices.

5 “(3) ELECTRICITY SUPPLIED EXCEEDING ELEC-  
6 TRICITY GENERATED.—If the quantity of electricity  
7 supplied by a retail electric supplier during a billing  
8 period exceeds the quantity of electricity generated  
9 by an on-site generating facility and fed back to the  
10 electric distribution system during the billing period,  
11 the supplier may bill the owner or operator for the  
12 net quantity of electricity supplied by the retail elec-  
13 tric supplier, in accordance with normal metering  
14 practices.

15 “(4) ELECTRICITY GENERATED EXCEEDING  
16 ELECTRICITY SUPPLIED.—If the quantity of elec-  
17 tricity generated by an on-site generating facility  
18 during a billing period exceeds the quantity of elec-  
19 tricity supplied by the retail electric supplier during  
20 the billing period—

21 “(A) the retail electric supplier may bill  
22 the owner or operator of the on-site generating  
23 facility for the appropriate charges for the bill-  
24 ing period in accordance with paragraph (2);  
25 and

1           “(B) the owner or operator of the on-site  
2           generating facility shall be credited for the ex-  
3           cess kilowatt-hours generated during the billing  
4           period, with the kilowatt-hour credit appearing  
5           on the bill for the following billing period.

6           “(d) SAFETY AND PERFORMANCE STANDARDS.—

7           “(1) REQUIREMENT.—An eligible on-site gener-  
8           ating facility and net metering system used by a re-  
9           tail electric consumer shall meet all applicable safe-  
10          ty, performance, reliability, and interconnection  
11          standards established by the National Electrical  
12          Code, the Institute of Electrical and Electronics En-  
13          gineers, and Underwriters Laboratories.

14          “(2) ADDITIONAL CONTROL AND TESTING RE-  
15          QUIREMENTS.—The Commission, after consultation  
16          with State regulatory authorities and nonregulated  
17          local distribution systems and after notice and op-  
18          portunity for comment, may adopt, by rule, addi-  
19          tional control and testing requirements for on-site  
20          generating facilities and net metering systems that  
21          the Commission determines are necessary to protect  
22          public safety and system reliability.”.

23 **SEC. 303. RENEWABLE ENERGY PORTFOLIO STANDARDS.**

24          (a) DEFINITION OF COVERED GENERATION FACIL-  
25          ITY.—In this section, the term “covered generation facil-

1 ity” means a nonhydroelectric facility that generates elec-  
2 tric energy for sale.

3 (b) REQUIRED RENEWABLE ENERGY.—Of the total  
4 amount of electricity sold by covered generation facilities  
5 during a calendar year, the amount generated by renew-  
6 able energy sources shall be not less than—

- 7 (1) 3.0 percent in 2002;
- 8 (2) 3.5 percent in 2003;
- 9 (3) 4.0 percent in 2004;
- 10 (4) 5.0 percent in 2005;
- 11 (5) 6.0 percent in 2006;
- 12 (6) 7.0 percent in 2007;
- 13 (7) 8.0 percent in 2008;
- 14 (8) 9.0 percent in 2009;
- 15 (9) 10.0 percent in 2010;
- 16 (10) 11.0 percent in 2011;
- 17 (11) 12.0 percent in 2012;
- 18 (12) 13.0 percent in 2013;
- 19 (13) 14.0 percent in 2014;
- 20 (14) 15.0 percent in 2015;
- 21 (15) 16.0 percent in 2016;
- 22 (16) 17.0 percent in 2017;
- 23 (17) 18.0 percent in 2018;
- 24 (18) 19.0 percent in 2019; and

1           (19) 20.0 percent in 2020 and each year there-  
2 after.

3           (c) RENEWABLE ENERGY CREDITS.—

4           (1) IDENTIFICATION OF ENERGY SOURCES.—

5           The Federal Energy Regulatory Commission shall  
6 establish standards and procedures under which a  
7 covered generation facility shall certify to a pur-  
8 chaser of electricity—

9                   (A) the amount of the electricity that is  
10 generated by a renewable energy source; and

11                   (B) the amount of the electricity that is  
12 generated by a source other than a renewable  
13 energy source.

14           (2) ISSUANCE OF RENEWABLE ENERGY CRED-

15 ITS.—Not later than April 1 of each year, beginning  
16 in 2003, the Federal Energy Regulatory Commission  
17 shall issue to a covered generation facility 1 renew-  
18 able energy credit for each megawatt-hour of elec-  
19 tricity sold by the covered generation facility in the  
20 preceding calendar year that was generated by a re-  
21 newable energy source.

22           (3) SUBMISSION OF RENEWABLE ENERGY

23 CREDITS.—Not later than July 1 of each year, a  
24 covered generation facility shall submit credits to the  
25 Federal Energy Regulatory Commission in an



1 amount equal to the total number of megawatt-hours  
2 of electricity sold by the covered generation facility  
3 in the preceding year multiplied by the applicable re-  
4 newable energy source requirement under subsection  
5 (a).

6 (4) USE OF RENEWABLE ENERGY CREDITS.—

7 (A) TIME FOR USE.—A renewable energy  
8 credit shall be used for the calendar year for  
9 which the renewable energy credit is issued.

10 (B) PERMITTED USES.—Until July 1 of  
11 the year in which a renewable energy credit was  
12 issued, a covered generation facility may—

13 (i) use the renewable energy credit to  
14 make a submission to the Federal Energy  
15 Regulatory Commission under paragraph  
16 (3); or

17 (ii) on notice to the Federal Energy  
18 Regulatory Commission, sell or otherwise  
19 transfer a renewable energy credit to an-  
20 other covered generation facility.

21 (d) RECORDKEEPING.—The Federal Energy Regu-  
22 latory Commission shall maintain records of all renewable  
23 energy credits issued and all credits sold or transferred.

24 (e) PENALTIES.—

1           (1) IN GENERAL.—The Federal Energy Regu-  
2           latory Commission may bring an action in United  
3           States district court to impose a civil penalty on any  
4           person that fails to comply with subsection (c)(3).

5           (2) AMOUNT OF PENALTY.—A person that fails  
6           to comply with a requirement to submit renewable  
7           energy credits under subsection (c)(3) shall be sub-  
8           ject to a civil penalty of not more than 3 times the  
9           estimated national average market value (as deter-  
10          mined by the Federal Energy Regulatory Commis-  
11          sion) for the calendar year concerned of the quantity  
12          of renewable energy credits that person is required  
13          to submit for the applicable fiscal year.

14 **SEC. 304. HIGH PERFORMANCE SCHOOLS.**

15          (a) PROGRAM ESTABLISHMENT AND ADMINISTRA-  
16          TION.—

17               (1) ESTABLISHMENT.—There is established in  
18               the Department of Energy the High Performance  
19               Schools Program (in this section referred to as the  
20               “Program”).

21               (2) IN GENERAL.—The Secretary of Energy  
22               may, through the Program, make grants—

23                       (A) to assist school districts in the produc-  
24                       tion, through construction or renovation, of  
25                       high performance elementary and secondary

1 school buildings that are healthful, productive,  
2 energy efficient, and environmentally sound;

3 (B) to State energy offices to administer  
4 the program of assistance to school districts  
5 pursuant to this section; and

6 (C) to State energy offices to promote par-  
7 ticipation by school districts in the Program.

8 (3) GRANTS TO ASSIST SCHOOL DISTRICTS.—

9 Grants under paragraph (2)(A) for new school build-  
10 ings shall be used to achieve energy efficiency per-  
11 formance that reduces energy use at least 30 percent  
12 below that of a school constructed in compliance  
13 with standards prescribed in Chapter 8 of the 2000  
14 International Energy Conservation Code, or a simi-  
15 lar State code intended to achieve substantially  
16 equivalent results. Grants under paragraph (2)(A)  
17 for existing school buildings shall be used to achieve  
18 energy efficiency performance that reduces energy  
19 use below the school's baseline consumption, assum-  
20 ing a 3-year, weather-normalized average for calcu-  
21 lating such baseline. Grants under paragraph (2)(A)  
22 shall be made to school districts that have—

23 (A) demonstrated a need for such grants  
24 in order to respond appropriately to increasing  
25 elementary and secondary school enrollments or

1 to make major investments in renovation of  
2 school facilities; and

3 (B) made a commitment to use the grant  
4 funds to develop high performance school build-  
5 ings in accordance with a plan developed and  
6 approved pursuant to paragraph (5)(A).

7 (4) OTHER GRANTS.—

8 (A) GRANTS FOR ADMINISTRATION.—  
9 Grants under paragraph (2)(B) shall be used to  
10 evaluate compliance by school districts with the  
11 requirements of this section, and in addition  
12 may be used for—

13 (i) distributing information and mate-  
14 rials to clearly define and promote the de-  
15 velopment of high performance school  
16 buildings for both new and existing facili-  
17 ties;

18 (ii) organizing and conducting pro-  
19 grams for school board members, school  
20 district personnel, architects, engineers,  
21 and others to advance the concepts of high  
22 performance school buildings;

23 (iii) obtaining technical services and  
24 assistance in planning and designing high  
25 performance school buildings; and

1 (iv) collecting and monitoring data  
2 and information pertaining to the high per-  
3 formance school building projects.

4 (B) GRANTS TO PROMOTE PARTICIPA-  
5 TION.—Grants under paragraph (2)(C) may be  
6 used for promotional and marketing activities,  
7 including facilitating private and public financ-  
8 ing, promoting the use of energy service compa-  
9 nies, working with school administrations, stu-  
10 dents, and communities, and coordinating pub-  
11 lic benefit programs.

12 (5) IMPLEMENTATION.—

13 (A) PLANS.—A grant under paragraph  
14 (2)(A) shall be provided only to a school district  
15 that, in consultation with its State office of en-  
16 ergy and education, has developed a plan that  
17 the State energy office determines to be feasible  
18 and appropriate in order to achieve the pur-  
19 poses for which such grants are made.

20 (B) SUPPLEMENTING GRANT FUNDS.—  
21 State energy offices shall encourage qualifying  
22 school districts to supplement their grant funds  
23 with funds from other sources in the implemen-  
24 tation of their plans.

25 (b) ALLOCATION OF FUNDS.—

1           (1) IN GENERAL.—Except as provided in para-  
2           graph (3), funds appropriated to carry out this sec-  
3           tion shall be provided to State energy offices.

4           (2) PURPOSES.—Except as provided in para-  
5           graph (3), funds appropriated to carry out this sec-  
6           tion shall be allocated as follows:

7                   (A) Seventy percent shall be used to make  
8                   grants under subsection (a)(2)(A).

9                   (B) Fifteen percent shall be used to make  
10                  grants under subsection (a)(2)(B).

11                  (C) Fifteen percent shall be used to make  
12                  grants under subsection (a)(2)(C).

13           (3) OTHER FUNDS.—The Secretary of Energy  
14           may retain not to exceed \$300,000 per year from  
15           amounts appropriated under subsection (c) to assist  
16           State energy offices in coordinating and imple-  
17           menting the Program. Such funds may be used to  
18           develop reference materials to further define the  
19           principles and criteria to achieve high performance  
20           school buildings.

21           (c) AUTHORIZATION OF APPROPRIATIONS.—There  
22           are authorized to be appropriated to the Secretary of En-  
23           ergy to carry out this section \$200,000,000 for each of  
24           the fiscal years 2002 through 2006, and such sums as may

1 be necessary for each of the fiscal years 2007 through  
2 2020.

3 (d) REPORT TO CONGRESS.—The Secretary of En-  
4 ergy shall conduct a biennial review of State actions imple-  
5 menting this section, and the Secretary shall report to  
6 Congress on the results of such reviews. In conducting  
7 such reviews, the Secretary shall assess the effectiveness  
8 of the calculation procedures used by the States in estab-  
9 lishing eligibility of schools for funding under this section,  
10 and may assess other aspects of the State program to de-  
11 termine whether they have been effectively implemented.

12 (e) DEFINITIONS.—For purposes of this section:

13 (1) ELEMENTARY AND SECONDARY SCHOOL.—  
14 The terms “elementary school” and “secondary  
15 school” shall have the same meaning given such  
16 terms in paragraphs (14) and (26) of section 14101  
17 of the Elementary and Secondary Education Act of  
18 1965 (20 U.S.C. 8801(14), (26)).

19 (2) HIGH PERFORMANCE SCHOOL BUILDING.—  
20 The term “high performance school building” means  
21 a school building which, in its design, construction,  
22 operation, and maintenance, maximizes use of re-  
23 newable energy and energy efficiency practices, is  
24 cost-effective on a life cycle basis, uses affordable,  
25 environmentally preferable, durable materials, en-

1 hances indoor environmental quality, protects and  
2 conserves water, and optimizes site potential.

3 (3) RENEWABLE ENERGY.—The term “renew-  
4 able energy” means energy produced by solar, wind,  
5 geothermal, photovoltaic, fuel cell, or biomass power.

6 **SEC. 305. HIGH PERFORMANCE SCHOOLS RESEARCH.**

7 (a) PROGRAM AUTHORIZED.—The Director of the  
8 National Science Foundation (in this section referred to  
9 as the “Director”) shall establish a competitive, merit-  
10 based research program to investigate how the character-  
11 istics of the physical environment of elementary and sec-  
12 ondary schools affect student educational achievement.

13 (b) PROGRAM REQUIREMENTS.—

14 (1) RESEARCH PROJECTS.—Awards made  
15 under subsection (a) shall be for research projects  
16 that focus on the quantification of the effects on stu-  
17 dent educational achievement of lighting, noise, tem-  
18 perature and ventilation, general upkeep, and other  
19 characteristics of the physical environment of school  
20 classrooms. The research projects shall be designed  
21 to separate the effects of the key variables that in-  
22 fluence student educational achievement in order to  
23 isolate the effects of the environmental variables.

24 (2) ASSESSMENTS.—For awards made under  
25 subsection (a), the Director shall ensure that each



1 research project specifies appropriate procedures to  
2 make assessments of student educational achieve-  
3 ment. Such assessments shall be carried out over a  
4 multiyear period.

5 (3) DISSEMINATION OF FINDINGS.—The Direc-  
6 tor may sponsor and support workshops, con-  
7 ferences, and dedicated web sites to disseminate in-  
8 formation to school administrators about the find-  
9 ings of research projects carried out under sub-  
10 section (a).

11 (c) GUIDELINES, PROCEDURES, AND CRITERIA.—  
12 The Director shall establish and publish application and  
13 selection guidelines, procedures, and criteria for the pro-  
14 gram established under subsection (a).

15 (d) AUTHORIZATION OF APPROPRIATIONS.—There  
16 are authorized to be appropriated to the National Science  
17 Foundation to carry out this section \$2,000,000 for each  
18 of the fiscal years 2002, 2003, and 2004.

19 **SEC. 306. VEHICLE FUEL ECONOMY STANDARDS.**

20 (a) INCREASED AVERAGE FUEL ECONOMY STAND-  
21 ARD FOR LIGHT TRUCKS.—

22 (1) DEFINITION OF LIGHT TRUCK.—Section  
23 32901(a) of title 49, United States Code, is amend-  
24 ed by adding at the end the following new para-  
25 graph:

1           “(17) ‘light truck’ has the meaning given that  
2 term in regulations prescribed by the Secretary of  
3 Transportation in the administration of this chap-  
4 ter.”.

5           (2) REQUIREMENT FOR INCREASED STAND-  
6 ARD.—Section 32902(a) of title 49, United States  
7 Code, is amended—

8           (A) by inserting “(1)” after “AUTO-  
9 MOBILES.—”;

10           (B) by inserting before the period at the  
11 end of the third sentence the following: “, sub-  
12 ject to paragraph (2)”; and

13           (C) by adding at the end the following new  
14 paragraph:

15           “(2) The average fuel economy standard for light  
16 trucks manufactured by a manufacturer may not be less  
17 than 27.5 miles per gallon, except that the average fuel  
18 economy standard for—

19           “(A) light trucks manufactured by a manufac-  
20 turer in a model year after model year 2002 and be-  
21 fore model year 2005 may not be less than 22.5  
22 miles per gallon; and

23           “(B) light trucks manufactured by a manufac-  
24 turer in a model year after model year 2004 and be-

1 fore model year 2007 may not be less than 25 miles  
2 per gallon.”.

3 (3) APPLICABILITY.—Paragraph (2) of section  
4 32902(a) of such title does not apply with respect to  
5 light trucks manufactured before model year 2003.

6 (b) FUEL ECONOMY STANDARDS FOR AUTOMOBILES  
7 UP TO 10,000 POUNDS GROSS VEHICLE WEIGHT.—

8 (1) VEHICLES DEFINED AS AUTOMOBILES.—  
9 Section 32901(a)(3) of title 49, United States Code,  
10 is amended by striking “and rated at—” and all  
11 that follows through the end and inserting “and is  
12 rated at not more than 10,000 pounds gross vehicle  
13 weight.”.

14 (2) EFFECTIVE DATE.—The amendment made  
15 by paragraph (1) shall take effect on January 1,  
16 2007.

17 (c) FUEL ECONOMY OF THE FEDERAL FLEET OF  
18 VEHICLES.—

19 (1) BASELINE AVERAGE FUEL ECONOMY.—The  
20 head of each executive agency shall determine, for  
21 each class of vehicles that are in the agency’s fleet  
22 of vehicles in fiscal year 2001, the average fuel econ-  
23 omy for all of the vehicles in that class that are in  
24 the agency’s fleet of vehicles for that fiscal year. For  
25 the purposes of this subsection, the average fuel

1 economy so determined for the agency's vehicles in  
2 a class of vehicles shall be the baseline average fuel  
3 economy for the agency's fleet of vehicles in that  
4 class.

5 (2) INCREASE OF AVERAGE FUEL ECONOMY.—

6 The head of an executive agency shall manage the  
7 procurement of vehicles in each class of vehicles for  
8 that agency in such a manner that—

9 (A) not later than September 30, 2003,  
10 the average fuel economy of the new vehicles in  
11 the agency's fleet of vehicles in each class of ve-  
12 hicles is not less than 3 miles per gallon higher  
13 than the baseline average fuel economy deter-  
14 mined for that class; and

15 (B) not later than September 30, 2005,  
16 the average fuel economy of the new vehicles in  
17 the agency's fleet of vehicles in each class of ve-  
18 hicles is not less than 6 miles per gallon higher  
19 than the baseline average fuel economy deter-  
20 mined for that class.

21 (3) CALCULATION OF AVERAGE FUEL ECON-  
22 OMY.—Average fuel economy shall be calculated for  
23 the purposes of this subsection in accordance with  
24 guidance which the Secretary of Transportation

1 shall prescribe for the implementation of this sub-  
2 section.

3 (4) DEFINITIONS.—In this subsection:

4 (A) The term “class of vehicles” means a  
5 class of vehicles for which an average fuel econ-  
6 omy standard is in effect under chapter 329 of  
7 title 49, United States Code.

8 (B) The term “executive agency” has the  
9 meaning given the term in section 4(1) of the  
10 Office of Federal Procurement Policy Act (41  
11 U.S.C. 403(1)).

12 (C) The term “new vehicle”, with respect  
13 to the fleet of vehicles of an executive agency,  
14 means a vehicle procured by or for the agency  
15 after September 30, 2002.

16 **SEC. 307. ENERGY STAR PROGRAM.**

17 (a) ESTABLISHMENT.—There shall be established, as  
18 a jointly administered program of the Environmental Pro-  
19 tection Agency and the Department of Energy, an Energy  
20 Star program to identify, establish standards for, and pro-  
21 mote cost-effective, energy-efficient products and buildings  
22 for government, industrial, commercial, and individual en-  
23 ergy users. Such program shall be conducted so that En-  
24 ergy Star labels for each product and building system, de-

1 sign, or product represents a standard of high quality and  
2 solid scientific basis.

3 (b) MEMORANDUM OF UNDERSTANDING.—Not later  
4 than 3 months after the date of the enactment of this Act,  
5 the Administrator of the Environmental Protection Agen-  
6 cy and the Secretary of Energy shall enter into and trans-  
7 mit to the Congress a memorandum of understanding de-  
8 lineating the respective responsibilities of the Environ-  
9 mental Protection Agency and the Department of Energy  
10 for the Energy Star program.

11 (c) CONSOLIDATION REPORT.—Not later than 6  
12 months after the date of the enactment of this Act, the  
13 Administrator of the Environmental Protection Agency  
14 and the Secretary of Energy shall jointly transmit to the  
15 Congress a report on the consolidation of standards for  
16 energy-efficient products and building systems, designs,  
17 and products for government, industrial, commercial, and  
18 individual energy users. Such report shall include an as-  
19 sessment of—

20 (1) standards established by private sector  
21 standards organizations and by Federal agencies;  
22 and

23 (2) how the Energy Star program should co-  
24 ordinate its efforts with such organizations and  
25 agencies to establish a uniform standard for each

1 type of product or building system, design, or prod-  
2 uct that is designated with an Energy Star label.

3 (d) ANNUAL REPORT.—The Administrator of the En-  
4 vironmental Protection Agency and the Secretary of En-  
5 ergy shall jointly transmit to the Congress an annual re-  
6 port containing—

7 (1) a description of the activities of the Envi-  
8 ronmental Protection Agency and the Department of  
9 Energy through the Energy Star program; and

10 (2) goals for the future of the Energy Star pro-  
11 gram.

12 (e) AUTHORIZATION OF APPROPRIATIONS.—For pur-  
13 poses of carrying out the Energy Star program, there are  
14 authorized to be appropriated—

15 (1) to the Administrator of the Environmental  
16 Protection Agency \$75,000,000 for fiscal year 2002  
17 and \$100,000,000 for fiscal year 2003; and

18 (2) to the Secretary of Energy \$3,000,000 for  
19 fiscal year 2002 and \$5,000,000 for fiscal year  
20 2003.

