

**AMENDMENT TO COMMITTEE PRINT #4**  
**OFFERED BY MRS. WILSON OF NEW MEXICO**

Page 21, after line 12, insert the following and make  
the necessary conforming changes:

1

**TITLE II—**

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1 **SECTION 1. SHORT TITLE; TABLE OF CONTENTS.**

2       (a) **SHORT TITLE.**—This <sup>Title</sup>~~Act~~ may be cited as the “Re-  
3 newable Fuels, Consumer Protection, and Energy Efficiency  
4 Act of 2007”.

5       (b) **TABLE OF CONTENTS.**—The table of contents of this  
6 <sup>Title</sup>~~Act~~ is as follows:

*Sec. 1. Short title; table of contents.*

*Sec. 2. Relationship to other law.*

**TITLE I—BIOFUELS FOR ENERGY SECURITY AND TRANSPORTATION**

*Sec. 101. Short title.*

*Sec. 102. Definitions.*

*Subtitle A—Renewable Fuel Standard*

*Sec. 111. Renewable fuel standard.*

*Sec. 112. Production of renewable fuel using renewable energy.*

*Sec. 113. Sense of Congress relating to the use of renewable resources to generate energy.*

*Subtitle B—Renewable Fuels Infrastructure*

*Sec. 121. Infrastructure pilot program for renewable fuels.*

*Sec. 122. Bioenergy research and development.*

*Sec. 123. Bioresearch centers for systems biology program.*

*Sec. 124. Loan guarantees for renewable fuel facilities.*

*Sec. 125. Grants for renewable fuel production research and development in certain States.*

*Sec. 126. Grants for infrastructure for transportation of biomass to local biorefineries.*

*Sec. 127. Biorefinery information center.*

*Sec. 128. Alternative fuel database and materials.*

*Sec. 129. Fuel tank cap labeling requirement.*

*Sec. 130. Biodiesel.*

*Sec. 131. Transitional assistance for farmers who plant dedicated energy crops for a local cellulosic refinery.*

*Sec. 132. Research and development in support of low-carbon fuels.*

*Subtitle C—Studies*

*Sec. 141. Study of advanced biofuels technologies.*

*Sec. 142. Study of increased consumption of ethanol-blended gasoline with higher levels of ethanol.*

*Sec. 143. Pipeline feasibility study.*

*Sec. 144. Study of optimization of flexible fueled vehicles to use E-85 fuel.*

*Sec. 145. Study of credits for use of renewable electricity in electric vehicles.*

*Sec. 146. Study of engine durability associated with the use of biodiesel.*

*Sec. 147. Study of incentives for renewable fuels.*

*Sec. 148. Study of streamlined lifecycle analysis tools for the evaluation of renewable carbon content of biofuels.*

*Sec. 149. Study of effects of ethanol-blended gasoline on off-road vehicles.*

*Sec. 150. Study of offshore wind resources.*

*Subtitle D—Environmental Safeguards*

*Sec. 161. Grants for production of advanced biofuels.*

*Sec. 162. Studies of effects of renewable fuel use.*

*Sec. 163. Integrated consideration of water quality in determinations on fuels and fuel additives.*

*Sec. 164. Anti-backsliding.*

**TITLE II—ENERGY EFFICIENCY PROMOTION**

*Sec. 201. Short title.*

*Sec. 202. Definition of Secretary.*

*Subtitle A—Promoting Advanced Lighting Technologies*

- Sec. 211. Accelerated procurement of energy efficient lighting.*
- Sec. 212. Incandescent reflector lamp efficiency standards.*
- Sec. 213. Bright Tomorrow Lighting Prizes.*
- Sec. 214. Sense of Senate concerning efficient lighting standards.*
- Sec. 215. Renewable energy construction grants.*

*Subtitle B—Expediting New Energy Efficiency Standards*

- Sec. 221. Definition of energy conservation standard.*
- Sec. 222. Regional efficiency standards for heating and cooling products.*
- Sec. 223. Furnace fan rulemaking.*
- Sec. 224. Expedited rulemakings.*
- Sec. 225. Periodic reviews.*
- Sec. 226. Energy efficiency labeling for consumer electronic products.*
- Sec. 227. Residential boiler efficiency standards.*
- Sec. 228. Technical corrections.*
- Sec. 229. Electric motor efficiency standards.*
- Sec. 230. Energy standards for home appliances.*
- Sec. 231. Improved energy efficiency for appliances and buildings in cold climates.*
- Sec. 232. Deployment of new technologies for high-efficiency consumer products.*
- Sec. 233. Industrial efficiency program.*

*Subtitle C—Promoting High Efficiency Vehicles, Advanced Batteries, and Energy Storage*

- Sec. 241. Lightweight materials research and development.*
- Sec. 242. Loan guarantees for fuel-efficient automobile parts manufacturers.*
- Sec. 243. Advanced technology vehicles manufacturing incentive program.*
- Sec. 244. Energy storage competitiveness.*
- Sec. 245. Advanced transportation technology program.*
- Sec. 246. Inclusion of electric drive in Energy Policy Act of 1992.*
- Sec. 247. Commercial insulation demonstration program.*

*Subtitle D—Setting Energy Efficiency Goals*

- Sec. 251. Oil savings plan and requirements.*
- Sec. 252. National energy efficiency improvement goals.*
- Sec. 253. National media campaign.*
- Sec. 254. Modernization of electricity grid system.*
- Sec. 255. Smart grid system report.*
- Sec. 256. Smart grid technology research, development, and demonstration.*
- Sec. 257. Smart grid interoperability framework.*
- Sec. 258. State consideration of smart grid.*
- Sec. 259. Support for energy independence of the United States.*
- Sec. 260. Energy Policy Commission.*

*Subtitle E—Promoting Federal Leadership in Energy Efficiency and Renewable Energy*

- Sec. 261. Federal fleet conservation requirements.*
- Sec. 262. Federal requirement to purchase electricity generated by renewable energy.*
- Sec. 263. Energy savings performance contracts.*
- Sec. 264. Energy management requirements for Federal buildings.*

- Sec. 265. Combined heat and power and district energy installations at Federal sites.*
- Sec. 266. Federal building energy efficiency performance standards.*
- Sec. 267. Application of International Energy Conservation Code to public and assisted housing.*
- Sec. 268. Energy efficient commercial buildings initiative.*
- Sec. 269. Clean energy corridors.*
- Sec. 270. Federal standby power standard.*
- Sec. 270A. Standard relating to solar hot water heaters.*
- Sec. 270B. Renewable energy innovation manufacturing partnership.*
- Sec. 270C. Express loans for renewable energy and energy efficiency.*
- Sec. 270D. Small business energy efficiency.*

*Subtitle F—Assisting State and Local Governments in Energy Efficiency*

- Sec. 271. Weatherization assistance for low-income persons.*
- Sec. 272. State energy conservation plans.*
- Sec. 273. Utility energy efficiency programs.*
- Sec. 274. Energy efficiency and demand response program assistance.*
- Sec. 275. Energy and environmental block grant.*
- Sec. 276. Energy sustainability and efficiency grants for institutions of higher education.*
- Sec. 277. Energy efficiency and renewable energy worker training program.*
- Sec. 278. Assistance to States to reduce school bus idling.*
- Sec. 279. Definition of State.*
- Sec. 280. Coordination of planned refinery outages.*
- Sec. 281. Technical criteria for clean coal power initiative.*
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- Sec. 283. Offshore renewable energy.*

*Subtitle G—Marine and Hydrokinetic Renewable Energy Promotion*

- Sec. 291. Definition of marine and hydrokinetic renewable energy.*
- Sec. 292. Research and development.*
- Sec. 293. National ocean energy research centers.*

**TITLE III—CARBON CAPTURE AND STORAGE RESEARCH,  
DEVELOPMENT, AND DEMONSTRATION**

- Sec. 301. Short title.*
- Sec. 302. Carbon capture and storage research, development, and demonstration program.*
- Sec. 303. Carbon dioxide storage capacity assessment.*
- Sec. 304. Carbon capture and storage initiative.*
- Sec. 305. Capitol power plant carbon dioxide emissions demonstration program.*
- Sec. 306. Assessment of carbon sequestration and methane and nitrous oxide emissions from terrestrial ecosystems.*
- Sec. 307. Abrupt climate change research program.*

**TITLE IV—COST-EFFECTIVE AND ENVIRONMENTALLY SUSTAINABLE  
PUBLIC BUILDINGS**

*Subtitle A—Public Buildings Cost Reduction*

- Sec. 401. Short title.*
- Sec. 402. Cost-effective and geothermal heat pump technology acceleration program.*

*Sec. 403. Environmental Protection Agency demonstration grant program for local governments.*

*Sec. 404. Definitions.*

*Subtitle B—Installation of Photovoltaic System at Department of Energy Headquarters Building*

*Sec. 411. Installation of photovoltaic system at Department of Energy headquarters building.*

*Subtitle C—High-Performance Green Buildings*

*Sec. 421. Short title.*

*Sec. 422. Findings and purposes.*

*Sec. 423. Definitions.*

*PART I—OFFICE OF HIGH-PERFORMANCE GREEN BUILDINGS*

*Sec. 431. Oversight.*

*Sec. 432. Office of High-Performance Green Buildings.*

*Sec. 433. Green Building Advisory Committee.*

*Sec. 434. Public outreach.*

*Sec. 435. Research and development.*

*Sec. 436. Budget and life-cycle costing and contracting.*

*Sec. 437. Authorization of appropriations.*

*PART II—HEALTHY HIGH-PERFORMANCE SCHOOLS*

*Sec. 441. Definition of high-performance school.*

*Sec. 442. Grants for healthy school environments.*

*Sec. 443. Model guidelines for siting of school facilities.*

*Sec. 444. Public outreach.*

*Sec. 445. Environmental health program.*

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*PART III—STRENGTHENING FEDERAL LEADERSHIP*

*Sec. 451. Incentives.*

*Sec. 452. Federal procurement.*

*Sec. 453. Federal green building performance.*

*Sec. 454. Storm water runoff requirements for Federal development projects.*

*PART IV—DEMONSTRATION PROJECT*

*Sec. 461. Coordination of goals.*

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*TITLE V—CORPORATE AVERAGE FUEL ECONOMY STANDARDS*

*Sec. 501. Short title.*

*Sec. 502. Average fuel economy standards for automobiles and certain other vehicles.*

*Sec. 503. Amending Fuel Economy Standards.*

*Sec. 504. Definitions.*

*Sec. 505. Ensuring safety of automobiles.*

*Sec. 506. Credit Trading Program.*

*Sec. 507. Labels for fuel economy and greenhouse gas emissions.*

*Sec. 508. Continued applicability of existing standards.*

- Sec. 509. National Academy of Sciences Studies.*
- Sec. 510. Standards for Executive agency automobiles.*
- Sec. 511. Increasing Consumer Awareness of Flexible Fuel Automobiles.*
- Sec. 512. Periodic review of accuracy of fuel economy labeling procedures.*
- Sec. 513. Tire fuel efficiency consumer information.*
- Sec. 514. Advanced Battery Initiative.*
- Sec. 515. Biodiesel standards.*
- Sec. 516. Use of Civil Penalties for research and development.*
- Sec. 517. Energy Security Fund and Alternative Fuel Grant Program.*
- Sec. 518. Authorization of appropriations.*
- Sec. 519. Application with Clean Air Act.*
- Sec. 520. Alternative fuel vehicle action plan.*
- Sec. 521. Study of the adequacy of transportation of domestically-produced renewable fuel by railroads and other modes of transportation.*

#### *TITLE VI—PRICE GOUGING*

- Sec. 601. Short title.*
- Sec. 602. Definitions.*
- Sec. 603. Prohibition on price gouging during energy emergencies.*
- Sec. 604. Prohibition on market manipulation.*
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- Sec. 606. Presidential declaration of energy emergency.*
- Sec. 607. Enforcement by the Federal Trade Commission.*
- Sec. 608. Enforcement by State Attorneys General.*
- Sec. 609. Penalties.*
- Sec. 610. Effect on other laws.*

#### *TITLE VII—ENERGY DIPLOMACY AND SECURITY*

- Sec. 701. Short title.*
- Sec. 702. Definitions.*
- Sec. 703. Sense of Congress on energy diplomacy and security.*
- Sec. 704. Strategic energy partnerships.*
- Sec. 705. International energy crisis response mechanisms.*
- Sec. 706. Hemisphere energy cooperation forum.*
- Sec. 707. National Security Council reorganization.*
- Sec. 708. Annual national energy security strategy report.*
- Sec. 709. Appropriate congressional committees defined.*
- Sec. 710. No Oil Producing and Exporting Cartels Act of 2007.*
- Sec. 711. Convention on Supplementary Compensation for Nuclear Damage contingent cost allocation.*

#### *TITLE VIII—MISCELLANEOUS*

- Sec. 801. Study of the effect of private wire laws on the development of combined heat and power facilities.*

### **1 SEC. 2. RELATIONSHIP TO OTHER LAW.**

- 2. Except to the extent expressly provided in this Act or*
- 3 an amendment made by this Act, nothing in this Act or*
- 4 an amendment made by this Act supersedes, limits the au-*

1 *thority provided or responsibility conferred by, or author-*  
 2 *izes any violation of any provision of law (including a reg-*  
 3 *ulation), including any energy or environmental law or*  
 4 *regulation.*

5 **TITLE I—BIOFUELS FOR ENERGY**  
 6 **SECURITY AND TRANSPOR-**  
 7 **TATION**

8 **SEC. 101. SHORT TITLE.**

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9 *This title may be cited as the “Biofuels for Energy Se-*  
 10 *curity and Transportation Act of 2007”.*

11 **SEC. 102. DEFINITIONS.**

12 *In this title:*

13 (1) **ADVANCED BIOFUEL.**—

14 (A) **IN GENERAL.**—*The term “advanced*  
 15 *biofuel” means fuel derived from renewable bio-*  
 16 *mass other than corn starch.*

17 (B) **INCLUSIONS.**—*The term “advanced*  
 18 *biofuel” includes—*

19 (i) *ethanol derived from cellulose,*  
 20 *hemicellulose, or lignin;*

21 (ii) *ethanol derived from sugar or*  
 22 *starch, other than ethanol derived from corn*  
 23 *starch;*

24 (iii) *ethanol derived from waste mate-*  
 25 *rial, including crop residue, other vegetative*

1 waste material, animal waste, and food  
2 waste and yard waste;

3 (iv) diesel-equivalent fuel derived from  
4 renewable biomass, including vegetable oil  
5 and animal fat;

6 (v) biogas (including landfill gas and  
7 sewage waste treatment gas) produced  
8 through the conversion of organic matter  
9 from renewable biomass;

10 (vi) butanol or other alcohols produced  
11 through the conversion of organic matter  
12 from renewable biomass; and

13 (vii) other fuel derived from cellulosic  
14 biomass.

15 (2) CELLULOSIC BIOMASS ETHANOL.—The term  
16 “cellulosic biomass ethanol” means ethanol derived  
17 from any cellulose, hemicellulose, or lignin that is de-  
18 rived from renewable biomass.

19 (3) CONVENTIONAL BIOFUEL.—The term “con-  
20 ventional biofuel” means ethanol derived from corn  
21 starch.

22 (4) RENEWABLE BIOMASS.—The term “renewable  
23 biomass” means—

24 (A) nonmerchantable materials or  
25 precommercial thinnings that—

1           (i) are byproducts of preventive treat-  
2           ments, such as trees, wood, brush, thinnings,  
3           chips, and slash, that are removed—

4                   (I) to reduce hazardous fuels;

5                   (II) to reduce or contain disease  
6           or insect infestation; or

7                   (III) to restore forest health;

8           (ii) would not otherwise be used for

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9           higher-value products; and

10           (iii) are harvested from National For-  
11           est System land or public land (as defined  
12           in section 103 of the Federal Land Policy  
13           and Management Act of 1976 (43 U.S.C.  
14           1702))—

15                   (I) where permitted by law; and

16                   (II) in accordance with—

17                           (aa) applicable land manage-  
18                           ment plans; and

19                           (bb) the requirements for old-  
20                           growth maintenance, restoration,  
21                           and management direction of  
22                           paragraphs (2), (3), and (4) of  
23                           subsection (e) and the require-  
24                           ments for large-tree retention of  
25                           subsection (f) of section 102 of the

1 *Healthy Forests Restoration Act*  
2 *of 2003 (16 U.S.C. 6512); or*

3 *(B) any organic matter that is available on*  
4 *a renewable or recurring basis from non-Federal*  
5 *land or from land belonging to an Indian tribe,*  
6 *or an Indian individual, that is held in trust by*  
7 *the United States or subject to a restriction*  
8 *against alienation imposed by the United States,*

9 *including—*

10 *(i) renewable plant material,*

11 *including—*

12 *(I) feed grains;*

13 *(II) other agricultural commod-*

14 *ities;*

15 *(III) other plants and trees; and*

16 *(IV) algae; and*

17 *(ii) waste material, including—*

18 *(I) crop residue;*

19 *(II) other vegetative waste mate-*  
20 *rial (including wood waste and wood*  
21 *residues);*

22 *(III) animal waste and byprod-*  
23 *ucts (including fats, oils, greases, and*  
24 *manure); and*

25 *(IV) food waste and yard waste.*

1 (5) *RENEWABLE FUEL*.—

2 (A) *IN GENERAL*.—The term “renewable  
3 fuel” means motor vehicle fuel or home heating  
4 fuel that is—

5 (i) produced from renewable biomass;

6 and

7 (ii) used to replace or reduce the quan-  
8 tity of fossil fuel present in a fuel or fuel

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9 mixture used to operate a motor vehicle or  
10 furnace.

11 (B) *INCLUSION*.—The term “renewable fuel”  
12 includes—

13 (i) conventional biofuel; and

14 (ii) advanced biofuel.

15 (6) *SECRETARY*.—The term “Secretary” means  
16 the Secretary of Energy

17 (7) *SMALL REFINERY*.—The term “small refin-  
18 ery” means a refinery for which the average aggregate  
19 daily crude oil throughput for a calendar year (as de-  
20 termined by dividing the aggregate throughput for the  
21 calendar year by the number of days in the calendar  
22 year) does not exceed 75,000 barrels.

1           **Subtitle A—Renewable Fuel**  
2                           **Standard**

3   **SEC. 111. RENEWABLE FUEL STANDARD.**

4       (a) *RENEWABLE FUEL PROGRAM.*—

5           (1) *REGULATIONS.*—

6                   (A) *IN GENERAL.*—Not later than 1 year  
7                   after the date of enactment of this Act, the Presi-  
8                   dent shall promulgate regulations to ensure that  
9                   motor vehicle fuel and home heating oil sold or  
10                   introduced into commerce in the United States  
11                   (except in noncontiguous States or territories),  
12                   on an annual average basis, contains the appli-  
13                   cable volume of renewable fuel determined in ac-  
14                   cordance with paragraph (2).

15                   (B) *PROVISIONS OF REGULATIONS.*—Re-  
16                   gardless of the date of promulgation, the regula-  
17                   tions promulgated under subparagraph (A)—

18                           (i) shall contain compliance provisions  
19                           applicable to refineries, blenders, distribu-  
20                           tors, and importers, as appropriate, to en-  
21                           sure that—

22                                   (I) the requirements of this sub-  
23                                   section are met; and

24                                   (II) renewable fuels produced from  
25                                   facilities that commence operations

1                   *after the date of enactment of this Act*  
2                   *achieve at least a 20 percent reduction*  
3                   *in life cycle greenhouse gas emissions*  
4                   *compared to gasoline; but*

5                   *(ii) shall not—*

6                                 *(I) restrict geographic areas in the*  
7                                 *contiguous United States in which re-*  
8                                 *newable fuel may be used; or*

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9   *(II) impose any per-gallon obliga-*  
10                                        *tion for the use of renewable fuel.*

11                    (C) *RELATIONSHIP TO OTHER REGULA-*  
12                    *TIONS.—Regulations promulgated under this*  
13                    *paragraph shall, to the maximum extent prac-*  
14                    *ticable, incorporate the program structure, com-*  
15                    *pliance, and reporting requirements established*  
16                    *under the final regulations promulgated to im-*  
17                    *plement the renewable fuel program established*  
18                    *by the amendment made by section 1501(a)(2) of*  
19                    *the Energy Policy Act of 2005 (Public Law 109-*  
20                    *58; 119 Stat. 1067).*

21                    (2) *APPLICABLE VOLUME.—*

22                                 (A) *CALENDAR YEARS 2008 THROUGH*  
23                                 *2022.—*

24   (i) *RENEWABLE FUEL.—For the pur-*  
25   *pose of paragraph (1), subject to clause (ii),*

1            *the applicable volume for any of calendar*  
 2            *years 2008 through 2022 shall be deter-*  
 3            *mined in accordance with the following*  
 4            *table:*

<b>Calendar year:</b>	<b>Applicable volume of renewable fuel (in billions of gallons):</b>
2008 .....	8.5
2009 .....	10.5
2010 .....	12.0
2011 .....	12.6
2012 .....	13.2
2013 .....	13.8
<hr/>	
2014 .....	14.4
2015 .....	15.0
2016 .....	18.0
2017 .....	21.0
2018 .....	24.0
2019 .....	27.0
2020 .....	30.0
2021 .....	33.0
2022 .....	36.0.

5            *(ii) ADVANCED BIOFUELS.—For the*  
 6            *purpose of paragraph (1), of the volume of*  
 7            *renewable fuel required under clause (i), the*  
 8            *applicable volume for any of calendar years*  
 9            *2016 through 2022 for advanced biofuels*  
 10           *shall be determined in accordance with the*  
 11           *following table:*

<b>Calendar year:</b>	<b>Applicable volume of advanced biofuels (in billions of gallons):</b>
2016 .....	3.0
2017 .....	6.0
2018 .....	9.0
2019 .....	12.0
2020 .....	15.0
2021 .....	18.0
2022 .....	21.0.

1           (B) *CALENDAR YEAR 2023 AND THERE-*  
2 *AFTER.—Subject to subparagraph (C), for the*  
3 *purposes of paragraph (1), the applicable volume*  
4 *for calendar year 2023 and each calendar year*  
5 *thereafter shall be determined by the President,*  
6 *in coordination with the Secretary of Energy,*  
7 *the Secretary of Agriculture, and the Adminis-*  
8 *trator of the Environmental Protection Agency,*  
9 *based on a review of the implementation of the*  
10 *program during calendar years 2007 through*  
11 *2022, including a review of—*

12                   (i) *the impact of renewable fuels on the*  
13 *energy security of the United States;*

14                   (ii) *the expected annual rate of future*  
15 *production of renewable fuels, including ad-*  
16 *vanced biofuels;*

17                   (iii) *the impact of renewable fuels on*  
18 *the infrastructure of the United States, in-*  
19 *cluding deliverability of materials, goods,*  
20 *and products other than renewable fuel, and*  
21 *the sufficiency of infrastructure to deliver*  
22 *renewable fuel; and*

23                   (iv) *the impact of the use of renewable*  
24 *fuels on other factors, including job cre-*  
25 *ation, the price and supply of agricultural*

1            *commodities, rural economic development,*  
 2            *and the environment.*

3            *(C) MINIMUM APPLICABLE VOLUME.—Sub-*  
 4            *ject to subparagraph (D), for the purpose of*  
 5            *paragraph (1), the applicable volume for cal-*  
 6            *endar year 2023 and each calendar year there-*  
 7            *after shall be equal to the product obtained by*  
 8            *multiplying—*

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9            *(i) the number of gallons of gasoline*  
 10           *that the President estimates will be sold or*  
 11           *introduced into commerce in the calendar*  
 12           *year; and*

13           *(ii) the ratio that—*

14           *(I) 36,000,000,000 gallons of re-*  
 15           *newable fuel; bears to*

16           *(II) the number of gallons of gaso-*  
 17           *line sold or introduced into commerce*  
 18           *in calendar year 2022.*

19           *(D) MINIMUM PERCENTAGE OF ADVANCED*  
 20           *BIOFUEL.—For the purpose of paragraph (1)*  
 21           *and subparagraph (C), at least 60 percent of the*  
 22           *minimum applicable volume for calendar year*  
 23           *2023 and each calendar year thereafter shall be*  
 24           *advanced biofuel.*

25           *(b) APPLICABLE PERCENTAGES.—*

1           (1) *PROVISION OF ESTIMATE OF VOLUMES OF*  
2 *GASOLINE SALES.*—Not later than October 31 of each  
3 *of calendar years 2008 through 2021, the Adminis-*  
4 *trator of the Energy Information Administration*  
5 *shall provide to the President an estimate, with re-*  
6 *spect to the following calendar year, of the volumes of*  
7 *gasoline projected to be sold or introduced into com-*  
8 *merce in the United States.*

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9           (2) *DETERMINATION OF APPLICABLE PERCENT-*  
10 *AGES.*—

11           (A) *IN GENERAL.*—Not later than November  
12 *30 of each of calendar years 2008 through 2022,*  
13 *based on the estimate provided under paragraph*  
14 *(1), the President shall determine and publish in*  
15 *the Federal Register, with respect to the fol-*  
16 *lowing calendar year, the renewable fuel obliga-*  
17 *tion that ensures that the requirements of sub-*  
18 *section (a) are met.*

19           (B) *REQUIRED ELEMENTS.*—The renewable  
20 *fuel obligation determined for a calendar year*  
21 *under subparagraph (A) shall—*

22                   (i) *be applicable to refineries, blenders,*  
23 *and importers, as appropriate;*

1                   (ii) be expressed in terms of a volume  
2                   percentage of gasoline sold or introduced  
3                   into commerce in the United States; and

4                   (iii) subject to paragraph (3)(A), con-  
5                   sist of a single applicable percentage that  
6                   applies to all categories of persons specified  
7                   in clause (i).

8                   (3) ADJUSTMENTS.—In determining the applica-  
9                   ble percentage for a calendar year, the President shall  
10                  make adjustments—

11                  (A) to prevent the imposition of redundant  
12                  obligations on any person specified in paragraph  
13                  (2)(B)(i); and

14                  (B) to account for the use of renewable fuel  
15                  during the previous calendar year by small re-  
16                  fineries that are exempt under subsection (g).