21 **SEC. 308. FUEL EFFICIENT TIRE PROGRAM.**

22 Section 30123 of title 49, United States Code, is  
23 amended—

24 (1) in subsection (b)—

1 (A) by inserting “(1)” before the first sen-  
2 tence; and

3 (B) by adding at the end the following:

4 “(2) The uniform quality system shall include stand-  
5 ards for rating tires for the following:

6 “(A) Treadwear.

7 “(B) Traction.

8 “(C) Temperature resistance.

9 “(D) Rolling resistance and fuel economy.”;

10 and

11 (2) by adding at the end the following:

12 “(d) NATIONAL TIRE FUEL EFFICIENCY PRO-  
13 GRAM.—(1) The Secretary shall, after consulting with the  
14 Administrator of the Environmental Protection Agency,  
15 industry representatives, and other appropriate organiza-  
16 tions, develop a national tire fuel efficiency program that  
17 will develop fuel efficiency ratings and label requirements  
18 for tires.

19 “(2) The program shall include—

20 “(A) specifications for testing procedures and  
21 labels that will enable tire buyers to make more in-  
22 formed purchasing decisions about the fuel efficiency  
23 of tires;

24 “(B) dissemination of information through la-  
25 bels, catalogs, trade publications, or other mecha-



1 nisms, that will allow tire buyers to assess the en-  
2 ergy consumption and potential costs savings of al-  
3 ternative tire products;

4 “(C) by no later than September 30, 2002, de-  
5 velopment by the Secretary of recommendations for  
6 minimum fuel efficiency standards for tires; and

7 “(D) by no later than January 1, 2003, pre-  
8 scription by the Secretary of minimum fuel efficiency  
9 standards for tires.

10 “(3) Recommendations and standards under para-  
11 graph (2) (C) and (D), respectively, shall—

12 “(A) be designed to ensure that the fuel effi-  
13 ciency of replacement tires is equal to or better than  
14 the fuel efficiency of tires sold as original equipment  
15 on new vehicles;

16 “(B) consider all safety implications; and

17 “(C) ensure the standards do not adversely im-  
18 pact tire safety.”.

19 **SEC. 309. ENVIRONMENTAL DISCLOSURE TO CONSUMERS.**

20 (a) **RETAIL SALES.**—The Federal Trade Commission  
21 shall issue rules requiring each retail electric supplier to  
22 include with each monthly billing to retail electric con-  
23 sumers a statement of the known energy sources used to  
24 generate the electricity the supplier distributes, on an an-  
25 nual basis, stated in numbers of kilowatt-hours, both in

1 percentages and in the form of a pie chart, of biomass  
2 power, coal-fired power, hydropower, natural gas-fired  
3 power, nuclear power, oil-fired power, wind power, geo-  
4 thermal power, solar thermal power, photovoltaic power,  
5 combined heat and power, and other sources of power, re-  
6 spectively.

7       (b) WHOLESALE SALES.—The Federal Trade Com-  
8 mission shall issue rules requiring any electric supplier  
9 that sells or makes an offer to sell electric energy at whole-  
10 sale to provide the purchaser or offeree such known infor-  
11 mation about the energy source used to generate the elec-  
12 tricity, on an annual basis, as the Commission may deter-  
13 mine.

14       (c) CERTIFICATION PROGRAM.—The Secretary of  
15 Energy, in consultation with the Federal Trade Commis-  
16 sion, shall develop a certification program for each retail  
17 electric supplier that sells electric energy, at least 50 per-  
18 cent of which, averaged over a year, is generated from re-  
19 newable energy sources. For purposes of this subsection,  
20 the term “renewable energy source” means biomass, wind  
21 power, geothermal power, solar thermal power, or photo-  
22 voltaic power.

1                   **TITLE IV—FEDERAL**  
2                   **GOVERNMENT PROGRAMS**

3 **SEC. 401. ENERGY SAVINGS MEASURES IN CAPITOL.**

4           (a) **REQUIREMENTS.**—The Architect of the Capitol—

5               (1) shall develop and implement a cost-effective  
6               energy conservation strategy for all facilities cur-  
7               rently administered by Congress to achieve a net re-  
8               duction of 25 percent in energy consumption on the  
9               congressional campus compared to fiscal year 1991  
10              consumption levels on a Btu-per-gross-square-foot  
11              basis not later than 4 years after the date of the en-  
12              actment of this Act;

13             (2) shall submit to Congress not later than 10  
14             months after the date of the enactment of this Act  
15             a comprehensive energy conservation and manage-  
16             ment plan which includes life cycle cost methods to  
17             determine the cost-effectiveness of proposed energy  
18             efficiency projects;

19             (3) shall present to Congress annually a report  
20             on congressional energy management and conserva-  
21             tion programs which details energy expenditures and  
22             cost estimates for each facility, energy management  
23             and conservation projects, and future priorities to  
24             ensure compliance with the requirements of this sec-  
25             tion;

1           (4) shall perform energy surveys of all congress-  
2           sional buildings and update such surveys as needed;

3           (5) shall use such surveys to determine the cost  
4           and payback period of energy and water conserva-  
5           tion measures likely to achieve the energy consump-  
6           tion levels contained in the strategy developed under  
7           paragraph (1);

8           (6) shall install energy and water conservation  
9           measures that will achieve such levels through life  
10          cycle cost methods and procedures included in the  
11          plan submitted under paragraph (2);

12          (7) may contract with nongovernmental entities  
13          and employ private sector capital to finance energy  
14          conservation projects and achieve energy consump-  
15          tion targets;

16          (8) may develop innovative contracting methods  
17          that will attract private sector funding for the instal-  
18          lation of energy-efficient and renewable energy tech-  
19          nology to meet the requirements of this section;

20          (9) may participate in the Department of Ener-  
21          gy's Financing Renewable Energy and Efficiency  
22          (FREE Savings) contracts program for Federal  
23          Government facilities;

24          (10) within 100 days after the date of the en-  
25          actment of this Act, shall submit to Congress the re-

1 sults of a study of the installation of sub-metering  
2 in buildings on the congressional campus;

3 (11) shall produce information packages and  
4 “how-to” guides for each Member and employing au-  
5 thority of Congress that detail simple, cost-effective  
6 methods to save energy and taxpayer dollars;

7 (12) shall work with the Department of Ener-  
8 gy’s Federal Energy Management Program and ap-  
9 propriate manufacturers, local utilities, trade asso-  
10 ciations, and national laboratories to identify and  
11 demonstrate innovative new renewable energy or en-  
12 ergy efficiency technologies in the Visitor’s Center,  
13 as allowed by the Visitor’s Center design param-  
14 eters; and

15 (13) shall include in the Visitor’s Center an ex-  
16 hibit on the energy efficiency measures employed in  
17 the congressional campus.

18 (b) REPEAL.—Section 310 of the Legislative Branch  
19 Appropriations Act, 1999 (40 U.S.C. 166i) is repealed.

20 **SEC. 402. ENERGY SAVINGS PERFORMANCE CONTRACTS.**

21 (a) COST SAVINGS FROM REPLACEMENT FACILI-  
22 TIES.—Section 801(a) of the National Energy Conserva-  
23 tion Policy Act (42 U.S.C. 8287(a)) is amended by adding  
24 at the end the following:

1           “(3)(A) In the case of an energy savings con-  
2           tract or energy savings performance contract pro-  
3           viding for energy savings through the construction  
4           and operation of one or more buildings or facilities  
5           to replace one or more existing buildings or facilities,  
6           benefits ancillary to the purpose of such contract  
7           under paragraph (1) may include savings resulting  
8           from reduced costs of operation and maintenance at  
9           such replacement buildings or facilities when com-  
10          pared with costs of operation and maintenance at  
11          the buildings or facilities being replaced.

12           “(B) Notwithstanding paragraph (2)(B), aggre-  
13          gate annual payments by an agency under an energy  
14          savings contract or energy savings performance con-  
15          tract referred to in subparagraph (A) may take into  
16          account (through the procedures developed pursuant  
17          to this section) savings resulting from reduced costs  
18          of operation and maintenance as described in sub-  
19          paragraph (A).”.

20          (b) REPEAL OF SUNSET.—Section 801(e) of the Na-  
21          tional Energy Conservation Policy Act (42 U.S.C.  
22          8287(c)) is repealed.

23          (c) ENERGY SAVINGS PERFORMANCE CONTRACT  
24          DEFINITIONS.—

1           (1) ENERGY SAVINGS.—Section 804(2) of the  
2           National Energy Conservation Policy Act (42 U.S.C.  
3           8287e(2)) is amended to read as follows:

4           “(2) The term ‘energy savings’ means a reduc-  
5           tion in the cost of energy or water, from a base cost  
6           established through a methodology set forth in the  
7           contract, used in either—

8                   “(A) an existing federally owned building  
9                   or buildings or other federally owned facilities  
10                  as a result of—

11                           “(i) the lease or purchase of operating  
12                           equipment, improvements, altered oper-  
13                           ation and maintenance, or technical serv-  
14                           ices;

15                           “(ii) the increased efficient use of ex-  
16                           isting energy sources by cogeneration or  
17                           heat recovery, excluding any cogeneration  
18                           process for other than a federally owned  
19                           building or buildings or other federally  
20                           owned facilities; or

21                           “(iii) the increased efficient use of ex-  
22                           isting water sources; or

23                   “(B) a replacement facility under section  
24                  801(a)(3).”.

1           (2) ENERGY SAVINGS CONTRACT.—Section  
2           804(3) of the National Energy Conservation Policy  
3           Act (42 U.S.C. 8287c(3)) is amended to read as fol-  
4           lows:

5           “(3) The terms ‘energy savings contract’ and  
6           ‘energy savings performance contract’ mean a con-  
7           tract which provides for—

8                   “(A) the performance of services for the  
9                   design, acquisition, installation, testing, oper-  
10                  ation, and, where appropriate, maintenance and  
11                  repair, of an identified energy or water con-  
12                  servation measure or series of measures at one  
13                  or more locations; or

14                   “(B) energy savings through the construc-  
15                  tion and operation of one or more buildings or  
16                  facilities to replace one or more existing build-  
17                  ings or facilities.”.

18           (3) ENERGY OR WATER CONSERVATION MEAS-  
19           URE.—Section 804(4) of the National Energy Con-  
20           servation Policy Act (42 U.S.C. 8287c(4)) is amend-  
21           ed to read as follows:

22           “(4) The term ‘energy or water conservation  
23           measure’ means—



1           “(A) an energy conservation measure, as  
2           defined in section 551(4) (42 U.S.C. 8259(4));  
3           or

4           “(B) a water conservation measure that  
5           improves water efficiency, is life cycle cost effec-  
6           tive, and involves water conservation, water re-  
7           cycling or reuse, improvements in operation or  
8           maintenance efficiencies, retrofit activities or  
9           other related activities, not at a Federal hydro-  
10          electric facility.”.

11          (4)    CONFORMING    AMENDMENT.—Section  
12          801(a)(2)(C) of the National Energy Conservation  
13          Policy Act (42 U.S.C. 8287(a)(2)(C)) is amended by  
14          inserting “or water” after “finance energy”.

15   **SEC. 403. FEDERAL PURCHASE REQUIREMENT.**

16          The President shall ensure that, of the total amount  
17          of electric power the Federal Government purchases dur-  
18          ing any fiscal year—

19                (1) not less than 3 percent in fiscal years 2002  
20                through 2004;

21                (2) not less than 5 percent in fiscal years 2005  
22                through 2009;

23                (3) not less than 7.5 percent in fiscal years  
24                2010 through 2019; and

1           (4) not less than 20 percent in fiscal year 2020  
2           and each fiscal year thereafter,  
3 shall be electric power generated by a renewable energy  
4 source.

5 **SEC. 404. FEDERAL BUILDINGS ENERGY EFFICIENCY.**

6           (a) **MINIMUM REQUIREMENT.**—Any federally owned  
7 or leased building for which a contract for construction  
8 or major retrofit is entered into after the date of the en-  
9 actment of this Act shall be required to achieve energy  
10 efficient design standards that exceed by at least 30 per-  
11 cent the standards contained in Standard 90.1–1999 of  
12 the American Society of Heating, Refrigerating, and Air-  
13 Conditioning Engineers.

14           (b) **ALTERNATIVE STANDARDS.**—The Secretary may  
15 establish a requirement for stricter standards than those  
16 required by subsection (a) where local climate conditions  
17 or other circumstances so warrant.

18 **SEC. 405. RETENTION OF SAVINGS.**

19           A Federal agency that is authorized by law to retain  
20 a portion of savings resulting from efficient energy and  
21 water management shall permit the retention of the sav-  
22 ings at the facility or site where the savings occur to pro-  
23 vide greater incentive for facility and site managers to un-  
24 dertake energy and water management initiatives, invest

1 in renewable energy systems, and purchase electricity from  
2 renewable energy sources.

3 **SEC. 406. GUARANTEED ENERGY SAVINGS.**

4 Section 546(a) of the National Energy Conservation  
5 Policy Act (42 U.S.C. 8256(a)) is amended by adding at  
6 the end the following new paragraph:

7 “(3) A contract entered into under this subsection  
8 shall provide for a guarantee of energy savings to the  
9 agency, shall establish payment schedules reflecting such  
10 guarantee, taking into account any capital costs under the  
11 contract, and shall provide for monitoring and verification  
12 of the energy savings.”.

13 **SEC. 407. PRESIDENT’S MANAGEMENT COUNCIL.**

14 The President’s Management Council shall periodi-  
15 cally assess the progress of Federal agencies in improving  
16 energy management.

17 **SEC. 408. FEDERAL USE OF ENERGY STAR STANDARDS.**

18 (a) REQUIREMENT.—Each Federal agency, in acquir-  
19 ing energy-using products, or in acquiring building sys-  
20 tems, designs, or products, shall acquire Energy Star  
21 products, systems, or designs. If Energy Star products,  
22 systems, or designs are not available, the Federal agency  
23 shall acquire products, systems, or designs designated as  
24 among the top 25 percent of such type of product, system,  
25 or design under the Federal Energy Management Pro-

1 gram, or other appropriate standards-setting organiza-  
2 tions.

3 (b) AVAILABILITY.—The General Services Adminis-  
4 tration and the Defense Logistics Agency shall ensure that  
5 Energy Star products, systems, and designs are made  
6 known and readily available to Federal agencies for acqui-  
7 sition.

## 8 **TITLE V—TAX PROVISIONS**

### 9 **SEC. 500. AMENDMENT OF 1986 CODE.**

10 Except as otherwise expressly provided, whenever in  
11 this title an amendment or repeal is expressed in terms  
12 of an amendment to, or repeal of, a section or other provi-  
13 sion, the reference shall be considered to be made to a  
14 section or other provision of the Internal Revenue Code  
15 of 1986.

## 16 **Subtitle A—Energy-Efficient** 17 **Property Used in Business**

### 18 **SEC. 501. CREDIT FOR CERTAIN ENERGY-EFFICIENT PROP-**

#### 19 **ERTY USED IN BUSINESS.**

20 (a) IN GENERAL.—Subpart E of part IV of sub-  
21 chapter A of chapter 1 (relating to rules for computing  
22 investment credit) is amended by inserting after section  
23 48 the following:

1 **“SEC. 48A. ENERGY CREDIT.**

2       “(a) IN GENERAL.—For purposes of section 46, the  
3 energy credit for any taxable year is the energy percentage  
4 of the basis of each energy property placed in service dur-  
5 ing such taxable year.

6       “(b) ENERGY PERCENTAGE.—

7           “(1) IN GENERAL.—The energy percentage is—

8               “(A) except as otherwise provided in this  
9 paragraph, 10 percent,

10               “(B) in the case of energy property de-  
11 scribed in clauses (i), (iii), and (vi) of sub-  
12 section (c)(1)(A), 20 percent,

13               “(C) in the case of energy property de-  
14 scribed in subsection (c)(1)(A)(v), 15 percent,

15               “(D) in the case of energy property de-  
16 scribed in subsection (c)(1)(A)(ii) relating to a  
17 high risk geothermal well, 20 percent,

18               “(E) in the case of energy property de-  
19 scribed in subsection (c)(1)(A)(vii), 30 percent,  
20 and

21               “(F)(i) in the case of a small employer  
22 with respect to the energy property described in  
23 subsection (c)(1)(A)(viii), 30 percent, and

24               “(ii) in the case of energy property de-  
25 scribed in subsection (c)(1)(A)(viii) other than  
26 with respect to a small employer, 0 percent.

1           “(2) COORDINATION WITH REHABILITATION.—

2           The energy percentage shall not apply to that por-  
3           tion of the basis of any property which is attrib-  
4           utable to qualified rehabilitation expenditures.

5           “(c) ENERGY PROPERTY DEFINED.—

6           “(1) IN GENERAL.—For purposes of this sub-  
7           part, the term ‘energy property’ means any  
8           property—

9                   “(A) which is—

10                           “(i) solar energy property,

11                           “(ii) geothermal energy property,

12                           “(iii) energy-efficient building prop-  
13                           erty other than property described in  
14                           clauses (iii)(I) and (v)(I) of subsection  
15                           (d)(3)(A),

16                           “(iv) combined heat and power system  
17                           property,

18                           “(v) low core loss distribution trans-  
19                           former property,

20                           “(vi) qualified anaerobic digester  
21                           property,

22                           “(vii) qualified wind energy systems  
23                           equipment property, or

24                           “(viii) qualified energy star property,

1           “(B)(i) the construction, reconstruction, or  
2 erection of which is completed by the taxpayer,  
3 or

4           “(ii) which is acquired by the taxpayer if  
5 the original use of such property commences  
6 with the taxpayer.

7           “(C) which can reasonably be expected to  
8 remain in operation for at least 5 years,

9           “(D) with respect to which depreciation (or  
10 amortization in lieu of depreciation) is allow-  
11 able, and

12           “(E) which meets the performance and  
13 quality standards (if any) which—

14           “(i) have been prescribed by the Sec-  
15 retary by regulations (after consultation  
16 with the Secretary of Energy), and

17           “(ii) are in effect at the time of the  
18 acquisition of the property.

19           “(2) EXCEPTIONS.—

20           “(A) PUBLIC UTILITY PROPERTY.—Such  
21 term shall not include any property which is  
22 public utility property (as defined in section  
23 46(f)(5) as in effect on the day before the date  
24 of the enactment of the Revenue Reconciliation

1 Act of 1990), except for property described in  
2 paragraph (1)(A)(iv).

3 “(B) CERTAIN WIND EQUIPMENT.—Such  
4 term shall not include equipment described in  
5 paragraph (1)(A)(vii) which is taken into ac-  
6 count for purposes of section 45 for the taxable  
7 year.

8 “(d) DEFINITIONS RELATING TO TYPES OF ENERGY  
9 PROPERTY.—For purposes of this section—

10 “(1) SOLAR ENERGY PROPERTY.—

11 “(A) IN GENERAL.—The term ‘solar en-  
12 ergy property’ means equipment which uses  
13 solar energy to generate electricity, to heat or  
14 cool (or provide hot water for use in) a struc-  
15 ture, or to provide solar process heat.

16 “(B) SWIMMING POOLS, ETC. USED AS  
17 STORAGE MEDIUM.—The term ‘solar energy  
18 property’ shall not include property with respect  
19 to which expenditures are properly allocable to  
20 a swimming pool, hot tub, or any other energy  
21 storage medium which has a function other  
22 than the function of such storage.

23 “(C) SOLAR PANELS.—No solar panel or  
24 other property installed as a roof (or portion  
25 thereof) shall fail to be treated as solar energy



1 property solely because it constitutes a struc-  
2 tural component of the structure on which it is  
3 installed.

4 “(2) GEOTHERMAL ENERGY PROPERTY.—

5 “(A) IN GENERAL.—The term ‘geothermal  
6 energy property’ means equipment used to  
7 produce, distribute, or use energy derived from  
8 a geothermal deposit (within the meaning of  
9 section 613(e)(2)), but only, in the case of elec-  
10 tricity generated by geothermal power, up to  
11 (but not including) the electrical transmission  
12 stage.

13 “(B) HIGH RISK GEOTHERMAL WELL.—  
14 The term ‘high risk geothermal well’ means a  
15 geothermal deposit (within the meaning of sec-  
16 tion 613(e)(2)) which requires high risk drilling  
17 techniques. Such deposit may not be located in  
18 a State or national park or in an area in which  
19 the relevant State park authority or the Na-  
20 tional Park Service determines the development  
21 of such a deposit will negatively impact on a  
22 State or national park.

23 “(3) ENERGY-EFFICIENT BUILDING PROP-  
24 ERTY.—

1                   “(A) IN GENERAL.—The term ‘energy-effi-  
2                   cient building property’ means—  
3                   “(i) a fuel cell which—  
4                       “(I) generates electricity using  
5                       an electrochemical process,  
6                       “(II) has an electricity-only gen-  
7                       eration efficiency greater than 30 per-  
8                       cent, and  
9                       “(III) has a minimum generating  
10                       capacity of 2 kilowatts,  
11                   “(ii) an electric heat pump hot water  
12                   heater which yields an energy factor of 1.7  
13                   or greater under test procedures prescribed  
14                   by the Secretary of Energy,  
15                       “(iii)(I) an electric heat pump which  
16                   has a heating system performance factor  
17                   (HSPF) of at least 8.5 but less than 9 and  
18                   a cooling seasonal energy efficiency ratio  
19                   (SEER) of at least 13.5 but less than 15,  
20                       “(II) an electric heat pump which has  
21                   a heating system performance factor  
22                   (HSPF) of 9 or greater and a cooling sea-  
23                   sonal energy efficiency ratio (SEER) of 15  
24                   or greater,

1           “(iv) a natural gas heat pump which  
2           has a coefficient of performance of not less  
3           than 1.25 for heating and not less than  
4           0.70 for cooling,

5           “(v)(I) a central air conditioner which  
6           has a cooling seasonal energy efficiency  
7           ratio (SEER) of at least 13.5 but less than  
8           15,

9           “(II) a central air conditioner which  
10          has a cooling seasonal energy efficiency  
11          ratio (SEER) of 15 or greater,

12          “(vi) an advanced natural gas water  
13          heater which—

14                 “(I) increases steady state effi-  
15                 ciency and reduces standby and vent  
16                 losses, and

17                 “(II) has an energy factor of at  
18                 least 0.65,

19          “(vii) an advanced natural gas fur-  
20          nace which achieves a 90 percent AFUE  
21          and rated for seasonal electricity use of  
22          less than 300 kWh per year, and

23          “(viii) natural gas cooling equipment  
24          which meets all applicable standards of the  
25          American Society of Heating, Refrig-

1 erating, and Air Conditioning Engineers  
2 and which—

3 “(I) has a coefficient of perform-  
4 ance of not less than .60, or

5 “(II) uses desiccant technology  
6 and has an efficiency rating of not  
7 less than 50 percent.

8 “(B) LIMITATIONS.—The credit under sub-  
9 section (a) for the taxable year may not  
10 exceed—

11 “(i) \$500 in the case of property de-  
12 scribed in subparagraph (A) other than  
13 clauses (i), (iv), and (viii) thereof,

14 “(ii) \$1,000 for each kilowatt of ca-  
15 pacity in the case of any fuel cell described  
16 in subparagraph (A)(i),

17 “(iii) \$1,000 in the case of any nat-  
18 ural gas heat pump described in subpara-  
19 graph (A)(iv), and

20 “(iv) \$150 for each ton of capacity in  
21 the case of any natural gas cooling equip-  
22 ment described in subparagraph (A)(viii).

23 “(4) COMBINED HEAT AND POWER SYSTEM  
24 PROPERTY.—

1           “(A) IN GENERAL.—The term ‘combined  
2 heat and power system property’ means  
3 property—

4           “(i) comprising a system for the same  
5 energy source for the simultaneous or se-  
6 quential generation of electrical power, me-  
7 chanical shaft power, or both, in combina-  
8 tion with steam, heat, or other forms of  
9 useful energy,

10           “(ii) which has an electrical capacity  
11 of more than 50 kilowatts or a mechanical  
12 energy capacity of more than 67 horse-  
13 power or an equivalent combination of elec-  
14 trical and mechanical energy capacities,

15           “(iii) which produces—

16           “(I) at least 20 percent of its  
17 total useful energy in the form of  
18 thermal energy, and

19           “(II) at least 20 percent of its  
20 total useful energy in the form of elec-  
21 trical or mechanical power (or a com-  
22 bination thereof), and

23           “(iv) the energy efficiency percentage  
24 of which exceeds—

1                   “(I) 60 percent in the case of a  
2                   system with an electrical capacity of  
3                   less than 1 megawatt),

4                   “(II) 65 percent in the case of a  
5                   system with an electrical capacity of  
6                   not less than 1 megawatt and not in  
7                   excess of 50 megawatts), and

8                   “(III) 70 percent in the case of a  
9                   system with an electrical capacity in  
10                  excess of 50 megawatts).

11                  “(B) SPECIAL RULES.—

12                  “(i) ENERGY EFFICIENCY PERCENT-  
13                  AGE.—For purposes of subparagraph  
14                  (A)(iv), the energy efficiency percentage of  
15                  a system is the fraction—

16                  “(I) the numerator of which is  
17                  the total useful electrical, thermal,  
18                  and mechanical power produced by  
19                  the system at normal operating rates,  
20                  and

21                  “(II) the denominator of which is  
22                  the lower heating value of the primary  
23                  fuel source for the system.

24                  “(ii) DETERMINATIONS MADE ON BTU  
25                  BASIS.—The energy efficiency percentage

1 and the percentages under subparagraph  
2 (A)(iii) shall be determined on a Btu basis.

3 “(iii) INPUT AND OUTPUT PROPERTY  
4 NOT INCLUDED.—The term ‘combined heat  
5 and power system property’ does not in-  
6 clude property used to transport the en-  
7 ergy source to the facility or to distribute  
8 energy produced by the facility.

9 “(iv) ACCOUNTING RULE FOR PUBLIC  
10 UTILITY PROPERTY.—If the combined heat  
11 and power system property is public utility  
12 property (as defined in section 46(f)(5) as  
13 in effect on the day before the date of the  
14 enactment of the Revenue Reconciliation  
15 Act of 1990), the taxpayer may only claim  
16 the credit under subsection (a)(1) if, with  
17 respect to such property, the taxpayer uses  
18 a normalization method of accounting.

19 “(5) LOW CORE LOSS DISTRIBUTION TRANS-  
20 FORMER PROPERTY.—The term ‘low core loss dis-  
21 tribution transformer property’ means a distribution  
22 transformer which has energy savings from a highly  
23 efficient core of at least 20 percent more than the  
24 average for power ratings reported by studies re-

1       quired under section 124 of the Energy Policy Act  
2       of 1992.

3               “(6) QUALIFIED ANAEROBIC DIGESTER PROP-  
4       ERTY.—The term ‘qualified anaerobic digester prop-  
5       erty’ means an anaerobic digester for manure or  
6       crop waste which achieves at least 65 percent effi-  
7       ciency measured in terms of the fraction of energy  
8       input converted to electricity and useful thermal en-  
9       ergy.

10              “(7) QUALIFIED WIND ENERGY SYSTEMS  
11       EQUIPMENT PROPERTY.—The term ‘qualified wind  
12       energy systems equipment property’ means wind en-  
13       ergy systems equipment with a turbine size of not  
14       more than 75 kilowatts rated capacity.

15              “(8) QUALIFIED ENERGY STAR PROPERTY.—

16                      “(A) IN GENERAL.—The term ‘qualified  
17       energy star product’ means a product which—

18                              “(i) meets the guidelines, specifica-  
19       tions, and performance levels of the En-  
20       ergy Star program jointly managed by the  
21       Environmental Protection Agency and the  
22       Department of Energy, and

23                              “(ii) displays the Energy Star label.

24                      “(B) SMALL EMPLOYER.—The term ‘small  
25       employer’ means, with respect to any calendar



1 year, any employer if such employer employed  
2 an average of 100 or fewer employees on busi-  
3 ness days during either of the 2 preceding cal-  
4 endar years. For purposes of the preceding sen-  
5 tence, a preceding calendar year may be taken  
6 into account only if the employer was in exist-  
7 ence throughout such year.

8 “(e) SPECIAL RULES.—For purposes of this  
9 section—

10 “(1) SPECIAL RULE FOR PROPERTY FINANCED  
11 BY SUBSIDIZED ENERGY FINANCING OR INDUSTRIAL  
12 DEVELOPMENT BONDS.—

13 “(A) REDUCTION OF BASIS.—For purposes  
14 of applying the energy percentage to any prop-  
15 erty, if such property is financed in whole or in  
16 part by—

17 “(i) subsidized energy financing, or

18 “(ii) the proceeds of a private activity  
19 bond (within the meaning of section 141)  
20 the interest on which is exempt from tax  
21 under section 103, the amount taken into  
22 account as the basis of such property shall  
23 not exceed the amount which (but for this  
24 subparagraph) would be so taken into ac-

1 count multiplied by the fraction deter-  
2 mined under subparagraph (B).

3 “(B) DETERMINATION OF FRACTION.—For  
4 purposes of subparagraph (A), the fraction de-  
5 termined under this subparagraph is 1 reduced  
6 by a fraction—

7 “(i) the numerator of which is that  
8 portion of the basis of the property which  
9 is allocable to such financing or proceeds,  
10 and

11 “(ii) the denominator of which is the  
12 basis of the property.

13 “(C) SUBSIDIZED ENERGY FINANCING.—  
14 For purposes of subparagraph (A), the term  
15 ‘subsidized energy financing’ means financing  
16 provided under a Federal, State, or local pro-  
17 gram a principal purpose of which is to provide  
18 subsidized financing for projects designed to  
19 conserve or produce energy.

20 “(2) CERTAIN PROGRESS EXPENDITURE RULES  
21 MADE APPLICABLE.—Rules similar to the rules of  
22 subsections (c)(4) and (d) of section 46 (as in effect  
23 on the day before the date of the enactment of the  
24 Revenue Reconciliation Act of 1990) shall apply for  
25 purposes of this section.

1 “(f) APPLICATION OF SECTION.—

2 “(1) IN GENERAL.—Except as provided by  
3 paragraph (2), this section shall apply to property  
4 placed in service after December 31, 2001, and be-  
5 fore January 1, 2009.

6 “(2) EXCEPTIONS.—

7 “(A) SOLAR ENERGY AND GEOTHERMAL  
8 ENERGY PROPERTY.—Paragraph (1) shall not  
9 apply to solar energy property or geothermal  
10 energy property.

11 “(B) CERTAIN ELECTRIC HEAT PUMPS  
12 AND CENTRAL AIR CONDITIONERS.—In the case  
13 of property which is described in subsection  
14 (d)(3)(A)(iii)(I) or (d)(3)(A)(v)(I), this section  
15 shall apply to property placed in service after  
16 December 31, 2001, and before January 1,  
17 2006.

18 “(g) TERMINATION.—This section shall not apply to  
19 property placed in service after December 31, 2006.”.

20 (b) CONFORMING AMENDMENTS.—

21 (1) Section 48 is amended to read as follows:

22 **“SEC. 48. REFORESTATION CREDIT.**

23 “(a) IN GENERAL.—For purposes of section 46, the  
24 reforestation credit for any taxable year is 20 percent of  
25 the portion of the amortizable basis of any qualified timber

1 property which was acquired during such taxable year and  
2 which is taken into account under section 194 (after the  
3 application of section 194(b)(1)).

4 “(b) DEFINITIONS.—For purposes of this subpart,  
5 the terms ‘amortizable basis’ and ‘qualified timber prop-  
6 erty’ have the respective meanings given to such terms by  
7 section 194.”.

8 (2) Section 39(d) is amended by adding at the  
9 end the following:

10 “(11) NO CARRYBACK OF ENERGY CREDIT BE-  
11 FORE EFFECTIVE DATE.—No portion of the unused  
12 business credit for any taxable year which is attrib-  
13 utable to the energy credit determined under section  
14 48A may be carried back to a taxable year ending  
15 before January 1, 2002.”.

16 (3) Section 280C is amended by adding at the  
17 end the following:

18 “(d) CREDIT FOR ENERGY PROPERTY EXPENSES.—

19 “(1) IN GENERAL.—No deduction shall be al-  
20 lowed for that portion of the expenses for energy  
21 property (as defined in section 48A(c)) otherwise al-  
22 lowable as a deduction for the taxable year which is  
23 equal to the amount of the credit determined for  
24 such taxable year under section 48A(a).

1           “(2) SIMILAR RULE WHERE TAXPAYER CAP-  
2           ITALIZES RATHER THAN DEDUCTS EXPENSES.—If—

3                   “(A) the amount of the credit allowable for  
4           the taxable year under section 48A (determined  
5           without regard to section 38(c)), exceeds

6                   “(B) the amount allowable as a deduction  
7           for the taxable year for expenses for energy  
8           property (determined without regard to para-  
9           graph (1)), the amount chargeable to capital  
10           account for the taxable year for such expenses  
11           shall be reduced by the amount of such excess.

12           “(3) CONTROLLED GROUPS.—Paragraph (3) of  
13           subsection (b) shall apply for purposes of this sub-  
14           section.”.

15           (4) Section 29(b)(3)(A)(i)(III) is amended by  
16           striking ‘section 48(a)(4)(C)’ and inserting ‘section  
17           48A(e)(1)(C)’.

18           (5) Section 50(a)(2)(E) is amended by striking  
19           ‘section 48(a)(5)’ and inserting ‘section 48A(e)(2)’.

20           (6) Section 168(e)(3)(B) is amended—

21                   (A) by striking clause (vi)(I) and inserting  
22           the following:

23                           “(I) is described in paragraph (1) or  
24                           (2) of section 48A(d) (or would be so de-

1           scribed if ‘solar and wind’ were substituted  
2           for ‘solar’ in paragraph (1)(B)),”, and  
3           (B) in the last sentence by striking “sec-  
4           tion 48(a)(3)” and inserting “section  
5           48A(c)(2)(A)”.

6           (c) CLERICAL AMENDMENT.—The table of sections  
7 for subpart E of part IV of subchapter A of chapter 1  
8 is amended by striking the item relating to section 48 and  
9 inserting the following:

“Sec. 48. Reforestation credit.  
“Sec. 48A. Energy credit.”.

10          (d) EFFECTIVE DATE.—The amendments made by  
11 this section shall apply to property placed in service after  
12 December 31, 2001, under rules similar to the rules of  
13 section 48(m) of the Internal Revenue Code of 1986 (as  
14 in effect on the day before the date of the enactment of  
15 the Revenue Reconciliation Act of 1990).

16 **SEC. 502. ENERGY-EFFICIENT COMMERCIAL BUILDING**  
17 **PROPERTY DEDUCTION.**

18          (a) IN GENERAL.—Part VI of subchapter B of chap-  
19 ter 1 (relating to itemized deductions for individuals and  
20 corporations) is amended by adding at the end the fol-  
21 lowing:

1 **“SEC. 199. ENERGY-EFFICIENT COMMERCIAL BUILDING**  
2 **PROPERTY.**

3 “(a) IN GENERAL.—There shall be allowed as a de-  
4 duction for the taxable year an amount equal to the en-  
5 ergy-efficient commercial building property expenditures  
6 made by a taxpayer for the taxable year.

7 “(b) MAXIMUM AMOUNT OF DEDUCTION.—The  
8 amount of energy-efficient commercial building property  
9 expenditures taken into account under subsection (a) shall  
10 not exceed an amount equal to the product of—

11 “(1) \$2.25, and

12 “(2) the square footage of the building with re-  
13 spect to which the expenditures are made.

14 “(c) YEAR DEDUCTION ALLOWED.—The deduction  
15 under subsection (a) shall be allowed in the taxable year  
16 in which the construction of the building is completed.

17 “(d) ENERGY-EFFICIENT COMMERCIAL BUILDING  
18 PROPERTY EXPENDITURES.—For purposes of this  
19 section—

20 “(1) IN GENERAL.—The term ‘energy-efficient  
21 commercial building property expenditures’ means  
22 an amount paid or incurred for energy-efficient com-  
23 mercial building property installed on or in connec-  
24 tion with new construction or reconstruction of  
25 property—

1           “(A) for which depreciation is allowable  
2           under section 167,

3           “(B) which is located in the United States,  
4           and

5           “(C) the construction or erection of which  
6           is completed by the taxpayer.

7           Such property includes all residential rental prop-  
8           erty, including low-rise multifamily structures and  
9           single family housing property which is not within  
10          the scope of Standard 90.1–1999 (described in para-  
11          graph (3)).

12          “(2) LABOR COSTS INCLUDED.—Such term in-  
13          cludes expenditures for labor costs properly allocable  
14          to the onsite preparation, assembly, or original in-  
15          stallation of the property.

16          “(3) ENERGY EXPENDITURES EXCLUDED.—  
17          Such term does not include any expenditures taken  
18          into account in determining any credit allowed under  
19          section 48A.

20          “(e) ENERGY-EFFICIENT COMMERCIAL BUILDING  
21          PROPERTY.—For purposes of subsection (d)—

22                 “(1) IN GENERAL.—The term ‘energy-efficient  
23                 commercial building property’ means any property  
24                 which reduces total annual energy and power costs  
25                 with respect to the lighting, heating, cooling, ventila-



1 tion, and hot water supply systems of the building  
2 by 50 percent or more in comparison to a reference  
3 building which meets the requirements of Standard  
4 90.1–1999 of the American Society of Heating, Re-  
5 frigerating, and Air Conditioning Engineers and the  
6 Illuminating Engineering Society of North America  
7 using methods of calculation under subparagraph  
8 (B) and certified by qualified professionals as pro-  
9 vided under paragraph (6).

10 “(2) METHODS OF CALCULATION.—The Sec-  
11 retary, in consultation with the Secretary of Energy,  
12 shall promulgate regulations which describe in detail  
13 methods for calculating and verifying energy and  
14 power consumption and cost, taking into consider-  
15 ation the provisions of the 1998 California Nonresi-  
16 dential ACM Manual. These procedures shall meet  
17 the following requirements:

18 “(A) In calculating tradeoffs and energy  
19 performance, the regulations shall prescribe the  
20 costs per unit of energy and power, such as kil-  
21 owatt hour, kilowatt, gallon of fuel oil, and  
22 cubic foot or Btu of natural gas, which may be  
23 dependent on time of usage.

24 “(B) The calculational methodology shall  
25 require that compliance be demonstrated for a

1 whole building. If some systems of the building,  
2 such as lighting, are designed later than other  
3 systems of the building, the method shall pro-  
4 vide that either—

5 “(i) the expenses taken into account  
6 under paragraph (1) shall not occur until  
7 the date designs for all energy-using sys-  
8 tems of the building are completed, or

9 “(ii) the expenses taken into account  
10 under paragraph (1) shall be a fraction of  
11 such expenses based on the performance of  
12 less than all energy-using systems in ac-  
13 cordance with subparagraph (C), and the  
14 energy performance of all systems and  
15 components not yet designed shall be as-  
16 sumed to comply minimally with the re-  
17 quirements of such Standard 90.1–1999.

18 “(C) The expenditures in connection with  
19 the design of subsystems in the building, such  
20 as the envelope, the heating, ventilation, air  
21 conditioning and water heating system, and the  
22 lighting system shall be allocated to the appro-  
23 priate building subsystem based on system-spe-  
24 cific energy cost savings targets in regulations  
25 promulgated by the Secretary of Energy which

1 are equivalent, using the calculation method-  
2 ology, to the whole building requirement of 50  
3 percent savings.

4 “(D) The calculational methods under this  
5 paragraph need not comply fully with section  
6 11 of such Standard 90.1–1999.

7 “(E) The calculational methods shall be  
8 fuel neutral, such that the same energy effi-  
9 ciency features shall qualify a building for the  
10 deduction under this section regardless of  
11 whether the heating source is a gas or oil fur-  
12 nace or an electric heat pump.

13 “(F) The calculational methods shall pro-  
14 vide appropriate calculated energy savings for  
15 design methods and technologies not otherwise  
16 credited in either such Standard 90.1–1999 or  
17 in the 1998 California Nonresidential ACM  
18 Manual, including the following:

19 “(i) Natural ventilation.

20 “(ii) Evaporative cooling.

21 “(iii) Automatic lighting controls such  
22 as occupancy sensors, photocells, and time-  
23 clocks.

24 “(iv) Daylighting.

1           “(v) Designs utilizing semi-condi-  
2           tioned spaces which maintain adequate  
3           comfort conditions without air conditioning  
4           or without heating.

5           “(vi) Improved fan system efficiency,  
6           including reductions in static pressure.

7           “(vii) Advanced unloading mecha-  
8           nisms for mechanical cooling, such as mul-  
9           tiple or variable speed compressors.

10          “(viii) The calculational methods may  
11          take into account the extent of commis-  
12          sioning in the building, and allow the tax-  
13          payer to take into account measured per-  
14          formance which exceeds typical perform-  
15          ance.

16          “(3) COMPUTER SOFTWARE.—

17                 “(A) IN GENERAL.—Any calculation under  
18                 this subsection shall be prepared by qualified  
19                 computer software.

20                 “(B) QUALIFIED COMPUTER SOFTWARE.—

21                 For purposes of this paragraph, the term  
22                 ‘qualified computer software’ means software—

23                         “(i) for which the software designer  
24                         has certified that the software meets all  
25                         procedures and detailed methods for calcu-

1           lating energy and power consumption and  
2           costs as required by the Secretary,

3           “(ii) which provides such forms as re-  
4           quired to be filed by the Secretary in con-  
5           nection with energy efficiency of property  
6           and the deduction allowed under this sec-  
7           tion, and

8           “(iii) which provides a notice form  
9           which summarizes the energy efficiency  
10          features of the building and its projected  
11          annual energy costs.

12          “(4) ALLOCATION OF DEDUCTION FOR PUBLIC  
13          PROPERTY.—In the case of energy-efficient commer-  
14          cial building property installed on or in public prop-  
15          erty, the Secretary shall promulgate a regulation to  
16          allow the allocation of the deduction to the person  
17          primarily responsible for designing the property in  
18          lieu of the public entity which is the owner of such  
19          property. Such person shall be treated as the tax-  
20          payer for purposes of this section.

21          “(5) NOTICE TO OWNER.—The qualified indi-  
22          vidual shall provide an explanation to the owner of  
23          the building regarding the energy efficiency features  
24          of the building and its projected annual energy costs

1 as provided in the notice under paragraph  
2 (3)(B)(iii).

3 “(6) CERTIFICATION.—

4 “(A) IN GENERAL.—Except as provided in  
5 this paragraph, the Secretary, in consultation  
6 with the Secretary of Energy, shall establish re-  
7 quirements for certification and compliance pro-  
8 cedures similar to the procedures under section  
9 45G(d).

10 “(B) QUALIFIED INDIVIDUALS.—Individ-  
11 uals qualified to determine compliance shall be  
12 only those individuals who are recognized by an  
13 organization certified by the Secretary for such  
14 purposes.