17                  (c) VOLUME CONVERSION FACTORS FOR RENEWABLE  
18                  FUELS BASED ON ENERGY CONTENT OR REQUIREMENTS.—

19                  (1) IN GENERAL.—For the purpose of subsection  
20                  (a), the President shall assign values to specific types  
21                  of advanced biofuels for the purpose of satisfying the  
22                  fuel volume requirements of subsection (a)(2) in ac-  
23                  cordance with this subsection.

24                  (2) ENERGY CONTENT RELATIVE TO ETHANOL.—  
25                  For advanced biofuel, 1 gallon of the advanced biofuel

1 shall be considered to be the equivalent of 1 gallon of  
2 renewable fuel multiplied by the ratio that—

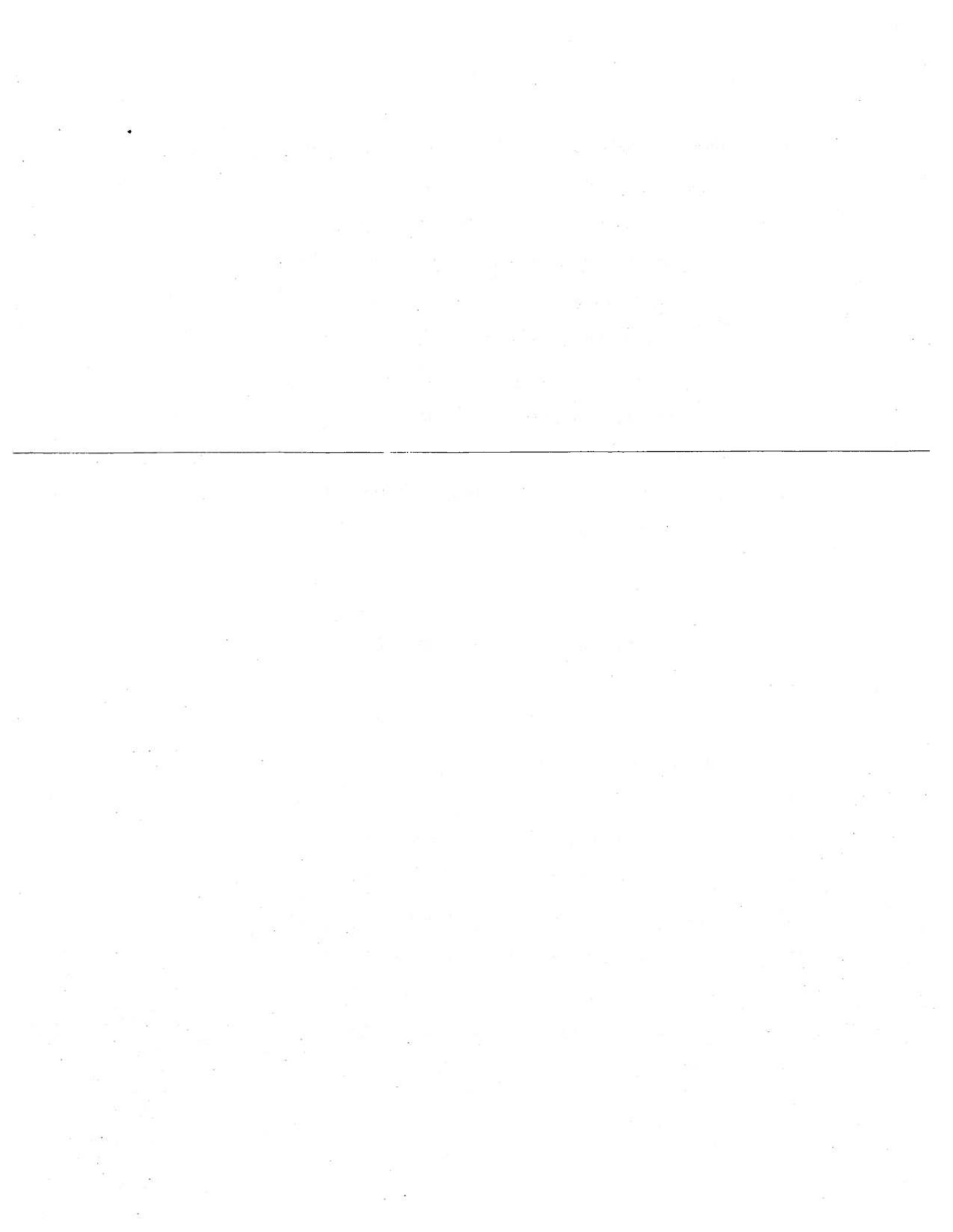
3 (A) the number of British thermal units of  
4 energy produced by the combustion of 1 gallon of  
5 the advanced biofuel (as measured under condi-  
6 tions determined by the Secretary); bears to

7 (B) the number of British thermal units of  
8 energy produced by the combustion of 1 gallon of  
9 pure ethanol (as measured under conditions de-  
10 termined by the Secretary to be comparable to  
11 conditions described in subparagraph (A)).

12 (3) *TRANSITIONAL ENERGY-RELATED CONVER-*  
13 *SION FACTORS FOR CELLULOSIC BIOMASS ETHANOL.*—  
14 *For any of calendar years 2008 through 2015, 1 gal-*  
15 *lon of cellulosic biomass ethanol shall be considered to*  
16 *be the equivalent of 2.5 gallons of renewable fuel.*

17 (d) *CREDIT PROGRAM.*—

18 (1) *IN GENERAL.*—*The President, in consultation*  
19 *with the Secretary and the Administrator of the En-*  
20 *vironmental Protection Agency, shall implement a*  
21 *credit program to manage the renewable fuel require-*  
22 *ment of this section in a manner consistent with the*  
23 *credit program established by the amendment made*  
24 *by section 1501(a)(2) of the Energy Policy Act of*  
25 *2005 (Public Law 109–58; 119 Stat. 1067).*



1           (2) *MARKET TRANSPARENCY.*—*In carrying out*  
2 *the credit program under this subsection, the Presi-*  
3 *dent shall facilitate price transparency in markets for*  
4 *the sale and trade of credits, with due regard for the*  
5 *public interest, the integrity of those markets, fair*  
6 *competition, and the protection of consumers and ag-*  
7 *ricultural producers.*

8           (e) *SEASONAL VARIATIONS IN RENEWABLE FUEL*  
9 *USE.*—

10           (1) *STUDY.*—*For each of calendar years 2008*  
11 *through 2022, the Administrator of the Energy Infor-*  
12 *mation Administration shall conduct a study of re-*  
13 *newable fuel blending to determine whether there are*  
14 *excessive seasonal variations in the use of renewable*  
15 *fuel.*

16           (2) *REGULATION OF EXCESSIVE SEASONAL VARI-*  
17 *ATIONS.*—*If, for any calendar year, the Administrator*  
18 *of the Energy Information Administration, based on*  
19 *the study under paragraph (1), makes the determina-*  
20 *tions specified in paragraph (3), the President shall*  
21 *promulgate regulations to ensure that 25 percent or*  
22 *more of the quantity of renewable fuel necessary to*  
23 *meet the requirements of subsection (a) is used during*  
24 *each of the 2 periods specified in paragraph (4) of*  
25 *each subsequent calendar year.*

1           (3) *DETERMINATIONS.*—*The determinations re-*  
2 *ferred to in paragraph (2) are that—*

3           (A) *less than 25 percent of the quantity of*  
4 *renewable fuel necessary to meet the requirements*  
5 *of subsection (a) has been used during 1 of the*  
6 *2 periods specified in paragraph (4) of the cal-*  
7 *endar year;*

8           (B) *a pattern of excessive seasonal variation*  
9 *described in subparagraph (A) will continue in*  
10 *subsequent calendar years; and*

11           (C) *promulgating regulations or other re-*  
12 *quirements to impose a 25 percent or more sea-*  
13 *sonal use of renewable fuels will not*  
14 *significantly—*

15           (i) *increase the price of motor fuels to*  
16 *the consumer; or*

17           (ii) *prevent or interfere with the at-*  
18 *tainment of national ambient air quality*  
19 *standards.*

20           (4) *PERIODS.*—*The 2 periods referred to in this*  
21 *subsection are—*

22           (A) *April through September; and*

23           (B) *January through March and October*  
24 *through December.*

25           (f) *WAIVERS.*—

1           (1) *IN GENERAL.*—*The President, in consultation*  
2 *with the Secretary of Energy, the Secretary of Agri-*  
3 *culture, and the Administrator of the Environmental*  
4 *Protection Agency, may waive the requirements of*  
5 *subsection (a) in whole or in part on petition by one*  
6 *or more States by reducing the national quantity of*  
7 *renewable fuel required under subsection (a), based on*  
8 *a determination by the President (after public notice*  
9 *and opportunity for comment), that—*

10           (A) *implementation of the requirement*  
11 *would severely harm the economy or environment*  
12 *of a State, a region, or the United States; or*

13           (B) *extreme and unusual circumstances*  
14 *exist that prevent distribution of an adequate*  
15 *supply of domestically-produced renewable fuel*  
16 *to consumers in the United States.*

17           (2) *PETITIONS FOR WAIVERS.*—*The President, in*  
18 *consultation with the Secretary of Energy, the Sec-*  
19 *retary of Agriculture, and the Administrator of the*  
20 *Environmental Protection Agency, shall approve or*  
21 *disapprove a State petition for a waiver of the re-*  
22 *quirements of subsection (a) within 30 days after the*  
23 *date on which the petition is received by the Presi-*  
24 *dent.*

1           (3) *TERMINATION OF WAIVERS.*—A waiver  
2           granted under paragraph (1) shall terminate after 1  
3           year, but may be renewed by the President after con-  
4           sultation with the Secretary of Energy, the Secretary  
5           of Agriculture, and the Administrator of the Environ-  
6           mental Protection Agency.

7           (g) *SMALL REFINERIES.*—

8           (1) *TEMPORARY EXEMPTION.*—

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9           (A) *IN GENERAL.*—The requirements of sub-  
10          section (a) shall not apply to—

11                 (i) small refineries (other than a small  
12                 refinery described in clause (ii)) until cal-  
13                 endar year 2013; and

14                 (ii) small refineries owned by a small  
15                 business refiner (as defined in section  
16                 45H(c) of the Internal Revenue Code of  
17                 1986) until calendar year 2015.

18          (B) *EXTENSION OF EXEMPTION.*—

19                 (i) *STUDY BY SECRETARY.*—Not later  
20                 than December 31, 2008, the Secretary shall  
21                 submit to the President and Congress a re-  
22                 port describing the results of a study to de-  
23                 termine whether compliance with the re-  
24                 quirements of subsection (a) would impose a

1            *disproportionate economic hardship on*  
2            *small refineries.*

3            *(ii) EXTENSION OF EXEMPTION.—In*  
4            *the case of a small refinery that the Sec-*  
5            *retary determines under clause (i) would be*  
6            *subject to a disproportionate economic hard-*  
7            *ship if required to comply with subsection*  
8            *(a), the President shall extend the exemp-*  
9            *tion under subparagraph (A) for the small*  
10           *refinery for a period of not less than 2 ad-*  
11           *ditional years.*

12           *(2) PETITIONS BASED ON DISPROPORTIONATE*  
13           *ECONOMIC HARDSHIP.—*

14           *(A) EXTENSION OF EXEMPTION.—A small*  
15           *refinery may at any time petition the President*  
16           *for an extension of the exemption under para-*  
17           *graph (1) for the reason of disproportionate eco-*  
18           *nomical hardship.*

19           *(B) EVALUATION OF PETITIONS.—In evalu-*  
20           *ating a petition under subparagraph (A), the*  
21           *President, in consultation with the Secretary,*  
22           *shall consider the findings of the study under*  
23           *paragraph (1)(B) and other economic factors.*

24           *(C) DEADLINE FOR ACTION ON PETI-*  
25           *TIONS.—The President shall act on any petition*

1           *submitted by a small refinery for a hardship ex-*  
2           *emption not later than 90 days after the date of*  
3           *receipt of the petition.*

4           (3) *OPT-IN FOR SMALL REFINERIES.*—*A small*  
5           *refinery shall be subject to the requirements of sub-*  
6           *section (a) if the small refinery notifies the President*  
7           *that the small refinery waives the exemption under*  
8           *paragraph (1).*

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9           (h) *PENALTIES AND ENFORCEMENT.*—

10           (1) *CIVIL PENALTIES.*—

11                   (A) *IN GENERAL.*—*Any person that violates*  
12           *a regulation promulgated under subsection (a),*  
13           *or that fails to furnish any information required*  
14           *under such a regulation, shall be liable to the*  
15           *United States for a civil penalty of not more*  
16           *than the total of—*

17                           (i) *\$25,000 for each day of the viola-*  
18                           *tion; and*

19                           (ii) *the amount of economic benefit or*  
20                           *savings received by the person resulting*  
21                           *from the violation, as determined by the*  
22                           *President.*

23                   (B) *COLLECTION.*—*Civil penalties under*  
24           *subparagraph (A) shall be assessed by, and col-*  
25           *lected in a civil action brought by, the Secretary*

1           or such other officer of the United States as is  
2           designated by the President.

3           (2) *INJUNCTIVE AUTHORITY.*—

4           (A) *IN GENERAL.*—The district courts of the  
5           United States shall have jurisdiction to—

6                   (i) restrain a violation of a regulation  
7                   promulgated under subsection (a);

8                   (ii) award other appropriate relief;

9                   and

10                   (iii) compel the furnishing of informa-  
11                   tion required under the regulation.

12           (B) *ACTIONS.*—An action to restrain such  
13           violations and compel such actions shall be  
14           brought by and in the name of the United States.

15           (C) *SUBPOENAS.*—In the action, a subpoena  
16           for a witness who is required to attend a district  
17           court in any district may apply in any other  
18           district.

19           (i) *VOLUNTARY LABELING PROGRAM.*—

20                   (1) *IN GENERAL.*—The President shall establish  
21                   criteria for a system of voluntary labeling of renew-  
22                   able fuels based on life cycle greenhouse gas emissions.

23                   (2) *CONSUMER EDUCATION.*—The President shall  
24                   ensure that the labeling system under this subsection

1 provides useful information to consumers making fuel  
2 purchases.

3 (3) FLEXIBILITY.—In carrying out this sub-  
4 section, the President may establish more than 1  
5 label, as appropriate.

6 (j) STUDY OF IMPACT OF RENEWABLE FUEL STAND-  
7 ARD.—

8 (1) IN GENERAL.—The Secretary shall enter into  
9 an arrangement with the National Academy of  
10 Sciences under which the Academy shall conduct a  
11 study to assess the impact of the requirements de-  
12 scribed in subsection (a)(2) on each industry relating  
13 to the production of feed grains, livestock, food, and  
14 energy.

15 (2) PARTICIPATION.—In conducting the study  
16 under paragraph (1), the National Academy of  
17 Sciences shall seek the participation, and consider the  
18 input, of—

19 (A) producers of feed grains;

20 (B) producers of livestock, poultry, and pork  
21 products;

22 (C) producers of food and food products;

23 (D) producers of energy;

1           (E) individuals and entities interested in  
2 issues relating to conservation, the environment,  
3 and nutrition; and

4           (F) users of renewable fuels.

5           (3) CONSIDERATIONS.—In conducting the study,  
6 the National Academy of Sciences shall consider—

7           (A) the likely impact on domestic animal  
8 agriculture feedstocks that, in any crop year, are  
9 significantly below current projections; and

10           (B) policy options to alleviate the impact  
11 on domestic animal agriculture feedstocks that  
12 are significantly below current projections.

13           (4) COMPONENTS.—The study shall include—

14           (A) a description of the conditions under  
15 which the requirements described in subsection  
16 (a)(2) should be suspended or reduced to prevent  
17 adverse impacts to domestic animal agriculture  
18 feedstocks described in paragraph (3)(B); and

19           (B) recommendations for the means by  
20 which the Federal Government could prevent or  
21 minimize adverse economic hardships and im-  
22 pacts.

23           (5) DEADLINE FOR COMPLETION OF STUDY.—Not  
24 later than 270 days after the date of enactment of this

1     *Act, the Secretary shall submit to Congress a report*  
2     *that describes the results of the study.*

3             (6) *PERIODIC REVIEWS.—*

4                     (A) *IN GENERAL.—To allow for the appro-*  
5                     *priate adjustment of the requirements described*  
6                     *in subsection (a)(2), the Secretary shall conduct*  
7                     *periodic reviews of—*

8                             (i) *existing technologies;*

9                             (ii) *the feasibility of achieving compli-*  
10                            *ance with the requirements; and*

11                            (iii) *the impacts of the requirements*  
12                            *described in subsection (a)(2) on each indi-*  
13                            *vidual and entity described in paragraph*  
14                            *(2).*

15             (k) *EFFECTIVE DATE.—Except as otherwise specifi-*  
16             *cally provided in this section, this section takes effect on*  
17             *the date on which the National Academies of Science com-*  
18             *pletes the study under subsection (j).*

19     **SEC. 112. PRODUCTION OF RENEWABLE FUEL USING RE-**  
20                     **NEWABLE ENERGY.**

21             (a) *DEFINITIONS.—In this section:*

22                     (1) *FACILITY.—The term “facility” means a fa-*  
23                     *cility used for the production of renewable fuel.*

24                     (2) *RENEWABLE ENERGY.—*

1           (A) *IN GENERAL.*—The term “renewable en-  
2           ergy” has the meaning given the term in section  
3           203(b) of the Energy Policy Act of 2005 (42  
4           U.S.C. 15852(b)).

5           (B) *INCLUSION.*—The term “renewable en-  
6           ergy” includes biogas produced through the con-  
7           version of organic matter from renewable bio-  
8           mass.

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9           (b) *ADDITIONAL CREDIT.*—

10           (1) *IN GENERAL.*—The President shall provide a  
11           credit under the program established under section  
12           111(d) to the owner of a facility that uses renewable  
13           energy to displace more than 90 percent of the fossil  
14           fuel normally used in the production of renewable  
15           fuel.

16           (2) *CREDIT AMOUNT.*—The President may pro-  
17           vide the credit in a quantity that is not more than  
18           the equivalent of 1.5 gallons of renewable fuel for each  
19           gallon of renewable fuel produced in a facility de-  
20           scribed in paragraph (1).

21 **SEC. 113. SENSE OF CONGRESS RELATING TO THE USE OF**  
22           **RENEWABLE RESOURCES TO GENERATE EN-**  
23           **ERGY.**

24           (a) *FINDINGS.*—Congress finds that—

1           (1) *the United States has a quantity of renew-*  
2           *able energy resources that is sufficient to supply a*  
3           *significant portion of the energy needs of the United*  
4           *States;*

5           (2) *the agricultural, forestry, and working land*  
6           *of the United States can help ensure a sustainable do-*  
7           *mestic energy system;*

8           (3) *accelerated development and use of renewable*  
9           *energy technologies provide numerous benefits to the*  
10          *United States, including improved national security,*  
11          *improved balance of payments, healthier rural econo-*  
12          *mies, improved environmental quality, and abundant,*  
13          *reliable, and affordable energy for all citizens of the*  
14          *United States;*

15          (4) *the production of transportation fuels from*  
16          *renewable energy would help the United States meet*  
17          *rapidly growing domestic and global energy demands,*  
18          *reduce the dependence of the United States on energy*  
19          *imported from volatile regions of the world that are*  
20          *politically unstable, stabilize the cost and availability*  
21          *of energy, and safeguard the economy and security of*  
22          *the United States;*

23          (5) *increased energy production from domestic*  
24          *renewable resources would attract substantial new in-*  
25          *vestments in energy infrastructure, create economic*

1 growth, develop new jobs for the citizens of the United  
2 States, and increase the income for farm, ranch, and  
3 forestry jobs in the rural regions of the United States;

4 (6) increased use of renewable energy is practical  
5 and can be cost effective with the implementation of  
6 supportive policies and proper incentives to stimulate  
7 markets and infrastructure; and

8 (7) public policies aimed at enhancing renewable  
9 ~~energy production and accelerating technological im-~~  
10 ~~provements will further reduce energy costs over time~~  
11 ~~and increase market demand.~~

12 (b) SENSE OF CONGRESS.—It is the sense of Congress  
13 that it is the goal of the United States that, not later than  
14 January 1, 2025, the agricultural, forestry, and working  
15 land of the United States should—

16 (1) provide from renewable resources not less  
17 than 25 percent of the total energy consumed in the  
18 United States; and

19 (2) continue to produce safe, abundant, and af-  
20 fordable food, feed, and fiber.

1           **Subtitle B—Renewable Fuels**  
2                           **Infrastructure**

3   **SEC. 121. INFRASTRUCTURE PILOT PROGRAM FOR RENEW-**  
4                           **ABLE FUELS.**

5           (a) *IN GENERAL.*—*The Secretary, in consultation with*  
6 *the Secretary of Transportation and the Administrator of*  
7 *the Environmental Protection Agency, shall establish a*  
8 *competitive grant pilot program (referred to in this section*  
9 *as the “pilot program”), to be administered through the Ve-*  
10 *hicle Technology Deployment Program of the Department*  
11 *of Energy, to provide not more than 10 geographically-dis-*  
12 *persed project grants to State governments, Indian tribal*  
13 *governments, local governments, metropolitan transpor-*  
14 *tation authorities, or partnerships of those entities to carry*  
15 *out 1 or more projects for the purposes described in sub-*  
16 *section (b).*

17           (b) *GRANT PURPOSES.*—*A grant under this section*  
18 *shall be used for the establishment of refueling infrastruc-*  
19 *ture corridors, as designated by the Secretary, for gasoline*  
20 *blends that contain not less than 11 percent, and not more*  
21 *than 85 percent, renewable fuel or diesel fuel that contains*  
22 *at least 10 percent renewable fuel, including—*

23                   (1) *installation of infrastructure and equipment*  
24                   *necessary to ensure adequate distribution of renewable*  
25                   *fuels within the corridor;*

1           (2) *installation of infrastructure and equipment*  
2 *necessary to directly support vehicles powered by re-*  
3 *newable fuels; and*

4           (3) *operation and maintenance of infrastructure*  
5 *and equipment installed as part of a project funded*  
6 *by the grant.*

7 (c) *APPLICATIONS.—*

8           (1) *REQUIREMENTS.—*

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9           (A) *IN GENERAL.—Subject to subparagraph*  
10 *(B), not later than 90 days after the date of en-*  
11 *actment of this Act, the Secretary shall issue re-*  
12 *quirements for use in applying for grants under*  
13 *the pilot program.*

14           (B) *MINIMUM REQUIREMENTS.—At a min-*  
15 *imum, the Secretary shall require that an appli-*  
16 *cation for a grant under this section—*

17           (i) *be submitted by—*

18                   (I) *the head of a State, tribal, or*  
19 *local government or a metropolitan*  
20 *transportation authority, or any com-*  
21 *bination of those entities; and*

22                   (II) *a registered participant in*  
23 *the Vehicle Technology Deployment*  
24 *Program of the Department of Energy;*  
25 *and*

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(ii) include—

(I) a description of the project proposed in the application, including the ways in which the project meets the requirements of this section;

(II) an estimate of the degree of use of the project, including the estimated size of fleet of vehicles operated with renewable fuel available within the geographic region of the corridor, measured as a total quantity and a percentage;

(III) an estimate of the potential petroleum displaced as a result of the project (measured as a total quantity and a percentage), and a plan to collect and disseminate petroleum displacement and other relevant data relating to the project to be funded under the grant, over the expected life of the project;

(IV) a description of the means by which the project will be sustainable without Federal assistance after the completion of the term of the grant;

1                   (V) a complete description of the  
2                   costs of the project, including acquisi-  
3                   tion, construction, operation, and  
4                   maintenance costs over the expected life  
5                   of the project; and

6                   (VI) a description of which costs  
7                   of the project will be supported by Fed-  
8                   eral assistance under this subsection.

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9                   (2) *PARTNERS.*—An applicant under paragraph  
10                  (1) may carry out a project under the pilot program  
11                  in partnership with public and private entities.

12                  (d) *SELECTION CRITERIA.*—In evaluating applica-  
13                  tions under the pilot program, the Secretary shall—

14                   (1) consider the experience of each applicant  
15                   with previous, similar projects; and

16                   (2) give priority consideration to applications  
17                   that—

18                           (A) are most likely to maximize displace-  
19                           ment of petroleum consumption, measured as a  
20                           total quantity and a percentage;

21                           (B) are best able to incorporate existing in-  
22                           frastructure while maximizing, to the extent  
23                           practicable, the use of advanced biofuels;

24                           (C) demonstrate the greatest commitment on  
25                           the part of the applicant to ensure funding for

1           *the proposed project and the greatest likelihood*  
2           *that the project will be maintained or expanded*  
3           *after Federal assistance under this subsection is*  
4           *completed;*

5           (D) *represent a partnership of public and*  
6           *private entities; and*

7           (E) *exceed the minimum requirements of*  
8           *subsection (c)(1)(B).*

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9           (e) *PILOT PROJECT REQUIREMENTS.—*

10           (1) *MAXIMUM AMOUNT.—The Secretary shall*  
11           *provide not more than \$20,000,000 in Federal assist-*  
12           *ance under the pilot program to any applicant.*

13           (2) *COST SHARING.—The non-Federal share of*  
14           *the cost of any activity relating to renewable fuel in-*  
15           *frastructure development carried out using funds from*  
16           *a grant under this section shall be not less than 20*  
17           *percent.*

18           (3) *MAXIMUM PERIOD OF GRANTS.—The Sec-*  
19           *retary shall not provide funds to any applicant under*  
20           *the pilot program for more than 2 years.*

21           (4) *DEPLOYMENT AND DISTRIBUTION.—The Sec-*  
22           *retary shall seek, to the maximum extent practicable,*  
23           *to ensure a broad geographic distribution of project*  
24           *sites funded by grants under this section.*

1           (5) *TRANSFER OF INFORMATION AND KNOWL-*  
2 *EDGE.—The Secretary shall establish mechanisms to*  
3 *ensure that the information and knowledge gained by*  
4 *participants in the pilot program are transferred*  
5 *among the pilot program participants and to other*  
6 *interested parties, including other applicants that*  
7 *submitted applications.*

8           (f) *SCHEDULE.—*

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9           (1) *INITIAL GRANTS.—*

10           (A) *IN GENERAL.—Not later than 90 days*  
11 *after the date of enactment of this Act, the Sec-*  
12 *retary shall publish in the Federal Register,*  
13 *Commerce Business Daily, and such other publi-*  
14 *cations as the Secretary considers to be appro-*  
15 *priate, a notice and request for applications to*  
16 *carry out projects under the pilot program.*

17           (B) *DEADLINE.—An application described*  
18 *in subparagraph (A) shall be submitted to the*  
19 *Secretary by not later than 180 days after the*  
20 *date of publication of the notice under that sub-*  
21 *paragraph.*

22           (C) *INITIAL SELECTION.—Not later than 90*  
23 *days after the date by which applications for*  
24 *grants are due under subparagraph (B), the Sec-*  
25 *retary shall select by competitive, peer-reviewed*

1            *proposal up to 5 applications for projects to be*  
2            *awarded a grant under the pilot program.*

3            (2) *ADDITIONAL GRANTS.—*

4            (A) *IN GENERAL.—Not later than 2 years*  
5            *after the date of enactment of this Act, the Sec-*  
6            *retary shall publish in the Federal Register,*  
7            *Commerce Business Daily, and such other publi-*  
8            *cations as the Secretary considers to be appro-*  
9            *prate, a notice and request for additional appli-*  
10           *cations to carry out projects under the pilot pro-*  
11           *gram that incorporate the information and*  
12           *knowledge obtained through the implementation*  
13           *of the first round of projects authorized under the*  
14           *pilot program.*

15           (B) *DEADLINE.—An application described*  
16           *in subparagraph (A) shall be submitted to the*  
17           *Secretary by not later than 180 days after the*  
18           *date of publication of the notice under that sub-*  
19           *paragraph.*

20           (C) *INITIAL SELECTION.—Not later than 90*  
21           *days after the date by which applications for*  
22           *grants are due under subparagraph (B), the Sec-*  
23           *retary shall select by competitive, peer-reviewed*  
24           *proposal such additional applications for*  
25           *projects to be awarded a grant under the pilot*

1           program as the Secretary determines to be ap-  
2           propriate.