15 “(C) PROFICIENCY OF QUALIFIED INDIVID-  
16 UALS.—The Secretary shall consult with non-  
17 profit organizations and State agencies with ex-  
18 pertise in energy efficiency calculations and in-  
19 spections to develop proficiency tests and train-  
20 ing programs to qualify individuals to determine  
21 compliance.

22 “(f) TERMINATION.—This section shall not apply  
23 with respect to any energy-efficient commercial building  
24 property expenditures in connection with property—



1 **“SEC. 45G. ENERGY EFFICIENT APPLIANCE CREDIT.**

2       “(a) GENERAL RULE.—For purposes of section 38,  
3 the energy efficient appliance credit determined under this  
4 section for the taxable year is an amount equal to the ap-  
5 plicable amount determined under subsection (b) with re-  
6 spect to qualified energy efficient appliances produced by  
7 the taxpayer during the calendar year ending with or with-  
8 in the taxable year.

9       “(b) APPLICABLE AMOUNT.—For purposes of sub-  
10 section (a), the applicable amount determined under this  
11 subsection with respect to a taxpayer is the sum of—

12               “(1) in the case of an energy efficient clothes  
13 washer described in subsection (d)(2)(A), an energy  
14 efficient refrigerator described in subsection  
15 (d)(3)(B)(i), or an energy efficient air conditioner  
16 described in subsection (d)(4)(A), an amount equal  
17 to—

18                       “(A) \$50, multiplied by

19                       “(B) the number of such washers, refrig-  
20 erators, and air conditioners produced by the  
21 taxpayer during such calendar year, and

22               “(2) in the case of an energy efficient clothes  
23 washer described in subsection (d)(2)(B), an energy  
24 efficient refrigerator described in subsection  
25 (d)(3)(B)(ii), or an energy efficient air conditioner



1 described in subsection (d)(4)(B), an amount equal  
2 to—

3 “(A) \$100, multiplied by

4 “(B) the number of such washers, refriger-  
5 erators, or air conditioners produced by the tax-  
6 payer during such calendar year.

7 “(c) LIMITATION ON MAXIMUM CREDIT.—

8 “(1) IN GENERAL.—The maximum amount of  
9 credit allowed under subsection (a) with respect to  
10 a taxpayer for all taxable years shall be—

11 “(A) \$30,000,000 with respect to the cred-  
12 it determined under subsection (b)(1), and

13 “(B) \$30,000,000 with respect to the cred-  
14 it determined under subsection (b)(2).

15 “(2) LIMITATION BASED ON GROSS RE-  
16 CEIPTS.—The credit allowed under subsection (a)  
17 with respect to a taxpayer for the taxable year shall  
18 not exceed an amount equal to 2 percent of the aver-  
19 age annual gross receipts of the taxpayer for the 3  
20 taxable years preceding the taxable year in which  
21 the credit is determined.

22 “(3) GROSS RECEIPTS.—For purposes of this  
23 subsection, the rules of paragraphs (2) and (3) of  
24 section 448(c) shall apply.

1 “(d) QUALIFIED ENERGY EFFICIENT APPLIANCE.—

2 For purposes of this section—

3 “(1) IN GENERAL.—The term ‘qualified energy  
4 efficient appliance’ means—

5 “(A) an energy efficient clothes washer,

6 “(B) an energy efficient refrigerator, or

7 “(C) an energy efficient air conditioner.

8 “(2) ENERGY EFFICIENT CLOTHES WASHER.—

9 The term ‘energy efficient clothes washer’ means a  
10 residential clothes washer, including a residential  
11 style coin operated washer, which is manufactured  
12 with—

13 “(A) a 1.26 Modified Energy Factor (re-  
14 ferred to in this paragraph as ‘MEF’) (as de-  
15 termined by the Secretary of Energy), or

16 “(B) a 1.42 MEF (as determined by the  
17 Secretary of Energy) (1.5 MEF for calendar  
18 years beginning after 2004).

19 “(3) ENERGY EFFICIENT REFRIGERATOR.—The  
20 term ‘energy efficient refrigerator’ means an auto-  
21 matic defrost refrigerator-freezer which—

22 “(A) has an internal volume of at least  
23 16.5 cubic feet, and

24 “(B) consumes—

1                   “(i) 10 percent less kw/hr/yr than the  
2                   energy conservation standards promulgated  
3                   by the Department of Energy for such re-  
4                   frigerator for 2001, or

5                   “(ii) 15 percent less kw/hr/yr than  
6                   such energy conservation standards.

7                   “(4) ENERGY EFFICIENT AIR CONDITIONER.—

8                   The term ‘energy efficient air conditioner’ means—

9                   “(A) a central air conditioner which has a  
10                  cooling seasonal energy efficiency ratio (SEER)  
11                  of at least 13.5 but less than 15, or

12                  “(B) a central air conditioner which has a  
13                  cooling seasonal energy efficiency ratio (SEER)  
14                  of 15 or greater.

15                  “(e) SPECIAL RULES.—

16                  “(1) IN GENERAL.—Rules similar to the rules  
17                  of subsections (c), (d), and (e) of section 52 shall  
18                  apply for purposes of this section.

19                  “(2) AGGREGATION RULES.—All persons treat-  
20                  ed as a single employer under subsection (a) or (b)  
21                  of section 52 or subsection (m) or (o) of section 414  
22                  shall be treated as one person for purposes of sub-  
23                  section (a).

24                  “(f) VERIFICATION.—The taxpayer shall submit such  
25                  information or certification as the Secretary, in consulta-

1 tion with the Secretary of Energy, determines necessary  
2 to claim the credit amount under subsection (a).

3 “(g) TERMINATION.—This section shall not apply—

4 “(1) with respect to energy efficient refriger-  
5 erators described in subsection (d)(3)(B)(i) produced  
6 in calendar years beginning after 2005, and

7 “(2) with respect to all other qualified energy  
8 efficient appliances produced in calendar years be-  
9 ginning after 2007.”.

10 (b) LIMITATION ON CARRYBACK.—Section 39(d) (re-  
11 lating to transition rules) is amended by adding at the  
12 end the following new paragraph:

13 “(12) NO CARRYBACK OF ENERGY EFFICIENT  
14 APPLIANCE CREDIT BEFORE EFFECTIVE DATE.—No  
15 portion of the unused business credit for any taxable  
16 year which is attributable to the energy efficient ap-  
17 pliance credit determined under section 45G may be  
18 carried to a taxable year ending before the date of  
19 the enactment of section 45G.”.

20 (c) CONFORMING AMENDMENT.—Section 38(b) (re-  
21 lating to general business credit) is amended by striking  
22 “plus” at the end of paragraph (14), by striking the period  
23 at the end of paragraph (15) and inserting “, plus”, and  
24 by adding at the end the following new paragraph:



1           “(1) MAXIMUM CREDIT.—

2                   “(A) IN GENERAL.—The credit allowed by  
3 this section with respect to a dwelling shall not  
4 exceed—

5                           “(i) in the case of a dwelling described  
6 in subsection (c)(3)(D)(i), \$2,000, and

7                           “(ii) in the case of a dwelling de-  
8 scribed in subsection (c)(3)(D)(ii), \$3,000.

9           “(B) PRIOR CREDIT AMOUNTS ON SAME  
10 DWELLING TAKEN INTO ACCOUNT.—If a credit  
11 was allowed under subsection (a) with respect  
12 to a dwelling in 1 or more prior taxable years,  
13 the amount of the credit otherwise allowable for  
14 the taxable year with respect to that dwelling  
15 shall not exceed the amount under clause (i) or  
16 (ii) (as the case may be), reduced by the sum  
17 of the credits allowed under subsection (a) with  
18 respect to the dwelling for all prior taxable  
19 years.

20           “(C) ADJUSTMENT FOR INFLATION.—

21                   “(i) IN GENERAL.—In the case of any  
22 taxable year beginning in a calendar year  
23 after 2002, each dollar amount contained  
24 in subparagraph (A) shall be increased by  
25 an amount equal to—

1                   “(I) such dollar amount, multi-  
2                   plied by

3                   “(II) the cost-of-living adjust-  
4                   ment determined under section 1(f)(3)  
5                   for the calendar year in which the tax-  
6                   able year begins by substituting ‘cal-  
7                   endar year 2001’ for ‘calendar year  
8                   1992’ in subparagraph (B) thereof.

9                   “(B) ROUNDING.—If any increase deter-  
10                  mined under paragraph (1) is not a multiple of  
11                  \$100, such increase shall be rounded to the  
12                  next lower multiple of \$100.

13                  “(2) COORDINATION WITH REHABILITATION  
14                  AND ENERGY CREDITS.—For purposes of this  
15                  section—

16                  “(A) the basis of any property referred to  
17                  in subsection (a) shall be reduced by that por-  
18                  tion of the basis of any property which is attrib-  
19                  utable to qualified rehabilitation expenditures  
20                  (as defined in section 47(c)(2)) or to the energy  
21                  percentage of energy property (as determined  
22                  under section 48A(a)), and

23                  “(B) expenditures taken into account  
24                  under either section 47 or 48A(a) shall not be  
25                  taken into account under this section.

1 “(c) DEFINITIONS.—For purposes of this section—

2 “(1) ELIGIBLE CONTRACTOR.—The term ‘eligi-  
3 ble contractor’ means the person who constructed  
4 the new energy-efficient home, or in the case of a  
5 manufactured home which conforms to Federal  
6 Manufactured Home Construction and Safety Stand-  
7 ards (24 C.F.R. 3280), the manufactured home pro-  
8 ducer of such home.

9 “(2) ENERGY-EFFICIENT PROPERTY.—The  
10 term ‘energy-efficient property’ means any energy-  
11 efficient building envelope component, and any en-  
12 ergy-efficient heating or cooling equipment which  
13 can, individually or in combination with other com-  
14 ponents, meet the requirements of this section.

15 “(3) QUALIFIED NEW ENERGY-EFFICIENT  
16 HOME.—The term ‘qualified new energy-efficient  
17 home’ means a dwelling—

18 “(A) located in the United States,

19 “(B) the construction of which is substan-  
20 tially completed after December 31, 2000,

21 “(C) the original use of which is as a prin-  
22 cipal residence (within the meaning of section  
23 121) which commences with the person who ac-  
24 quires such dwelling from the eligible con-  
25 tractor, and



1           “(D) which is certified to have a projected  
2           level of annual heating and cooling energy con-  
3           sumption, measured in terms of average annual  
4           energy cost to the homeowner which is at  
5           least—

6                   “(i) 30 percent less than the annual  
7                   level of heating and cooling energy con-  
8                   sumption of a reference dwelling con-  
9                   structed in accordance with the standards  
10                  of chapter 4 of the 2000 International En-  
11                  ergy Conservation Code, or

12                   “(ii) 50 percent less than such annual  
13                   level of heating and cooling energy con-  
14                   sumption.

15           “(4) CONSTRUCTION.—The term ‘construction’  
16           includes reconstruction and rehabilitation.

17           “(5) ACQUIRE.—The term ‘acquire’ includes  
18           purchase and, in the case of reconstruction and re-  
19           habilitation, such term includes a binding written  
20           contract for such reconstruction or rehabilitation.

21           “(6) BUILDING ENVELOPE COMPONENT.—The  
22           term ‘building envelope component’ means—

23                   “(A) insulation material or system which is  
24                   specifically and primarily designed to reduce the

1 heat loss or gain of a dwelling when installed in  
2 or on such dwelling, and

3 “(B) exterior windows (including skylights)  
4 and doors.

5 “(7) MANUFACTURED HOME INCLUDED.—The  
6 term ‘dwelling’ includes a manufactured home con-  
7 forming to Federal Manufactured Home Construc-  
8 tion and Safety Standards (24 C.F.R. 3280).

9 “(d) CERTIFICATION.—

10 “(1) METHOD.—A certification described in  
11 subsection (c)(3)(D) shall be determined on the  
12 basis of 1 of the following methods:

13 “(A) A component-based method, using the  
14 applicable technical energy efficiency specifica-  
15 tions or ratings (including product labeling re-  
16 quirements) for the energy-efficient building en-  
17 velope component or energy-efficient heating or  
18 cooling equipment. The Secretary shall, in con-  
19 sultation with the Administrator of the Envi-  
20 ronmental Protection Agency, develop prescrip-  
21 tive component-based packages that are equiva-  
22 lent in energy performance to properties that  
23 qualify under subparagraph (B).

24 “(B) An energy performance-based method  
25 that calculates projected energy usage and cost

1 reductions in the dwelling in relation to a ref-  
2 erence dwelling—

3 “(i) heated by the same energy source  
4 and heating system type, and

5 “(ii) constructed in accordance with  
6 the standards of chapter 4 of the 2000  
7 International Energy Conservation Code.

8 Computer software shall be used in support of an  
9 energy performance-based method certification under  
10 subparagraph (B). Such software shall meet proce-  
11 dures and methods for calculating energy and cost  
12 savings in regulations promulgated by the Secretary  
13 of Energy. Such regulations on the specifications for  
14 software and verification protocols shall be based on  
15 the 1998 California Residential Alternative Calcula-  
16 tion Method Approval Manual.

17 “(2) PROVIDER.—Such certification shall be  
18 provided by—

19 “(A) in the case of a method described in  
20 paragraph (1)(A), a local building regulatory  
21 authority, a utility, a manufactured home pro-  
22 duction inspection primary inspection agency  
23 (IPLA), or a home energy rating organization,  
24 or

1           “(B) in the case of a method described in  
2 paragraph (1)(B), an individual recognized by  
3 an organization designated by the Secretary for  
4 such purposes.

5           “(3) FORM.—

6           “(A) IN GENERAL.—Such certification  
7 shall be made in writing in a manner that  
8 specifies in readily verifiable fashion the energy-  
9 efficient building envelope components and en-  
10 energy-efficient heating or cooling equipment in-  
11 stalled and their respective rated energy effi-  
12 ciency performance, and in the case of a meth-  
13 od described in paragraph (1)(B), accompanied  
14 by written analysis documenting the proper ap-  
15 plication of a permissible energy performance  
16 calculation method to the specific circumstances  
17 of such dwelling.

18           “(B) FORM PROVIDED TO BUYER.—A form  
19 documenting the energy-efficient building enve-  
20 lope components and energy-efficient heating or  
21 cooling equipment installed and their rated en-  
22 energy efficiency performance shall be provided to  
23 the buyer of the dwelling. The form shall in-  
24 clude labeled R-value for insulation products,  
25 NFRC-labeled U-factor and Solar Heat Gain

1 Coefficient for windows, skylights, and doors,  
2 labeled AFUE ratings for furnaces and boilers,  
3 labeled HSPF ratings for electric heat pumps,  
4 and labeled SEER ratings for air conditioners.

5 “(C) RATINGS LABEL AFFIXED IN DWELL-  
6 ING.—A permanent label documenting the rat-  
7 ings in subparagraph (B) shall be affixed to the  
8 front of the electrical distribution panel of the  
9 dwelling, or shall be otherwise permanently dis-  
10 played in a readily inspectable location in the  
11 dwelling.

12 “(4) REGULATIONS.—

13 “(A) IN GENERAL.—In prescribing regula-  
14 tions under this subsection for energy perform-  
15 ance-based certification methods, the Secretary,  
16 after examining the requirements for energy  
17 consultants and home energy ratings providers  
18 specified by the Mortgage Industry National  
19 Accreditation Procedures for Home Energy  
20 Rating Systems, shall prescribe procedures for  
21 calculating annual energy usage and cost reduc-  
22 tions for heating and cooling and for the report-  
23 ing of the results. Such regulations shall—

24 “(i) provide that any calculation pro-  
25 cedures be fuel neutral such that the same

1 energy efficiency measures allow a home to  
2 qualify for the credit under this section re-  
3 gardless of whether the dwelling uses a gas  
4 or oil furnace or boiler or an electric heat  
5 pump, and

6 “(ii) require that any computer soft-  
7 ware allow for the printing of the Federal  
8 tax forms necessary for the credit under  
9 this section and for the printing of forms  
10 for disclosure to the homebuyer.

11 “(B) PROVIDERS.—For purposes of para-  
12 graph (2)(B), the Secretary shall establish re-  
13 quirements for the designation of individuals  
14 based on the requirements for energy consult-  
15 ants and home energy raters specified by the  
16 Mortgage Industry National Accreditation Pro-  
17 cedures for Home Energy Rating Systems.

18 “(e) BASIS ADJUSTMENT.—For purposes of this sub-  
19 title, if a credit is allowed under this section for any ex-  
20 penditure with respect to any property, the increase in the  
21 basis of such property which would (but for this sub-  
22 section) result from such expenditure shall be reduced by  
23 the amount of the credit so allowed.”.

24 (b) CREDIT MADE PART OF GENERAL BUSINESS  
25 CREDIT.—Subsection (b) of section 38 (relating to current

1 year business credit) is amended by striking “plus” at the  
2 end of paragraph (15), by striking the period at the end  
3 of paragraph (16) and inserting “, plus”, and by adding  
4 at the end the following:

5           “(17) the new energy-efficient home credit de-  
6           termined under section 45H.”.

7           (c) DENIAL OF DOUBLE BENEFIT.—Section 280C  
8 (relating to certain expenses for which credits are allow-  
9 able) is amended by adding at the end the following:

10          (e) NEW ENERGY-EFFICIENT HOME EXPENSES.—  
11 No deduction shall be allowed for that portion of expenses  
12 for a new energy-efficient home otherwise allowable as a  
13 deduction for the taxable year which is equal to the  
14 amount of the credit determined for such taxable year  
15 under section 45H.”.

16          (d) CREDIT ALLOWED AGAINST REGULAR AND MIN-  
17 IMUM TAX.—

18           (1) IN GENERAL.—Subsection (c) of section 38  
19 (relating to limitation based on amount of tax) is  
20 amended by redesignating paragraph (3) as para-  
21 graph (4) and by inserting after paragraph (2) the  
22 following new paragraph:

23           “(3) SPECIAL RULES FOR NEW ENERGY EFFI-  
24           CIENT HOME CREDIT.—

1           “(A) IN GENERAL.—In the case of the new  
2 energy efficient home credit—

3           “(i) this section and section 39 shall  
4 be applied separately with respect to the  
5 credit, and

6           “(ii) in applying paragraph (1) to the  
7 credit—

8           “(I) subparagraphs (A) and (B)  
9 thereof shall not apply, and

10           “(II) the limitation under para-  
11 graph (1) (as modified by subclause  
12 (I)) shall be reduced by the credit al-  
13 lowed under subsection (a) for the  
14 taxable year (other than the new en-  
15 ergy efficient home credit).

16           “(B) NEW ENERGY EFFICIENT HOME  
17 CREDIT.—For purposes of this subsection, the  
18 term ‘new energy efficient home credit’ means  
19 the credit allowable under subsection (a) by rea-  
20 son of section 45H.

21           “(e) TERMINATION.—This section shall not apply to  
22 taxable years beginning after December 31, 2006.”.

23           (2) CONFORMING AMENDMENT.—Subclause (II)  
24 of section 38(c)(2)(A)(ii) is amended by inserting



1 “or the new energy efficient home credit” after “em-  
2 ployment credit”.

3 (e) LIMITATION ON CARRYBACK.—Subsection (d) of  
4 section 39 is amended by adding at the end the following:

5 “(13) NO CARRYBACK OF NEW ENERGY-EFFI-  
6 CIENT HOME CREDIT BEFORE EFFECTIVE DATE.—  
7 No portion of the unused business credit for any  
8 taxable year which is attributable to the credit deter-  
9 mined under section 45H may be carried back to  
10 any taxable year ending before January 1, 2001.”.

11 (f) DEDUCTION FOR CERTAIN UNUSED BUSINESS  
12 CREDITS.—Subsection (e) of section 196 is amended by  
13 striking “and” at the end of paragraph (8), by striking  
14 the period at the end of paragraph (9) and inserting “,  
15 and”, and by adding after paragraph (10) the following:

16 “(11) the new energy-efficient home credit de-  
17 termined under section 45H.”.

18 (g) CLERICAL AMENDMENT.—The table of sections  
19 for subpart D of part IV of subchapter A of chapter 1  
20 is amended by inserting after the item relating to section  
21 45G the following:

“Sec. 45H. New energy-efficient home credit.”.

22 (h) EFFECTIVE DATE.—The amendments made by  
23 this section shall apply to taxable years ending after De-  
24 cember 31, 2000.

1 **SEC. 512. CREDIT FOR ENERGY EFFICIENCY IMPROVE-**  
2 **MENTS TO EXISTING HOMES.**

3 (a) IN GENERAL.—Subpart A of part IV of sub-  
4 chapter A of chapter 1 (relating to nonrefundable personal  
5 credits) is amended by inserting after section 25B the fol-  
6 lowing new section:

7 **“SEC. 25C. ENERGY EFFICIENCY IMPROVEMENTS TO EXIST-**  
8 **ING HOMES.**

9 “(a) ALLOWANCE OF CREDIT.—In the case of an in-  
10 dividual, there shall be allowed as a credit against the tax  
11 imposed by this chapter for the taxable year an amount  
12 equal to 20 percent of the amount paid or incurred by  
13 the taxpayer for qualified energy efficiency improvements  
14 installed during such taxable year.

15 “(b) LIMITATIONS.—

16 “(1) MAXIMUM CREDIT.—The credit allowed by  
17 this section with respect to a dwelling shall not ex-  
18 ceed \$2,000.