3       (g) *REPORTS TO CONGRESS.*—

4           (1) *INITIAL REPORT.*—Not later than 60 days  
5           after the date on which grants are awarded under this  
6           section, the Secretary shall submit to Congress a re-  
7           port containing—

8                   (A) *an identification of the grant recipients*  
9                   *and a description of the projects to be funded*  
10                   *under the pilot program;*

11                   (B) *an identification of other applicants*  
12                   *that submitted applications for the pilot pro-*  
13                   *gram but to which funding was not provided;*  
14                   *and*

15                   (C) *a description of the mechanisms used by*  
16                   *the Secretary to ensure that the information and*  
17                   *knowledge gained by participants in the pilot*  
18                   *program are transferred among the pilot pro-*  
19                   *gram participants and to other interested par-*  
20                   *ties, including other applicants that submitted*  
21                   *applications.*

22           (2) *EVALUATION.*—Not later than 2 years after  
23           the date of enactment of this Act, and annually there-  
24           after until the termination of the pilot program, the  
25           Secretary shall submit to Congress a report con-

1     *taining an evaluation of the effectiveness of the pilot*  
 2     *program, including an assessment of the petroleum*  
 3     *displacement and benefits to the environment derived*  
 4     *from the projects included in the pilot program.*

5     *(h) AUTHORIZATION OF APPROPRIATIONS.—There is*  
 6     *authorized to be appropriated to the Secretary to carry out*  
 7     *this section \$200,000,000, to remain available until ex-*  
 8     *pended.*

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9     **SEC. 122. BIOENERGY RESEARCH AND DEVELOPMENT.**

10     *Section 931(c) of the Energy Policy Act of 2005 (42*  
 11     *U.S.C. 16231(c)) is amended—*

12             *(1) in paragraph (2), by striking*  
 13             *“\$251,000,000” and inserting “\$377,000,000”; and*  
 14             *(2) in paragraph (3), by striking*  
 15             *“\$274,000,000” and inserting “\$398,000,000”.*

16     **SEC. 123. BIORESEARCH CENTERS FOR SYSTEMS BIOLOGY**  
 17             **PROGRAM.**

18     *Section 977(a)(1) of the Energy Policy Act of 2005 (42*  
 19     *U.S.C. 16317(a)(1)) is amended by inserting before the pe-*  
 20     *riod at the end the following: “, including the establishment*  
 21     *of at least 11 bioresearch centers of varying sizes, as appro-*  
 22     *priate, that focus on biofuels, of which at least 2 centers*  
 23     *shall be located in each of the 4 Petroleum Administration*  
 24     *for Defense Districts with no subdistricts and 1 center shall*

1 *be located in each of the subdistricts of the Petroleum Ad-*  
2 *ministration for Defense District with subdistricts”.*

3 **SEC. 124. LOAN GUARANTEES FOR RENEWABLE FUEL FA-**  
4 **CILITIES.**

5 (a) *IN GENERAL.*—*Section 1703 of the Energy Policy*  
6 *Act of 2005 (42 U.S.C. 16513) is amended by adding at*  
7 *the end the following:*

8 “(f) *RENEWABLE FUEL FACILITIES.*—

9 “(1) *IN GENERAL.*—*The Secretary may make*  
10 *guarantees under this title for projects that produce*  
11 *advanced biofuel (as defined in section 102 of the*  
12 *Biofuels for Energy Security and Transportation Act*  
13 *of 2007).*

14 “(2) *REQUIREMENTS.*—*A project under this sub-*  
15 *section shall employ new or significantly improved*  
16 *technologies for the production of renewable fuels as*  
17 *compared to commercial technologies in service in the*  
18 *United States at the time that the guarantee is issued.*

19 “(3) *ISSUANCE OF FIRST LOAN GUARANTEES.*—  
20 *The requirement of section 20320(b) of division B of*  
21 *the Continuing Appropriations Resolution, 2007*  
22 *(Public Law 109–289, Public Law 110–5), relating to*  
23 *the issuance of final regulations, shall not apply to*  
24 *the first 6 guarantees issued under this subsection.*

1           “(4) *PROJECT DESIGN.*—A project for which a  
2           *guarantee is made under this subsection shall have a*  
3           *project design that has been validated through the op-*  
4           *eration of a continuous process pilot facility with an*  
5           *annual output of at least 50,000 gallons of ethanol or*  
6           *the energy equivalent volume of other advanced*  
7           *biofuels.*

8           “(5) *MAXIMUM GUARANTEED PRINCIPAL.*—The  
9           *total principal amount of a loan guaranteed under*  
10           *this subsection may not exceed \$250,000,000 for a*  
11           *single facility.*

12           “(6) *AMOUNT OF GUARANTEE.*—The Secretary  
13           *shall guarantee 100 percent of the principal and in-*  
14           *terest due on 1 or more loans made for a facility that*  
15           *is the subject of the guarantee under paragraph (3).*

16           “(7) *DEADLINE.*—The Secretary shall approve or  
17           *disapprove an application for a guarantee under this*  
18           *subsection not later than 90 days after the date of re-*  
19           *ceipt of the application.*

20           “(8) *REPORT.*—Not later than 30 days after ap-  
21           *proving or disapproving an application under para-*  
22           *graph (7), the Secretary shall submit to Congress a*  
23           *report on the approval or disapproval (including the*  
24           *reasons for the action).”.*

1           (b) *IMPROVEMENTS TO UNDERLYING LOAN GUAR-*  
 2 *ANTEE AUTHORITY.—*

3           (1) *DEFINITION OF COMMERCIAL TECH-*  
 4 *NOLOGY.—Section 1701(1) of the Energy Policy Act*  
 5 *of 2005 (42 U.S.C. 16511(1)) is amended by striking*  
 6 *subparagraph (B) and inserting the following:*

7                   “(B) *EXCLUSION.—The term ‘commercial*  
 8 *technology’ does not include a technology if the*  
 9 *sole use of the technology is in connection with—*

10                           “(i) *a demonstration plant; or*

11                           “(ii) *a project for which the Secretary*  
 12 *approved a loan guarantee.”.*

13           (2) *SPECIFIC APPROPRIATION OR CONTRIBU-*  
 14 *TION.—Section 1702 of the Energy Policy Act of 2005*  
 15 *(42 U.S.C. 16512) is amended by striking subsection*  
 16 *(b) and inserting the following:*

17                   “(b) *SPECIFIC APPROPRIATION OR CONTRIBUTION.—*

18                           “(1) *IN GENERAL.—No guarantee shall be made*  
 19 *unless—*

20                                   “(A) *an appropriation for the cost has been*  
 21 *made; or*

22                                   “(B) *the Secretary has received from the*  
 23 *borrower a payment in full for the cost of the ob-*  
 24 *ligation and deposited the payment into the*  
 25 *Treasury.*

1           “(2) *LIMITATION.*—*The source of payments re-*  
2           *ceived from a borrower under paragraph (1)(B) shall*  
3           *not be a loan or other debt obligation that is made*  
4           *or guaranteed by the Federal Government.*

5           “(3) *RELATION TO OTHER LAWS.*—*Section*  
6           *504(b) of the Federal Credit Reform Act of 1990 (2*  
7           *U.S.C. 661c(b)) shall not apply to a loan or loan*  
8           *guarantee made in accordance with paragraph*  
9           *(1)(B).”.*

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10           (3) *AMOUNT.*—*Section 1702 of the Energy Policy*  
11           *Act of 2005 (42 U.S.C. 16512) is amended by striking*  
12           *subsection (c) and inserting the following:*

13           “(c) *AMOUNT.*—

14           “(1) *IN GENERAL.*—*Subject to paragraph (2), the*  
15           *Secretary shall guarantee up to 100 percent of the*  
16           *principal and interest due on 1 or more loans for a*  
17           *facility that are the subject of the guarantee.*

18           “(2) *LIMITATION.*—*The total amount of loans*  
19           *guaranteed for a facility by the Secretary shall not*  
20           *exceed 80 percent of the total cost of the facility, as*  
21           *estimated at the time at which the guarantee is*  
22           *issued.”.*

23           (4) *SUBROGATION.*—*Section 1702(g)(2) of the*  
24           *Energy Policy Act of 2005 (42 U.S.C. 16512(g)(2)) is*  
25           *amended—*

1           (A) by striking subparagraph (B); and  
2           (B) by redesignating subparagraph (C) as  
3           subparagraph (B).

4           (5) FEES.—Section 1702(h) of the Energy Policy  
5           Act of 2005 (42 U.S.C. 16512(h)) is amended by  
6           striking paragraph (2) and inserting the following:

7           “(2) AVAILABILITY.—Fees collected under this  
8           subsection shall—

9           “(A) be deposited by the Secretary into a  
10           special fund in the Treasury to be known as the  
11           ‘Incentives For Innovative Technologies Fund’;  
12           and

13           “(B) remain available to the Secretary for  
14           expenditure, without further appropriation or  
15           fiscal year limitation, for administrative ex-  
16           penses incurred in carrying out this title.”.

17   **SEC. 125. GRANTS FOR RENEWABLE FUEL PRODUCTION RE-**  
18           **SEARCH AND DEVELOPMENT IN CERTAIN**  
19           **STATES.**

20           (a) IN GENERAL.—The Secretary shall provide grants  
21           to eligible entities to conduct research into, and develop and  
22           implement, renewable fuel production technologies in States  
23           with low rates of ethanol production, including low rates  
24           of production of cellulosic biomass ethanol, as determined  
25           by the Secretary.

1       (b) *ELIGIBILITY.*—*To be eligible to receive a grant*  
2 *under the section, an entity shall—*

3           (1)(A) *be an institution of higher education (as*  
4 *defined in section 2 of the Energy Policy Act of 2005*  
5 *(42 U.S.C. 15801)) located in a State described in*  
6 *subsection (a);*

7           (B) *be an institution—*

8           (i) *referred to in section 532 of the Equity*  
9 *in Educational Land-Grant Status Act of 1994*  
10 *(Public Law 103–382; 7 U.S.C. 301 note);*

11           (ii) *that is eligible for a grant under the*  
12 *Tribally Controlled College or University Assist-*  
13 *ance Act of 1978 (25 U.S.C. 1801 et seq.), in-*  
14 *cluding Diné College; or*

15           (iii) *that is eligible for a grant under the*  
16 *Navajo Community College Act (25 U.S.C. 640a*  
17 *et seq.); or*

18           (C) *be a consortium of such institutions of higher*  
19 *education, industry, State agencies, Indian tribal*  
20 *agencies, or local government agencies located in the*  
21 *State; and*

22           (2) *have proven experience and capabilities with*  
23 *relevant technologies.*

1       (c) *AUTHORIZATION OF APPROPRIATIONS.*—*There is*  
2 *authorized to be appropriated to carry out this section*  
3 *\$25,000,000 for each of fiscal years 2008 through 2010.*

4 **SEC. 126. GRANTS FOR INFRASTRUCTURE FOR TRANSPOR-**  
5 **TATION OF BIOMASS TO LOCAL BIOREFIN-**  
6 **ERIES.**

7       (a) *IN GENERAL.*—*The Secretary shall conduct a pro-*  
8 *gram under which the Secretary shall provide grants to In-*  

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9 *dian tribal and local governments and other eligible entities*  
10 *(as determined by the Secretary) (referred to in this section*  
11 *as “eligible entities”) to promote the development of infra-*  
12 *structure to support the separation, production, processing,*  
13 *and transportation of biomass to local biorefineries, includ-*  
14 *ing by portable processing equipment.*

15       (b) *PHASES.*—*The Secretary shall conduct the pro-*  
16 *gram in the following phases:*

17           (1) *DEVELOPMENT.*—*In the first phase of the*  
18 *program, the Secretary shall make grants to eligible*  
19 *entities to assist the eligible entities in the develop-*  
20 *ment of local projects to promote the development of*  
21 *infrastructure to support the separation, production,*  
22 *processing, and transportation of biomass to local bio-*  
23 *refineries, including by portable processing equip-*  
24 *ment.*

1           (2) *IMPLEMENTATION.*—*In the second phase of*  
2 *the program, the Secretary shall make competitive*  
3 *grants to eligible entities to implement projects devel-*  
4 *oped under paragraph (1).*

5           (c) *AUTHORIZATION OF APPROPRIATIONS.*—*There are*  
6 *authorized to be appropriated such sums as are necessary*  
7 *to carry out this section.*

8 **SEC. 127. BIOREFINERY INFORMATION CENTER.**

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9           (a) *IN GENERAL.*—*The Secretary, in cooperation with*  
10 *the Secretary of Agriculture, shall establish a biorefinery*  
11 *information center to make available to interested parties*  
12 *information on—*

13           (1) *renewable fuel resources, including informa-*  
14 *tion on programs and incentives for renewable fuels;*

15           (2) *renewable fuel producers;*

16           (3) *renewable fuel users; and*

17           (4) *potential renewable fuel users.*

18           (b) *ADMINISTRATION.*—*In administering the bio-*  
19 *refinery information center, the Secretary shall—*

20           (1) *continually update information provided by*  
21 *the center;*

22           (2) *make information available to interested par-*  
23 *ties on the process for establishing a biorefinery; and*

1           (3) *make information and assistance provided by*  
 2           *the center available through a toll-free telephone num-*  
 3           *ber and website.*

4           (c) *AUTHORIZATION OF APPROPRIATIONS.—There are*  
 5           *authorized to be appropriated such sums as are necessary*  
 6           *to carry out this section.*

7 **SEC. 128. ALTERNATIVE FUEL DATABASE AND MATERIALS.**

8           *The Secretary and the Director of the National Insti-*  
 9           *tute of Standards and Technology shall jointly establish and*  
 10           *make available to the public—*

11           (1) *a database that describes the physical prop-*  
 12           *erties of different types of alternative fuel; and*

13           (2) *standard reference materials for different*  
 14           *types of alternative fuel.*

15 **SEC. 129. FUEL TANK CAP LABELING REQUIREMENT.**

16           *Section 406(a) of the Energy Policy Act of 1992 (42*  
 17           *U.S.C. 13232(a)) is amended—*

18           (1) *by striking “The Federal Trade Commission”*  
 19           *and inserting the following:*

20           “(1) *IN GENERAL.—The Federal Trade Commis-*  
 21           *sion”; and*

22           (2) *by adding at the end the following:*

23           “(2) **FUEL TANK CAP LABELING REQUIRE-**  
 24           **MENT.—Beginning with model year 2010, the fuel**  
 25           *tank cap of each alternative fueled vehicle manufac-*

1        *tured for sale in the United States shall be clearly la-*  
2        *beled to inform consumers that such vehicle can oper-*  
3        *ate on alternative fuel.”.*

4        **SEC. 130. BIODIESEL.**

5        (a) *IN GENERAL.*—*Not later than 180 days after the*  
6        *date of enactment of this Act, the Secretary shall submit*  
7        *to Congress a report on any research and development chal-*  
8        *lenges inherent in increasing to 5 percent the proportion*  
9        *of diesel fuel sold in the United States that is biodiesel (as*  
10       *defined in section 757 of the Energy Policy Act of 2005*  
11       *(42 U.S.C. 16105)).*

12       (b) *REGULATIONS.*—*The President shall promulgate*  
13       *regulations providing for the uniform labeling of biodiesel*  
14       *blends that are certified to meet applicable standards pub-*  
15       *lished by the American Society for Testing and Materials.*

16       (c) *NATIONAL BIODIESEL FUEL QUALITY STAND-*  
17       *ARD.*—

18                (1) *QUALITY REGULATIONS.*—*Not later than 180*  
19        *days after the date of enactment of this Act, the Presi-*  
20        *dent shall promulgate regulations to ensure that each*  
21        *diesel-equivalent fuel derived from renewable biomass*  
22        *and introduced into interstate commerce is tested and*  
23        *certified to comply with applicable standards of the*  
24        *American Society for Testing and Materials.*

1           (2) *ENFORCEMENT.*—*The President shall ensure*  
 2 *that all biodiesel entering interstate commerce meets*  
 3 *the requirements of paragraph (1).*

4           (3) *FUNDING.*—*There are authorized to be ap-*  
 5 *propriated to the President to carry out this section:*

6                   (A) *\$3,000,000 for fiscal year 2008.*

7                   (B) *\$3,000,000 for fiscal year 2009.*

8                   (C) *\$3,000,000 for fiscal year 2010.*

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9 **SEC. 131. TRANSITIONAL ASSISTANCE FOR FARMERS WHO**  
 10 **PLANT DEDICATED ENERGY CROPS FOR A**  
 11 **LOCAL CELLULOSIC REFINERY.**

12 (a) *DEFINITIONS.*—*In this section:*

13           (1) *CELLULOSIC CROP.*—*The term “cellulosic*  
 14 *crop” means a tree or grass that is grown*  
 15 *specifically—*

16                   (A) *to provide raw materials (including*  
 17 *feedstocks) for conversion to liquid transpor-*  
 18 *tation fuels or chemicals through biochemical or*  
 19 *thermochemical processes; or*

20                   (B) *for energy generation through combus-*  
 21 *tion, pyrolysis, or cofiring.*

22           (2) *CELLULOSIC REFINER.*—*The term “cellulosic*  
 23 *refiner” means the owner or operator of a cellulosic*  
 24 *refinery.*

1           (3) *CELLULOSIC REFINERY.*—The term “cel-  
2           lulosic refinery” means a refinery that processes a cel-  
3           lulosic crop.

4           (4) *QUALIFIED CELLULOSIC CROP.*—The term  
5           “qualified cellulosic crop” means, with respect to an  
6           agricultural producer, a cellulosic crop that is—

7                   (A) the subject of a contract or memo-  
8                   randum of understanding between the producer  
9                   and a cellulosic refiner, under which the pro-  
10                  ducer is obligated to sell the crop to the cellulosic  
11                  refiner by a certain date; and

12                   (B) produced not more than 70 miles from  
13                  a cellulosic refinery owned or operated by the  
14                  cellulosic refiner.

15           (5) *SECRETARY.*—The term “Secretary” means  
16           the Secretary of Agriculture.

17           (b) *TRANSITIONAL ASSISTANCE PAYMENTS.*—The Sec-  
18           retary shall make transitional assistance payments to an  
19           agricultural producer during the first year in which the  
20           producer devotes land to the production of a qualified cel-  
21           lulosic crop.

22           (c) *AMOUNT OF PAYMENT.*—

23                   (1) *DETERMINED BY FORMULA.*—Subject to  
24                   paragraph (2), the Secretary shall devise a formula to  
25                   be used to calculate the amount of a payment to be

1       *made to an agricultural producer under this section,*  
2       *based on the opportunity cost (as determined in ac-*  
3       *cordance with such standard as the Secretary may es-*  
4       *tablish, taking into consideration land rental rates*  
5       *and other applicable costs) incurred by the producer*  
6       *during the first year in which the producer devotes*  
7       *land to the production of the qualified cellulosic crop.*

8           (2) *LIMITATION.—The total of the amount paid*  
9       *to a producer under this section shall not exceed an*  
10       *amount equal to 25 percent of the amounts made*  
11       *available under subsection (e) for the applicable fiscal*  
12       *year.*

13       (d) *REGULATIONS.—The Secretary shall promulgate*  
14       *such regulations as the Secretary determines to be necessary*  
15       *to carry out this section.*

16       (e) *AUTHORIZATION OF APPROPRIATIONS.—There is*  
17       *authorized to be appropriated to carry out this section*  
18       *\$4,088,000 for each of fiscal years 2008 through 2012, to*  
19       *remain available until expended.*

20       **SEC. 132. RESEARCH AND DEVELOPMENT IN SUPPORT OF**  
21                               **LOW-CARBON FUELS.**

22       (a) *DECLARATION OF POLICY.—Congress declares that,*  
23       *in order to achieve maximum reductions in greenhouse gas*  
24       *emissions, enhance national security, and ensure the protec-*  
25       *tion of wildlife habitat, biodiversity, water quality, air*

1 *quality, and rural and regional economies throughout the*  
2 *lifecycle of each low-carbon fuel, it is necessary and desir-*  
3 *able to undertake a combination of basic and applied re-*  
4 *search, as well as technology development and demonstra-*  
5 *tion, involving the colleges and universities of the United*  
6 *States, in partnership with the Federal Government, State*  
7 *governments, and the private sector.*

8 (b) *PURPOSE.*—*The purpose of this section is to pro-*  
9 *vide for research support to facilitate the development of*  
10 *sustainable markets and technologies to produce and use*  
11 *woody biomass and other low-carbon fuels for the produc-*  
12 *tion of thermal and electric energy, biofuels, and bioprod-*  
13 *ucts.*

14 (c) *DEFINITION OF FUEL EMISSION BASELINE.*—*In*  
15 *this section, the term “fuel emission baseline” means the*  
16 *average lifecycle greenhouse gas emissions per unit of energy*  
17 *of the fossil fuel component of conventional transportation*  
18 *fuels in commerce in the United States in calendar year*  
19 *2008, as determined by the President.*

20 (d) *GRANT PROGRAM.*—*The President shall establish*  
21 *a program to provide to eligible entities (as identified by*  
22 *the President) grants for use in—*

23 (1) *providing financial support for not more*  
24 *than 4 nor less than 6 demonstration facilities that—*

1           (A) use woody biomass to deploy advanced  
2 technologies for production of thermal and elec-  
3 tric energy, biofuels, and bioproducts; and

4           (B) are targeted at regional feedstocks and  
5 markets;

6           (2) conducting targeted research for the develop-  
7 ment of cellulosic ethanol and other liquid fuels from  
8 woody or other biomass that may be used in transpor-  
9 

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tation or stationary applications, such as industrial  
10 processes or industrial, commercial, and residential  
11 heating;

12           (3) conducting research into the best scientif-  
13 ically-based and periodically-updated methods of as-  
14 sessing and certifying the impacts of each low-carbon  
15 fuel with respect to—

16           (A) the reduction in lifecycle greenhouse gas  
17 emissions of each fuel as compared to—

18           (i) the fuel emission baseline; and

19           (ii) the greenhouse gas emissions of  
20 other sectors, such as the agricultural, in-  
21 dustrial, and manufacturing sectors;

22           (B) the contribution of the fuel toward en-  
23 hancing the energy security of the United States  
24 by displacing imported petroleum and petroleum  
25 products;

1           (C) any impacts of the fuel on wildlife habi-  
2           tat, biodiversity, water quality, and air quality;  
3           and

4           (D) any effect of the fuel with respect to  
5           rural and regional economies;

6           (4) conducting research to determine to what ex-  
7           tent the use of low-carbon fuels in the transportation  
8           sector would impact greenhouse gas emissions in other  
9           sectors, such as the agricultural, industrial, and man-  
10          ufacturing sectors;

11          (5) conducting research for the development of  
12          the supply infrastructure that may provide renewable  
13          biomass feedstocks in a consistent, predictable, and  
14          environmentally-sustainable manner;

15          (6) conducting research for the development of  
16          supply infrastructure that may provide renewable  
17          low-carbon fuels in a consistent, predictable, and en-  
18          vironmentally-sustainable manner; and

19          (7) conducting policy research on the global  
20          movement of low-carbon fuels in a consistent, predict-  
21          able, and environmentally-sustainable manner.

22          (e) *AUTHORIZATION OF APPROPRIATIONS.*—Of the  
23          funding authorized under section 122, there are authorized  
24          to be appropriated to carry out this section—

25                 (1) \$45,000,000 for fiscal year 2009;

- 1 (2) \$50,000,000 for fiscal year 2010;
- 2 (3) \$55,000,000 for fiscal year 2011;
- 3 (4) \$60,000,000 for fiscal year 2012; and
- 4 (5) \$65,000,000 for fiscal year 2013.

### 5 **Subtitle C—Studies**

#### 6 **SEC. 141. STUDY OF ADVANCED BIOFUELS TECHNOLOGIES.**

7 (a) *IN GENERAL.*—Not later than October 1, 2012, the  
8 Secretary shall offer to enter into a contract with the Na-  
9 tional Academy of Sciences under which the Academy shall  
10 conduct a study of technologies relating to the production,  
11 transportation, and distribution of advanced biofuels.

12 (b) *SCOPE.*—In conducting the study, the Academy  
13 shall—

14 (1) include an assessment of the maturity of ad-  
15 vanced biofuels technologies;

16 (2) consider whether the rate of development of  
17 those technologies will be sufficient to meet the ad-  
18 vanced biofuel standards required under section 111;

19 (3) consider the effectiveness of the research and  
20 development programs and activities of the Depart-  
21 ment of Energy relating to advanced biofuel tech-  
22 nologies; and

23 (4) make policy recommendations to accelerate  
24 the development of those technologies to commercial  
25 viability, as appropriate.