19 “(2) PRIOR CREDIT AMOUNTS FOR TAXPAYER  
20 ON SAME DWELLING TAKEN INTO ACCOUNT.—If a  
21 credit was allowed to the taxpayer under subsection  
22 (a) with respect to a dwelling in 1 or more prior tax-  
23 able years, the amount of the credit otherwise allow-  
24 able for the taxable year with respect to that dwell-  
25 ing shall not exceed the amount of \$2,000 reduced  
26 by the sum of the credits allowed under subsection

1 (a) to the taxpayer with respect to the dwelling for  
2 all prior taxable years.

3 “(3) ADJUSTMENT FOR INFLATION.—

4 “(A) IN GENERAL.—In the case of any  
5 taxable year beginning in a calendar year after  
6 2001, the \$2,000 amount contained in para-  
7 graphs (1) and (2) shall each be increased by  
8 an amount equal to—

9 “(i) \$2000, multiplied by

10 “(ii) the cost-of-living adjustment de-  
11 termined under section 1(f)(3) for the cal-  
12 endar year in which the taxable year be-  
13 gins by substituting ‘calendar year 2000’  
14 for ‘calendar year 1992’ in subparagraph  
15 (B) thereof.

16 “(B) ROUNDING.—If any increase deter-  
17 mined under subparagraph (A) is not a multiple  
18 of \$100, such increase shall be rounded to the  
19 next lowest multiple of \$100.”.

20 “(c) CARRYFORWARD OF UNUSED CREDIT.—If the  
21 credit allowable under subsection (a) exceeds the limita-  
22 tion imposed by section 26(a) for such taxable year re-  
23 duced by the sum of the credits allowable under this sub-  
24 part (other than this section), such excess shall be carried

1 to the succeeding taxable year and added to the credit al-  
2 lowable under subsection (a) for such taxable year.

3       “(d) QUALIFIED ENERGY EFFICIENCY IMPROVE-  
4 MENTS.—For purposes of this section, the term ‘qualified  
5 energy efficiency improvements’ means any energy effi-  
6 cient building envelope component which is certified to  
7 meet or exceed the prescriptive criteria for such compo-  
8 nent in the 2000 International Energy Conservation Code,  
9 or any combination of energy efficiency measures which  
10 achieves at least a 30 percent reduction in heating and  
11 cooling energy usage for the dwelling (as measured in  
12 terms of energy cost to the taxpayer), if—

13               “(1) such component or combinations of meas-  
14 ures is installed in or on a dwelling—

15                       “(A) located in the United States, and

16                       “(B) owned and used by the taxpayer as  
17 the taxpayer’s principal residence (within the  
18 meaning of section 121),

19               “(2) the original use of such component or com-  
20 bination of measures commences with the taxpayer,  
21 and

22               “(3) such component or combination of meas-  
23 ures reasonably can be expected to remain in use for  
24 at least 5 years.

1       “(e) CERTIFICATION.—The certification described in  
2 subsection (d) shall be—

3           “(1) in the case of any component described in  
4 subsection (d), determined on the basis of applicable  
5 energy efficiency ratings (including product labeling  
6 requirements) for affected building envelope compo-  
7 nents,

8           “(2) in the case of combinations of measures  
9 described in subsection (d), determined by the per-  
10 formance-based methods described in section  
11 45G(d),

12           “(3) provided by a third party, such as a local  
13 building regulatory authority, a utility, a manufac-  
14 tured home production inspection primary inspection  
15 agency (IPLA), or a home energy rating organiza-  
16 tion, consistent with the requirements of section  
17 45G(d)(2), and

18           “(4) made in writing on forms which specify in  
19 readily inspectable fashion the energy-efficient com-  
20 ponents and other measures and their respective ef-  
21 ficiency ratings, and which shall include a perma-  
22 nent label affixed to the electrical distribution panel  
23 as described in section 45G(d)(3)(C).

24       “(f) DEFINITIONS AND SPECIAL RULES.—

1           “(1) DOLLAR AMOUNTS IN CASE OF JOINT OC-  
2           CUPANCY.—In the case of any dwelling unit which is  
3           jointly occupied and used during any calendar year  
4           as a residence by 2 or more individuals the following  
5           shall apply:

6                   “(A) The amount of the credit allowable  
7                   under subsection (a) by reason of expenditures  
8                   for the qualified energy efficiency improvements  
9                   made during such calendar year by any of such  
10                  individuals with respect to such dwelling unit  
11                  shall be determined by treating all of such indi-  
12                  viduals as 1 taxpayer whose taxable year is  
13                  such calendar year.

14                  “(B) There shall be allowable with respect  
15                  to such expenditures to each of such individ-  
16                  uals, a credit under subsection (a) for the tax-  
17                  able year in which such calendar year ends in  
18                  an amount which bears the same ratio to the  
19                  amount determined under subparagraph (A) as  
20                  the amount of such expenditures made by such  
21                  individual during such calendar year bears to  
22                  the aggregate of such expenditures made by all  
23                  of such individuals during such calendar year.

24           “(2) TENANT-STOCKHOLDER IN COOPERATIVE  
25           HOUSING CORPORATION.—In the case of an indi-

1       vidual who is a tenant-stockholder (as defined in sec-  
2       tion 216) in a cooperative housing corporation (as  
3       defined in such section), such individual shall be  
4       treated as having paid his tenant-stockholder's pro-  
5       portionate share (as defined in section 216(b)(3)) of  
6       the cost of qualified energy efficiency improvements  
7       made by such corporation.

8               “(3) CONDOMINIUMS.—

9               “(A) IN GENERAL.—In the case of an indi-  
10       vidual who is a member of a condominium man-  
11       agement association with respect to a condo-  
12       minium which he owns, such individual shall be  
13       treated as having paid his proportionate share  
14       of the cost of qualified energy efficiency im-  
15       provements made by such association.

16              “(B) CONDOMINIUM MANAGEMENT ASSO-  
17       CIATION.—For purposes of this paragraph, the  
18       term ‘condominium management association’  
19       means an organization which meets the require-  
20       ments of paragraph (1) of section 528(c) (other  
21       than subparagraph (E) thereof) with respect to  
22       a condominium project substantially all of the  
23       units of which are used as residences.

24              “(4) BUILDING ENVELOPE COMPONENT.—The  
25       term ‘building envelope component’ means—

1           “(A) insulation material or system which is  
2           specifically and primarily designed to reduce the  
3           heat loss or gain or a dwelling when installed  
4           in or on such dwelling, and

5           “(B) exterior windows (including skylights)  
6           and doors.

7           “(5) MANUFACTURED HOMES INCLUDED.—For  
8           purposes of this section, the term ‘dwelling’ includes  
9           a manufactured home which conforms to Federal  
10          Manufactured Home Construction and Safety Stand-  
11          ards (24 C.F.R. 3280).

12          “(g) BASIS ADJUSTMENT.—For purposes of this sub-  
13          title, if a credit is allowed under this section for any ex-  
14          penditure with respect to any property, the increase in the  
15          basis of such property which would (but for this sub-  
16          section) result from such expenditure shall be reduced by  
17          the amount of the credit so allowed.

18          “(h) TERMINATION.—This section shall not apply to  
19          taxable years beginning after December 31, 2006.”.

20          (b) CONFORMING AMENDMENTS.—

21                 (1) Subsection (c) of section 23 is amended by  
22                 striking “and 1400C” and inserting “, 25C, and  
23                 1400C”.

24                 (2) Subparagraph (C) of section 25(e)(1) is  
25                 amended by inserting “25C,” after “24,”.





1 credits) is amended by inserting after section 25C the fol-  
2 lowing:

3 **“SEC. 25D. RESIDENTIAL WIND, AND FUEL CELL ENERGY**  
4 **PROPERTY.**

5 “(a) ALLOWANCE OF CREDIT.—In the case of an in-  
6 dividual, there shall be allowed as a credit against the tax  
7 imposed by this chapter for the taxable year an amount  
8 equal to the sum of—

9 “(1) 30 percent of the qualified photovoltaic  
10 property expenditures,

11 “(2) 30 percent of the qualified wind energy  
12 property expenditures, and

13 “(3) 30 percent for the qualified fuel cell prop-  
14 erty expenditures,

15 made by the taxpayer during the taxable year.

16 “(b) LIMITATIONS.—

17 “(1) TYPE OF PROPERTY.—No expenditure may  
18 be taken into account under this section unless such  
19 expenditure is made by the taxpayer for property in-  
20 stalled on or in connection with a dwelling unit  
21 which is located in the United States and which is  
22 used as a residence.

23 “(2) SAFETY CERTIFICATIONS.—No credit shall  
24 be allowed under this section for an item of photo-  
25 voltaic, wind energy, or fuel cell property unless such

1 property meets appropriate fire and electric code re-  
2 quirements.

3 “(c) DEFINITIONS.—For purposes of this section—

4 “(1) QUALIFIED PHOTOVOLTAIC PROPERTY EX-  
5 PENDITURE.—The term ‘qualified photovoltaic prop-  
6 erty expenditure’ means an expenditure for property  
7 which uses solar energy to generate electricity for  
8 use in a dwelling unit.

9 “(2) SOLAR PANELS.—No expenditure relating  
10 to a solar panel or other property installed as a roof  
11 (or portion thereof) shall fail to be treated as prop-  
12 erty described in paragraph (1) or (2) solely because  
13 it constitutes a structural component of the struc-  
14 ture on which it is installed.

15 “(3) QUALIFIED WIND ENERGY PROPERTY EX-  
16 PENDITURE.—The term ‘qualified wind energy prop-  
17 erty expenditure’ means an expenditure for property  
18 which uses wind energy to generate electricity for  
19 use in a dwelling unit.

20 “(4) QUALIFIED FUEL CELL PROPERTY EX-  
21 PENDITURE.—The term ‘qualified fuel cell property  
22 expenditure’ means an expenditure for property  
23 which uses an electrochemical fuel cell system to  
24 generate electricity for use in a dwelling unit.

1           “(5) LABOR COSTS.—Expenditures for labor  
2 costs properly allocable to the onsite preparation, as-  
3 sembly, or original installation of the property de-  
4 scribed in paragraph (1), (2), or (4) and for piping  
5 or wiring to interconnect such property to the dwell-  
6 ing unit shall be taken into account for purposes of  
7 this section.

8           “(6) ENERGY STORAGE MEDIUM.—Expendi-  
9 tures which are properly allocable to a swimming  
10 pool, hot tub, or any other energy storage medium  
11 which has a function other than the function of such  
12 storage shall not be taken into account for purposes  
13 of this section.

14           “(d) SPECIAL RULES.—For purposes of this  
15 section—

16           “(1) DOLLAR AMOUNTS IN CASE OF JOINT OC-  
17 CUPANCY.—In the case of any dwelling unit which is  
18 jointly occupied and used during any calendar year  
19 as a residence by 2 or more individuals the following  
20 shall apply:

21           “(A) The amount of the credit allowable  
22 under subsection (a) by reason of expenditures  
23 (as the case may be) made during such cal-  
24 endar year by any of such individuals with re-  
25 spect to such dwelling unit shall be determined

1 by treating all of such individuals as 1 taxpayer  
2 whose taxable year is such calendar year.

3 “(B) There shall be allowable with respect  
4 to such expenditures to each of such individ-  
5 uals, a credit under subsection (a) for the tax-  
6 able year in which such calendar year ends in  
7 an amount which bears the same ratio to the  
8 amount determined under subparagraph (A) as  
9 the amount of such expenditures made by such  
10 individual during such calendar year bears to  
11 the aggregate of such expenditures made by all  
12 of such individuals during such calendar year.

13 “(2) TENANT-STOCKHOLDER IN COOPERATIVE  
14 HOUSING CORPORATION.—In the case of an indi-  
15 vidual who is a tenant-stockholder (as defined in sec-  
16 tion 216) in a cooperative housing corporation (as  
17 defined in such section), such individual shall be  
18 treated as having made his tenant-stockholder’s pro-  
19 portionate share (as defined in section 216(b)(3)) of  
20 any expenditures of such corporation.

21 “(3) CONDOMINIUMS.—

22 “(A) IN GENERAL.—In the case of an indi-  
23 vidual who is a member of a condominium man-  
24 agement association with respect to a condo-  
25 minium which such individual owns, such indi-

1           vidual shall be treated as having made his pro-  
2           portionate share of any expenditures of such as-  
3           sociation.

4           “(B) CONDOMINIUM MANAGEMENT ASSO-  
5           CIATION.—For purposes of this paragraph, the  
6           term ‘condominium management association’  
7           means an organization which meets the require-  
8           ments of paragraph (1) of section 528(c) (other  
9           than subparagraph (E) thereof) with respect to  
10          a condominium project substantially all of the  
11          units of which are used as residences.

12          “(4) JOINT OWNERSHIP OF ITEMS OF SOLAR OR  
13          WIND ENERGY PROPERTY.—

14                 “(A) IN GENERAL.—Any expenditure oth-  
15                 erwise qualifying as an expenditure described in  
16                 paragraph (1), (2), or (4) of subsection (c) shall  
17                 not be treated as failing to so qualify merely be-  
18                 cause such expenditure was made with respect  
19                 to 2 or more dwelling units.

20                 “(B) LIMITS APPLIED SEPARATELY.—In  
21                 the case of any expenditure described in sub-  
22                 paragraph (A), the amount of the credit allow-  
23                 able under subsection (a) shall (subject to para-  
24                 graph (1)) be computed separately with respect

1 to the amount of the expenditure made for each  
2 dwelling unit.

3 “(5) ALLOCATION IN CERTAIN CASES.—If less  
4 than 80 percent of the use of an item is for nonbusi-  
5 ness residential purposes, only that portion of the  
6 expenditures for such item which is properly allo-  
7 cable to use for nonbusiness residential purposes  
8 shall be taken into account. For purposes of this  
9 paragraph, use for a swimming pool shall be treated  
10 as use which is not for residential purposes.

11 “(6) WHEN EXPENDITURE MADE; AMOUNT OF  
12 EXPENDITURE.—

13 “(A) IN GENERAL.—Except as provided in  
14 subparagraph (B), an expenditure with respect  
15 to an item shall be treated as made when the  
16 original installation of the item is completed.

17 “(B) EXPENDITURES PART OF BUILDING  
18 CONSTRUCTION.—In the case of an expenditure  
19 in connection with the construction or recon-  
20 struction of a structure, such expenditure shall  
21 be treated as made when the original use of the  
22 constructed or reconstructed structure by the  
23 taxpayer begins.

24 “(C) AMOUNT.—The amount of any ex-  
25 penditure shall be the cost thereof.

1           “(7) REDUCTION OF CREDIT FOR GRANTS, TAX-  
2           EXEMPT BONDS, AND SUBSIDIZED ENERGY FINANC-  
3           ING.—The rules of section 29(b)(3) shall apply for  
4           purposes of this section.

5           “(e) BASIS ADJUSTMENTS.—For purposes of this  
6           subtitle, if a credit is allowed under this section for any  
7           expenditure with respect to any property, the increase in  
8           the basis of such property which would (but for this sub-  
9           section) result from such expenditure shall be reduced by  
10          the amount of the credit so allowed.

11          “(f) TERMINATION.—The credit allowed under this  
12          section shall not apply to taxable years beginning after  
13          December 31, 2006.”.

14          (b) CONFORMING AMENDMENTS.—

15                 (1) Subsection (a) of section 1016 is amended  
16                 by striking “and” at the end of paragraph (29), by  
17                 striking the period at the end of paragraph (30) and  
18                 inserting “; and”, and by adding at the end the fol-  
19                 lowing:

20                         “(31) to the extent provided in section 25D(e),  
21                         in the case of amounts with respect to which a credit  
22                         has been allowed under section 25D.”.

23                 (2) The table of sections for subpart A of part  
24                 IV of subchapter A of chapter 1 is amended by in-





1       “(c) ENERGY STAR PRODUCT.—For purposes of this  
2 section, the term ‘Energy Star product’ means a product  
3 which—

4               “(1) meets the guidelines, specifications, and  
5 performance levels of the Energy Star program  
6 jointly managed by the Environmental Protection  
7 Agency and the Department of Energy, and

8               “(2) displays the Energy Star label.

9       “(d) REFUNDABLE CREDIT FOR CERTAIN TAX-  
10 PAYERS.—If the adjusted gross income of the taxpayer for  
11 the taxable year is \$75,000 or less (\$150,000 or less in  
12 the case of a joint return), the credit allowable under sub-  
13 section (a) shall be treated as a credit allowed under sub-  
14 part C.

15       “(e) TERMINATION.—This section shall not apply to  
16 taxable years beginning after December 31, 2006.”.

17       (b) CLERICAL AMENDMENT.—The table of sections  
18 for subpart A of part IV of subchapter A of chapter 1  
19 is amended by inserting after the item relating to section  
20 25D the following new item:

                  “Sec. 25E. Credit for purchase of Energy Star products.”

21       (c) EFFECTIVE DATE.—The amendments made by  
22 this section shall apply to taxable years beginning after  
23 December 31, 2001.

1 **Subtitle C—Electricity Facilities**  
2 **and Production**

3 **SEC. 521. INCENTIVE FOR DISTRIBUTED GENERATION.**

4 (a) DEPRECIATION OF DISTRIBUTED POWER PROP-  
5 erty.—

6 (1) IN GENERAL.—Subparagraph (C) of section  
7 168(e)(3) (relating to 7-year property) is amended  
8 by redesignating clause (ii) as clause (iii) and by in-  
9 serting after clause (i) the following:

10 “(ii) any distributed power property,  
11 and”.

12 (2) 10-YEAR CLASS LIFE.—The table contained  
13 in section 168(g)(3)(B) is amended by inserting  
14 after the item relating to subparagraph (C)(i) the  
15 following:

“(C)(ii) ..... 10”.

16 (b) DISTRIBUTED POWER PROPERTY.—Section  
17 168(i) is amended by adding at the end the following:

18 “(15) DISTRIBUTED POWER PROPERTY.—The  
19 term ‘distributed power property’ means property—

20 “(A) which is used in the generation of  
21 electricity for primary use—

22 “(i) in nonresidential real or residen-  
23 tial rental property used in the taxpayer’s  
24 trade or business, or

1           “(ii) in the taxpayer’s industrial man-  
2           ufacturing process or plant activity, with a  
3           rated total capacity in excess of 500 kilo-  
4           watts,

5           “(B) which also may produce usable ther-  
6           mal energy or mechanical power for use in a  
7           heating or cooling application, as long as at  
8           least 40 percent of the total useful energy pro-  
9           duced consists of—

10           “(i) with respect to assets described in  
11           subparagraph (A)(i), electrical power  
12           (whether sold or used by the taxpayer), or

13           “(ii) with respect to assets described  
14           in subparagraph (A)(ii), electrical power  
15           (whether sold or used by the taxpayer) and  
16           thermal or mechanical energy used in the  
17           taxpayer’s industrial manufacturing proc-  
18           ess or plant activity,

19           “(C) which is not used to transport pri-  
20           mary fuel to the generating facility or to dis-  
21           tribute energy within or outside of the facility,  
22           and

23           “(D) where it is reasonably expected that  
24           not more than 50 percent of the produced elec-

1           tricity will be sold to, or used by, unrelated per-  
2           sons.

3           For purposes of subparagraph (B), energy output is  
4           determined on the basis of expected annual output  
5           levels, measured in British thermal units (Btu),  
6           using standard conversion factors established by the  
7           Secretary.”.

8           (c) EFFECTIVE DATE.—The amendments made by  
9           this section shall apply to property placed in service after  
10          the date of the enactment of this Act.

11 **SEC. 522. MODIFICATIONS TO CREDIT FOR ELECTRICITY**  
12                           **PRODUCED FROM RENEWABLE AND WASTE**  
13                           **PRODUCTS.**

14          (a) INCREASE IN CREDIT RATE.—

15                  (1) IN GENERAL.—Section 45(a)(1) is amended  
16                  by striking “1.5 cents” and inserting “1.8 cents”.

17                  (2) CONFORMING AMENDMENTS.—

18                          (A) Section 45(b)(2) is amended by strik-  
19                          ing “1.5 cent” and inserting “1.8 cent”.

20                          (B) Section 45(d)(2)(B) is amended by in-  
21                          serting “(calendar year 2001 in the case of the  
22                          1.8 cent amount in subsection (a))” after  
23                          “1992”.

24          (b) EXPANSION OF QUALIFIED RESOURCES.—

1           (1) IN GENERAL.—Section 45(c)(1) (relating to  
2 qualified energy resources) is amended by striking  
3 “and” at the end of subparagraph (B), by striking  
4 the period at the end of subparagraph (C) and in-  
5 serting “, and”, and by adding at the end the fol-  
6 lowing:

7                   “(D) alternative resources.”.

8           (2) DEFINITION OF ALTERNATIVE RE-  
9 SOURCES.—Section 45(c) (relating to definitions) is  
10 amended—

11                   (A) by redesignating paragraph (3) as  
12 paragraph (5),

13                   (B) by redesignating paragraph (4) as  
14 paragraph (3), and

15                   (C) by inserting after paragraph (3), as re-  
16 designated by subparagraph (B), the following:

17                   “(4) ALTERNATIVE RESOURCES.—

18                           “(A) IN GENERAL.—The term ‘alternative  
19 resources’ means—

20                                   “(i) solar,

21                                   “(ii) biomass (other than closed loop  
22 biomass),

23                                   “(iii) municipal solid waste,

24                                   “(iv) geothermal, and

25                                   “(v) landfill gas.