1       (c) *REPORT.*—Not later than November 30, 2014, the  
2 Secretary shall submit to the Committee on Energy and  
3 Natural Resources of the Senate and the Committee on En-  
4 ergy and Commerce of the House of Representatives a report  
5 describing the results of the study conducted under this sec-  
6 tion.

7 **SEC. 142. STUDY OF INCREASED CONSUMPTION OF ETH-**  
8                                   **ANOL-BLENDED GASOLINE WITH HIGHER**  

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9                                   **LEVELS OF ETHANOL.**

10       (a) *IN GENERAL.*—The Secretary, in cooperation with  
11 the Secretary of Agriculture, the Administrator of the Envi-  
12 ronmental Protection Agency, and the Secretary of Trans-  
13 portation, and after providing notice and an opportunity  
14 for public comment, shall conduct a study of the feasibility  
15 of increasing consumption in the United States of ethanol-  
16 blended gasoline with levels of ethanol that are not less than  
17 10 percent and not more than 40 percent.

18       (b) *STUDY.*—The study under subsection (a) shall  
19 include—

20               (1) a review of production and infrastructure  
21 constraints on increasing consumption of ethanol;

22               (2) an evaluation of the economic, market, and  
23 energy-related impacts of State and regional dif-  
24 ferences in ethanol blends;

1           (3) *an evaluation of the economic, market, and*  
2 *energy-related impacts on gasoline retailers and con-*  
3 *sumers of separate and distinctly labeled fuel storage*  
4 *facilities and dispensers;*

5           (4) *an evaluation of the environmental impacts*  
6 *of mid-level ethanol blends on evaporative and ex-*  
7 *haust emissions from on-road, off-road, and marine*  
8 *engines, recreational boats, vehicles, and equipment;*

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9           (5) *an evaluation of the impacts of mid-level eth-*  
10 *anol blends on the operation, durability, and perform-*  
11 *ance of on-road, off-road, and marine engines, rec-*  
12 *reational boats, vehicles, and equipment; and*

13           (6) *an evaluation of the safety impacts of mid-*  
14 *level ethanol blends on consumers that own and oper-*  
15 *ate off-road and marine engines, recreational boats,*  
16 *vehicles, or equipment.*

17           (c) *REPORT.*—*Not later than 1 year after the date of*  
18 *enactment of this Act, the Secretary shall submit to Con-*  
19 *gress a report describing the results of the study conducted*  
20 *under this section.*

21 **SEC. 143. PIPELINE FEASIBILITY STUDY.**

22           (a) *IN GENERAL.*—*The Secretary, in coordination*  
23 *with the Secretary of Agriculture and the Secretary of*  
24 *Transportation, shall conduct a study of the feasibility of*  
25 *the construction of dedicated ethanol pipelines.*

1 (b) *FACTORS.*—*In conducting the study, the Secretary*  
2 *shall consider—*

3 (1) *the quantity of ethanol production that*  
4 *would make dedicated pipelines economically viable;*

5 (2) *existing or potential barriers to dedicated*  
6 *ethanol pipelines, including technical, siting, financ-*  
7 *ing, and regulatory barriers;*

8 (3) *market risk (including throughput risk) and*  
9 *means of mitigating the risk;*

10 (4) *regulatory, financing, and siting options that*  
11 *would mitigate risk in those areas and help ensure*  
12 *the construction of 1 or more dedicated ethanol pipe-*  
13 *lines;*

14 (5) *financial incentives that may be necessary*  
15 *for the construction of dedicated ethanol pipelines, in-*  
16 *cluding the return on equity that sponsors of the ini-*  
17 *tial dedicated ethanol pipelines will require to invest*  
18 *in the pipelines;*

19 (6) *technical factors that may compromise the*  
20 *safe transportation of ethanol in pipelines, identi-*  
21 *fying remedial and preventative measures to ensure*  
22 *pipeline integrity; and*

23 (7) *such other factors as the Secretary considers*  
24 *appropriate.*

1       (c) *REPORT.*—Not later than 15 months after the date  
2 of enactment of this Act, the Secretary shall submit to Con-  
3 gress a report describing the results of the study conducted  
4 under this section.

5 **SEC. 144. STUDY OF OPTIMIZATION OF FLEXIBLE FUELED**  
6 **VEHICLES TO USE E-85 FUEL.**

7       (a) *IN GENERAL.*—The Secretary shall conduct a  
8 study of methods of increasing the fuel efficiency of flexible  

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9 fueled vehicles by optimizing flexible fueled vehicles to oper-  
10 ate using E-85 fuel.

11       (b) *REPORT.*—Not later than 180 days after the date  
12 of enactment of this Act, the Secretary shall submit to the  
13 Committee on Energy and Natural Resources of the Senate  
14 and the Committee on Natural Resources of the House of  
15 Representatives a report that describes the results of the  
16 study, including any recommendations of the Secretary.

17 **SEC. 145. STUDY OF CREDITS FOR USE OF RENEWABLE**  
18 **ELECTRICITY IN ELECTRIC VEHICLES.**

19       (a) *DEFINITION OF ELECTRIC VEHICLE.*—In this sec-  
20 tion, the term “electric vehicle” means an electric motor ve-  
21 hicle (as defined in section 601 of the Energy Policy Act  
22 of 1992 (42 U.S.C. 13271)) for which the rechargeable stor-  
23 age battery—

24               (1) receives a charge directly from a source of  
25 electric current that is external to the vehicle; and

1           (2) provides a minimum of 80 percent of the mo-  
2           tive power of the vehicle.

3           (b) *STUDY*.—The Secretary shall conduct a study on  
4           the feasibility of issuing credits under the program estab-  
5           lished under section 111(d) to electric vehicles powered by  
6           electricity produced from renewable energy sources.

7           (c) *REPORT*.—Not later than 18 months after the date  
8           of enactment of this Act, the Secretary shall submit to the  
9           Committee on Energy and Natural Resources of the Senate  
10          and the Committee on Energy and Commerce of the House  
11          of Representatives a report that describes the results of the  
12          study, including a description of—

13               (1) existing programs and studies on the use of  
14               renewable electricity as a means of powering electric  
15               vehicles; and

16               (2) alternatives for—

17                   (A) designing a pilot program to determine  
18                   the feasibility of using renewable electricity to  
19                   power electric vehicles as an adjunct to a renew-  
20                   able fuels mandate;

21                   (B) allowing the use, under the pilot pro-  
22                   gram designed under subparagraph (A), of elec-  
23                   tricity generated from nuclear energy as an ad-  
24                   ditional source of supply;

1           (C) *identifying the source of electricity used*  
2           *to power electric vehicles; and*

3           (D) *equating specific quantities of elec-*  
4           *tricity to quantities of renewable fuel under sec-*  
5           *tion 111(d).*

6 **SEC. 146. STUDY OF ENGINE DURABILITY ASSOCIATED**  
7           **WITH THE USE OF BIODIESEL.**

8           (a) *IN GENERAL.*—*Not later than 30 days after the*  

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9 *date of enactment of this Act, the Secretary shall initiate*  
10 *a study on the effects of the use of biodiesel on engine dura-*  
11 *bility.*

12           (b) *COMPONENTS.*—*The study under this section shall*  
13 *include—*

14           (1) *an assessment of whether the use of biodiesel*  
15 *in conventional diesel engines lessens engine dura-*  
16 *bility; and*

17           (2) *an assessment of the effects referred to in sub-*  
18 *section (a) with respect to biodiesel blends at varying*  
19 *concentrations, including—*

- 20           (A) *B5;*  
21           (B) *B10;*  
22           (C) *B20; and*  
23           (D) *B30.*

1 **SEC. 147. STUDY OF INCENTIVES FOR RENEWABLE FUELS.**

2 (a) *STUDY.*—*The President shall conduct a study of*  
 3 *the renewable fuels industry and markets in the United*  
 4 *States, including—*

5 (1) *the costs to produce conventional and ad-*  
 6 *vanced biofuels;*

7 (2) *the factors affecting the future market prices*  
 8 *for those biofuels, including world oil prices; and*

9 ~~(3) *the financial incentives necessary to enhance,*~~  
 10 *to the maximum extent practicable, the biofuels in-*  
 11 *dustry of the United States to reduce the dependence*  
 12 *of the United States on foreign oil during calendar*  
 13 *years 2011 through 2030.*

14 (b) *GOALS.*—*The study shall include an analysis of the*  
 15 *options for financial incentives and the advantage and dis-*  
 16 *advantages of each option.*

17 (c) *REPORT.*—*Not later than 1 year after the date of*  
 18 *enactment of this Act, the President shall submit to Con-*  
 19 *gress a report that describes the results of the study.*

20 **SEC. 148. STUDY OF STREAMLINED LIFECYCLE ANALYSIS**

21 **TOOLS FOR THE EVALUATION OF RENEWABLE**

22 **CARBON CONTENT OF BIOFUELS.**

23 (a) *IN GENERAL.*—*The Secretary, in consultation with*  
 24 *the Secretary of Agriculture and the Administrator of the*  
 25 *Environmental Protection Agency, shall conduct a study*  
 26 *of—*

1           (1) *published methods for evaluating the lifecycle*  
2 *fossil and renewable carbon content of fuels, including*  
3 *conventional and advanced biofuels; and*

4           (2) *methods for performing simplified, stream-*  
5 *lined lifecycle analyses of the fossil and renewable*  
6 *carbon content of biofuels.*

7           (b) *REPORT.*—*Not later than 1 year after the date of*  
8 *enactment of this Act, the Secretary shall submit to the*  
9 *Committee on Energy and Natural Resources of the Senate*  
10 *and the Committee on Energy and Commerce of the House*  
11 *of Representatives a report that describes the results of the*  
12 *study under subsection (a), including recommendations for*  
13 *a method for performing a simplified, streamlined lifecycle*  
14 *analysis of the fossil and renewable carbon content of*  
15 *biofuels that includes—*

16           (1) *carbon inputs to feedstock production; and*

17           (2) *carbon inputs to the biofuel production proc-*  
18 *ess, including the carbon associated with electrical*  
19 *and thermal energy inputs.*

20 **SEC. 149. STUDY OF EFFECTS OF ETHANOL-BLENDED GASO-**  
21 **LINE ON OFF-ROAD VEHICLES.**

22           (a) *STUDY.*—

23           (1) *IN GENERAL.*—*The Secretary, in consultation*  
24 *with the Secretary of Transportation and the Admin-*  
25 *istrator of the Environmental Protection Agency,*

1 shall conduct a study to determine the effects of eth-  
2 anol-blended gasoline on off-road vehicles and rec-  
3 reational boats.

4 (2) *EVALUATION.*—The study shall include an  
5 evaluation of the operational, safety, durability, and  
6 environmental impacts of ethanol-blended gasoline on  
7 off-road and marine engines, recreational boats, and  
8 related equipment.

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9 (b) *REPORT.*—Not later than 1 year after the date of  
10 enactment of this Act, the Secretary shall submit to Con-  
11 gress a report describing the results of the study.

12 **SEC. 150. STUDY OF OFFSHORE WIND RESOURCES.**

13 (a) *DEFINITIONS.*—In this section:

14 (1) *ELIGIBLE INSTITUTION.*—The term “eligible  
15 institution” means a college or university that—

16 (A) as of the date of enactment of this Act,  
17 has an offshore wind power research program;  
18 and

19 (B) is located in a region of the United  
20 States that is in reasonable proximity to the  
21 eastern outer Continental Shelf, as determined  
22 by the Secretary.

23 (2) *SECRETARY.*—The term “Secretary” means  
24 the Secretary of the Interior, acting through the Di-  
25 rector of the Minerals Management Service.

1           (b) *STUDY.*—*The Secretary, in cooperation with an el-*  
2 *igible institution, as selected by the Secretary, shall conduct*  
3 *a study to assess each offshore wind resource located in the*  
4 *region of the eastern outer Continental Shelf.*

5           (c) *REPORT.*—*Upon completion of the study under*  
6 *subsection (b), the Secretary shall submit to Congress a re-*  
7 *port that includes—*

8           (1) *a description of—*

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9                   (A) *the locations and total power generation*  
10 *resources of the best offshore wind resources lo-*  
11 *cated in the region of the eastern outer Conti-*  
12 *ental Shelf, as determined by the Secretary;*

13                   (B) *based on conflicting zones relating to*  
14 *any infrastructure that, as of the date of enact-*  
15 *ment of this Act, is located in close proximity to*  
16 *any offshore wind resource, the likely exclusion*  
17 *zones of each offshore wind resource described in*  
18 *subparagraph (A);*

19                   (C) *the relationship of the temporal vari-*  
20 *ation of each offshore wind resource described in*  
21 *subparagraph (A) with—*

22                           (i) *any other offshore wind resource;*

23                           and

24                           (ii) *with loads and corresponding sys-*  
25 *tem operator markets;*

1           (D) *the geological compatibility of each off-*  
2           *shore wind resource described in subparagraph*  
3           *(A) with any potential technology relating to sea*  
4           *floor towers; and*

5           (E) *with respect to each area in which an*  
6           *offshore wind resource described in subparagraph*  
7           *(A) is located, the relationship of the authority*  
8           *under any coastal management plan of the State*  

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9           *in which the area is located with the Federal*  
10          *Government; and*

11          (2) *recommendations on the manner by which to*  
12          *handle offshore wind intermittence.*

13          (d) *INCORPORATION OF STUDY.—Effective beginning*  
14          *on the date on which the Secretary completes the study*  
15          *under subsection (b), the Secretary shall incorporate the*  
16          *findings included in the report under subsection (c) into*  
17          *the planning process documents for any wind energy lease*  
18          *sale—*

19                 (1) *relating to any offshore wind resource located*  
20                 *in any appropriate area of the outer Continental*  
21                 *Shelf, as determined by the Secretary; and*

22                 (2) *that is completed on or after the date of en-*  
23                 *actment of this Act.*

24          (e) *EFFECT.—Nothing in this section—*

1           (1) *delays any final regulation to be promul-*  
2 *gated by the Secretary of the Interior to carry out sec-*  
3 *tion 8(p) of the Outer Continental Shelf Lands Act*  
4 *(43 U.S.C. 1337(p)); or*

5           (2) *limits the authority of the Secretary to lease*  
6 *any offshore wind resource located in any appro-*  
7 *priate area of the outer Continental Shelf, as deter-*  
8 *mined by the Secretary.*

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9           (f) *AUTHORIZATION OF APPROPRIATIONS.—There is*  
10 *authorized to be appropriated to carry out this section*  
11 *\$5,000,000, to remain available until expended.*

12                   ***Subtitle D—Environmental***  
13                           ***Safeguards***

14 ***SEC. 161. GRANTS FOR PRODUCTION OF ADVANCED***  
15 ***BIOFUELS.***

16           (a) *IN GENERAL.—The Secretary shall establish a*  
17 *grant program to encourage the production of advanced*  
18 *biofuels.*

19           (b) *REQUIREMENTS AND PRIORITY.—In making*  
20 *grants under this section, the Secretary—*

21                   (1) *shall make awards to the proposals for ad-*  
22 *vanced biofuels with the greatest reduction in lifecycle*  
23 *greenhouse gas emissions compared to the comparable*  
24 *motor vehicle fuel lifecycle emissions during calendar*  
25 *year 2007; and*

1           (2) shall not make an award to a project that  
2 does not achieve at least a 50-percent reduction in  
3 such lifecycle greenhouse gas emissions.

4           (c) AUTHORIZATION OF APPROPRIATIONS.—There is  
5 authorized to be appropriated to carry out this section  
6 \$500,000,000 for the period of fiscal years 2008 through  
7 2015.

8 **SEC. 162. STUDIES OF EFFECTS OF RENEWABLE FUEL USE.**

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9           Section 211 of the Clean Air Act (42 U.S.C. 7545) is  
10 amended by adding at the end the following:

11           “(t) STUDIES OF EFFECTS OF RENEWABLE FUEL  
12 USE.—

13           “(1) IN GENERAL.—Not later than 1 year after  
14 the date of enactment of this subsection, the Adminis-  
15 trator shall offer to enter into appropriate arrange-  
16 ments with the National Academy of Sciences and  
17 any other independent research institute determined  
18 to be appropriate by the Administrator, in consulta-  
19 tion with appropriate Federal agencies, to conduct 2  
20 studies on the effects of increased domestic use of re-  
21 newable fuels under the Renewable Fuels, Consumer  
22 Protection, and Energy Efficiency Act of 2007.

23           “(2) MATTERS TO BE STUDIED.—

24           “(A) IN GENERAL.—The studies under this  
25 subsection shall assess, quantify, and recommend

1        *analytical methodologies in relation to environ-*  
2        *mental changes associated with the increased do-*  
3        *mestic use of renewable fuels under the Renew-*  
4        *able Fuels, Consumer Protection, and Energy Ef-*  
5        *iciency Act of 2007, including production, han-*  
6        *dling, transportation, and use of the fuels.*

7                *“(B) SPECIFIC MATTERS.—The studies shall*  
8        *include an assessment and quantification, to the*  
9        *maximum extent practicable, of significant*  
10       *changes—*

11                *“(i) in air and water quality and the*  
12        *quality of other natural resources;*

13                *“(ii) in land use patterns;*

14                *“(iii) in the rate of deforestation in the*  
15        *United States and globally;*

16                *“(iv) to greenhouse gas emissions;*

17                *“(v) to significant geographic areas*  
18        *and habitats with high biodiversity values*  
19        *(including species richness, the presence of*  
20        *species that are exclusively native to a*  
21        *place, or the presence of endangered species);*  
22        *or*

23                *“(vi) in the long-term capacity of the*  
24        *United States to produce biomass feedstocks.*

1           “(C) *BASELINE COMPARISON.*—*In making*  
2           *an assessment or quantifying effects of increased*  
3           *use of renewable fuels, the studies shall use an*  
4           *appropriate baseline involving increased use of*  
5           *the conventional transportation fuels, if displace-*  
6           *ment by use of renewable fuels had not occurred.*

7           “(3) *REPORTS TO CONGRESS.*—*The Adminis-*  
8           *trator shall submit to Congress a report summarizing*  
9           *the assessments and findings of—*

10           “(A) *the first study, along with any rec-*  
11           *ommendations by the Administrator to mitigate*  
12           *adverse effects identified by the study, not later*  
13           *than 3 years after the date of enactment of this*  
14           *subsection; and*

15           “(B) *the second study, along with any rec-*  
16           *ommendations by the Administrator to mitigate*  
17           *adverse effects identified by the study, not later*  
18           *December 31, 2015.”.*

19 **SEC. 163. INTEGRATED CONSIDERATION OF WATER QUAL-**  
20           **ITY IN DETERMINATIONS ON FUELS AND**  
21           **FUEL ADDITIVES.**

22           *Section 211(c)(1) of the Clean Air Act (42 U.S.C.*  
23           *7545(c)(1)) is amended—*

1           (1) by striking “nonroad vehicle (A) if in the  
2 judgment of the Administrator” and inserting  
3 “nonroad vehicle—

4           “(A) if, in the judgment of the Adminis-  
5 trator, any fuel or fuel additive or”;

6           (2) in subparagraph (A), by striking “air pollu-  
7 tion which” and inserting “air pollution or water  
8 pollution (including any degradation in the quality  
9 of groundwater) that”; and

10          (3) by striking “, or (B) if” and inserting the  
11 following: “; or

12           “(B) if”.

13 **SEC. 164. ANTI-BACKSLIDING.**

14          Section 211 of the Clean Air Act (42 U.S.C. 7545) (as  
15 amended by section 162) is amended by adding at the end  
16 the following:

17          “(u) **PREVENTION OF AIR QUALITY DETERIORA-**  
18 **TION.—**

19           “(1) **STUDY.—**

20           “(A) **IN GENERAL.—**Not later than 18  
21 months after the date of enactment of the Renew-  
22 able Fuels, Consumer Protection, and Energy Ef-  
23 ficiency Act of 2007, the Administrator shall  
24 complete a study to determine whether the re-  
25 newable fuel volumes required by that Act will

1       *adversely impact air quality as a result of*  
2       *changes in vehicle and engine emissions of air*  
3       *pollutants regulated under this Act.*

4               “(B) *CONSIDERATIONS.—The study shall*  
5       *include consideration of—*

6                       “(i) *different blend levels, types of re-*  
7                       *newable fuels, and available vehicle tech-*  
8                       *nologies; and*

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9                       “(ii) *appropriate national, regional,*  
10                      *and local air quality control measures.*

11               “(2) *REGULATIONS.—Not later than 3 years*  
12       *after the date of enactment of the Renewable Fuels,*  
13       *Consumer Protection, and Energy Efficiency Act of*  
14       *2007, the Administrator shall—*

15                       “(A) *promulgate regulations to implement*  
16       *appropriate measures to mitigate, to the greatest*  
17       *extent achievable, considering the results of the*  
18       *study under paragraph (1), any adverse impacts*  
19       *on air quality, as the result of the renewable vol-*  
20       *umes required by that Act; or*

21                       “(B) *make a determination that no such*  
22       *measures are necessary.*

23               “(3) *OTHER REQUIREMENTS.—Nothing in title I*  
24       *of the Renewable Fuels, Consumer Protection, and*  
25       *Energy Efficiency Act of 2007 supercedes or otherwise*

1       *affects any Federal or State requirement under any*  
 2       *other provision of law that is more stringent than*  
 3       *any requirement of this title.”.*

4       **TITLE II—ENERGY EFFICIENCY**  
 5                                   **PROMOTION**

6       **SEC. 201. SHORT TITLE.**

7           *This title may be cited as the “Energy Efficiency Pro-*  
 8       *motion Act of 2007”.*

9       **SEC. 202. DEFINITION OF SECRETARY.**

10       *In this title, the term “Secretary” means the Secretary*  
 11       *of Energy.*

12       **Subtitle A—Promoting Advanced**  
 13                                   **Lighting Technologies**

14       **SEC. 211. ACCELERATED PROCUREMENT OF ENERGY EFFI-**  
 15                                   **CIENT LIGHTING.**

16       *Section 553 of the National Energy Conservation Pol-*  
 17       *icy Act (42 U.S.C. 8259b) is amended by adding the fol-*  
 18       *lowing:*

19           “(f) **ACCELERATED PROCUREMENT OF ENERGY EFFI-**  
 20       **CIENT LIGHTING.—**

21           “(1) **IN GENERAL.—***Not later than October 1,*  
 22       *2013, in accordance with guidelines issued by the Sec-*  
 23       *retary, all general purpose lighting in Federal build-*  
 24       *ings shall be Energy Star products or products des-*

1     *ignated under the Federal Energy Management Pro-*  
 2     *gram.*

3             “(2) *GUIDELINES.*—

4                 “(A) *IN GENERAL.*—*Not later than 1 year*  
 5                 *after the date of enactment of this subsection, the*  
 6                 *Secretary shall issue guidelines to carry out this*  
 7                 *subsection.*

8                 “(B) *REPLACEMENT COSTS.*—*The guidelines*  


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 9                 *shall take into consideration the costs of replac-*  
 10                 *ing all general service lighting and the reduced*  
 11                 *cost of operation and maintenance expected to*  
 12                 *result from such replacement.”.*

13     **SEC. 212. INCANDESCENT REFLECTOR LAMP EFFICIENCY**  
 14             **STANDARDS.**

15         (a) *DEFINITIONS.*—*Section 321 of the Energy Policy*  
 16         *and Conservation Act (42 U.S.C. 6291) is amended—*

17             (1) *in paragraph (30)(C)(i)—*

18                 (A) *in the matter preceding subclause (I)—*

19                     (i) *by striking “or similar bulb shapes*  
 20                     *(excluding ER or BR)” and inserting “ER,*  
 21                     *BR, BPAR, or similar bulb shapes”; and*

22                     (ii) *by striking “2.75” and inserting*  
 23                     *“2.25”; and*

1           (B) by striking “is either—” and all that  
 2 follows through subclause (II) and inserting “has  
 3 a rated wattage that is 40 watts or higher”; and  
 4 (2) by adding at the end the following:

5           “(52) *BPAR INCANDESCENT REFLECTOR*  
 6 *LAMP.—The term ‘BPAR incandescent reflector lamp’*  
 7 *means a reflector lamp as shown in figure C78.21–*  
 8 *278 on page 32 of ANSI C78.21–2003.*

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9           “(53) *BR INCANDESCENT REFLECTOR LAMP;*  
 10 *BR30; BR40.—*

11           “(A) *BR INCANDESCENT REFLECTOR*  
 12 *LAMP.—The term ‘BR incandescent reflector*  
 13 *lamp’ means a reflector lamp that has—*

14                   “(i) *a bulged section below the major*  
 15 *diameter of the bulb and above the approxi-*  
 16 *mate baseline of the bulb, as shown in fig-*  
 17 *ure 1 (RB) on page 7 of ANSI C79.1–1994,*  
 18 *incorporated by reference in section 430.22*  
 19 *of title 10, Code of Federal Regulations (as*  
 20 *in effect on the date of enactment of this*  
 21 *paragraph); and*

22                   “(ii) *a finished size and shape shown*  
 23 *in ANSI C78.21–1989, including the ref-*  
 24 *erenced reflective characteristics in part 7 of*  
 25 *ANSI C78.21–1989, incorporated by ref-*

1            *erence in section 430.22 of title 10, Code of*  
2            *Federal Regulations (as in effect on the date*  
3            *of enactment of this paragraph).*

4            *“(B) BR30.—The term ‘BR30’ means a BR*  
5            *incandescent reflector lamp with a diameter of*  
6            *30/8ths of an inch.*

7            *“(C) BR40.—The term ‘BR40’ means a BR*  
8            *incandescent reflector lamp with a diameter of*  
9            *40/8ths of an inch.*

10           *“(54) ER INCANDESCENT REFLECTOR LAMP;*  
11           *ER30; ER40.—*

12           *“(A) ER INCANDESCENT REFLECTOR*  
13           *LAMP.—The term ‘ER incandescent reflector*  
14           *lamp’ means a reflector lamp that has—*

15                    *“(i) an elliptical section below the*  
16                    *major diameter of the bulb and above the*  
17                    *approximate baseline of the bulb, as shown*  
18                    *in figure 1 (RE) on page 7 of ANSI C79.1–*  
19                    *1994, incorporated by reference in section*  
20                    *430.22 of title 10, Code of Federal Regula-*  
21                    *tions (as in effect on the date of enactment*  
22                    *of this paragraph); and*

23                    *“(ii) a finished size and shape shown*  
24                    *in ANSI C78.21–1989, incorporated by ref-*  
25                    *erence in section 430.22 of title 10, Code of*

1           *Federal Regulations (as in effect on the date*  
 2           *of enactment of this paragraph).*

3           “(B) ER30.—*The term ‘ER30’ means an*  
 4           *ER incandescent reflector lamp with a diameter*  
 5           *of 30/8ths of an inch.*”

6           “(C) ER40.—*The term ‘ER40’ means an*  
 7           *ER incandescent reflector lamp with a diameter*  
 8           *of 40/8ths of an inch.*”

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9           “(55) R20 INCANDESCENT REFLECTOR LAMP.—  
 10          *The term ‘R20 incandescent reflector lamp’ means a*  
 11          *reflector lamp that has a face diameter of approxi-*  
 12          *mately 2.5 inches, as shown in figure 1(R) on page*  
 13          *7 of ANSI C79.1–1994.”*

14          (b) *STANDARDS FOR FLUORESCENT LAMPS AND IN-*  
 15          *CANDESCENT REFLECTOR LAMPS.—Section 325(i) of the*  
 16          *Energy Policy and Conservation Act (42 U.S.C. 6925(i))*  
 17          *is amended by striking paragraph (1) and inserting the fol-*  
 18          *lowing:*

19                 “(1) *STANDARDS.—*

20                         “(A) *DEFINITION OF EFFECTIVE DATE.—In*  
 21                         *this paragraph (other than subparagraph (D)),*  
 22                         *the term ‘effective date’ means, with respect to*  
 23                         *each type of lamp specified in a table contained*  
 24                         *in subparagraph (B), the last day of the period*  
 25                         *of months corresponding to that type of lamp (as*

1 specified in the table) that follows October 24,  
2 1992.

3 “(B) *MINIMUM STANDARDS.*—Each of the  
4 following general service fluorescent lamps and  
5 incandescent reflector lamps manufactured after  
6 the effective date specified in the tables contained  
7 in this paragraph shall meet or exceed the fol-  
8 lowing lamp efficacy and CRI standards:

*“FLUORESCENT LAMPS*

<i>Lamp Type</i>	<i>Nominal Lamp Wattage</i>	<i>Minimum CRI</i>	<i>Minimum Average Lamp Efficacy (LPW)</i>	<i>Effective Date (Period of Months)</i>
<i>4-foot medium bi-pin</i> .....	<i>&gt;35 W</i>	<i>69</i>	<i>75.0</i>	<i>36</i>
	<i>≤35 W</i>	<i>45</i>	<i>75.0</i>	<i>36</i>
<i>2-foot U-shaped</i> .....	<i>&gt;35 W</i>	<i>69</i>	<i>68.0</i>	<i>36</i>
	<i>≤35 W</i>	<i>45</i>	<i>64.0</i>	<i>36</i>
<i>8-foot slimline</i> .....	<i>65 W</i>	<i>69</i>	<i>80.0</i>	<i>18</i>
	<i>≤65 W</i>	<i>45</i>	<i>80.0</i>	<i>18</i>
<i>8-foot high output</i> .....	<i>&gt;100 W</i>	<i>69</i>	<i>80.0</i>	<i>18</i>
	<i>≤100 W</i>	<i>45</i>	<i>80.0</i>	<i>18</i>

*“INCANDESCENT REFLECTOR LAMPS*

<i>Nominal Lamp Wattage</i>	<i>Minimum Average Lamp Efficacy (LPW)</i>	<i>Effective Date (Period of Months)</i>
<i>40–50</i> .....	<i>10.5</i>	<i>36</i>
<i>51–66</i> .....	<i>11.0</i>	<i>36</i>
<i>67–85</i> .....	<i>12.5</i>	<i>36</i>
<i>86–115</i> .....	<i>14.0</i>	<i>36</i>
<i>116–155</i> .....	<i>14.5</i>	<i>36</i>
<i>156–205</i> .....	<i>15.0</i>	<i>36</i>

9 “(C) *EXEMPTIONS.*—The standards speci-  
10 fied in subparagraph (B) shall not apply to the  
11 following types of incandescent reflector lamps:

12 “(i) Lamps rated at 50 watts or less  
13 that are ER30, BR30, BR40, or ER40  
14 lamps.

1                   “(i) Lamps rated at 65 watts that are  
2                   BR30, BR40, or ER40 lamps.

3                   “(iii) R20 incandescent reflector lamps  
4                   rated 45 watts or less.

5                   “(D) EFFECTIVE DATES.—

6                   “(i) ER, BR, AND BPAR LAMPS.—The  
7                   standards specified in subparagraph (B)  
8                   shall apply with respect to ER incandescent  

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9                   reflector lamps, BR incandescent reflector  
10                  lamps, BPAR incandescent reflector lamps,  
11                  and similar bulb shapes on and after Janu-  
12                  ary 1, 2008.

13                  “(ii) LAMPS BETWEEN 2.25–2.75  
14                  INCHES IN DIAMETER.—The standards spec-  
15                  ified in subparagraph (B) shall apply with  
16                  respect to incandescent reflector lamps with  
17                  a diameter of more than 2.25 inches, but  
18                  not more than 2.75 inches, on and after  
19                  January 1, 2008.”.

20 **SEC. 213. BRIGHT TOMORROW LIGHTING PRIZES.**

21                  (a) ESTABLISHMENT.—Not later than 1 year after the  
22                  date of enactment of this Act, as part of the program carried  
23                  out under section 1008 of the Energy Policy Act of 2005  
24                  (42 U.S.C. 16396), the Secretary shall establish and award

1 *Bright Tomorrow Lighting Prizes for solid state lighting*  
2 *in accordance with this section.*

3 (b) *PRIZE SPECIFICATIONS.—*

4 (1) *60-WATT INCANDESCENT REPLACEMENT LAMP*  
5 *PRIZE.—The Secretary shall award a 60-Watt Incan-*  
6 *descent Replacement Lamp Prize to an entrant that*  
7 *produces a solid-state light package simultaneously*  
8 *capable of—*

---

9 (A) *producing a luminous flux greater than*  
10 *900 lumens;*

11 (B) *consuming less than or equal to 10*  
12 *watts;*

13 (C) *having an efficiency greater than 90*  
14 *lumens per watt;*

15 (D) *having a color rendering index greater*  
16 *than 90;*

17 (E) *having a correlated color temperature of*  
18 *not less than 2,750, and not more than 3,000, de-*  
19 *grees Kelvin;*

20 (F) *having 70 percent of the lumen value*  
21 *under subparagraph (A) exceeding 25,000 hours*  
22 *under typical conditions expected in residential*  
23 *use;*

24 (G) *having a light distribution pattern*  
25 *similar to a soft 60-watt incandescent A19 bulb;*

1           (H) having a size and shape that fits with-  
2           in the maximum dimensions of an A19 bulb in  
3           accordance with American National Standards  
4           Institute standard C78.20-2003, figure C78.20-  
5           211;

6           (I) using a single contact medium screw  
7           socket; and

8           (J) mass production for a competitive sales  
9           commercial market satisfied by the submission of  
10          10,000 such units equal to or exceeding the cri-  
11          teria described in subparagraphs (A) through (I).

12          (2) *PAR TYPE 38 HALOGEN REPLACEMENT LAMP*  
13          *PRIZE.*—The Secretary shall award a Parabolic Alu-  
14          minized Reflector Type 38 Halogen Replacement  
15          Lamp Prize (referred to in this section as the “PAR  
16          Type 38 Halogen Replacement Lamp Prize”) to an  
17          entrant that produces a solid-state-light package si-  
18          multaneously capable of—

19               (A) producing a luminous flux greater than  
20               or equal to 1,350 lumens;

21               (B) consuming less than or equal to 11  
22               watts;

23               (C) having an efficiency greater than 123  
24               lumens per watt;

1           (D) having a color rendering index greater  
2 than or equal to 90;

3           (E) having a correlated color coordinate  
4 temperature of not less than 2,750, and not more  
5 than 3,000, degrees Kelvin;

6           (F) having 70 percent of the lumen value  
7 under subparagraph (A) exceeding 25,000 hours  
8 under typical conditions expected in residential  
9 use;

10           (G) having a light distribution pattern  
11 similar to a PAR 38 halogen lamp;

12           (H) having a size and shape that fits with-  
13 in the maximum dimensions of a PAR 38 halo-  
14 gen lamp in accordance with American National  
15 Standards Institute standard C78-21-2003, fig-  
16 ure C78.21-238;

17           (I) using a single contact medium screw  
18 socket; and

19           (J) mass production for a competitive sales  
20 commercial market satisfied by the submission of  
21 10,000 such units equal to or exceeding the cri-  
22 teria described in subparagraphs (A) through (I).

23           (3) TWENTY-FIRST CENTURY LAMP PRIZE.—The  
24 Secretary shall award a Twenty-First Century Lamp

1     *Prize to an entrant that produces a solid-state-light-*  
2     *light capable of—*

3             (A) *producing a light output greater than*  
4             *1,200 lumens;*

5             (B) *having an efficiency greater than 150*  
6             *lumens per watt;*

7             (C) *having a color rendering index greater*  
8             *than 90;*

---

9             (D) *having a color coordinate temperature*  
10            *between 2,800 and 3,000 degrees Kelvin; and*

11            (E) *having a lifetime exceeding 25,000*  
12            *hours.*

13     (c) *PRIVATE FUNDS.—The Secretary may accept and*  
14     *use funding from private sources as part of the prizes*  
15     *awarded under this section.*

16     (d) *TECHNICAL REVIEW.—The Secretary shall estab-*  
17     *lish a technical review committee composed of non-Federal*  
18     *officers to review entrant data submitted under this section*  
19     *to determine whether the data meets the prize specifications*  
20     *described in subsection (b).*

21     (e) *THIRD PARTY ADMINISTRATION.—The Secretary*  
22     *may competitively select a third party to administer*  
23     *awards under this section.*

24     (f) *AWARD AMOUNTS.—Subject to the availability of*  
25     *funds to carry out this section, the amount of—*

1           (1) *the 60-Watt Incandescent Replacement Lamp*  
2 *Prize described in subsection (b)(1) shall be*  
3 *\$10,000,000;*

4           (2) *the PAR Type 38 Halogen Replacement*  
5 *Lamp Prize described in subsection (b)(2) shall be*  
6 *\$5,000,000; and*

7           (3) *the Twenty-First Century Lamp Prize de-*  
8 *scribed in subsection (b)(3) shall be \$5,000,000.*

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9           (g) *FEDERAL PROCUREMENT OF SOLID-STATE-*  
10 *LIGHTS.—*

11           (1) *60-WATT INCANDESCENT REPLACEMENT.—*  
12 *Subject to paragraph (3), as soon as practicable after*  
13 *the successful award of the 60-Watt Incandescent Re-*  
14 *placement Lamp Prize under subsection (b)(1), the*  
15 *Secretary (in consultation with the Administrator of*  
16 *General Services) shall develop governmentwide Fed-*  
17 *eral purchase guidelines with a goal of replacing the*  
18 *use of 60-watt incandescent lamps in Federal Govern-*  
19 *ment buildings with a solid-state-light package de-*  
20 *scribed in subsection (b)(1) by not later than the date*  
21 *that is 5 years after the date the award is made.*

22           (2) *PAR 38 HALOGEN REPLACEMENT LAMP RE-*  
23 *PLACEMENT.—Subject to paragraph (3), as soon as*  
24 *practicable after the successful award of the PAR*  
25 *Type 38 Halogen Replacement Lamp Prize under*

1 subsection (b)(2), the Secretary (in consultation with  
 2 the Administrator of General Services) shall develop  
 3 governmentwide Federal purchase guidelines with the  
 4 goal of replacing the use of PAR 38 halogen lamps in  
 5 Federal Government buildings with a solid-state-light  
 6 package described in subsection (b)(2) by not later  
 7 than the date that is 5 years after the date the award  
 8 is made.

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9 (3) WAIVERS.—

10 (A) IN GENERAL.—The Secretary or the Ad-  
 11 ministrator of General Services may waive the  
 12 application of paragraph (1) or (2) if the Sec-  
 13 retary or Administrator determines that the re-  
 14 turn on investment from the purchase of a solid-  
 15 state-light package described in paragraph (1) or  
 16 (2) of subsection (b), respectively, is cost prohibi-  
 17 tive.

18 (B) REPORT OF WAIVER.—If the Secretary  
 19 or Administrator waives the application of para-  
 20 graph (1) or (2), the Secretary or Administrator,  
 21 respectively, shall submit to Congress an annual  
 22 report that describes the waiver and provides a  
 23 detailed justification for the waiver.

24 (h) REPORT.—Not later than 2 years after the date  
 25 of enactment of this Act, and annually thereafter, the Ad-

1 *administrator of General Services shall submit to the Energy*  
2 *Information Agency a report describing the quantity, type,*  
3 *and cost of each lighting product purchased by the Federal*  
4 *Government.*

5 *(i) BRIGHT LIGHT TOMORROW AWARD FUND.—*

6 *(1) ESTABLISHMENT.—There is established in*  
7 *the United States Treasury a Bright Light Tomorrow*  
8 *permanent fund without fiscal year limitation to*  
9 *award prizes under paragraphs (1), (2), and (3) of*  
10 *subsection (b).*

11 *(2) SOURCES OF FUNDING.—The fund established*  
12 *under paragraph (1) shall accept—*

13 *(A) fiscal year appropriations; and*

14 *(B) private contributions authorized under*  
15 *subsection (c).*

16 *(j) AUTHORIZATION OF APPROPRIATIONS.—There are*  
17 *authorized to be appropriated such sums as are necessary*  
18 *to carry out this section.*

19 **SEC. 214. SENSE OF SENATE CONCERNING EFFICIENT**  
20 **LIGHTING STANDARDS.**

21 *(a) FINDINGS.—The Senate finds that—*

22 *(1) there are approximately 4,000,000,000 screw-*  
23 *based sockets in the United States that contain tradi-*  
24 *tional, energy-inefficient, incandescent light bulbs;*

1           (2) *incandescent light bulbs are based on tech-*  
2 *nology that is more than 125 years old;*

3           (3) *there are radically more efficient lighting al-*  
4 *ternatives in the market, with the promise of even*  
5 *more choices over the next several years;*

6           (4) *national policy can support a rapid substi-*  
7 *tution of new, energy-efficient light bulbs for the less*  
8 *efficient products in widespread use; and,*

9           (5) *transforming the United States market to use*  
10 *of more efficient lighting technologies can—*

11           (A) *reduce electric costs in the United*  
12 *States by more than \$18,000,000,000 annually;*

13           (B) *save the equivalent electricity that is*  
14 *produced by 80 base load coal-fired power*  
15 *plants; and*

16           (C) *reduce fossil fuel related emissions by*  
17 *approximately 158,000,000 tons each year.*

18           (b) *SENSE OF THE SENATE.—It is the sense of the Sen-*  
19 *ate that the Senate should—*

20           (1) *pass a set of mandatory, technology-neutral*  
21 *standards to establish firm energy efficiency perform-*  
22 *ance targets for lighting products;*

23           (2) *ensure that the standards become effective*  
24 *within the next 10 years; and*

25           (3) *in developing the standards—*

1           (A) *establish the efficiency requirements to*  
 2           *ensure that replacement lamps will provide con-*  
 3           *sumers with the same quantity of light while*  
 4           *using significantly less energy;*

5           (B) *ensure that consumers will continue to*  
 6           *have multiple product choices, including energy-*  
 7           *saving halogen, incandescent, compact fluores-*  
 8           *cent, and LED light bulbs; and*

---

9           (C) *work with industry and key stake-*  
 10          *holders on measures that can assist consumers*  
 11          *and businesses in making the important transi-*  
 12          *tion to more efficient lighting.*

13 **SEC. 215. RENEWABLE ENERGY CONSTRUCTION GRANTS.**

14       (a) *DEFINITIONS.—In this section:*

15           (1) *ALASKA SMALL HYDROELECTRIC POWER.—*

16       *The term “Alaska small hydroelectric power” means*  
 17       *power that—*

18           (A) *is generated—*

19                   (i) *in the State of Alaska;*

20                   (ii) *without the use of a dam or im-*  
 21                   *poundment of water; and*

22                   (iii) *through the use of—*

23                           (I) *a lake tap (but not a perched*  
 24                           *alpine lake); or*

1 (II) a run-of-river screened at the  
2 point of diversion; and

3 (B) has a nameplate capacity rating of a  
4 wattage that is not more than 15 megawatts.

5 (2) *ELIGIBLE APPLICANT*.—The term “eligible  
6 applicant” means any—

7 (A) governmental entity;

8 (B) private utility;

---

9 (C) public utility;

10 (D) municipal utility;

11 (E) cooperative utility;

12 (F) Indian tribes; and

13 (G) Regional Corporation (as defined in  
14 section 3 of the Alaska Native Claims Settlement  
15 Act (43 U.S.C. 1602)).

16 (3) *OCEAN ENERGY*.—

17 (A) *INCLUSIONS*.—The term “ocean energy”  
18 includes current, wave, and tidal energy.

19 (B) *EXCLUSION*.—The term “ocean energy”  
20 excludes thermal energy.

21 (4) *RENEWABLE ENERGY PROJECT*.—The term  
22 “renewable energy project” means a project—

23 (A) for the commercial generation of elec-  
24 tricity; and

25 (B) that generates electricity from—

1                   (i) solar, wind, or geothermal energy  
2                   or ocean energy;

3                   (ii) biomass (as defined in section  
4                   203(b) of the Energy Policy Act of 2005 (42  
5                   U.S.C. 15852(b)));

6                   (iii) landfill gas; or

7                   (iv) Alaska small hydroelectric power.

8                   **(b) RENEWABLE ENERGY CONSTRUCTION GRANTS.—**

---

9                   (1) *IN GENERAL.*—The Secretary shall use  
10                   amounts appropriated under this section to make  
11                   grants for use in carrying out renewable energy  
12                   projects.

13                   (2) *CRITERIA.*—Not later than 180 days after the  
14                   date of enactment of this Act, the Secretary shall set  
15                   forth criteria for use in awarding grants under this  
16                   section.

17                   (3) *APPLICATION.*—To receive a grant from the  
18                   Secretary under paragraph (1), an eligible applicant  
19                   shall submit to the Secretary an application at such  
20                   time, in such manner, and containing such informa-  
21                   tion as the Secretary may require, including a writ-  
22                   ten assurance that—

23                   (A) all laborers and mechanics employed by  
24                   contractors or subcontractors during construc-  
25                   tion, alteration, or repair that is financed, in

1 whole or in part, by a grant under this section  
2 shall be paid wages at rates not less than those  
3 prevailing on similar construction in the local-  
4 ity, as determined by the Secretary of Labor in  
5 accordance with sections 3141-3144, 3146, and  
6 3147 of title 40, United States Code; and

7 (B) the Secretary of Labor shall, with re-  
8 spect to the labor standards described in this  
9 paragraph, have the authority and functions set  
10 forth in Reorganization Plan Numbered 14 of  
11 1950 (5 U.S.C. App.) and section 3145 of title  
12 40, United States Code.

13 (4) NON-FEDERAL SHARE.—Each eligible appli-  
14 cant that receives a grant under this subsection shall  
15 contribute to the total cost of the renewable energy  
16 project constructed by the eligible applicant an  
17 amount not less than 50 percent of the total cost of  
18 the project.

19 (c) AUTHORIZATION OF APPROPRIATIONS.—There are  
20 authorized to be appropriated to the Fund such sums as  
21 are necessary to carry out this section.

1 **Subtitle B—Expediting New Energy**  
 2 **Efficiency Standards**

3 **SEC. 221. DEFINITION OF ENERGY CONSERVATION STAND-**  
 4 **ARD.**

5 *Section 321 of the Energy Policy and Conservation Act*  
 6 *(42 U.S.C. 6291) is amended by striking paragraph (6) and*  
 7 *inserting the following:*

8 *“(6) ENERGY CONSERVATION STANDARD.—*

---

9 *“(A) IN GENERAL.—The term ‘energy con-*  
 10 *servation standard’ means 1 or more perform-*  
 11 *ance standards that—*

12 *“(i) for covered products (excluding*  
 13 *clothes washers, dishwashers, showerheads,*  
 14 *faucets, water closets, and urinals), pre-*  
 15 *scribe a minimum level of energy efficiency*  
 16 *or a maximum quantity of energy use, de-*  
 17 *termined in accordance with test procedures*  
 18 *prescribed under section 323;*

19 *“(ii) for showerheads, faucets, water*  
 20 *closets, and urinals, prescribe a minimum*  
 21 *level of water efficiency or a maximum*  
 22 *quantity of water use, determined in ac-*  
 23 *cordance with test procedures prescribed*  
 24 *under section 323; and*

1                   “(iii) for clothes washers and  
2                   dishwashers—

3                   “(I) prescribe a minimum level of  
4                   energy efficiency or a maximum quan-  
5                   tity of energy use, determined in ac-  
6                   cordance with test procedures pre-  
7                   scribed under section 323; and

8                   “(II) may include a minimum  
9                   level of water efficiency or a maximum  
10                  quantity of water use, determined in  
11                  accordance with those test procedures.

12                  “(B) INCLUSIONS.—The term ‘energy con-  
13                  servation standard’ includes—

14                  “(i) 1 or more design requirements, if  
15                  the requirements were established—

16                  “(I) on or before the date of enact-  
17                  ment of this subclause; or

18                  “(II) as part of a consensus agree-  
19                  ment under section 325(hh); and

20                  “(ii) any other requirements that the  
21                  Secretary may prescribe under section  
22                  325(r).

23                  “(C) EXCLUSION.—The term ‘energy con-  
24                  servation standard’ does not include a perform-  
25                  ance standard for a component of a finished cov-

1           ered product, unless regulation of the component  
2           is authorized or established pursuant to this  
3           title.”.

4 **SEC. 222. REGIONAL EFFICIENCY STANDARDS FOR HEAT-**  
5                                   **ING AND COOLING PRODUCTS.**

6           (a) *IN GENERAL.*—Section 327 of the Energy Policy  
7 and Conservation Act (42 U.S.C. 6297) is amended—

8           (1) by redesignating subsections (e), (f), and (g)  
9           as subsections (f), (g), and (h), respectively; and

10           (2) by inserting after subsection (d) the fol-  
11           lowing:

12           “(e) *REGIONAL EFFICIENCY STANDARDS FOR HEATING*  
13 *AND COOLING PRODUCTS.*—

14           “(1) *IN GENERAL.*—

15                           “(A) *DETERMINATION.*—The Secretary may  
16                           determine, after notice and comment, that more  
17                           stringent Federal energy conservation standards  
18                           are appropriate for furnaces, boilers, or central  
19                           air conditioning equipment than applicable Fed-  
20                           eral energy conservation standards.

21                           “(B) *FINDING.*—The Secretary may deter-  
22                           mine that more stringent standards are appro-  
23                           priate for up to 2 different regions only after  
24                           finding that the regional standards—

1                   “(i) would contribute to energy savings  
2                   that are substantially greater than that of a  
3                   single national energy standard; and

4                   “(ii) are economically justified.

5                   “(C) REGIONS.—On making a determina-  
6                   tion described in subparagraph (B), the Sec-  
7                   retary shall establish the regions so that the more  
8                   stringent standards would achieve the maximum  
9                   level of energy savings that is technologically fea-  
10                  sible and economically justified.

11                  “(D) FACTORS.—In determining the appro-  
12                  priateness of 1 or more regional standards for  
13                  furnaces, boilers, and central and commercial air  
14                  conditioning equipment, the Secretary shall con-  
15                  sider all of the factors described in paragraphs  
16                  (1) through (4) of section 325(o).

17                  “(2) STATE PETITION.—After a determination  
18                  made by the Secretary under paragraph (1), a State  
19                  may petition the Secretary requesting a rule that a  
20                  State regulation that establishes a standard for fur-  
21                  naces, boilers, or central air conditioners become effec-  
22                  tive at a level determined by the Secretary to be ap-  
23                  propriate for the region that includes the State.

24                  “(3) RULE.—Subject to paragraphs (4) through  
25                  (7), the Secretary may issue the rule during the pe-

1 *riod described in paragraph (4) and after consider-*  
2 *ation of the petition and the comments of interested*  
3 *persons.*

4 *“(4) PROCEDURE.—*

5 *“(A) NOTICE.—The Secretary shall provide*  
6 *notice of any petition filed under paragraph (2)*  
7 *and afford interested persons a reasonable oppor-*  
8 *tunity to make written comments, including re-*  
9 *buttal comments, on the petition.*

10 *“(B) DECISION.—Except as provided in*  
11 *subparagraph (C), during the 180-day period be-*  
12 *ginning on the date on which the petition is*  
13 *filed, the Secretary shall issue the requested rule*  
14 *or deny the petition.*

15 *“(C) EXTENSION.—The Secretary may pub-*  
16 *lish in the Federal Register a notice—*

17 *“(i) extending the period to a specified*  
18 *date, but not longer than 1 year after the*  
19 *date on which the petition is filed; and*

20 *“(ii) describing the reasons for the*  
21 *delay.*

22 *“(D) DENIALS.—If the Secretary denies a*  
23 *petition under this subsection, the Secretary*  
24 *shall publish in the Federal Register notice of,*  
25 *and the reasons for, the denial.*

1           “(5) *FINDING OF SIGNIFICANT BURDEN ON MAN-*  
2 *UFACTURING, MARKETING, DISTRIBUTION, SALE, OR*  
3 *SERVICING OF COVERED PRODUCT ON NATIONAL*  
4 *BASIS.—*

5           “(A) *IN GENERAL.—The Secretary may not*  
6 *issue a rule under this subsection if the Secretary*  
7 *finds (and publishes the finding) that interested*  
8 *persons have established, by a preponderance of*  
9 *the evidence, that the State regulation will sig-*  
10 *nificantly burden manufacturing, marketing,*  
11 *distribution, sale, or servicing of a covered prod-*  
12 *uct on a national basis.*

13           “(B) *FACTORS.—In determining whether to*  
14 *make a finding described in subparagraph (A),*  
15 *the Secretary shall evaluate all relevant factors,*  
16 *including—*

17           “(i) *the extent to which the State regu-*  
18 *lation will increase manufacturing or dis-*  
19 *tribution costs of manufacturers, distribu-*  
20 *tors, and others;*

21           “(ii) *the extent to which the State reg-*  
22 *ulation will disadvantage smaller manufac-*  
23 *turers, distributors, or dealers or lessen com-*  
24 *petition in the sale of the covered product in*  
25 *the State; and*

1           “(iii) the extent to which the State reg-  
2           ulation would cause a burden to manufac-  
3           turers to redesign and produce the covered  
4           product type (or class), taking into consid-  
5           eration the extent to which the regulation  
6           would result in a reduction—

7                   “(I) in the current models, or in  
8                   the projected availability of models,  
9                   that could be shipped on the effective  
10                  date of the regulation to the State and  
11                  within the United States; or

12                   “(II) in the current or projected  
13                  sales volume of the covered product  
14                  type (or class) in the State and the  
15                  United States.