1           “(B) BIOMASS.—The term ‘biomass’  
2 means any solid, nonhazardous, cellulosic waste  
3 material or any organic carbohydrate matter,  
4 which is segregated from other waste materials,  
5 and which is derived from—

6           “(i) any of the following forest-related  
7 resources: mill residues, precommercial  
8 thinnings, slash, and brush, but not includ-  
9 ing old-growth timber,

10           “(ii) waste pallets, crates, dunnage,  
11 untreated wood waste from construction or  
12 manufacturing activities, landscape or  
13 right-of-way tree trimmings, unsegregated  
14 municipal solid waste, and post-consumer  
15 wastepaper, or

16           “(iii) any of the following agriculture  
17 sources: orchard tree crops, vineyard,  
18 grain, legumes, sugar, and other crop by-  
19 products or residues, including any pack-  
20 aging and other materials which are  
21 nontoxic and biodegradable and are associ-  
22 ated with the processing, feeding, selling,  
23 transporting, and disposal of such agricul-  
24 tural materials.

1           “(C) MUNICIPAL SOLID WASTE.—The term  
2           ‘municipal solid waste’ has the same meaning  
3           given the term ‘solid waste’ under section 2(27)  
4           of the Solid Waste Utilization Act (42 U.S.C.  
5           6903).

6           “(D) GEOTHERMAL.—The term ‘geo-  
7           thermal’ means energy derived from a geo-  
8           thermal deposit (within the meaning of section  
9           613(e)(2)), but only, in the case of electricity  
10          generated by geothermal power, up to (but not  
11          including) the electrical transmission stage.

12          “(E) LANDFILL GAS.—The term ‘landfill  
13          gas’ means gas generated from the decomposi-  
14          tion of any household solid waste, commercial  
15          solid waste, and industrial solid waste disposed  
16          of in a municipal solid waste landfill unit (as  
17          such terms are defined in regulations promul-  
18          gated under subtitle D of the Solid Waste Dis-  
19          posal Act (42 U.S.C. 6941 et seq.).”.

20          (3) QUALIFIED FACILITY.—Section 45(e)(5)  
21          (defining qualified facility), as redesignated by para-  
22          graph (2)(A), is amended by adding at the end the  
23          following:

24                  “(D) ALTERNATIVE RESOURCES FACIL-  
25                  ITY.—



1           “(i) IN GENERAL.—Except as pro-  
2           vided in clauses (ii) and (iii), in the case  
3           of a facility using alternative resources to  
4           produce electricity, the term ‘qualified fa-  
5           cility’ means any facility of the taxpayer  
6           which is originally placed in service after  
7           the date of the enactment of this subpara-  
8           graph.

9           “(ii) BIOMASS FACILITY.—In the case  
10          of a facility using biomass described in  
11          paragraph (4)(A)(ii) to produce electricity,  
12          the term ‘qualified facility’ means any fa-  
13          cility of the taxpayer.

14          “(iii) GEOTHERMAL FACILITY.—In  
15          the case of a facility using geothermal to  
16          produce electricity, the term ‘qualified fa-  
17          cility’ means any facility of the taxpayer  
18          which is originally placed in service after  
19          December 31, 1992.

20          “(iv) SPECIAL RULES.—In the case of  
21          a qualified facility described in this sub-  
22          paragraph, the 10-year period referred to  
23          in subsection (a) shall be treated as begin-  
24          ning no earlier than the date of the enact-  
25          ment of this subparagraph.”.

1           (4) GOVERNMENT-OWNED FACILITY.—Section  
2           45(d)(6) (relating to credit eligibility in the case of  
3           government-owned facilities using poultry waste) is  
4           amended—

5                   (A) by inserting “or alternative resources”  
6           after “poultry waste”, and

7                   (B) by inserting “OR ALTERNATIVE RE-  
8           SOURCES” after “POULTRY WASTE” in the  
9           heading thereof.

10          (5) QUALIFIED FACILITIES WITH CO-PRODUC-  
11          TION.—Section 45(b) (relating to limitations and ad-  
12          justments) is amended by adding at the end the fol-  
13          lowing:

14                “(4) INCREASED CREDIT FOR CO-PRODUCTION  
15          FACILITIES.—

16                   “(A) IN GENERAL.—In the case of a quali-  
17           fied facility described in subsection (c)(3)(D)(i)  
18           which has a co-production facility or a qualified  
19           facility described in subparagraph (A), (B), or  
20           (C) of subsection (c)(3) which adds a co-pro-  
21           duction facility after the date of the enactment  
22           of this paragraph, the amount in effect under  
23           subsection (a)(1) for an eligible taxable year of  
24           a taxpayer shall (after adjustment under para-

1 graph (2) and before adjustment under para-  
2 graphs (1) and (3)) be increased by .25 cents.

3 “(B) CO-PRODUCTION FACILITY.—For  
4 purposes of subparagraph (A), the term ‘co-pro-  
5 duction facility’ means a facility which—

6 “(i) enables a qualified facility to  
7 produce heat, mechanical power, chemicals,  
8 liquid fuels, or minerals from qualified en-  
9 ergy resources in addition to electricity,  
10 and

11 “(ii) produces such energy on a con-  
12 tinuous basis.

13 “(C) ELIGIBLE TAXABLE YEAR.—For pur-  
14 poses of subparagraph (A), the term ‘eligible  
15 taxable year’ means any taxable year in which  
16 the amount of gross receipts attributable to the  
17 co-production facility of a qualified facility are  
18 at least 10 percent of the amount of gross re-  
19 cepts attributable to electricity produced by  
20 such facility.”.

21 (6) QUALIFIED FACILITIES LOCATED WITHIN  
22 QUALIFIED INDIAN LANDS.—Section 45(b) (relating  
23 to limitations and adjustments) is amended by add-  
24 ing at the end the following:

1           “(5) INCREASED CREDIT FOR QUALIFIED FA-  
2           CILITY LOCATED WITHIN QUALIFIED INDIAN  
3           LAND.—In the case of a qualified facility described  
4           in subsection (c)(3)(D) which—

5                   “(A) is located within—

6                           “(i) qualified Indian lands (as defined  
7                           in section 7871(c)(3)), or

8                           “(ii) lands which are held in trust by  
9                           a Native Corporation (as defined in section  
10                           3(m) of the Alaska Native Claims Settle-  
11                           ment Act (43 U.S.C. 1602(m)) for Alaska  
12                           Natives, and

13                   “(B) is operated with the explicit written  
14                   approval of the Indian tribal government or Na-  
15                   tive Corporation (as so defined) having jurisdic-  
16                   tion over such lands,

17           the amount in effect under subsection (a)(1) for a  
18           taxable year shall (after adjustment under para-  
19           graphs (2) and (4) and before adjustment under  
20           paragraphs (1) and (3)) be increased by .25 cents.”.

21           (7) ELECTRICITY PRODUCED FROM CERTAIN  
22           RESOURCES CO-FIRED IN COAL PLANTS.—Section  
23           45(d) (relating to definitions and special rules) is  
24           amended by adding at the end the following:

1           “(8) SPECIAL RULE FOR ELECTRICITY PRO-  
2           DUCED FROM CERTAIN RESOURCES CO-FIRED IN  
3           COAL PLANTS.—In the case of electricity produced  
4           from biomass (including closed loop biomass), mu-  
5           nicipal solid waste, or animal waste, co-fired in a fa-  
6           cility which produces electricity from coal—

7                   “(A) subsection (a)(1) shall be applied by  
8                   substituting ‘1 cent’ for ‘1.8 cents’,

9                   “(B) such facility shall be considered a  
10                  qualified facility for purposes of this section,  
11                  and

12                  “(C) the 10-year period referred to in sub-  
13                  section (a) shall be treated as beginning no ear-  
14                  lier than the date of the enactment of this para-  
15                  graph.”.

16           (8) CONFORMING AMENDMENTS.—

17                   (A) The heading for section 45 is amended  
18                   by inserting “**AND WASTE ENERGY**” after  
19                   “**RENEWABLE**”.

20                   (B) The item relating to section 45 in the  
21                   table of sections subpart D of part IV of sub-  
22                   chapter A of chapter 1 is amended by inserting  
23                   “and waste energy” after “renewable”.

24           (c) ADDITIONAL MODIFICATIONS OF RENEWABLE  
25           AND WASTE ENERGY RESOURCE CREDIT.—

1           (1) CREDITS FOR CERTAIN TAX EXEMPT ORGA-  
2           NIZATIONS AND GOVERNMENTAL UNITS.—Section  
3           45(d) (relating to definitions and special rules) is  
4           amended by adding at the end the following:

5           “(9) CREDITS FOR CERTAIN TAX EXEMPT OR-  
6           GANIZATIONS AND GOVERNMENTAL UNITS.—

7           “(A) ALLOWANCE OF CREDIT.—Any credit  
8           which would be allowable under subsection (a)  
9           with respect to a qualified facility of an entity  
10          if such entity were not exempt from tax under  
11          this chapter shall be treated as a credit allow-  
12          able under subpart C to such entity if such en-  
13          tity is—

14                 “(i) an organization described in sec-  
15                 tion 501(e)(12)(C) and exempt from tax  
16                 under section 501(a),

17                 “(ii) an organization described in sec-  
18                 tion 1381(a)(2)(C), or

19                 “(iii) an entity the income of which is  
20                 excludable from gross income under section  
21                 115.

22           “(B) USE OF CREDIT.—

23                 “(i) TRANSFER OF CREDIT.—An enti-  
24                 ty described in subparagraph (A) may as-  
25                 sign, trade, sell, or otherwise transfer any

1 credit allowable to such entity under sub-  
2 paragraph (A) to any taxpayer.

3 “(ii) USE OF CREDIT AS AN OFF-  
4 SET.—Notwithstanding any other provision  
5 of law, in the case of an entity described  
6 in clause (i) or (ii) of subparagraph (A),  
7 any credit allowable to such entity under  
8 subparagraph (A) may be applied by such  
9 entity, without penalty, as a prepayment of  
10 any loan, debt, or other obligation the enti-  
11 ty has incurred under subchapter I of  
12 chapter 31 of title 7 of the Rural Elec-  
13 trification Act of 1936 (7 U.S.C. 901 et  
14 seq.).

15 “(C) CREDIT NOT INCOME.—Neither a  
16 transfer under clause (i) or a use under clause  
17 (ii) of subparagraph (B) of any credit allowable  
18 under subparagraph (A) shall result in income  
19 for purposes of section 501(c)(12).

20 “(D) TRANSFER PROCEEDS TREATED AS  
21 ARISING FROM ESSENTIAL GOVERNMENT FUNC-  
22 TION.—Any proceeds derived by an entity de-  
23 scribed in subparagraph (A)(iii) from the trans-  
24 fer of any credit under subparagraph (B)(i)

1 shall be treated as arising from an essential  
2 government function.

3 “(E) CREDITS NOT REDUCED BY TAX-EX-  
4 EMPT BONDS OR CERTAIN OTHER SUBSIDIES.—  
5 Subsection (b)(3) shall not apply to reduce any  
6 credit allowable under subparagraph (A) with  
7 respect to—

8 “(i) proceeds described in subpara-  
9 graph (A)(ii) of such subsection, or

10 “(ii) any loan, debt, or other obliga-  
11 tion incurred under subchapter I of chap-  
12 ter 31 of title 7 of the Rural Electrification  
13 Act of 1936 (7 U.S.C. 901 et seq.),  
14 used to provide financing for any qualified facil-  
15 ity.

16 “(F) TREATMENT OF UNRELATED PER-  
17 SONS.—For purposes of this paragraph, sales  
18 among and between entities described in sub-  
19 paragraph (A) shall be treated as sales between  
20 unrelated parties.”.

21 (2) COORDINATION WITH OTHER CREDITS.—  
22 Section 45(d) is amended by adding at the end the  
23 following:

24 “(10) COORDINATION WITH OTHER CREDITS.—  
25 This section shall not apply to any qualified facility



1 with respect to which a credit under any other sec-  
2 tion is allowed for the taxable year unless the tax-  
3 payer elects to waive the application of such credit  
4 to such facility.”.

5 (3) EXPANSION TO INCLUDE ANIMAL WASTE.—  
6 Section 45 (relating to electricity produced from cer-  
7 tain renewable resources), is amended—

8 (A) by striking “poultry” each place it ap-  
9 pears in subsection (c)(1)(C) and subsection  
10 (d)(6) and inserting “animal”,

11 (B) by striking “POULTRY” in the heading  
12 of paragraph (6) of subsection (d) and inserting  
13 “ANIMAL”,

14 (C) by striking paragraph (3) of subsection  
15 (e) and inserting the following:

16 “(3) ANIMAL WASTE.—The term ‘animal waste’  
17 means poultry manure and litter and other animal  
18 wastes, including—

19 “(A) wood shavings, straw, rice hulls, and  
20 other bedding material for the disposition of  
21 manure, and

22 “(B) byproducts, packaging, and other ma-  
23 terials which are nontoxic and biodegradable  
24 and are associated with the processing, feeding,

1 selling, transporting, and disposal of such ani-  
2 mal wastes.”, and

3 (D) by striking subparagraph (C) of sub-  
4 section (c)(5) and inserting the following:

5 “(C) ANIMAL WASTE FACILITY.—

6 “(i) IN GENERAL.—Except as pro-  
7 vided in clause (ii), in the case of a facility  
8 using animal waste (other than poultry) to  
9 produce electricity, the term ‘qualified fa-  
10 cility’ means any facility of the taxpayer  
11 which is originally placed in service after  
12 the date of the enactment of this clause.

13 “(ii) POULTRY WASTE.—In the case  
14 of a facility using animal waste relating to  
15 poultry to produce electricity, the term  
16 ‘qualified facility’ means any facility of the  
17 taxpayer which is originally placed in serv-  
18 ice after December 31, 1999.”.

19 (4) TREATMENT OF QUALIFIED FACILITIES NOT  
20 IN COMPLIANCE WITH POLLUTION LAWS.—Section  
21 45(c)(5) (relating to qualified facilities) is amended  
22 by adding at the end the following:

23 “(E) NONCOMPLIANCE WITH POLLUTION  
24 LAWS.—For purposes of this paragraph, a facil-  
25 ity which is not in compliance with the applica-

1           ble State and Federal pollution prevention, con-  
 2           trol, and permit requirements for any period of  
 3           time shall not be considered to be a qualified  
 4           facility during such period.”.

5           (5) PERMANENT EXTENSION OF QUALIFIED FA-  
 6           CILITY DATES.—Section 45(c)(5) (relating to quali-  
 7           fied facility), as redesignated by subsection (b)(2), is  
 8           amended by striking “, and before January 1, 2002”  
 9           in subparagraphs (A) and (B).

10          (d) EFFECTIVE DATE.—The amendments made by  
 11         this section shall apply to electricity and other energy pro-  
 12         duced after the date of the enactment of this Act.

13         **SEC. 523. TREATMENT OF FACILITIES USING BAGASSE TO**  
 14                         **PRODUCE ENERGY AS SOLID WASTE DIS-**  
 15                         **POSAL FACILITIES ELIGIBLE FOR TAX-EX-**  
 16                         **EMPT FINANCING.**

17          (a) IN GENERAL.—Section 142 (relating to exempt  
 18         facility bond) is amended by adding at the end the fol-  
 19         lowing:

20                 “(k) SOLID WASTE DISPOSAL FACILITIES.—For pur-  
 21         poses of subsection (a)(6), the term ‘solid waste disposal  
 22         facilities’ includes property located in Hawaii and used for  
 23         the collection, storage, treatment, utilization, processing,  
 24         or final disposal of bagasse in the manufacture of eth-  
 25         anol.”.

1 (b) EFFECTIVE DATE.—The amendment made by  
 2 this section shall apply to bonds issued after the date of  
 3 the enactment of this Act.

4 **SEC. 524. DEPRECIATION OF PROPERTY USED IN THE**  
 5 **TRANSMISSION OF ELECTRICITY.**

6 (a) DEPRECIATION OF PROPERTY USED IN THE  
 7 TRANSMISSION OF ELECTRICITY.—

8 (1) IN GENERAL.—Subparagraph (C) of section  
 9 168(e)(3) (relating to 7-year property) is amended  
 10 by striking “and” at the end of clause (ii), by redesi-  
 11 gnating clause (iii) as clause (iv), and by inserting  
 12 after clause (ii) the following:

13 “(iii) any property used in the trans-  
 14 mission of electricity, and”.

15 (2) 10-YEAR CLASS LIFE.—The table contained  
 16 in section 168(g)(3)(B) is amended by inserting  
 17 after the item relating to subparagraph (C)(ii) the  
 18 following:

“(C)(iii) ..... 10”.

19 (b) DEFINITION OF PROPERTY USED IN THE TRANS-  
 20 MISSION OF ELECTRICITY.—Section 168(i) is amended by  
 21 adding at the end the following:

22 “(16) PROPERTY USED IN THE TRANSMISSION  
 23 OF ELECTRICITY.—The term ‘property used in the  
 24 transmission of electricity’ means property used in  
 25 the transmission of electricity for sale.”.

1 (c) EFFECTIVE DATE.—The amendments made by  
2 this section shall apply to property placed in service after  
3 the date of the enactment of this Act.

4 **SEC. 525. CREDIT FOR INVESTMENT IN ADDITIONAL PLANT**  
5 **CAPACITY FOR EXISTING RENEWABLE RE-**  
6 **SOURCES FACILITIES PRODUCING ELEC-**  
7 **TRICITY.**

8 (a) IN GENERAL.—Subpart E of part IV of sub-  
9 chapter A of chapter 1 (relating to rules for computing  
10 investment credit) is amended by inserting after section  
11 48A the following:

12 **“SEC. 48B. INCREASED OUTPUT OF EXISTING RENEWABLE**  
13 **RESOURCES FACILITIES PRODUCING ELEC-**  
14 **TRICITY.**

15 “(a) IN GENERAL.—For purposes of section 46, the  
16 renewable resources facilities increased output credit for  
17 any taxable year is the 20 percent of the basis of qualified  
18 property placed in service during such taxable year.

19 “(b) QUALIFIED PROPERTY.—For purposes of sub-  
20 section (a), the term ‘qualified property’ means property  
21 originally placed in service after the date of the enactment  
22 of this section as part of a qualified facility if—

23 “(1) such property is used to generate addi-  
24 tional capacity from increased efficiency or additions  
25 of new capacity, and

1           “(2) after such property is placed in service, the  
2           nameplate capacity rating of such facility for elec-  
3           tricity production is not less than 110 percent of the  
4           nameplate capacity rating of such facility as of the  
5           date of the enactment of this section.

6           “(c) QUALIFIED FACILITY.—For purposes of this  
7           section, the term ‘qualified facility’ means a facility de-  
8           scribed in section 45(c)(5).

9           “(d) APPLICABLE RULES.—For purposes of this sec-  
10          tion, rules similar to the rules of section 48A(e) shall  
11          apply.

12          “(e) TERMINATION.—No credit shall be allowed  
13          under this section for property placed in service after De-  
14          cember 31, 2004.”.

15          (b) CREDIT MADE PART OF INVESTMENT CREDIT.—  
16          Section 46 is amended by striking “and” at the end of  
17          paragraph (2), by striking the period at the end of para-  
18          graph (3) and inserting “, and”, and by inserting after  
19          paragraph (3) the following new paragraph:

20                 “(4) the renewable resources facilities increased  
21                 output credit.”.

22          (c) NO CARRYBACK BEFORE EFFECTIVE DATE.—  
23          Section 39(d) is amended by adding at the end the fol-  
24          lowing:



1           “(1) the new qualified fuel cell motor vehicle  
2 credit determined under subsection (b),

3           “(2) the new qualified hybrid motor vehicle  
4 credit determined under subsection (c), and

5           “(3) the new qualified alternative fuel motor ve-  
6 hicle credit determined under subsection (d).

7           “(b) NEW QUALIFIED FUEL CELL MOTOR VEHICLE  
8 CREDIT.—

9           “(1) IN GENERAL.—For purposes of subsection  
10 (a), the new qualified fuel cell motor vehicle credit  
11 determined under this subsection with respect to a  
12 new qualified fuel cell motor vehicle placed in service  
13 by the taxpayer during the taxable year is—

14           “(A) \$4,000, if such vehicle has a gross ve-  
15 hicle weight rating of not more than 8,500  
16 pounds,

17           “(B) \$10,000, if such vehicle has a gross  
18 vehicle weight rating of more than 8,500  
19 pounds but not more than 14,000 pounds,

20           “(C) \$20,000, if such vehicle has a gross  
21 vehicle weight rating of more than 14,000  
22 pounds but not more than 26,000 pounds, and

23           “(D) \$40,000, if such vehicle has a gross  
24 vehicle weight rating of more than 26,000  
25 pounds.



1           “(2) INCREASE FOR FUEL EFFICIENCY.—

2                   “(A) IN GENERAL.—The amount deter-  
3 mined under paragraph (1)(A) with respect to  
4 a new qualified fuel cell motor vehicle which is  
5 a passenger automobile or light truck shall be  
6 increased by—

7                           “(i) \$1,000, if such vehicle achieves at  
8 least 150 percent but less than 175 per-  
9 cent of the 2000 model year city fuel econ-  
10 omy,

11                           “(ii) \$1,500, if such vehicle achieves  
12 at least 175 percent but less than 200 per-  
13 cent of the 2000 model year city fuel econ-  
14 omy,

15                           “(iii) \$2,000, if such vehicle achieves  
16 at least 200 percent but less than 225 per-  
17 cent of the 2000 model year city fuel econ-  
18 omy,

19                           “(iv) \$2,500, if such vehicle achieves  
20 at least 225 percent but less than 250 per-  
21 cent of the 2000 model year city fuel econ-  
22 omy,

23                           “(v) \$3,000, if such vehicle achieves  
24 at least 250 percent but less than 275 per-

1 cent of the 2000 model year city fuel econ-  
 2 omy,

3 “(vi) \$3,500, if such vehicle achieves  
 4 at least 275 percent but less than 300 per-  
 5 cent of the 2000 model year city fuel econ-  
 6 omy, and

7 “(vii) \$4,000, if such vehicle achieves  
 8 at least 300 percent of the 2000 model  
 9 year city fuel economy.