16           “(6) APPLICATION.—No State regulation shall  
17           become effective under this subsection with respect to  
18           any covered product manufactured before the date  
19           specified in the determination made by the Secretary  
20           under paragraph (1).

21           “(7) PETITION TO WITHDRAW FEDERAL RULE  
22           FOLLOWING AMENDMENT OF FEDERAL STANDARD.—

23                   “(A) IN GENERAL.—If a State has issued a  
24                  rule under paragraph (3) with respect to a cov-  
25                  ered product and subsequently a Federal energy

1           *conservation standard concerning the product is*  
2           *amended pursuant to section 325, any person*  
3           *subject to the State regulation may file a peti-*  
4           *tion with the Secretary requesting the Secretary*  
5           *to withdraw the rule issued under paragraph (3)*  
6           *with respect to the product in the State.*

7           “(B) *BURDEN OF PROOF.*—*The Secretary*  
8           *shall consider the petition in accordance with*  
9           *paragraph (5) and the burden shall be on the pe-*  
10           *titioner to show by a preponderance of the evi-*  
11           *dence that the rule received by the State under*  
12           *paragraph (3) should be withdrawn as a result*  
13           *of the amendment to the Federal standard.*

14           “(C) *WITHDRAWAL.*—*If the Secretary deter-*  
15           *mines that the petitioner has shown that the rule*  
16           *issued by the Secretary under paragraph (3)*  
17           *should be withdrawn in accordance with sub-*  
18           *paragraph (B), the Secretary shall withdraw the*  
19           *rule.”.*

20           (b) *CONFORMING AMENDMENTS.*—

21           (1) *Section 327 of the Energy Policy and Con-*  
22           *servations Act (42 U.S.C. 6297) is amended—*

23           (A) *in subsection (b)—*

1           (i) in paragraph (2), by striking “sub-  
2           section (e)” and inserting “subsection (f)”;

3           and

4           (ii) in paragraph (3)—

5                 (I) by striking “subsection (f)(1)”  
6                 and inserting “subsection (g)(1)”; and

7                 (II) by striking “subsection (f)(2)”  
8                 and inserting “subsection (g)(2)”; and

---

9           (B) in subsection (c)(3), by striking “sub-  
10           section (f)(3)” and inserting “subsection (g)(3)”.

11           (2) Section 345(b)(2) of the Energy Policy and  
12           Conservation Act (42 U.S.C. 6316(b)(2)) is amended  
13           by adding at the end the following:

14                 “(E) RELATIONSHIP TO CERTAIN STATE  
15                 REGULATIONS.—Notwithstanding subparagraph  
16                 (A), a standard prescribed or established under  
17                 section 342(a) with respect to the equipment  
18                 specified in subparagraphs (B), (C), (D), (H),  
19                 (I), and (J) of section 340 shall not supersede a  
20                 State regulation that is effective under the terms,  
21                 conditions, criteria, procedures, and other re-  
22                 quirements of section 327(e).”

1 **SEC. 223. FURNACE FAN RULEMAKING.**

2 *Section 325(f)(3) of the Energy Policy and Conserva-*  
3 *tion Act (42 U.S.C. 6295(f)(3)) is amended by adding at*  
4 *the end the following:*

5 “(E) *FINAL RULE.*—

6 “(i) *IN GENERAL.*—*The Secretary shall*  
7 *publish a final rule to carry out this sub-*  
8 *section not later than December 31, 2014.*

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9 “(ii) *CRITERIA.*—*The standards shall*  
10 *meet the criteria established under sub-*  
11 *section (o).”*

12 **SEC. 224. EXPEDITED RULEMAKINGS.**

13 (a) *PROCEDURE FOR PRESCRIBING NEW OR AMENDED*  
14 *STANDARDS.*—*Section 325(p) of the Energy Policy and*  
15 *Conservation Act (42 U.S.C. 6295(p)) is amended by add-*  
16 *ing at the end the following:*

17 “(5) *DIRECT FINAL RULES.*—

18 “(A) *IN GENERAL.*—*On receipt of a state-*  
19 *ment that is submitted jointly by interested per-*  
20 *sons that are fairly representative of relevant*  
21 *points of view (including representatives of man-*  
22 *ufacturers of covered products, States, and effi-*  
23 *ciency advocates), as determined by the Sec-*  
24 *retary, and contains recommendations with re-*  
25 *spect to an energy or water conservation*  
26 *standard—*

1           “(i) if the Secretary determines that  
2           the recommended standard contained in the  
3           statement is in accordance with subsection  
4           (o) or section 342(a)(6)(B), as applicable,  
5           the Secretary may issue a final rule that es-  
6           tablishes an energy or water conservation  
7           standard and is published simultaneously  
8           with a notice of proposed rulemaking that  
9           proposes a new or amended energy or water  
10          conservation standard that is identical to  
11          the standard established in the final rule to  
12          establish the recommended standard (re-  
13          ferred to in this paragraph as a ‘direct  
14          final rule’); or

15           “(ii) if the Secretary determines that a  
16          direct final rule cannot be issued based on  
17          the statement, the Secretary shall publish a  
18          notice of the determination, together with  
19          an explanation of the reasons for the deter-  
20          mination.

21           “(B) PUBLIC COMMENT.—The Secretary  
22          shall—

23           “(i) solicit public comment with re-  
24          spect to each direct final rule issued by the  
25          Secretary under subparagraph (A)(i); and

1           “(i) publish a response to each com-  
2           ment so received.

3           “(C) WITHDRAWAL OF DIRECT FINAL  
4           RULES.—

5           “(i) IN GENERAL.—Not later than 120  
6           days after the date on which a direct final  
7           rule issued under subparagraph (A)(i) is  
8           published in the Federal Register, the Sec-  
9           retary shall withdraw the direct final rule  
10          if—

11                   “(I) the Secretary receives 1 or  
12                   more adverse public comments relating  
13                   to the direct final rule under subpara-  
14                   graph (B)(i); and

15                   “(II) based on the complete rule-  
16                   making record relating to the direct  
17                   final rule, the Secretary tentatively de-  
18                   termines that the adverse public com-  
19                   ments are relevant under subsection  
20                   (o), section 342(a)(6)(B), or any other  
21                   applicable law.

22           “(ii) ACTION ON WITHDRAWAL.—On  
23           withdrawal of a direct final rule under  
24           clause (i), the Secretary shall—

1           “(I) proceed with the notice of  
2           proposed rulemaking published simul-  
3           taneously with the direct final rule as  
4           described in subparagraph (A)(i); and

5           “(II) publish in the Federal Reg-  
6           ister the reasons why the direct final  
7           rule was withdrawn.

8           “(iii) *TREATMENT OF WITHDRAWN DI-*  
9           *RECT FINAL RULES.*—A direct final rule  
10           that is withdrawn under clause (i) shall not  
11           be considered to be a final rule for purposes  
12           of subsection (o).

13           “(D) *EFFECT OF PARAGRAPH.*—Nothing in  
14           this paragraph authorizes the Secretary to issue  
15           a direct final rule based solely on receipt of more  
16           than 1 statement containing recommended  
17           standards relating to the direct final rule.”.

18           (b) *CONFORMING AMENDMENT.*—Section 345(b)(1) of  
19           the Energy Policy and Conservation Act (42 U.S.C.  
20           6316(b)(1)) is amended in the first sentence by inserting  
21           “section 325(p)(5),” after “The provisions of”.

22           **SEC. 225. PERIODIC REVIEWS.**

23           (a) *TEST PROCEDURES.*—Section 323(b)(1) of the En-  
24           ergy Policy and Conservation Act (42 U.S.C. 6293(b)(1))

1 is amended by striking “(1)” and all that follows through  
2 the end of the paragraph and inserting the following:

3 “(1) TEST PROCEDURES.—

4 “(A) AMENDMENT.—At least once every 7  
5 years, the Secretary shall review test procedures  
6 for all covered products and—

7 “(i) amend test procedures with respect  
8 to any covered product, if the Secretary de-  
9 termines that amended test procedures  
10 would more accurately or fully comply with  
11 the requirements of paragraph (3); or

12 “(ii) publish notice in the Federal Reg-  
13 ister of any determination not to amend a  
14 test procedure.”.

15 (b) ENERGY CONSERVATION STANDARDS.—Section  
16 325(m) of the Energy Policy and Conservation Act (42  
17 U.S.C. 6295(m)) is amended—

18 (1) by designating the first and second sentences  
19 as paragraphs (1) and (4), respectively;

20 (2) by striking paragraph (1) (as so designated)  
21 and inserting the following:

22 “(1) IN GENERAL.—After issuance of the last  
23 final rules required for a product under this part, the  
24 Secretary shall, not later than 5 years after the date  
25 of issuance of a final rule establishing or amending

1     *a standard or determining not to amend a standard,*  
 2     *publish a final rule to determine whether standards*  
 3     *for the product should or should not be amended based*  
 4     *on the criteria in subsection (n)(2).*

5             “(2) ANALYSIS.—Prior to publication of the de-  
 6     termination, the Secretary shall publish a notice of  
 7     availability describing the analysis of the Department  
 8     and provide opportunity for written comment.

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9             “(3) FINAL RULE.—Not later than 3 years after  
 10    a positive determination under paragraph (1), the  
 11    Secretary shall publish a final rule amending the  
 12    standard for the product.”; and

13            (3) in paragraph (4) (as so designated), by strik-  
 14    ing “(4) An” and inserting the following:

15            “(4) APPLICATION OF AMENDMENT.—An”.

16            (c) STANDARDS.—Section 342(a)(6) of the Energy Pol-  
 17    icy and Conservation Act (42 U.S.C. 6313(a)(6)) is amend-  
 18    ed by striking “(6)(A)(i)” and all that follows through the  
 19    end of subparagraph (A) and inserting the following:

20            “(6) AMENDED ENERGY EFFICIENCY STAND-  
 21    ARDS.—

22            “(A) IN GENERAL.—

23            “(i) ANALYSIS OF POTENTIAL ENERGY  
 24    SAVINGS.—If ASHRAE/IES Standard 90.1  
 25    is amended with respect to any small com-

1            *mercial package air conditioning and heat-*  
2            *ing equipment, large commercial package*  
3            *air conditioning and heating equipment,*  
4            *very large commercial package air condi-*  
5            *tioning and heating equipment, packaged*  
6            *terminal air conditioners, packaged ter-*  
7            *terminal heat pumps, warm-air furnaces,*  
8            *packaged boilers, storage water heaters, in-*  
9            *stantaneous water heaters, or unfired hot*  
10           *water storage tanks, not later than 180 days*  
11           *after the amendment of the standard, the*  
12           *Secretary shall publish in the Federal Reg-*  
13           *ister for public comment an analysis of the*  
14           *energy savings potential of amended energy*  
15           *efficiency standards.*

16            *“(i) AMENDED UNIFORM NATIONAL*  
17            *STANDARD FOR PRODUCTS.—*

18            *“(I) IN GENERAL.—Except as pro-*  
19            *vided in subclause (II), not later than*  
20            *18 months after the date of publication*  
21            *of the amendment to the ASHRAE/*  
22            *IES Standard 90.1 for a product de-*  
23            *scribed in clause (i), the Secretary*  
24            *shall establish an amended uniform*  
25            *national standard for the product at*

1           the minimum level specified in the  
2           amended ASHRAE/IES Standard  
3           90.1.

4           “(II) MORE STRINGENT STAND-  
5           ARD.—Subclause (I) shall not apply if  
6           the Secretary determines, by rule pub-  
7           lished in the Federal Register, and  
8           supported by clear and convincing evi-

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9           dence, that adoption of a uniform na-  
10          tional standard more stringent than  
11          the amended ASHRAE/IES Standard  
12          90.1 for the product would result in  
13          significant additional conservation of  
14          energy and is technologically feasible  
15          and economically justified.

16          “(iii) RULE.—If the Secretary makes a  
17          determination described in clause (ii)(II)  
18          for a product described in clause (i), not  
19          later than 30 months after the date of publi-  
20          cation of the amendment to the ASHRAE/  
21          IES Standard 90.1 for the product, the Sec-  
22          retary shall issue the rule establishing the  
23          amended standard.”.

24          (d) TEST PROCEDURES.—Section 343(a) of the En-  
25          ergy Policy and Conservation Act (42 U.S.C. 6313(a)) is

1 amended by striking “(a)” and all that follows through the  
2 end of paragraph (1) and inserting the following:

3 “(a) **PRESCRIPTION BY SECRETARY; REQUIRE-**  
4 **MENTS.—**

5 “(1) **TEST PROCEDURES.—**

6 “(A) **AMENDMENT.—**At least once every 7  
7 years, the Secretary shall conduct an evaluation  
8 of each class of covered equipment and—

9 “(i) if the Secretary determines that  
10 amended test procedures would more accu-  
11 rately or fully comply with the requirements  
12 of paragraphs (2) and (3), shall prescribe  
13 test procedures for the class in accordance  
14 with this section; or

15 “(ii) shall publish notice in the Federal  
16 Register of any determination not to amend  
17 a test procedure.”.

18 (e) **EFFECTIVE DATE.—**The amendments made by sub-  
19 sections (b) and (c) take effect on January 1, 2012.

20 **SEC. 226. ENERGY EFFICIENCY LABELING FOR CONSUMER**  
21 **ELECTRONIC PRODUCTS.**

22 (a) **IN GENERAL.—**Section 324(a) of the Energy Pol-  
23 icy and Conservation Act (42 U.S.C. 6294(a)) is  
24 amended—

1           (1) in paragraph (2), by adding at the end the  
2 following:

3           “(H) LABELING REQUIREMENTS.—

4           “(i) IN GENERAL.—Subject to clauses  
5 (ii) through (iv), not later than 18 months  
6 after the date of issuance of applicable De-  
7 partment of Energy testing procedures, the  
8 Commission, in consultation with the Sec-  
9 retary and the Administrator of the Envi-  
10 ronmental Protection Agency (acting  
11 through the Energy Star program), shall,  
12 by regulation, promulgate labeling or other  
13 disclosure requirements for the energy use  
14 of—

15           “(I) televisions;

16           “(II) personal computers;

17           “(III) cable or satellite set-top  
18 boxes;

19           “(IV) stand-alone digital video re-  
20 corder boxes; and

21           “(V) personal computer monitors.

22           “(i) ALTERNATE TESTING PROCE-  
23 DURES.—In the absence of applicable test-  
24 ing procedures described in clause (i) for  
25 products described in subclauses (I) through

1 (V) of that clause, the Commission may by  
2 regulation promulgate labeling requirements  
3 for a consumer product category described  
4 in clause (i) if the Commission—

5 “(I) identifies adequate non-De-  
6 partment of Energy testing procedures  
7 for those products; and

8 “(II) determines that labeling of  
9 those products is likely to assist con-  
10 sumers in making purchasing deci-  
11 sions.

12 “(iii) DEADLINE AND REQUIREMENTS  
13 FOR LABELING.—

14 “(I) DEADLINE.—Not later than  
15 18 months after the date of promulga-  
16 tion of any requirements under clause  
17 (i) or (ii), the Commission shall re-  
18 quire labeling of electronic products de-  
19 scribed in clause (i).

20 “(II) REQUIREMENTS.—The re-  
21 quirements promulgated under clause  
22 (i) or (ii) may include specific require-  
23 ments for each electronic product to be  
24 labeled with respect to the placement,

1                   size, and content of Energy Guide la-  
2                   bels.

3                   “(iv) DETERMINATION OF FEASI-  
4                   BILITY.—Clause (i) or (ii) shall not apply  
5                   in any case in which the Commission deter-  
6                   mines that labeling in accordance with this  
7                   subsection—

8                   “(I) is not technologically or eco-  
9                   nomically feasible; or

10                  “(II) is not likely to assist con-  
11                  sumers in making purchasing deci-  
12                  sions.”; and

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

14                  “(6) AUTHORITY TO INCLUDE ADDITIONAL PROD-  
15                  UCT CATEGORIES.—The Commission may require la-  
16                  beling in accordance with this subsection for any con-  
17                  sumer product not specified in this subsection or sec-  
18                  tion 322 if the Commission determines that labeling  
19                  for the product is likely to assist consumers in mak-  
20                  ing purchasing decisions.”.

21                  (b) CONTENT OF LABEL.—Section 324(c) of the En-  
22                  ergy Policy and Conservation Act (42 U.S.C. 6924(c)) is  
23                  amended by adding at the end the following:

24                  “(9) DISCRETIONARY APPLICATION.—The Com-  
25                  mission may apply paragraphs (1), (2), (3), (5), and

1 (6) of this subsection to the labeling of any product  
 2 covered by paragraph (2)(H) or (6) of subsection  
 3 (a).”.

4 **SEC. 227. RESIDENTIAL BOILER EFFICIENCY STANDARDS.**

5 Section 325(f) of the Energy Policy and Conservation  
 6 Act (42 U.S.C. 6295(f)) is amended—

7 (1) by redesignating paragraph (3) as para-  
 8 graph (4); and

9 (2) by inserting after paragraph (2) the fol-  
 10 lowing:

11 “(3) **BOILERS.**—

12 “(A) **IN GENERAL.**—Subject to subpara-  
 13 graphs (B) and (C), boilers manufactured on or  
 14 after September 1, 2012, shall meet the following  
 15 requirements:

<i>Boiler Type</i>	<i>Minimum Annual Fuel Utilization Efficiency</i>	<i>Design Requirements</i>
<i>Gas Hot Water</i>	82%	<i>No Constant Burning Pilot, Automatic Means for Adjusting Water Temperature</i>
<i>Gas Steam</i>	80%	<i>No Constant Burning Pilot</i>
<i>Oil Hot Water</i>	84%	<i>Automatic Means for Adjusting Temperature</i>
<i>Oil Steam</i>	82%	<i>None</i>
<i>Electric Hot Water</i>	<i>None</i>	<i>Automatic Means for Adjusting Temperature</i>
<i>Electric Steam</i>	<i>None</i>	<i>None</i>

1           “(B) PILOTS.—The manufacturer shall not  
2 equip gas hot water or steam boilers with con-  
3 stant-burning pilot lights.

4           “(C) AUTOMATIC MEANS FOR ADJUSTING  
5 WATER TEMPERATURE.—

6           “(i) IN GENERAL.—The manufacturer  
7 shall equip each gas, oil, and electric hot  
8 water boiler (other than a boiler equipped  
9 with tankless domestic water heating coils)  
10 with an automatic means for adjusting the  
11 temperature of the water supplied by the  
12 boiler to ensure that an incremental change  
13 in inferred heat load produces a cor-  
14 responding incremental change in the tem-  
15 perature of water supplied.

16           “(ii) CERTAIN BOILERS.—For a boiler  
17 that fires at 1 input rate, the requirements  
18 of this subparagraph may be satisfied by  
19 providing an automatic means that allows  
20 the burner or heating element to fire only  
21 when the means has determined that the in-  
22 ferred heat load cannot be met by the resid-  
23 ual heat of the water in the system.

24           “(iii) NO INFERRED HEAT LOAD.—  
25 When there is no inferred heat load with re-

1            *spect to a hot water boiler, the automatic*  
2            *means described in clauses (i) and (ii) shall*  
3            *limit the temperature of the water in the*  
4            *boiler to not more than 140 degrees Fahr-*  
5            *enheit.*

6            *“(iv) OPERATION.—A boiler described*  
7            *in clause (i) or (ii) shall be operable only*  
8            *when the automatic means described in*  
9            *clauses (i), (ii), and (iii) is installed.”.*

10 **SEC. 228. TECHNICAL CORRECTIONS.**

11            *(a) DEFINITION OF FLUORESCENT LAMP.—Section*  
12 *321(30)(B)(viii) of the Energy Policy and Conservation Act*  
13 *(42 U.S.C. 6291(30)(B)(viii)) is amended by striking “82”*  
14 *and inserting “87”.*

15            *(b) STANDARDS FOR COMMERCIAL PACKAGE AIR CON-*  
16 *DITIONING AND HEATING EQUIPMENT.—Section 342(a)(1)*  
17 *of the Energy Policy and Conservation Act (42 U.S.C.*  
18 *6313(a)(1)) is amended in the matter preceding subpara-*  
19 *graph (A) by striking “but before January 1, 2010,”.*

20            *(c) MERCURY VAPOR LAMP BALLASTS.—*

21            *(1) DEFINITIONS.—Section 321 of the Energy*  
22 *Policy and Conservation Act (42 U.S.C. 6291) (as*  
23 *amended by section 212(a)(2)) is amended—*

24            *(A) in paragraph (46)(A)—*

1           (i) in clause (i), by striking "bulb"  
2           and inserting "the arc tube"; and

3           (ii) in clause (ii), by striking "has a  
4           bulb" and inserting "wall loading is";

5           (B) in paragraph (47)(A), by striking "op-  
6           erating at a partial" and inserting "typically  
7           operating at a partial vapor";

8           (C) in paragraph (48), by inserting "in-  
9           tended for general illumination" after "lamps";  
10          and

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

12           "(56) The term 'specialty application mercury  
13           vapor lamp ballast' means a mercury vapor lamp  
14           ballast that—

15           "(A) is designed and marketed for medical  
16           use, optical comparators, quality inspection, in-  
17           dustrial processing, or scientific use, including  
18           fluorescent microscopy, ultraviolet curing, and  
19           the manufacture of microchips, liquid crystal  
20           displays, and printed circuit boards; and

21           "(B) in the case of a specialty application  
22           mercury vapor lamp ballast, is labeled as a spe-  
23           cialty application mercury vapor lamp ballast."

24           (2) STANDARD SETTING AUTHORITY.—Section  
25           325(ee) of the Energy Policy and Conservation Act

1       (42 U.S.C. 6295(ee)) is amended by inserting “(other  
2       than specialty application mercury vapor lamp bal-  
3       lasts)” after “ballasts”.

4       **SEC. 229. ELECTRIC MOTOR EFFICIENCY STANDARDS.**

5       (a) *DEFINITIONS.*—Section 340(13) of the Energy Pol-  
6       icy and Conservation Act (42 U.S.C. 6311(13)) is amended  
7       by striking subparagraph (A) and inserting the following:

8               “(A)(i) The term ‘electric motor’ means—

9                       “(I) a general purpose electric motor—  
10                      subtype I; and

11                     “(II) a general purpose electric motor—  
12                     subtype II.

13               “(ii) The term ‘general purpose electric motor—  
14       subtype I’ means any motor that is considered a gen-  
15       eral purpose motor under section 431.12 of title 10,  
16       Code of Federal Regulations (or successor regula-  
17       tions).

18               “(iii) The term ‘general purpose electric motor—  
19       subtype II’ means a motor that, in addition to the de-  
20       sign elements for a general purpose electric motor—  
21       subtype I, incorporates the design elements (as estab-  
22       lished in National Electrical Manufacturers Associa-  
23       tion MG-1 (2006)) for any of the following:

24                     “(I) A U-Frame Motor.

25                     “(II) A Design C Motor.

1           “(III) *A close-coupled pump motor.*

2           “(IV) *A footless motor.*

3           “(V) *A vertical solid shaft normal thrust*  
4 *(tested in a horizontal configuration).*

5           “(VI) *An 8-pole motor.*

6           “(VII) *A poly-phase motor with voltage of*  
7 *not more than 600 volts (other than 230 or 460*  
8 *volts).”.*

9           (b) *STANDARDS.—Section 342(b) of the Energy Policy*  
10 *and Conservation Act (42 U.S.C. 6313(13)) is amended by*  
11 *striking paragraph (1) and inserting the following:*

12           “(1) *STANDARDS.—*

13           “(A) *GENERAL PURPOSE ELECTRIC MO-*  
14 *TORS—SUBTYPE I.—*

15           “(i) *IN GENERAL.—Except as otherwise*  
16 *provided in this subparagraph, a general*  
17 *purpose electric motor—subtype I with a*  
18 *power rating of not less than 1, and not*  
19 *more than 200, horsepower manufactured*  
20 *(alone or as a component of another piece*  
21 *of equipment) after the 3-year period begin-*  
22 *ning on the date of enactment of this sub-*  
23 *paragraph, shall have a nominal full load*  
24 *efficiency established in Table 12–12 of Na-*  
25 *tional Electrical Manufacturers Association*

1           *(referred to in this paragraph as 'NEMA')*  
2           *MG-1 (2006).*

3           “(i) *FIRE PUMP MOTORS.—A fire*  
4            *pump motor shall have a nominal full load*  
5            *efficiency established in Table 12-11 of*  
6            *NEMA MG-1 (2006).*

7           “(B) *GENERAL PURPOSE ELECTRIC MO-*  
8           *TORS—SUBTYPE II.—A general purpose electric*  
9            *motor—subtype II with a power rating of not*  
10            *less than 1, and not more than 200, horsepower*  
11            *manufactured (alone or as a component of an-*  
12            *other piece of equipment) after the 3-year period*  
13            *beginning on the date of enactment of this sub-*  
14            *paragraph, shall have a nominal full load effi-*  
15            *ciency established in Table 12-11 of NEMA MG-*  
16            *1 (2006).*

17           “(C) *DESIGN B, GENERAL PURPOSE ELEC-*  
18           *TRIC MOTORS.—A NEMA Design B, general pur-*  
19            *pose electric motor with a power rating of not*  
20            *less than 201, and not more than 500, horse-*  
21            *power manufactured (alone or as a component of*  
22            *another piece of equipment) after the 3-year pe-*  
23            *riod beginning on the date of the enactment of*  
24            *this subparagraph shall have a nominal full load*

1           *efficiency established in Table 12–11 of NEMA*  
2           *MG–1 (2006).”.*

3           (c) *EFFECTIVE DATE.*—*The amendments made by this*  
4 *section take effect on the date that is 3 years after the date*  
5 *of enactment of this Act.*

6 **SEC. 230. ENERGY STANDARDS FOR HOME APPLIANCES.**

7           (a) *DEFINITION OF ENERGY CONSERVATION STAND-*  
8 *ARD.*—*Section 321(6)(A) of the Energy Policy and Con-*  
9 *servaion Act (42 U.S.C. 6291(6)(A)) is amended by strik-*  
10 *ing “or, in the case of” and inserting “and, in the case*  
11 *of residential clothes washers, residential dishwashers,”.*

12           (b) *REFRIGERATORS, REFRIGERATOR-FREEZERS, AND*  
13 *FREEZERS.*—*Section 325(b) of the Energy Policy and Con-*  
14 *servaion Act (42 U.S.C. 6295(b)) is amended by adding*  
15 *at the end the following:*

16           “(4) *REFRIGERATORS, REFRIGERATOR-FREEZ-*  
17 *ERS, AND FREEZERS MANUFACTURED ON OR AFTER*  
18 *JANUARY 1, 2014.*—*Not later than December 31, 2010,*  
19 *the Secretary shall publish a final rule determining*  
20 *whether to amend the standards in effect for refrig-*  
21 *erators, refrigerator-freezers, and freezers manufac-*  
22 *tured on or after January 1, 2014, and including any*  
23 *amended standards.”.*

24           (c) *RESIDENTIAL CLOTHES WASHERS AND DISH-*  
25 *WASHERS.*—*Section 325(g)(4) of the Energy Policy and*

1 *Conservation Act (42 U.S.C. 6295(g)(4)) is amended by*  
2 *adding at the end the following:*

3 “(D) CLOTHES WASHERS.—

4 “(i) CLOTHES WASHERS MANUFAC-  
5 TURED ON OR AFTER JANUARY 1, 2011.—A  
6 residential clothes washer manufactured on  
7 or after January 1, 2011, shall have—

8 “(I) a modified energy factor of at  
9 least 1.26; and

10 “(II) a water factor of not more  
11 than 9.5.

12 “(ii) CLOTHES WASHERS MANUFAC-  
13 TURED ON OR AFTER JANUARY 1, 2015.—Not  
14 later than January 1, 2015, the Secretary  
15 shall publish a final rule determining  
16 whether to amend the standards in effect for  
17 residential clothes washers manufactured on  
18 or after January 1, 2015, and including  
19 any amended standards.

20 “(E) DISHWASHERS.—

21 “(i) DISHWASHERS MANUFACTURED ON  
22 OR AFTER JANUARY 1, 2010.—A dishwasher  
23 manufactured on or after January 1, 2010,  
24 shall use not more than—

1                   “(I) in the case of a standard-size  
2                   dishwasher, 355 kWh per year or 6.5  
3                   gallons of water per cycle; and

4                   “(II) in the case of a compact-size  
5                   dishwasher, 260 kWh per year or 4.5  
6                   gallons of water per cycle.

7                   “(ii) *DISHWASHERS MANUFACTURED*  
8                   *ON OR AFTER JANUARY 1, 2018.—Not later*  
9                   *than January 1, 2015, the Secretary shall*  
10                  *publish a final rule determining whether to*  
11                  *amend the standards for dishwashers manu-*  
12                  *factured on or after January 1, 2018, and*  
13                  *including any amended standards.”.*

14                  (d) *DEHUMIDIFIERS.—Section 325(cc) of the Energy*  
15                  *Policy and Conservation Act (42 U.S.C. 6295(cc)) is*  
16                  *amended—*

17                         (1) *in paragraph (1), by inserting “and before*  
18                         *October 1, 2012,” after “2007,”; and*

19                         (2) *by striking paragraph (2) and inserting the*  
20                         *following:*

21                                 “(2) *DEHUMIDIFIERS MANUFACTURED ON OR*  
22                                 *AFTER OCTOBER 1, 2012.—Dehumidifiers manufac-*  
23                                 *tured on or after October 1, 2012, shall have an En-*  
24                                 *ergy Factor that meets or exceeds the following values:*

<i>Product Capacity (pints/day):</i>	<i>Minimum Energy Factor li- ters/kWh</i>
<i>Up to 35.00</i> .....	<i>1.35</i>
<i>35.01–45.00</i> .....	<i>1.50</i>
<i>45.01–54.00</i> .....	<i>1.60</i>
<i>54.01–75.00</i> .....	<i>1.70</i>
<i>Greater than 75.00</i> .....	<i>2.5.”</i>

1       (e) *ENERGY STAR PROGRAM.*—Section 324A(d)(2) of  
2 *the Energy Policy and Conservation Act (42 U.S.C.*  
3 *6294a(d)(2)) is amended by striking “2010” and inserting*  
4 *“2009”.*

5 **SEC. 231. IMPROVED ENERGY EFFICIENCY FOR APPLIANCES**  
6 **AND BUILDINGS IN COLD CLIMATES.**

7       (a) *RESEARCH.*—Section 911(a)(2) of the *Energy Pol-*  
8 *icy Act of 2005 (42 U.S.C. 16191(a)(2)) is amended—*

9           (1) *in subparagraph (C), by striking “and” at*  
10 *the end;*

11           (2) *in subparagraph (D), by striking the period*  
12 *at the end and inserting “; and”; and*

13           (3) *by adding at the end the following:*

14                   *“(E) technologies to improve the energy effi-*  
15 *ciency of appliances and mechanical systems for*  
16 *buildings in cold climates, including combined*  
17 *heat and power units and increased use of re-*  
18 *newable resources, including fuel.”.*

19       (b) *REBATES.*—Section 124 of the *Energy Policy Act*  
20 *of 2005 (42 U.S.C. 15821) is amended—*

1           (1) *in subsection (b)(1), by inserting “, or prod-*  
2 *ucts with improved energy efficiency in cold cli-*  
3 *mates,” after “residential Energy Star products”; and*

4           (2) *in subsection (e), by inserting “or product*  
5 *with improved energy efficiency in a cold climate”*  
6 *after “residential Energy Star product” each place it*  
7 *appears.*

8 **SEC. 232. DEPLOYMENT OF NEW TECHNOLOGIES FOR HIGH-**  
9 **EFFICIENCY CONSUMER PRODUCTS.**

10 (a) *DEFINITIONS.—In this section:*

11           (1) *ENERGY SAVINGS.—The term “energy sav-*  
12 *ings” means megawatt-hours of electricity or million*  
13 *British thermal units of natural gas saved by a prod-*  
14 *uct, in comparison to projected energy consumption*  
15 *under the energy efficiency standard applicable to the*  
16 *product.*

17           (2) *HIGH-EFFICIENCY CONSUMER PRODUCT.—*  
18 *The term “high-efficiency consumer product” means a*  
19 *product that exceeds the energy efficiency of com-*  
20 *parable products available in the market by a per-*  
21 *centage determined by the Secretary to be an appro-*  
22 *priate benchmark for the consumer product category*  
23 *competing for an award under this section.*

24 (b) *FINANCIAL INCENTIVES PROGRAM.—Effective be-*  
25 *ginning October 1, 2007, the Secretary shall competitively*

1 *award financial incentives under this section for the manu-*  
2 *facture of high-efficiency consumer products.*

3 (c) *REQUIREMENTS.—*

4 (1) *IN GENERAL.—The Secretary shall make*  
5 *awards under this section to manufacturers of high-*  
6 *efficiency consumer products, based on the bid of each*  
7 *manufacturer in terms of dollars per megawatt-hour*  
8 *or million British thermal units saved.*

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9 (2) *ACCEPTANCE OF BIDS.—In making awards*  
10 *under this section, the Secretary shall—*

11 (A) *solicit bids for reverse auction from ap-*  
12 *propriate manufacturers, as determined by the*  
13 *Secretary; and*

14 (B) *award financial incentives to the man-*  
15 *ufacturers that submit the lowest bids that meet*  
16 *the requirements established by the Secretary.*

17 (d) *FORMS OF AWARDS.—An award for a high-effi-*  
18 *ciency consumer product under this section shall be in the*  
19 *form of a lump sum payment in an amount equal to the*  
20 *product obtained by multiplying—*

21 (1) *the amount of the bid by the manufacturer*  
22 *of the high-efficiency consumer product; and*

23 (2) *the energy savings during the projected useful*  
24 *life of the high-efficiency consumer product, not to ex-*

1        *ceed 10 years, as determined under regulations issued*  
2        *by the Secretary.*

3        **SEC. 233. INDUSTRIAL EFFICIENCY PROGRAM.**

4        (a) *DEFINITIONS.—In this section:*

5                (1) *ELIGIBLE ENTITY.—The term eligible entity*  
6        *means—*

7                (A) *an institution of higher education*  
8                *under contract or in partnership with a non-*  
9                *profit or for-profit private entity acting on be-*  
10               *half of an industrial or commercial sector or*  
11               *subsector;*

12               (B) *a nonprofit or for-profit private entity*  
13               *acting on behalf on an industrial or commercial*  
14               *sector or subsector; or*

15               (C) *a consortia of entities acting on behalf*  
16               *of an industrial or commercial sector or sub-*  
17               *sector.*

18               (2) *ENERGY-INTENSIVE COMMERCIAL APPLICA-*  
19               *TIONS.—The term “energy-intensive commercial ap-*  
20               *plications” means processes and facilities that use*  
21               *significant quantities of energy as part of the pri-*  
22               *mary economic activities of the processes and facili-*  
23               *ties, including—*

24               (A) *information technology data centers;*

25               (B) *product manufacturing; and*

1 (C) food processing.

2 (3) *FEEDSTOCK*.—The term “feedstock” means  
3 the raw material supplied for use in manufacturing,  
4 chemical, and biological processes.

5 (4) *MATERIALS MANUFACTURERS*.—The term  
6 “materials manufacturers” means the energy-inten-  
7 sive primary manufacturing industries, including the  
8 aluminum, chemicals, forest and paper products,  
9 glass, metal casting, and steel industries.

10 (5) *PARTNERSHIP*.—The term “partnership”  
11 means an energy efficiency and utilization partner-  
12 ship established under subsection (c)(1)(A).

13 (6) *PROGRAM*.—The term “program” means the  
14 industrial efficiency program established under sub-  
15 section (b).

16 (b) *ESTABLISHMENT OF PROGRAM*.—The Secretary  
17 shall establish a program under which the Secretary, in co-  
18 operation with materials manufacturers, companies en-  
19 gaged in energy-intensive commercial applications, and na-  
20 tional industry trade associations representing the manu-  
21 factures and companies, shall support, develop, and pro-  
22 mote the use of new materials manufacturing and indus-  
23 trial and commercial processes, technologies, and techniques  
24 to optimize energy efficiency and the economic competitive-  
25 ness of the United States.

1 (c) *PARTNERSHIPS.*—

2 (1) *IN GENERAL.*—As part of the program, the  
3 Secretary shall—

4 (A) establish energy efficiency and utiliza-  
5 tion partnerships between the Secretary and eli-  
6 gible entities to conduct research on, develop, and  
7 demonstrate new processes, technologies, and op-  
8 erating practices and techniques to significantly  
9 improve energy efficiency and utilization by ma-  
10 terials manufacturers and in energy-intensive  
11 commercial applications, including the conduct  
12 of activities to—

13 (i) increase the energy efficiency of in-  
14 dustrial and commercial processes and fa-  
15 cilities in energy-intensive commercial ap-  
16 plication sectors;

17 (ii) research, develop, and demonstrate  
18 advanced technologies capable of energy in-  
19 tensity reductions and increased environ-  
20 mental performance in energy-intensive  
21 commercial application sectors; and

22 (iii) promote the use of the processes,  
23 technologies, and techniques described in  
24 clauses (i) and (ii); and

1           (B) pay the Federal share of the cost of any  
2           eligible partnership activities for which a pro-  
3           posal has been submitted and approved in ac-  
4           cordance with paragraph (3)(B).

5           (2) *ELIGIBLE ACTIVITIES.*—Partnership activi-  
6           ties eligible for financial assistance under this sub-  
7           section include—

8           (A) feedstock and recycling research, devel-  
9           opment, and demonstration activities to identify  
10          and promote—

11           (i) opportunities for meeting manufac-  
12          turing feedstock requirements with more en-  
13          ergy efficient and flexible sources of feed-  
14          stock or energy supply;

15           (ii) strategies to develop and deploy  
16          technologies that improve the quality and  
17          quantity of feedstocks recovered from process  
18          and waste streams; and

19           (iii) other methods using recycling,  
20          reuse, and improved industrial materials;

21          (B) industrial and commercial energy effi-  
22          ciency and sustainability assessments to—

23           (i) assist individual industrial and  
24          commercial sectors in developing tools, tech-  
25          niques, and methodologies to assess—

1 (I) the unique processes and fa-  
2 cilities of the sectors;

3 (II) the energy utilization require-  
4 ments of the sectors; and

5 (III) the application of new, more  
6 energy efficient technologies; and

7 (ii) conduct energy savings assess-  
8 ments;

---

9 (C) the incorporation of technologies and  
10 innovations that would significantly improve the  
11 energy efficiency and utilization of energy-inten-  
12 sive commercial applications; and

13 (D) any other activities that the Secretary  
14 determines to be appropriate.

15 (3) PROPOSALS.—

16 (A) IN GENERAL.—To be eligible for finan-  
17 cial assistance under this subsection, a partner-  
18 ship shall submit to the Secretary a proposal  
19 that describes the proposed research, develop-  
20 ment, or demonstration activity to be conducted  
21 by the partnership.

22 (B) REVIEW.—After reviewing the scientific,  
23 technical, and commercial merit of a proposals  
24 submitted under subparagraph (A), the Secretary  
25 shall approve or disapprove the proposal.

1           (C) *COMPETITIVE AWARDS.*—*The provision*  
2           *of financial assistance under this subsection shall*  
3           *be on a competitive basis.*

4           (4) *COST-SHARING REQUIREMENT.*—*In carrying*  
5           *out this section, the Secretary shall require cost shar-*  
6           *ing in accordance with section 988 of the Energy Pol-*  
7           *icy Act of 2005 (42 U.S.C. 16352).*

8           (d) *AUTHORIZATION OF APPROPRIATIONS.*—

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9           (1) *IN GENERAL.*—*There are authorized to be ap-*  
10          *propriated to the Secretary to carry out this section—*

11               (A) *\$184,000,000 for fiscal year 2008;*

12               (B) *\$190,000,000 for fiscal year 2009;*

13               (C) *\$196,000,000 for fiscal year 2010;*

14               (D) *\$202,000,000 for fiscal year 2011;*

15               (E) *\$208,000,000 for fiscal year 2012; and*

16               (F) *such sums as are necessary for fiscal*  
17          *year 2013 and each fiscal year thereafter.*

18           (2) *PARTNERSHIP ACTIVITIES.*—*Of the amounts*  
19          *made available under paragraph (1), not less than 50*  
20          *percent shall be used to pay the Federal share of part-*  
21          *nership activities under subsection (c).*

1 **Subtitle C—Promoting High Effi-**  
2 **ciency Vehicles, Advanced Bat-**  
3 **teries, and Energy Storage**

4 **SEC. 241. LIGHTWEIGHT MATERIALS RESEARCH AND DE-**  
5 **VELOPMENT.**

6 (a) *IN GENERAL.*—As soon as practicable after the  
7 date of enactment of this Act, the Secretary shall establish  
8 a research and development program to determine ways in  
9 which—

10 (1) *the weight of vehicles may be reduced to im-*  
11 *prove fuel efficiency without compromising passenger*  
12 *safety; and*

13 (2) *the cost of lightweight materials (such as steel*  
14 *alloys, fiberglass, and carbon composites) required for*  
15 *the construction of lighter-weight vehicles may be re-*  
16 *duced.*

17 (b) *AUTHORIZATION OF APPROPRIATIONS.*—There is  
18 authorized to be appropriated to carry out this section  
19 \$60,000,000 for each of fiscal years 2007 through 2012.

20 **SEC. 242. LOAN GUARANTEES FOR FUEL-EFFICIENT AUTO-**  
21 **MOBILE PARTS MANUFACTURERS.**

22 (a) *IN GENERAL.*—Section 712(a) of the Energy Pol-  
23 icy Act of 2005 (42 U.S.C. 16062(a)) is amended in the  
24 second sentence by striking “grants to automobile manufac-

1 *turers” and inserting “grants and loan guarantees under*  
2 *section 1703 to automobile manufacturers and suppliers”.*

3 (b) *CONFORMING AMENDMENT.—Section 1703(b) of*  
4 *the Energy Policy Act of 2005 (42 U.S.C. 16513(b)) is*  
5 *amended by striking paragraph (8) and inserting the fol-*  
6 *lowing:*

7 “(8) *Production facilities for the manufacture of*  
8 *fuel efficient vehicles or parts of those vehicles, includ-*  
9 *ing electric drive vehicles and advanced diesel vehi-*  
10 *cles.”.*

11 **SEC. 243. ADVANCED TECHNOLOGY VEHICLES MANUFAC-**  
12 **TURING INCENTIVE PROGRAM.**

13 (a) *DEFINITIONS.—In this section:*

14 (1) *ADJUSTED AVERAGE FUEL ECONOMY.—The*  
15 *term “adjusted average fuel economy” means the aver-*  
16 *age fuel economy of a manufacturer for all light duty*  
17 *vehicles produced by the manufacturer, adjusted such*  
18 *that the fuel economy of each vehicle that qualifies for*  
19 *an award shall be considered to be equal to the aver-*  
20 *age fuel economy for vehicles of a similar footprint for*  
21 *model year 2005.*

22 (2) *ADVANCED TECHNOLOGY VEHICLE.—The*  
23 *term “advanced technology vehicle” means a light*  
24 *duty vehicle that meets—*

1           (A) the Bin 5 Tier II emission standard es-  
2           tablished in regulations issued by the Adminis-  
3           trator of the Environmental Protection Agency  
4           under section 202(i) of the Clean Air Act (42  
5           U.S.C. 7521(i)), or a lower-numbered Bin emis-  
6           sion standard;

7           (B) any new emission standard for fine  
8           particulate matter prescribed by the Adminis-  
9           trator under that Act (42 U.S.C. 7401 et seq.);  
10          and

11          (C) at least 125 percent of the average base  
12          year combined fuel economy, calculated on an  
13          energy-equivalent basis, for vehicles of a substan-  
14          tially similar footprint.

15          (3) COMBINED FUEL ECONOMY.—The term “com-  
16          bined fuel economy” means—

17               (A) the combined city/highway miles per  
18               gallon values, as reported in accordance with sec-  
19               tion 32908 of title 49, United States Code; and

20               (B) in the case of an electric drive vehicle  
21               with the ability to recharge from an off-board  
22               source, the reported mileage, as determined in a  
23               manner consistent with the Society of Auto-  
24               motive Engineers recommended practice for that  
25               configuration or a similar practice recommended

1           by the Secretary, using a petroleum equivalence  
2           factor for the off-board electricity (as defined in  
3           section 474 of title 10, Code of Federal Regula-  
4           tions).

5           (4) *ENGINEERING INTEGRATION COSTS.*—The  
6           term “engineering integration costs” includes the cost  
7           of engineering tasks relating to—

8                   (A) *incorporating qualifying components*  
9                   *into the design of advanced technology vehicles;*  
10                  *and*

11                   (B) *designing new tooling and equipment*  
12                   *and developing new manufacturing processes*  
13                   *and material suppliers for production facilities*  
14                   *that produce qualifying components or advanced*  
15                   *technology vehicles.*

16           (5) *QUALIFYING COMPONENTS.*—The term  
17           “qualifying components” means components that the  
18           Secretary determines to be—

19                   (A) *specially designed for advanced tech-*  
20                   *nology vehicles; and*

21                   (B) *installed for the purpose of meeting the*  
22                   *performance requirements of advanced technology*  
23                   *vehicles.*

24           (b) *ADVANCED VEHICLES MANUFACTURING FACIL-*  
25           *ITY.*—The Secretary shall provide facility funding awards

1 *under this section to automobile manufacturers and compo-*  
2 *nent suppliers to pay not more than 30 percent of the cost*  
3 *of—*

4           (1) *reequipping, expanding, or establishing a*  
5 *manufacturing facility in the United States to*  
6 *produce—*

7                   (A) *qualifying advanced technology vehicles;*  
8                   *or*

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9                   (B) *qualifying components; and*

10           (2) *engineering integration performed in the*  
11 *United States of qualifying vehicles and qualifying*  
12 *components.*

13           (c) *PERIOD OF AVAILABILITY.—An award under sub-*  
14 *section (b) shall apply to—*

15                   (1) *facilities and equipment placed in service be-*  
16 *fore December 30, 2017; and*

17                   (2) *engineering integration costs incurred during*  
18 *the period beginning on the date of enactment of this*  
19 *Act and ending on December 30, 2017.*

20           (d) *IMPROVEMENT.—The Secretary shall issue regula-*  
21 *tions that require that, in order for an automobile manufac-*  
22 *turer to be eligible for an award under this section during*  
23 *a particular year, the adjusted average fuel economy of the*  
24 *manufacturer for light duty vehicles produced by the manu-*  
25 *facturer during the most recent year for which data are*

1 available shall be not less than the average fuel economy  
2 for all light duty vehicles of the manufacturer for model  
3 year 2005.

4 (e) *SET ASIDE FOR SMALL AUTOMOBILE MANUFAC-*  
5 *TURERS AND COMPONENT SUPPLIERS.—*

6 (1) *DEFINITION OF COVERED FIRM.—In this sub-*  
7 *section, the term “covered firm” means a firm that—*

8 (A) *employs less than 500 individuals; and*

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9 (B) *manufactures automobiles or compo-*  
10 *nents of automobiles.*

11 (2) *SET ASIDE.—Of the amount of funds that*  
12 *are used to provide awards for each fiscal year under*  
13 *this section, the Secretary shall use not less than 30*  
14 *percent of the amount to provide awards to covered*  
15 *firms or consortia led by a covered firm.*

16 **SEC. 244. ENERGY STORAGE COMPETITIVENESS.**

17 (a) *SHORT TITLE.—This section may be cited as the*  
18 *“United States Energy Storage Competitiveness Act of*  
19 *2007”.*

20 (b) *ENERGY STORAGE SYSTEMS FOR MOTOR TRANS-*  
21 *PORTATION AND ELECTRICITY TRANSMISSION AND DIS-*  
22 *TRIBUTION.—*

23 (1) *DEFINITIONS.—In this subsection:*

1           (A) *COUNCIL.*—The term “Council” means  
2           the Energy Storage Advisory Council established  
3           under paragraph (3).

4           (B) *COMPRESSED AIR ENERGY STORAGE.*—  
5           The term “compressed air energy storage”  
6           means, in the case of an electricity grid applica-  
7           tion, the storage of energy through the compres-  
8           sion of air.

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9           (C) *DEPARTMENT.*—The term “Depart-  
10          ment” means the Department of Energy.

11          (D) *FLYWHEEL.*—The term “flywheel”  
12          means, in the case of an electricity grid applica-  
13          tion, a device used to store rotational kinetic en-  
14          ergy.

15          (E)        *ULTRACAPACITOR.*—The        term  
16          “ultracapacitor” means an energy storage device  
17          that has a power density comparable to conven-  
18          tional capacitors but capable of exceeding the en-  
19          ergy density of conventional capacitors by sev-  
20          eral orders of magnitude.