10 “(B) 2000 MODEL YEAR CITY FUEL ECON-  
 11 OMY.—For purposes of subparagraph (A), the  
 12 2000 model year city fuel economy with respect  
 13 to a vehicle shall be determined in accordance  
 14 with the following tables:

15 “(i) In the case of a passenger auto-  
 16 mobile:

<b>If vehicle inertia weight</b>	<b>The 2000 model year city fuel</b>
<b>class is:</b>	<b>economy is:</b>
1,500 or 1,750 lbs .....	43.7 mpg
2,000 lbs .....	38.3 mpg
2,250 lbs .....	34.1 mpg
2,500 lbs .....	30.7 mpg
2,750 lbs .....	27.9 mpg
3,000 lbs .....	25.6 mpg
3,500 lbs .....	22.0 mpg
4,000 lbs .....	19.3 mpg
4,500 lbs .....	17.2 mpg
5,000 lbs .....	15.5 mpg
5,500 lbs .....	14.1 mpg
6,000 lbs .....	12.9 mpg
6,500 lbs .....	11.9 mpg
7,000 or 8,500 lbs .....	11.1 mpg.

17 “(ii) In the case of a light truck:

<b>“If vehicle inertia weight class is:</b>	<b>The 2000 model year city fuel economy is:</b>
1,500 or 1,750 lbs .....	37.6 mpg
2,000 lbs .....	33.7 mpg
2,250 lbs .....	30.6 mpg
2,500 lbs .....	28.0 mpg
2,750 lbs .....	25.9 mpg
3,000 lbs .....	24.1 mpg
3,500 lbs .....	21.3 mpg
4,000 lbs .....	19.0 mpg
4,500 lbs .....	17.3 mpg
5,000 lbs .....	15.8 mpg
5,500 lbs .....	14.6 mpg
6,000 lbs .....	13.6 mpg
6,500 lbs .....	12.8 mpg
7,000 or 8,500 lbs .....	12.0 mpg.

1                   “(C) VEHICLE INERTIA WEIGHT CLASS.—

2                   For purposes of subparagraph (B), the term  
 3                   ‘vehicle inertia weight class’ has the same  
 4                   meaning as when defined in regulations pre-  
 5                   scribed by the Administrator of the Environ-  
 6                   mental Protection Agency for purposes of the  
 7                   administration of title II of the Clean Air Act  
 8                   (42 U.S.C. 7521 et seq.).

9                   “(3) NEW QUALIFIED FUEL CELL MOTOR VEHI-  
 10                  CLE.—For purposes of this subsection, the term  
 11                  ‘new qualified fuel cell motor vehicle’ means a motor  
 12                  vehicle—

13                   “(A) which is propelled by power derived  
 14                   from one or more cells which convert chemical  
 15                   energy directly into electricity by combining ox-  
 16                   ygen with hydrogen fuel which is stored on  
 17                   board the vehicle in any form and may or may  
 18                   not require reformation prior to use,

1           “(B) which, in the case of a passenger  
2           automobile or light truck—

3                   “(i) for 2002 and later model vehicles,  
4                   has received a certificate of conformity  
5                   under the Clean Air Act and meets or ex-  
6                   ceeds the equivalent qualifying California  
7                   low emission vehicle standard under sec-  
8                   tion 243(e)(2) of the Clean Air Act for  
9                   that make and model year, and

10                   “(ii) for 2004 and later model vehi-  
11                   cles, has received a certificate that such ve-  
12                   hicle meets or exceeds the Bin 5 Tier II  
13                   emission level established in regulations  
14                   prescribed by the Administrator of the En-  
15                   vironmental Protection Agency under sec-  
16                   tion 202(i) of the Clean Air Act for that  
17                   make and model year vehicle,

18                   “(C) the original use of which commences  
19                   with the taxpayer,

20                   “(D) which is acquired for use or lease by  
21                   the taxpayer and not for resale, and

22                   “(E) which is made by a manufacturer.

23           “(c) NEW QUALIFIED HYBRID MOTOR VEHICLE  
24           CREDIT.—

1           “(1) IN GENERAL.—For purposes of subsection  
2           (a), the new qualified hybrid motor vehicle credit de-  
3           termined under this subsection with respect to a new  
4           qualified hybrid motor vehicle placed in service by  
5           the taxpayer during the taxable year is the credit  
6           amount determined under paragraph (2).

7           “(2) CREDIT AMOUNT.—

8                   “(A) IN GENERAL.—The credit amount de-  
9                   termined under this paragraph shall be deter-  
10                   mined in accordance with the following tables:

11                           “(i) In the case of a new qualified hy-  
12                           brid motor vehicle which is a passenger  
13                           automobile or light truck and which pro-  
14                           vides the following percentage of the max-  
15                           imum available power:

**“If percentage of the maximum available power is:   The credit amount is:**

At least 5 percent but less than 10 percent .....	\$250
At least 10 percent but less than 20 percent .....	\$500
At least 20 percent but less than 30 percent .....	\$750
At least 30 percent .....	\$1,000.

16                           “(ii) In the case of a new qualified hy-  
17                           brid motor vehicle which is a heavy duty  
18                           hybrid motor vehicle and which provides  
19                           the following percentage of the maximum  
20                           available power:

1 “(I) If such vehicle has a gross  
2 vehicle weight rating of not more than  
3 14,000 pounds:

**“If percentage of the maximum available power is: The credit amount is:**

At least 20 percent but less than 30 percent .....	\$1,500
At least 30 percent but less than 40 percent .....	\$1,750
At least 40 percent but less than 50 percent .....	\$2,000
At least 50 percent but less than 60 percent .....	\$2,250
At least 60 percent .....	\$2,500.

4 “(II) If such vehicle has a gross  
5 vehicle weight rating of more than  
6 14,000 but not more than 26,000  
7 pounds:

**“If percentage of the maximum available power is: The credit amount is:**

At least 20 percent but less than 30 percent .....	\$4,000
At least 30 percent but less than 40 percent .....	\$4,500
At least 40 percent but less than 50 percent .....	\$5,000
At least 50 percent but less than 60 percent .....	\$5,500
At least 60 percent .....	\$6,000.

8 “(III) If such vehicle has a gross  
9 vehicle weight rating of more than  
10 26,000 pounds:

**“If percentage of the maximum available power is: The credit amount is:**

At least 20 percent but less than 30 percent .....	\$6,000
At least 30 percent but less than 40 percent .....	\$7,000
At least 40 percent but less than 50 percent .....	\$8,000
At least 50 percent but less than 60 percent .....	\$9,000
At least 60 percent .....	\$10,000.

11 “(B) INCREASE FOR FUEL EFFICIENCY.—

12 “(i) AMOUNT.—The amount deter-  
13 mined under subparagraph (A)(i) with re-  
14 spect to a passenger automobile or light  
15 truck shall be increased by—

1           “(I) \$500, if such vehicle  
2 achieves at least 125 percent but less  
3 than 150 percent of the 2000 model  
4 year city fuel economy,

5           “(II) \$1,000, if such vehicle  
6 achieves at least 150 percent but less  
7 than 175 percent of the 2000 model  
8 year city fuel economy,

9           “(III) \$1,500, if such vehicle  
10 achieves at least 175 percent but less  
11 than 200 percent of the 2000 model  
12 year city fuel economy,

13           “(IV) \$2,000, if such vehicle  
14 achieves at least 200 percent but less  
15 than 225 percent of the 2000 model  
16 year city fuel economy,

17           “(V) \$2,500, if such vehicle  
18 achieves at least 225 percent but less  
19 than 250 percent of the 2000 model  
20 year city fuel economy, and

21           “(VI) \$3,000, if such vehicle  
22 achieves at least 250 percent of the  
23 2000 model year city fuel economy.

24           “(ii) 2000 MODEL YEAR CITY FUEL  
25 ECONOMY.—For purposes of clause (i), the

1 2000 model year city fuel economy with re-  
2 spect to a vehicle shall be determined using  
3 the tables provided in subsection (b)(2)(B)  
4 with respect to such vehicle.

5 “(C) INCREASE FOR ACCELERATED EMIS-  
6 SIONS PERFORMANCE.—The amount deter-  
7 mined under subparagraph (A)(ii) with respect  
8 to an applicable heavy duty hybrid motor vehi-  
9 cle shall be increased by the increase credit  
10 amount determined in accordance with the fol-  
11 lowing tables:

12 “(i) In the case of a vehicle which has  
13 a gross vehicle weight rating of not more  
14 than 14,000 pounds:

<b>“If the model year is:</b>	<b>The increase credit amount is:</b>
2002 .....	\$3,500
2003 .....	\$3,000
2004 .....	\$2,500
2005 .....	\$2,000
2006 .....	\$1,500.

15 “(ii) In the case of a vehicle which  
16 has a gross vehicle weight rating of more  
17 than 14,000 pounds but not more than  
18 26,000 pounds:

<b>“If the model year is:</b>	<b>The increase credit amount is:</b>
2002 .....	\$9,000
2003 .....	\$7,750
2004 .....	\$6,500
2005 .....	\$5,250
2006 .....	\$4,000.



1                   “(iii) In the case of a vehicle which  
2                   has a gross vehicle weight rating of more  
3                   than 26,000 pounds:

<b>“If the model year is:</b>	<b>The increase credit amount is:</b>
2002 .....	\$14,000
2003 .....	\$12,000
2004 .....	\$10,000
2005 .....	\$8,000
2006 .....	\$6,000.

4                   “(D) DEFINITIONS.—

5                   “(i) APPLICABLE HEAVY DUTY HY-  
6                   BRID MOTOR VEHICLE.—For purposes of  
7                   subparagraph (C), the term ‘applicable  
8                   heavy duty hybrid motor vehicle’ means a  
9                   heavy duty hybrid motor vehicle which is  
10                  powered by an internal combustion or heat  
11                  engine which is certified as meeting the  
12                  emission standards set in the regulations  
13                  prescribed by the Administrator of the En-  
14                  vironmental Protection Agency for 2007  
15                  and later model year diesel heavy duty en-  
16                  gines or 2008 and later model year  
17                  ottocycle heavy duty engines, as applicable.

18                  “(ii) HEAVY DUTY HYBRID MOTOR VE-  
19                  HICLE.—For purposes of this paragraph,  
20                  the term ‘heavy duty hybrid motor vehicle’  
21                  means a new qualified hybrid motor vehicle  
22                  which has a gross vehicle weight rating of

1 more than 10,000 pounds and draws pro-  
2 pulsion energy from both of the following  
3 onboard sources of stored energy:

4 “(I) An internal combustion or  
5 heat engine using consumable fuel  
6 which, for 2002 and later model vehi-  
7 cles, has received a certificate of con-  
8 formity under the Clean Air Act and  
9 meets or exceeds a level of not greater  
10 than 3.0 grams per brake horse-  
11 power-hour of oxides of nitrogen and  
12 0.01 per brake horsepower-hour of  
13 particulate matter.

14 “(II) A rechargeable energy stor-  
15 age system.

16 “(iii) MAXIMUM AVAILABLE POWER.—

17 “(I) PASSENGER AUTOMOBILE  
18 OR LIGHT TRUCK.—For purposes of  
19 subparagraph (A)(i), the term ‘max-  
20 imum available power’ means the  
21 maximum power available from the  
22 battery or other electrical storage de-  
23 vice, during a standard 10 second  
24 pulse power test, divided by the sum  
25 of the battery or other electrical stor-

1                   age device and the SAE net power of  
2                   the heat engine.

3                   “(II) HEAVY DUTY HYBRID  
4                   MOTOR VEHICLE.—For purposes of  
5                   subparagraph (A)(ii), the term ‘max-  
6                   imum available power’ means the  
7                   maximum power available from the  
8                   battery or other electrical storage de-  
9                   vice, during a standard 10 second  
10                  pulse power test, divided by the vehi-  
11                  cle’s total traction power. The term  
12                  ‘total traction power’ means the sum  
13                  of the electric motor peak power and  
14                  the heat engine peak power of the ve-  
15                  hicle, except that if the electric motor  
16                  is the sole means by which the vehicle  
17                  can be driven, the total traction power  
18                  is the peak electric motor power.

19                  “(3) NEW QUALIFIED HYBRID MOTOR VEHI-  
20                  CLE.—For purposes of this subsection, the term  
21                  ‘new qualified hybrid motor vehicle’ means a motor  
22                  vehicle—

23                         “(A) which draws propulsion energy from  
24                         onboard sources of stored energy which are  
25                         both—

1           “(i) an internal combustion or heat  
2           engine using combustible fuel, and

3           “(ii) a rechargeable energy storage  
4           system,

5           “(B) which, in the case of a passenger  
6           automobile or light truck—

7           “(i) for 2002 and later model vehicles,  
8           has received a certificate of conformity  
9           under the Clean Air Act and meets or ex-  
10          ceeds the equivalent qualifying California  
11          low emission vehicle standard under sec-  
12          tion 243(e)(2) of the Clean Air Act for  
13          that make and model year, and

14          “(ii) for 2004 and later model vehi-  
15          cles, has received a certificate that such ve-  
16          hicle meets or exceeds the Bin 5 Tier II  
17          emission level established in regulations  
18          prescribed by the Administrator of the En-  
19          vironmental Protection Agency under sec-  
20          tion 202(i) of the Clean Air Act for that  
21          make and model year vehicle,

22          “(C) the original use of which commences  
23          with the taxpayer,

24          “(D) which is acquired for use or lease by  
25          the taxpayer and not for resale, and

1                   “(E) which is made by a manufacturer.

2           “(d) NEW QUALIFIED ALTERNATIVE FUEL MOTOR  
3 VEHICLE CREDIT.—

4                   “(1) ALLOWANCE OF CREDIT.—Except as pro-  
5 vided in paragraph (5), the credit determined under  
6 this subsection is an amount equal to the applicable  
7 percentage of the incremental cost of any new quali-  
8 fied alternative fuel motor vehicle placed in service  
9 by the taxpayer during the taxable year.

10                   “(2) APPLICABLE PERCENTAGE.—For purposes  
11 of paragraph (1), the applicable percentage with re-  
12 spect to any new qualified alternative fuel motor ve-  
13 hicle is—

14                   “(A) 50 percent, plus

15                   “(B) 30 percent, if such vehicle—

16                   “(i) has received a certificate of con-  
17 formity under the Clean Air Act and meets  
18 or exceeds the most stringent standard  
19 available for certification under the Clean  
20 Air Act for that make and model year vehi-  
21 cle (other than a zero emission standard),  
22 or

23                   “(ii) has received an order from an  
24 applicable State certifying the vehicle for  
25 sale or lease in California and meets or ex-

1 ceeds the most stringent standard available  
2 for certification under the State laws of  
3 California (enacted in accordance with a  
4 waiver granted under section 209(b) of the  
5 Clean Air Act) for that make and model  
6 year vehicle (other than a zero emission  
7 standard).

8 “(3) INCREMENTAL COST.—For purposes of  
9 this subsection, the incremental cost of any new  
10 qualified alternative fuel motor vehicle is equal to  
11 the amount of the excess of the manufacturer’s sug-  
12 gested retail price for such vehicle over such price  
13 for a gasoline or diesel fuel motor vehicle of the  
14 same model, to the extent such amount does not  
15 exceed—

16 “(A) \$5,000, if such vehicle has a gross ve-  
17 hicle weight rating of not more than 8,500  
18 pounds,

19 “(B) \$10,000, if such vehicle has a gross  
20 vehicle weight rating of more than 8,500  
21 pounds but not more than 14,000 pounds,

22 “(C) \$25,000, if such vehicle has a gross  
23 vehicle weight rating of more than 14,000  
24 pounds but not more than 26,000 pounds, and

1           “(D) \$40,000, if such vehicle has a gross  
2           vehicle weight rating of more than 26,000  
3           pounds.

4           “(4) QUALIFIED ALTERNATIVE FUEL MOTOR  
5           VEHICLE DEFINED.—For purposes of this  
6           subsection—

7           “(A) IN GENERAL.—The term ‘qualified  
8           alternative fuel motor vehicle’ means any motor  
9           vehicle—

10           “(i) which is only capable of operating  
11           on an alternative fuel,

12           “(ii) the original use of which com-  
13           mences with the taxpayer,

14           “(iii) which is acquired by the tax-  
15           payer for use or lease, but not for resale,  
16           and

17           “(iv) which is made by a manufac-  
18           turer.

19           “(B) ALTERNATIVE FUEL.—The term ‘al-  
20           ternative fuel’ means compressed natural gas,  
21           liquefied natural gas, liquefied petroleum gas,  
22           hydrogen, and any liquid at least 85 percent of  
23           the volume of which consists of methanol.

24           “(5) CREDIT FOR MIXED-FUEL VEHICLES.—

1           “(A) IN GENERAL.—In the case of a  
2 mixed-fuel vehicle placed in service by the tax-  
3 payer during the taxable year, the credit deter-  
4 mined under this subsection is an amount equal  
5 to—

6           “(i) in the case of a 75/25 mixed-fuel  
7 vehicle, 70 percent of the credit which  
8 would have been allowed under this sub-  
9 section if such vehicle was a qualified alter-  
10 native fuel motor vehicle, and

11           “(ii) in the case of a 95/5 mixed-fuel  
12 vehicle, 95 percent of the credit which  
13 would have been allowed under this sub-  
14 section if such vehicle was a qualified alter-  
15 native fuel motor vehicle.

16           “(B) MIXED-FUEL VEHICLE.—For pur-  
17 poses of this subsection, the term ‘mixed-fuel  
18 vehicle’ means any motor vehicle described in  
19 subparagraph (C) or (D) of paragraph (3),  
20 which—

21           “(i) is certified by the manufacturer  
22 as being able to perform efficiently in nor-  
23 mal operation on a combination of an al-  
24 ternative fuel and a petroleum-based fuel,

25           “(ii) either—



1                   “(I) has received a certificate of  
2                   conformity under the Clean Air Act,  
3                   or

4                   “(II) has received an order from  
5                   an applicable State certifying the vehi-  
6                   cle for sale or lease in California and  
7                   meets or exceeds the low emission ve-  
8                   hicle standard under section 88.105-  
9                   94 of title 40, Code of Federal Regu-  
10                  lations, for that make and model year  
11                  vehicle,

12                  “(iii) the original use of which com-  
13                  mences with the taxpayer,

14                  “(iv) which is acquired by the tax-  
15                  payer for use or lease, but not for resale,  
16                  and

17                  “(v) which is made by a manufac-  
18                  turer.

19                  “(C) 75/25 MIXED-FUEL VEHICLE.—For  
20                  purposes of this subsection, the term ‘75/25  
21                  mixed-fuel vehicle’ means a mixed-fuel vehicle  
22                  which operates using at least 75 percent alter-  
23                  native fuel and not more than 25 percent petro-  
24                  leum-based fuel.

1           “(D) 95/5 MIXED-FUEL VEHICLE.—For  
2           purposes of this subsection, the term ‘95/5  
3           mixed-fuel vehicle’ means a mixed-fuel vehicle  
4           which operates using at least 95 percent alter-  
5           native fuel and not more than 5 percent petro-  
6           leum-based fuel.

7           “(e) APPLICATION WITH OTHER CREDITS.—The  
8           credit allowed under subsection (a) for any taxable year  
9           shall not exceed the excess (if any) of—

10           “(1) the regular tax for the taxable year re-  
11           duced by the sum of the credits allowable under sub-  
12           part A and sections 27, 29, and 30, over

13           “(2) the tentative minimum tax for the taxable  
14           year.

15           “(f) OTHER DEFINITIONS AND SPECIAL RULES.—  
16           For purposes of this section—

17           “(1) CONSUMABLE FUEL.—The term  
18           ‘consumable fuel’ means any solid, liquid, or gaseous  
19           matter which releases energy when consumed by an  
20           auxiliary power unit.

21           “(2) MOTOR VEHICLE.—The term ‘motor vehi-  
22           cle’ has the meaning given such term by section  
23           30(c)(2).

24           “(3) 2000 MODEL YEAR CITY FUEL ECON-  
25           OMY.—The 2000 model year city fuel economy with

1 respect to any vehicle shall be measured under rules  
2 similar to the rules under section 4064(c).

3 “(4) OTHER TERMS.—The terms ‘automobile’,  
4 ‘passenger automobile’, ‘light truck’, and ‘manufac-  
5 turer’ have the meanings given such terms in regula-  
6 tions prescribed by the Administrator of the Envi-  
7 ronmental Protection Agency for purposes of the ad-  
8 ministration of title II of the Clean Air Act (42  
9 U.S.C. 7521 et seq.).

10 “(5) VEHICLE MUST BE ASSEMBLED IN UNITED  
11 STATES.—No amount shall be allowed as a credit  
12 under subsection (a) with respect to any vehicle un-  
13 less such vehicle is assembled in the United States  
14 by individuals employed under a collective bar-  
15 gaining agreement.

16 “(6) REDUCTION IN BASIS.—For purposes of  
17 this subtitle, the basis of any property for which a  
18 credit is allowable under subsection (a) shall be re-  
19 duced by the amount of such credit so allowed (de-  
20 termined without regard to subsection (e)).

21 “(7) NO DOUBLE BENEFIT.—The amount of  
22 any deduction or credit allowable under this  
23 chapter—

24 “(A) for any incremental cost taken into  
25 account in computing the amount of the credit

1           determined under subsection (d) shall be re-  
2           duced by the amount of such credit attributable  
3           to such cost, and

4           “(B) with respect to a vehicle described  
5           under subsection (b) or (c), shall be reduced by  
6           the amount of credit allowed under subsection  
7           (a) for such vehicle for the taxable year.

8           “(8) PROPERTY USED BY TAX-EXEMPT ENTI-  
9           TIES.—In the case of a credit amount which is al-  
10          lowable with respect to a motor vehicle which is ac-  
11          quired by an entity exempt from tax under this  
12          chapter, the person which sells or leases such vehicle  
13          to the entity shall be treated as the taxpayer with  
14          respect to the vehicle for purposes of this section  
15          and the credit shall be allowed to such person, but  
16          only if the person clearly discloses to the entity in  
17          any sale or lease document the specific amount of  
18          any credit otherwise allowable to the entity under  
19          this section and reduces the sale or lease price of  
20          such vehicle by an equivalent amount of such credit.

21          “(9) RECAPTURE.—The Secretary shall, by reg-  
22          ulations, provide for recapturing the benefit of any  
23          credit allowable under subsection (a) with respect to  
24          any property which ceases to be property eligible for  
25          such credit (including recapture in the case of a

1 lease period of less than the economic life of a vehi-  
2 cle).

3 “(10) PROPERTY USED OUTSIDE UNITED  
4 STATES, ETC., NOT QUALIFIED.—No credit shall be  
5 allowed under subsection (a) with respect to any  
6 property referred to in section 50(b) or with respect  
7 to the portion of the cost of any property taken into  
8 account under section 179.

9 “(11) ELECTION TO NOT TAKE CREDIT.—No  
10 credit shall be allowed under subsection (a) for any  
11 vehicle if the taxpayer elects to not have this section  
12 apply to such vehicle.

13 “(12) CARRYFORWARD ALLOWED.—

14 “(A) IN GENERAL.—If the credit amount  
15 allowable under subsection (a) for a taxable  
16 year exceeds the amount of the limitation under  
17 subsection (e) for such taxable year (referred to  
18 as the ‘unused credit year’ in this paragraph),  
19 such excess shall be allowed as a credit  
20 carryforward for each of the 20 taxable years  
21 following the unused credit year.

22 “(B) RULES.—Rules similar to the rules of  
23 section 39 shall apply with respect to the credit  
24 carryforward under subparagraph (A).

1           “(13) INTERACTION WITH AIR QUALITY AND  
2 MOTOR VEHICLE SAFETY STANDARDS.—Unless oth-  
3 erwise provided in this section, a motor vehicle shall  
4 not be considered eligible for a credit under this sec-  
5 tion unless such vehicle is in compliance with—

6           “(A) the applicable provisions of the Clean  
7 Air Act for the applicable make and model year  
8 of the vehicle (or applicable air quality provi-  
9 sions of State law in the case of a State which  
10 has adopted such provision under a waiver  
11 under section 209(b) of the Clean Air Act), and

12           “(B) the motor vehicle safety provisions of  
13 sections 30101 through 30169 of title 49,  
14 United States Code.

15           “(g) REGULATIONS.—

16           “(1) IN GENERAL.—The Secretary shall pro-  
17 mulgate such regulations as necessary to carry out  
18 the provisions of this section.

19           “(2) ADMINISTRATOR OF ENVIRONMENTAL  
20 PROTECTION AGENCY.—The Administrator of the  
21 Environmental Protection Agency, in coordination  
22 with the Secretary of Transportation and the Sec-  
23 retary of the Treasury, shall prescribe such regula-  
24 tions as necessary to determine whether a motor ve-

1 hicle meets the requirements to be eligible for a  
2 credit under this section.

3 “(h) TERMINATION.—This section shall not apply to  
4 any property placed in service after—

5 “(1) in the case of a new qualified fuel cell  
6 motor vehicle (as described in subsection (b)), De-  
7 cember 31, 2011, and

8 “(2) in the case of any other property, Decem-  
9 ber 31, 2007.”.

10 (b) CONFORMING AMENDMENTS.—

11 (1) Section 1016(a) is amended by striking  
12 “and” at the end of paragraph (31), by striking the  
13 period at the end of paragraph (32) and inserting “,  
14 and”, and by adding at the end the following:

15 “(33) to the extent provided in section  
16 30B(f)(4).”.

17 (2) Section 53(d)(1)(B)(iii) is amended by in-  
18 serting “, or not allowed under section 30B solely by  
19 reason of the application of section 30B(e)(2)” be-  
20 fore the period.

21 (3) Section 55(c)(2) is amended by inserting  
22 “30B(e),” after “30(b)(3)”.

23 (4) Section 6501(m) is amended by inserting  
24 “30B(f)(9),” after “30(d)(4),”.

1           (5) The table of sections for subpart B of part  
2           IV of subchapter A of chapter 1 is amended by in-  
3           serting after the item relating to section 30A the fol-  
4           lowing:

“Sec. 30B. Alternative motor vehicle credit.”.

5           (e) EFFECTIVE DATE.—The amendments made by  
6           this section shall apply to property placed in service after  
7           December 31, 2001, in taxable years ending after such  
8           date.

9           **SEC. 532. MODIFICATION OF CREDIT FOR QUALIFIED ELEC-**  
10           **TRIC VEHICLES.**

11           (a) AMOUNT OF CREDIT.—

12           (1) IN GENERAL.—Section 30(a) (relating to al-  
13           lowance of credit) is amended by striking “10 per-  
14           cent of”.

15           (2) LIMITATION OF CREDIT ACCORDING TO  
16           TYPE OF VEHICLE.—Section 30(b) (relating to limi-  
17           tations) is amended—

18           (A) by striking paragraphs (1) and (2) and  
19           inserting the following:

20           “(1) LIMITATION ACCORDING TO TYPE OF VE-  
21           HICLE.—The amount of the credit allowed under  
22           subsection (a) for any vehicle shall not exceed the  
23           greatest of the following amounts applicable to such  
24           vehicle:



1           “(A) In the case of a vehicle which con-  
2 forms to the Motor Vehicle Safety Standard  
3 500 prescribed by the Secretary of Transpor-  
4 tation, the lesser of—

5                   “(i) 10 percent of the manufacturer’s  
6 suggested retail price of the vehicle, or

7                   “(ii) \$4,000.

8           “(B) In the case of a vehicle with a gross  
9 vehicle weight rating not exceeding 8,500  
10 pounds—

11                   “(i) \$4,000, or

12                   “(ii) \$6,000, if such vehicle is—

13                           “(I) capable of a driving range of  
14 at least 100 miles on a single charge  
15 of the vehicle’s rechargeable batteries  
16 and measured pursuant to the urban  
17 dynamometer schedules under appen-  
18 dix I to part 86 of title 40, Code of  
19 Federal Regulations, or

20                           “(II) capable of a payload capac-  
21 ity of at least 1000 pounds.

22           “(C) In the case of a vehicle with a gross  
23 vehicle weight rating exceeding 8,500 but not  
24 exceeding 14,000 pounds, \$10,000.

1           “(D) In the case of a vehicle with a gross  
2 vehicle weight rating exceeding 14,000 but not  
3 exceeding 26,000 pounds, \$20,000.

4           “(E) In the case of a vehicle with a gross  
5 vehicle weight rating exceeding 26,000 pounds,  
6 \$40,000.”, and

7           (B) by redesignating paragraph (3) as  
8 paragraph (2).

9           (3) CONFORMING AMENDMENTS.—

10           (A) Section 53(d)(1)(B)(iii) is amended by  
11 striking “section 30(b)(3)(B)” and inserting  
12 “section 30(b)(2)(B)”.

13           (B) Section 55(c)(2) is amended by strik-  
14 ing “30(b)(3)” and inserting “30(b)(2)”.

15           (b) QUALIFIED BATTERY ELECTRIC VEHICLE.—

16           (1) IN GENERAL.—Section 30(c)(1)(A) (defin-  
17 ing qualified electric vehicle) is amended to read as  
18 follows:

19           “(A) which is—

20           “(i) operated solely by use of a bat-  
21 tery or battery pack, or

22           “(ii) powered primarily through the  
23 use of an electric battery or battery pack  
24 using a flywheel or capacitor which stores  
25 energy produced by an electric motor

1 through regenerative braking to assist in  
2 vehicle operation,”.

3 (2) LEASED VEHICLES.—Section 30(e)(1)(C) is  
4 amended by inserting “or lease” after “use”.

5 (3) CONFORMING AMENDMENTS.—

6 (A) Subsections (a), (b)(2), and (c) of sec-  
7 tion 30 are each amended by inserting “bat-  
8 tery” after “qualified” each place it appears.

9 (B) The heading of subsection (c) of sec-  
10 tion 30 is amended by inserting “BATTERY”  
11 after “QUALIFIED”.

12 (C) The heading of section 30 is amended  
13 by inserting “**BATTERY**” after “**QUALIFIED**”.

14 (D) The item relating to section 30 in the  
15 table of sections for subpart B of part IV of  
16 subchapter A of chapter 1 is amended by in-  
17 serting “battery” after “qualified”.

18 (E) Section 179A(e)(3) is amended by in-  
19 serting “battery” before “electric”.

20 (F) The heading of paragraph (3) of sec-  
21 tion 179A(e) is amended by inserting “BAT-  
22 TERY” before “ELECTRIC”.

23 (c) ADDITIONAL SPECIAL RULES.—Section 30(d)  
24 (relating to special rules) is amended by adding at the end  
25 the following:

1           “(5) NO DOUBLE BENEFIT.—The amount of  
2           any deduction or credit allowable under this chapter  
3           for any cost taken into account in computing the  
4           amount of the credit determined under subsection  
5           (a) shall be reduced by the amount of such credit at-  
6           tributable to such cost.

7           “(6) PROPERTY USED BY TAX-EXEMPT ENTI-  
8           TIES.—In the case of a credit amount which is al-  
9           lowable with respect to a vehicle which is acquired  
10          by an entity exempt from tax under this chapter, the  
11          person which sells or leases such vehicle to the entity  
12          shall be treated as the taxpayer with respect to the  
13          vehicle for purposes of this section and the credit  
14          shall be allowed to such person, but only if the per-  
15          son clearly discloses to the entity in any sale or lease  
16          contract the specific amount of any credit otherwise  
17          allowable to the entity under this section and re-  
18          duces the sale or lease price of such vehicle by an  
19          equivalent amount of such credit.”.

20          (d) EXTENSION.—Section 30(e) (relating to termi-  
21          nation) is amended by striking “2004” and inserting  
22          “2007”.

23          (e) EFFECTIVE DATE.—The amendments made by  
24          this section shall apply to property placed in service after

1 December 31, 2001, in taxable years ending after such  
2 date.

3 **SEC. 533. CREDIT FOR RETAIL SALE OF ALTERNATIVE**  
4 **FUELS AS MOTOR VEHICLE FUEL.**

5 (a) IN GENERAL.—Subpart D of part IV of sub-  
6 chapter A of chapter 1 (relating to business related cred-  
7 its) is amended by inserting after section 40 the following:

8 **“SEC. 40A. CREDIT FOR RETAIL SALE OF ALTERNATIVE**  
9 **FUELS AS MOTOR VEHICLE FUEL.**

10 “(a) GENERAL RULE.—For purposes of section 38,  
11 the alternative fuel retail sales credit for any taxable year  
12 is 25 cents for each gasoline gallon equivalent of alter-  
13 native fuel sold at retail by the taxpayer during such year  
14 as a fuel to propel any qualified motor vehicle, but only  
15 if the taxpayer reduces the retail sales price of such fuel  
16 by an equivalent amount of such credit.

17 “(b) DEFINITIONS.—For purposes of this section—

18 “(1) ALTERNATIVE FUEL.—The term ‘alter-  
19 native fuel’ means compressed natural gas, liquefied  
20 natural gas, liquefied petroleum gas, hydrogen, and  
21 any liquid at least 85 percent of the volume of which  
22 consists of methanol.

23 “(2) GASOLINE GALLON EQUIVALENT.—The  
24 term ‘gasoline gallon equivalent’ means, with respect  
25 to any alternative fuel, the amount (determined by

1 the Secretary) of such fuel having a Btu content of  
2 114,000.

3 “(3) QUALIFIED MOTOR VEHICLE.—The term  
4 ‘qualified motor vehicle’ means any motor vehicle (as  
5 defined in section 30(c)(2)) which meets any appli-  
6 cable Federal or State emissions standards with re-  
7 spect to each fuel by which such vehicle is designed  
8 to be propelled.

9 “(4) SOLD AT RETAIL.—

10 “(A) IN GENERAL.—The term ‘sold at re-  
11 tail’ means the sale, for a purpose other than  
12 resale, after manufacture, production, or impor-  
13 tation.

14 “(B) USE TREATED AS SALE.—If any per-  
15 son uses alternative fuel (including any use  
16 after importation) as a fuel to propel any quali-  
17 fied alternative fuel motor vehicle (as defined in  
18 section 30B(d)(4)) before such fuel is sold at  
19 retail, then such use shall be treated in the  
20 same manner as if such fuel were sold at retail  
21 as a fuel to propel such a vehicle by such per-  
22 son.

23 “(c) NO DOUBLE BENEFIT.—The amount of any de-  
24 duction or credit allowable under this chapter for any fuel  
25 taken into account in computing the amount of the credit

1 determined under subsection (a) shall be reduced by the  
2 amount of such credit attributable to such fuel.

3 “(d) PASS-THRU IN THE CASE OF ESTATES AND  
4 TRUSTS.—Under regulations prescribed by the Secretary,  
5 rules similar to the rules of subsection (d) of section 52  
6 shall apply.

7 “(e) TERMINATION.—This section shall not apply to  
8 any fuel sold at retail after December 31, 2006.”.

9 (b) CREDIT TREATED AS BUSINESS CREDIT.—Sec-  
10 tion 38(b) (relating to current year business credit) is  
11 amended by striking “plus” at the end of paragraph (16),  
12 by striking the period at the end of paragraph (17) and  
13 inserting “, plus”, and by adding at the end the following:

14 “(18) the alternative fuel retail sales credit de-  
15 termined under section 40A(a).”.

16 (c) TRANSITIONAL RULE.—Section 39(d) (relating to  
17 transitional rules) is amended by adding at the end the  
18 following:

19 “(14) NO CARRYBACK OF SECTION 40A CREDIT  
20 BEFORE EFFECTIVE DATE.—No portion of the un-  
21 used business credit for any taxable year which is  
22 attributable to the alternative fuel retail sales credit  
23 determined under section 40A(a) may be carried  
24 back to a taxable year ending before January 1,  
25 2002.”.

1 (d) CLERICAL AMENDMENT.—The table of sections  
2 for subpart D of part IV of subchapter A of chapter 1  
3 is amended by inserting after the item relating to section  
4 40 the following:

“Sec. 40A. Credit for retail sale of alternative fuels as motor vehicle fuel.”.

5 (e) EFFECTIVE DATE.—The amendments made by  
6 this section shall apply to fuel sold at retail after Decem-  
7 ber 31, 2001, in taxable years ending after such date.

8 **SEC. 534. EXTENSION OF DEDUCTION FOR CERTAIN RE-**  
9 **FUELING PROPERTY.**

10 (a) IN GENERAL.—Section 179A(f) (relating to ter-  
11 mination) is amended by striking “2004” and inserting  
12 “2007”.

13 (b) CONFORMING AMENDMENT.—Section 179A(c)  
14 (relating to qualified clean-fuel vehicle property defined)  
15 is amended by striking paragraph (3).

16 (c) EFFECTIVE DATE.—The amendments made by  
17 this section shall apply to property placed in service after  
18 December 31, 2001, in taxable years ending after such  
19 date.

20 **SEC. 535. CREDIT FOR INSTALLATION OF ALTERNATIVE**  
21 **FUELING STATIONS.**

22 (a) IN GENERAL.—Subpart B of part IV of sub-  
23 chapter A of chapter 1 (relating to foreign tax credit, etc.)  
24 is amended by adding at the end the following:



1 **“SEC. 30C. CLEAN-FUEL VEHICLE REFUELING PROPERTY**  
2 **CREDIT.**

3 “(a) CREDIT ALLOWED.—There shall be allowed as  
4 a credit against the tax imposed by this chapter for the  
5 taxable year an amount equal to—

6 “(1) 50 percent, in the case of retail clean-fuel  
7 vehicle refueling property, and

8 “(2) 50 percent, in the case of residential clean-  
9 fuel vehicle refueling property,

10 of the amount paid or incurred by the taxpayer during  
11 the taxable year for the installation of clean-fuel vehicle  
12 refueling property.

13 “(b) LIMITATION.—The credit allowed under—

14 “(1) subsection (a)(1) with respect to clean-fuel  
15 vehicle refueling property, shall not exceed \$30,000,  
16 and

17 “(2) subsection (a)(2) with respect to clean-fuel  
18 vehicle refueling property, shall not exceed \$1,000.

19 “(c) YEAR CREDIT ALLOWED.—The credit allowed  
20 under subsection (a) shall be allowed in the taxable year  
21 in which the clean-fuel vehicle refueling property is placed  
22 in service by the taxpayer.

23 “(d) DEFINITIONS.—For purposes of this section—

24 “(1) CLEAN-FUEL VEHICLE REFUELING PROP-  
25 erty.—The term ‘clean-fuel vehicle refueling prop-  
26 erty’ has the same meaning given the term ‘qualified

1 clean-fuel vehicle refueling property’ under section  
2 179A.

3 “(2) RESIDENTIAL CLEAN-FUEL VEHICLE RE-  
4 FUELING PROPERTY.—The term ‘residential clean-  
5 fuel vehicle refueling property’ means clean-fuel ve-  
6 hicle refueling property which is installed on prop-  
7 erty which is used as the principal residence (within  
8 the meaning of section 121) of the taxpayer.

9 “(3) RETAIL CLEAN-FUEL VEHICLE REFUELING  
10 PROPERTY.—The term ‘retail clean-fuel vehicle re-  
11 fueling property’ means clean-fuel vehicle refueling  
12 property—

13 “(A) which is installed on property used in  
14 a trade or business of the taxpayer, and

15 “(B) if such refueling property—

16 “(i) is—

17 “(I) available to the public dur-  
18 ing normal business hours, and

19 “(II) capable of serving at least 3  
20 motor vehicles at the same time, or

21 “(ii) regularly serves at least 1 fleet of  
22 10 or more motor vehicles.

23 “(e) APPLICATION WITH OTHER CREDITS.—The  
24 credit allowed under subsection (a) for any taxable year  
25 shall not exceed the excess (if any) of—

1           “(1) the regular tax for the taxable year re-  
2           duced by the sum of the credits allowable under sub-  
3           part A and sections 27, 29, 30, and 30B, over

4           “(2) the tentative minimum tax for the taxable  
5           year.

6           “(f) BASIS REDUCTION.—For purposes of this title,  
7           the basis of any property shall be reduced by the portion  
8           of the cost of such property taken into account under sub-  
9           section (a).

10          “(g) NO DOUBLE BENEFIT.—No deduction shall be  
11          allowed under section 179A with respect to any property  
12          with respect to which a credit is allowed under subsection  
13          (a).

14          “(h) REFUELING PROPERTY INSTALLED FOR TAX-  
15          EXEMPT ENTITIES.—In the case of clean-fuel vehicle re-  
16          fueling property installed on property owned or used by  
17          an entity exempt from tax under this chapter, the person  
18          which installs such refueling property for the entity shall  
19          be treated as the taxpayer with respect to the refueling  
20          property for purposes of this section (and such refueling  
21          property shall be treated as retail clean-fuel vehicle refuel-  
22          ing property) and the credit shall be allowed to such per-  
23          son, but only if the person clearly discloses to the entity  
24          in any installation contract the specific amount of the  
25          credit allowable under this section and modifies the price

1 of such contract to take into account the amount of such  
2 credit.

3 “(i) CARRYFORWARD ALLOWED.—

4 “(1) IN GENERAL.—If the credit amount allow-  
5 able under subsection (a) for a taxable year exceeds  
6 the amount of the limitation under subsection (b)  
7 for such taxable year (referred to as the ‘unused  
8 credit year’ in this subsection), such excess shall be  
9 allowed as a credit carryforward for each of the 20  
10 taxable years following the unused credit year.

11 “(2) RULES.—Rules similar to the rules of sec-  
12 tion 39 shall apply with respect to the credit  
13 carryforward under paragraph (1).

14 “(j) SPECIAL RULES.—Rules similar to the rules of  
15 paragraphs (4) and (5) of section 179A(e) shall apply.

16 “(k) REGULATIONS.—The Secretary shall prescribe  
17 such regulations as necessary to carry out the provisions  
18 of this section.

19 “(l) TERMINATION.—This section shall not apply to  
20 any property placed in service after December 31, 2006.”.

21 (b) CONFORMING AMENDMENTS.—

22 (1) Section 1016(a) is amended by striking  
23 “and” at the end of paragraph (32), by striking the  
24 period at the end of paragraph (33) and inserting “,  
25 and”, and by adding at the end the following:

1           “(34) to the extent provided in section  
2           30C(f).”.

3           (2) Section 53(d)(1)(B)(iii) is amended by in-  
4           serting “, or not allowed under section 30C solely by  
5           reason of the application of section 30C(e)(2)” be-  
6           fore the period.

7           (3) Section 55(c)(2) is amended by inserting  
8           “30C(e),” after “30B(e)”.

9           (4) The table of sections for subpart B of part  
10          IV of subchapter A of chapter 1 is amended by in-  
11          serting after the item relating to section 30B the fol-  
12          lowing:

          “Sec. 30C. Clean-fuel vehicle refueling property credit.”.

13          (c) EFFECTIVE DATE.—The amendments made by  
14          this section shall apply to property placed in service after  
15          December 31, 2001, in taxable years ending after such  
16          date.

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