21          (2) *PROGRAM.*—The Secretary shall carry out a  
22          research, development, and demonstration program to  
23          support the ability of the United States to remain  
24          globally competitive in energy storage systems for

1 *motor transportation and electricity transmission*  
2 *and distribution.*

3 (3) *ENERGY STORAGE ADVISORY COUNCIL.—*

4 (A) *ESTABLISHMENT.—Not later than 90*  
5 *days after the date of enactment of this Act, the*  
6 *Secretary shall establish an Energy Storage Ad-*  
7 *visory Council.*

8 (B) *COMPOSITION.—*

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9 (i) *IN GENERAL.—Subject to clause*  
10 *(ii), the Council shall consist of not less*  
11 *than 15 individuals appointed by the Sec-*  
12 *retary, based on recommendations of the*  
13 *National Academy of Sciences.*

14 (ii) *ENERGY STORAGE INDUSTRY.—The*  
15 *Council shall consist primarily of represent-*  
16 *atives of the energy storage industry of the*  
17 *United States.*

18 (iii) *CHAIRPERSON.—The Secretary*  
19 *shall select a Chairperson for the Council*  
20 *from among the members appointed under*  
21 *clause (i).*

22 (C) *MEETINGS.—*

23 (i) *IN GENERAL.—The Council shall*  
24 *meet not less than once a year.*

1                   (ii) *FEDERAL ADVISORY COMMITTEE*  
2                   *ACT.—The Federal Advisory Committee Act*  
3                   *(5 U.S.C. App. 2) shall apply to a meeting*  
4                   *of the Council.*

5                   (D) *PLANS.—No later than 1 year after the*  
6                   *date of enactment of this Act, in conjunction*  
7                   *with the Secretary, the Council shall develop 5-*  
8                   *year plans for integrating basic and applied re-*

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9                   *search so that the United States retains a glob-*  
10                   *ally competitive domestic energy storage indus-*  
11                   *try for motor transportation and electricity*  
12                   *transmission and distribution.*

13                   (E) *REVIEW.—The Council shall—*

14                   (i) *assess the performance of the De-*  
15                   *partment in meeting the goals of the plans*  
16                   *developed under subparagraph (D); and*

17                   (ii) *make specific recommendations to*  
18                   *the Secretary on programs or activities that*  
19                   *should be established or terminated to meet*  
20                   *those goals.*

21                   (4) *BASIC RESEARCH PROGRAM.—*

22                   (A) *BASIC RESEARCH.—The Secretary shall*  
23                   *conduct a basic research program on energy stor-*  
24                   *age systems to support motor transportation and*

1 *electricity transmission and distribution,*  
2 *including—*

3 *(i) materials design;*

4 *(ii) materials synthesis and character-*  
5 *ization;*

6 *(iii) electrode-active materials, includ-*  
7 *ing electrolytes and bioelectrolytes;*

8 *(iv) surface and interface dynamics;*

9 *(v) modeling and simulation; and*

10 *(vi) thermal behavior and life degrada-*  
11 *tion mechanisms; and*

12 *(vii) thermal behavior and life deg-*  
13 *radation mechanisms.*

14 *(B) NANOSCIENCE CENTERS.—The Sec-*  
15 *retary, in cooperation with the Council, shall co-*  
16 *ordinate the activities of the nanoscience centers*  
17 *of the Department to help the nanoscience centers*  
18 *of the Department maintain a globally competi-*  
19 *tive posture in energy storage systems for motor*  
20 *transportation and electricity transmission and*  
21 *distribution.*

22 *(5) APPLIED RESEARCH PROGRAM.—The Sec-*  
23 *retary shall conduct an applied research program on*  
24 *energy storage systems to support motor transpor-*

1 *tation and electricity transmission and distribution*  
2 *technologies, including—*

3 *(A) ultracapacitors;*

4 *(B) flywheels;*

5 *(C) batteries and battery systems (including*  
6 *flow batteries);*

7 *(D) compressed air energy systems;*

8 *(E) power conditioning electronics;*

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9 *(F) manufacturing technologies for energy*  
10 *storage systems; and*

11 *(G) thermal management systems.*

12 *(6) ENERGY STORAGE RESEARCH CENTERS.—*

13 *(A) IN GENERAL.—The Secretary shall es-*  
14 *tablish, through competitive bids, not more than*  
15 *4 energy storage research centers to translate*  
16 *basic research into applied technologies to ad-*  
17 *vance the capability of the United States to*  
18 *maintain a globally competitive posture in en-*  
19 *ergy storage systems for motor transportation*  
20 *and electricity transmission and distribution.*

21 *(B) PROGRAM MANAGEMENT.—The centers*  
22 *shall be jointly managed by the Under Secretary*  
23 *for Science of the Department.*

24 *(C) PARTICIPATION AGREEMENTS.—As a*  
25 *condition of participating in a center, a partici-*

1        *part shall enter into a participation agreement*  
2        *with the center that requires that activities con-*  
3        *ducted by the participant for the center promote*  
4        *the goal of enabling the United States to compete*  
5        *successfully in global energy storage markets.*

6                *(D) PLANS.—A center shall conduct activi-*  
7        *ties that promote the achievement of the goals of*  
8        *the plans of the Council under paragraph (3)(D).*

9                *(E) COST SHARING.—In carrying out this*  
10        *paragraph, the Secretary shall require cost-shar-*  
11        *ing in accordance with section 988 of the Energy*  
12        *Policy Act of 2005 (42 U.S.C. 16352).*

13                *(F) NATIONAL LABORATORIES.—A national*  
14        *laboratory (as defined in section 2 of the Energy*  
15        *Policy Act of 2005 (42 U.S.C. 15801)) may par-*  
16        *ticipate in a center established under this para-*  
17        *graph, including a cooperative research and de-*  
18        *velopment agreement (as defined in section 12(d)*  
19        *of the Stevenson-Wydler Technology Innovation*  
20        *Act of 1980 (15 U.S.C. 3710a(d))).*

21                *(7) DISCLOSURE.—Section 623 of the Energy*  
22        *Policy Act of 1992 (42 U.S.C. 13293) may apply to*  
23        *any project carried out through a grant, contract, or*  
24        *cooperative agreement under this section.*

1           (8) *INTELLECTUAL PROPERTY.*—*In accordance*  
2 *with section 202(a)(ii) of title 35, United States Code,*  
3 *section 152 of the Atomic Energy Act of 1954 (42*  
4 *U.S.C. 2182), and section 9 of the Federal Nonnuclear*  
5 *Research and Development Act of 1974 (42 U.S.C.*  
6 *5908), the Secretary may require, for any new inven-*  
7 *tion developed under paragraph (6)—*

8           (A) *that any industrial participant that is*  

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9 *active in a Energy Storage Research Center es-*  
10 *tablished under paragraph (6) related to the ad-*  
11 *vancement of energy storage technologies carried*  
12 *out, in whole or in part, with Federal funding,*  
13 *be granted the first option to negotiate with the*  
14 *invention owner, at least in the field of energy*  
15 *storage technologies, nonexclusive licenses and*  
16 *royalties on terms that are reasonable, as deter-*  
17 *mined by the Secretary;*

18           (B) *that, during a 2-year period beginning*  
19 *on the date on which an invention is made, the*  
20 *patent holder shall not negotiate any license or*  
21 *royalty agreement with any entity that is not an*  
22 *industrial participant under paragraph (6);*

23           (C) *that, during the 2-year period described*  
24 *in subparagraph (B), the patent holder shall ne-*  
25 *gotiate nonexclusive licenses and royalties in*

1           *good faith with any interested industrial partici-*  
2           *part under paragraph (6); and*

3           (D) *such other terms as the Secretary deter-*  
4           *mines to be necessary to promote the accelerated*  
5           *commercialization of inventions made under*  
6           *paragraph (6) to advance the capability of the*  
7           *United States to successfully compete in global*  
8           *energy storage markets.*

9           (9) *REVIEW BY NATIONAL ACADEMY OF*  
10          *SCIENCES.—Not later than 3 years after the date of*  
11          *enactment of this Act, the Secretary shall offer to*  
12          *enter into an arrangement with the National Acad-*  
13          *emy of Sciences to assess the performance of the De-*  
14          *partment in carrying out this section.*

15          (10) *AUTHORIZATION OF APPROPRIATIONS.—*  
16          *There are authorized to be appropriated to carry*  
17          *out—*

18                 (A) *the basic research program under para-*  
19                 *graph (4) \$50,000,000 for each of fiscal years*  
20                 *2008 through 2017;*

21                 (B) *the applied research program under*  
22                 *paragraph (5) \$80,000,000 for each of fiscal*  
23                 *years 2008 through 2017; and;*

1           (C) *the energy storage research center pro-*  
 2           *gram under paragraph (6) \$100,000,000 for each*  
 3           *of fiscal years 2008 through 2017.*

4 **SEC. 245. ADVANCED TRANSPORTATION TECHNOLOGY PRO-**  
 5           **GRAM.**

6           (a) *ELECTRIC DRIVE VEHICLE DEMONSTRATION PRO-*  
 7 *GRAM.—*

8           (1) *DEFINITIONS.—In this subsection—*

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9           (A) *BATTERY.—The term “battery” means*  
 10           *an electrochemical energy storage device powered*  
 11           *directly by electrical current.*

12           (B) *PLUG-IN ELECTRIC DRIVE VEHICLE.—*  
 13           *The term “plug-in electric drive vehicle” means*  
 14           *a precommercial vehicle that—*

15                   (i) *draws motive power from a battery*  
 16                   *with a capacity of at least 4 kilowatt-hours;*

17                   (ii) *can be recharged from an external*  
 18                   *source of electricity for motive power; and*

19                   (iii) *is a light-, medium-, or heavy-*  
 20                   *duty onroad or nonroad vehicle.*

21           (2) *PROGRAM.—The Secretary shall establish a*  
 22           *competitive program to provide grants for demonstra-*  
 23           *tions of plug-in electric drive vehicles.*

24           (3) *ELIGIBILITY.—*

1           (A) *IN GENERAL.*—A State government,  
2           local government, metropolitan transportation  
3           authority, air pollution control district, private  
4           entity, and nonprofit entity shall be eligible to  
5           receive a grant under this subsection.

6           (B) *CERTAIN APPLICANTS.*—A battery man-  
7           ufacturer that proposes to supply to an appli-  
8           cant for a grant under this section a battery  
9           with a capacity of greater than 1 kilowatt-hour  
10          for use in a plug-in electric drive vehicle shall—

11                 (i) ensure that the applicant includes  
12                 in the application a description of the price  
13                 of the battery per kilowatt-hour;

14                 (ii) on approval by the Secretary of the  
15                 application, publish, or permit the Sec-  
16                 retary to publish, the price described in  
17                 clause (i); and

18                 (iii) for any order received by the bat-  
19                 tery manufacturer for at least 1,000 bat-  
20                 teries, offer the batteries at that price.

21           (4) *PRIORITY.*—In making grants under this  
22           subsection, the Secretary shall give priority to pro-  
23           posals that—

1           (A) are likely to contribute to the commer-  
2           cialization and production of plug-in electric  
3           drive vehicles in the United States; and

4           (B) reduce petroleum usage.

5           (5) SCOPE OF DEMONSTRATIONS.—The Secretary  
6           shall ensure, to the extent practicable, that the pro-  
7           gram established under this subsection includes a va-  
8           riety of applications, manufacturers, and end-uses.

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9           (6) REPORTING.—The Secretary shall require a  
10          grant recipient under this subsection to submit to the  
11          Secretary, on an annual basis, data relating to vehi-  
12          cle, performance, life cycle costs, and emissions of ve-  
13          hicles demonstrated under the grant, including emis-  
14          sions of greenhouse gases.

15          (7) COST SHARING.—Section 988 of the Energy  
16          Policy Act of 2005 (42 U.S.C. 16352) shall apply to  
17          a grant made under this subsection.

18          (8) AUTHORIZATIONS OF APPROPRIATIONS.—  
19          There are authorized to be appropriated to carry out  
20          this subsection \$60,000,000 for each of fiscal years  
21          2008 through 2012, of which not less than  
22          \$20,000,000 shall be available each fiscal year only to  
23          make grants local and municipal governments.

24          (b) NEAR-TERM ELECTRIC DRIVE TRANSPORTATION  
25          DEPLOYMENT PROGRAM.—

1           (1) *DEFINITION OF QUALIFIED ELECTRIC TRANS-*  
2 *PORTATION PROJECT.—*

3           (A) *IN GENERAL.—In this subsection, the*  
4 *term “qualified electric transportation project”*  
5 *means a project that would simultaneously re-*  
6 *duce emissions of criteria pollutants, greenhouse*  
7 *gas emissions, and petroleum usage by at least*  
8 *40 percent as compared to commercially avail-*  
9 *able, petroleum-based technologies.*

10          (B) *INCLUSIONS.—In this subsection, the*  
11 *term “qualified electric transportation project”*  
12 *includes a project relating to—*

13           (i) *shipside or shoreside electrification*  
14 *for vessels;*

15           (ii) *truck-stop electrification;*

16           (iii) *electric truck refrigeration units;*

17           (iv) *battery powered auxiliary power*  
18 *units for trucks;*

19           (v) *electric airport ground support*  
20 *equipment;*

21           (vi) *electric material and cargo han-*  
22 *dling equipment;*

23           (vii) *electric or dual-mode electric*  
24 *freight rail;*

1                   (viii) any distribution upgrades needed  
2                   to supply electricity to the project; and

3                   (ix) any ancillary infrastructure, in-  
4                   cluding panel upgrades, battery chargers,  
5                   in-situ transformers, and trenching.

6                   (2) *ESTABLISHMENT.*—Not later than 1 year  
7                   after the date of enactment of this Act, the Secretary,  
8                   in consultation with the Secretary of Transportation  
9                   and the Administrator of the Environmental Protec-  
10                  tion Agency, shall establish a program to provide  
11                  grants and loans to eligible entities for the conduct of  
12                  qualified electric transportation projects.

13                  (3) *GRANTS.*—

14                  (A) *IN GENERAL.*—Of the amounts made  
15                  available for grants under paragraph (2)—

16                         (i)  $\frac{2}{3}$  shall be made available by the  
17                         Secretary on a competitive basis for quali-  
18                         fied electric transportation projects based on  
19                         the overall cost-effectiveness of a qualified  
20                         electric transportation project in reducing  
21                         emissions of criteria pollutants, emissions of  
22                         greenhouse gases, and petroleum usage; and

23                         (ii)  $\frac{1}{3}$  shall be made available by the  
24                         Secretary for qualified electric transpor-  
25                         tation projects in the order that the grant

1 applications are received, if the qualified  
2 electric transportation projects meet the  
3 minimum standard for the reduction of  
4 emissions of criteria pollutants, emissions of  
5 greenhouse gases, and petroleum usage de-  
6 scribed in paragraph (1)(A).

7 (B) PRIORITY.—In providing grants under  
8 ~~this paragraph, the Secretary shall give priority~~  
9 to large-scale projects and large-scale aggregators  
10 of projects.

11 (C) COST SHARING.—Section 988 of the En-  
12 ergy Policy Act of 2005 (42 U.S.C. 16352) shall  
13 apply to a grant made under this paragraph.

14 (4) REVOLVING LOAN PROGRAM.—

15 (A) IN GENERAL.—The Secretary shall es-  
16 tablish a revolving loan program to provide  
17 loans to eligible entities for the conduct of quali-  
18 fied electric transportation projects under para-  
19 graph (2).

20 (B) CRITERIA.—The Secretary shall estab-  
21 lish criteria for the provision of loans under this  
22 paragraph.

23 (C) FUNDING.—Of amounts made available  
24 to carry out this subsection, the Secretary shall  
25 use any amounts not used to provide grants

1           *under paragraph (3) to carry out the revolving*  
2           *loan program under this paragraph.*

3           (c) *MARKET ASSESSMENT PROGRAM.—The Adminis-*  
4           *trator of the Environmental Protection Agency, in consulta-*  
5           *tion with the Secretary and private industry, shall carry*  
6           *out a program—*

7           (1) *to inventory and analyze existing electric*  
8           *drive transportation technologies and hybrid tech-*  
9           *nologies and markets; and*

10          (2) *to identify and implement methods of remov-*  
11          *ing barriers for existing and emerging applications of*  
12          *electric drive transportation technologies and hybrid*  
13          *transportation technologies.*

14          (d) *ELECTRICITY USAGE PROGRAM.—*

15          (1) *IN GENERAL.—The Secretary, in consultation*  
16          *with the Administrator of the Environmental Protec-*  
17          *tion Agency and private industry, shall carry out a*  
18          *program—*

19                (A) *to work with utilities to develop low-*  
20                *cost, simple methods of—*

21                    (i) *using off-peak electricity; or*

22                    (ii) *managing on-peak electricity use;*

23                (B) *to develop systems and processes—*

1           (i) to enable plug-in electric vehicles to  
2 enhance the availability of emergency back-  
3 up power for consumers;

4           (ii) to study and demonstrate the po-  
5 tential value to the electric grid to use the  
6 energy stored in the on-board storage sys-  
7 tems to improve the efficiency and reli-  
8 ability of the grid generation system; and

9           (iii) to work with utilities and other  
10 interested stakeholders to study and dem-  
11 onstrate the implications of the introduction  
12 of plug-in electric vehicles and other types  
13 of electric transportation on the production  
14 of electricity from renewable resources.

15           (2) OFF-PEAK ELECTRICITY USAGE GRANTS.—In  
16 carrying out the program under paragraph (1), the  
17 Secretary shall provide grants to assist eligible public  
18 and private electric utilities for the conduct of pro-  
19 grams or activities to encourage owners of electric  
20 drive transportation technologies—

21           (A) to use off-peak electricity; or

22           (B) to have the load managed by the utility.

23           (e) AUTHORIZATION OF APPROPRIATIONS.—There is  
24 authorized to be appropriated to carry out subsections (b),

1 (c), and (d) \$125,000,000 for each of fiscal years 2008  
2 through 2013.

3 (f) *ELECTRIC DRIVE TRANSPORTATION TECH-*  
4 *NOLOGIES.*—

5 (1) *DEFINITIONS.*—*In this subsection:*

6 (A) *BATTERY.*—*The term “battery” means*  
7 *an electrochemical energy storage device powered*  
8 *directly by electrical current.*

9 (B) *ELECTRIC DRIVE TRANSPORTATION*  
10 *TECHNOLOGY.*—*The term “electric drive trans-*  
11 *portation technology” means—*

12 (i) *technology used in vehicles that use*  
13 *an electric motor for all or part of the mo-*  
14 *tive power of the vehicles, including battery*  
15 *electric, hybrid electric, plug-in hybrid elec-*  
16 *tric, fuel cell, and plug-in fuel cell vehicles,*  
17 *or rail transportation; or*

18 (ii) *equipment relating to transpor-*  
19 *tation or mobile sources of air pollution*  
20 *that use an electric motor to replace an in-*  
21 *ternal combustion engine for all or part of*  
22 *the work of the equipment, including—*

23 (I) *corded electric equipment*  
24 *linked to transportation or mobile*  
25 *sources of air pollution; and*

1                   (ii) *electrification technologies at*  
2                   *airports, ports, truck stops, and mate-*  
3                   *rial-handling facilities.*

4                   (C) *ENERGY STORAGE DEVICE.—*

5                   (i) *IN GENERAL.—The term “energy*  
6                   *storage device” means the onboard device*  
7                   *used in an on-road or nonroad vehicle to*  
8                   *store energy, or a battery, ultracapacitor,*  
9                   *compressed air energy storage system, or*  
10                   *flywheel used to store energy in a stationary*  
11                   *application.*

12                   (ii) *INCLUSIONS.—The term “energy*  
13                   *storage device” includes—*

14                   (I) *in the case of an electric or*  
15                   *hybrid electric or fuel cell vehicle, a*  
16                   *battery, ultracapacitor, or similar de-*  
17                   *vice; and*

18                   (II) *in the case of a hybrid hy-*  
19                   *draulic vehicle, an accumulator or*  
20                   *similar device.*

21                   (D) *ENGINE DOMINANT HYBRID VEHICLE.—*

22                   *The term “engine dominant hybrid vehicle”*  
23                   *means an on-road or nonroad vehicle that—*

24                   (i) *is propelled by an internal combus-*  
25                   *tion engine or heat engine using—*

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(I) any combustible fuel; and

(II) an on-board, rechargeable energy storage device; and

(ii) has no means of using an off-board source of energy.

(E) NONROAD VEHICLE.—The term “nonroad vehicle” means a vehicle—

(i) powered by—

(I) a nonroad engine, as that term is defined in section 216 of the Clean Air Act (42 U.S.C. 7550); or

(II) fully or partially by an electric motor powered by a fuel cell, a battery, or an off-board source of electricity; and

(ii) that is not a motor vehicle or a vehicle used solely for competition.

(F) PLUG-IN ELECTRIC DRIVE VEHICLE.—  
In this section, the term “plug-in electric drive vehicle” means a precommercial vehicle that—

(i) draws motive power from a battery with a capacity of at least 4 kilowatt-hours;

(ii) can be recharged from an external source of electricity for motive power; and

1                   (iii) is a light-, medium-, or heavy-  
2                   duty onroad or nonroad vehicle.

3                   (2) EVALUATION OF PLUG-IN ELECTRIC DRIVE  
4                   TRANSPORTATION TECHNOLOGY BENEFITS.—

5                   (A) IN GENERAL.—The Secretary, in co-  
6                   operation with the Administrator of the Envi-  
7                   ronmental Protection Agency, the heads of other  
8                   appropriate Federal agencies, and appropriate  
9                   interested stakeholders, shall evaluate and, as ap-  
10                  propriate, modify existing test protocols for fuel  
11                  economy and emissions to ensure that any proto-  
12                  cols for electric drive transportation technologies,  
13                  including plug-in electric drive vehicles, accu-  
14                  rately measure the fuel economy and emissions  
15                  performance of the electric drive transportation  
16                  technologies.

17                  (B) REQUIREMENTS.—Test protocols (in-  
18                  cluding any modifications to test protocols) for  
19                  electric drive transportation technologies under  
20                  subparagraph (A) shall—

21                         (i) be designed to assess the full poten-  
22                         tial of benefits in terms of reduction of  
23                         emissions of criteria pollutants, reduction of  
24                         energy use, and petroleum reduction; and

25                         (ii) consider—

- 1                   (I) the vehicle and fuel as a sys-  
2                   tem, not just an engine;  
3                   (II) nightly off-board charging, as  
4                   applicable; and  
5                   (III) different engine-turn on  
6                   speed control strategies.

7                   (3) *PLUG-IN ELECTRIC DRIVE VEHICLE RE-*  
8                   *SEARCH AND DEVELOPMENT.*—*The Secretary shall*  
9                   *conduct an applied research program for plug-in elec-*  
10                   *tric drive vehicle technology and engine dominant hy-*  
11                   *brid vehicle technology, including—*

12                   (A) *high-capacity, high-efficiency energy*  
13                   *storage devices that, as compared to existing*  
14                   *technologies that are in commercial service, have*  
15                   *improved life, energy storage capacity, and*  
16                   *power delivery capacity;*

17                   (B) *high-efficiency on-board and off-board*  
18                   *charging components;*

19                   (C) *high-power and energy-efficient*  
20                   *drivetrain systems for passenger and commercial*  
21                   *vehicles and for nonroad vehicles;*

22                   (D) *development and integration of control*  
23                   *systems and power trains for plug-in electric ve-*  
24                   *hicles, plug-in hybrid fuel cell vehicles, and en-*  
25                   *gine dominant hybrid vehicles, including—*

- 1                   (i) *development of efficient cooling sys-*  
2                   *tems;*
- 3                   (ii) *analysis and development of con-*  
4                   *trol systems that minimize the emissions*  
5                   *profile in cases in which clean diesel en-*  
6                   *gines are part of a plug-in hybrid drive sys-*  
7                   *tem; and*
- 8                   (iii) *development of different control*  
9                   *systems that optimize for different goals,*  
10                  *including—*
- 11                   (I) *prolonging energy storage de-*  
12                   *vice life;*
- 13                   (II) *reduction of petroleum con-*  
14                   *sumption; and*
- 15                   (III) *reduction of greenhouse gas*  
16                   *emissions;*
- 17                   (E) *application of nanomaterial technology*  
18                   *to energy storage devices and fuel cell systems;*  
19                   *and*
- 20                   (F) *use of smart vehicle and grid inter-*  
21                   *connection devices and software that enable com-*  
22                   *munications between the grid of the future and*  
23                   *electric drive transportation technology vehicles.*
- 24                  (4) *EDUCATION PROGRAM.—*

1           (A) *IN GENERAL.*—The Secretary shall de-  
2           velop a nationwide electric drive transportation  
3           technology education program under which the  
4           Secretary shall provide—

5                   (i) *teaching materials to secondary*  
6                   *schools and high schools; and*

7                   (ii) *assistance for programs relating to*  
8                   *electric drive system and component engi-*  
9                   *neering to institutions of higher education.*

10           (B) *ELECTRIC VEHICLE COMPETITION.*—The  
11           program established under subparagraph (A)  
12           shall include a plug-in hybrid electric vehicle  
13           competition for institutions of higher education,  
14           which shall be known as the “Dr. Andrew Frank  
15           Plug-In Electric Vehicle Competition”.

16           (C) *ENGINEERS.*—In carrying out the pro-  
17           gram established under subparagraph (A), the  
18           Secretary shall provide financial assistance to  
19           institutions of higher education to create new, or  
20           support existing, degree programs to ensure the  
21           availability of trained electrical and mechanical  
22           engineers with the skills necessary for the ad-  
23           vancement of—

24                   (i) *plug-in electric drive vehicles; and*

1                   (ii) other forms of electric drive trans-  
2                   portation technology vehicles.

3                   (5) AUTHORIZATION OF APPROPRIATIONS.—  
4                   There are authorized to be appropriated for each of  
5                   fiscal years 2008 through 2013—

6                   (A) to carry out paragraph (3)  
7                   \$200,000,000; and

8                   (B) to carry out paragraph (4) \$5,000,000.

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9                   (g) COLLABORATION AND MERIT REVIEW.—

10                   (1) COLLABORATION WITH NATIONAL LABORA-  
11                   TORIES.—To the maximum extent practicable, Na-  
12                   tional Laboratories shall collaborate with the public,  
13                   private, and academic sectors and with other Na-  
14                   tional Laboratories in the design, conduct, and dis-  
15                   semination of the results of programs and activities  
16                   authorized under this section.

17                   (2) COLLABORATION WITH MOBILE ENERGY  
18                   STORAGE PROGRAM.—To the maximum extent prac-  
19                   ticable, the Secretary shall seek to coordinate the sta-  
20                   tionary and mobile energy storage programs of the  
21                   Department of the Energy with the programs and ac-  
22                   tivities authorized under this section

23                   (3) MERIT REVIEW.—Notwithstanding section  
24                   989 of the Energy Policy Act of 2005 (42 U.S.C.  
25                   16353), of the amounts made available to carry out

1     *this section, not more than 30 percent shall be pro-*  
 2     *vided to National Laboratories.*

3     **SEC. 246. INCLUSION OF ELECTRIC DRIVE IN ENERGY POL-**  
 4                     **ICY ACT OF 1992.**

5     *Section 508 of the Energy Policy Act of 1992 (42*  
 6     *U.S.C. 13258) is amended—*

7             (1) *by redesignating subsections (a) through (d)*  
 8     *as subsections (b) through (e), respectively;*

9             (2) *by inserting before subsection (b) the fol-*  
 10     *lowing:*

11     “(a) *DEFINITIONS.—In this section:*

12             “(1) *FUEL CELL ELECTRIC VEHICLE.—The term*  
 13     *‘fuel cell electric vehicle’ means an on-road or*  
 14     *nonroad vehicle that uses a fuel cell (as defined in sec-*  
 15     *tion 803 of the Spark M. Matsunaga Hydrogen Act*  
 16     *of 2005 (42 U.S.C. 16152)).*

17             “(2) *HYBRID ELECTRIC VEHICLE.—The term*  
 18     *‘hybrid electric vehicle’ means a new qualified hybrid*  
 19     *motor vehicle (as defined in section 30B(d)(3) of the*  
 20     *Internal Revenue Code of 1986).*

21             “(3) *MEDIUM- OR HEAVY-DUTY ELECTRIC VEHI-*  
 22     *CLE.—The term ‘medium- or heavy-duty electric vehi-*  
 23     *cle’ means an electric, hybrid electric, or plug-in hy-*  
 24     *brid electric vehicle with a gross vehicle weight of*  
 25     *more than 8,501 pounds.*

1           “(4) *NEIGHBORHOOD ELECTRIC VEHICLE.*—*The*  
2 *term ‘neighborhood electric vehicle’ means a 4-wheeled*  
3 *on-road or nonroad vehicle that—*

4           “(A) *has a top attainable speed in 1 mile*  
5 *of more than 20 mph and not more than 25 mph*  
6 *on a paved level surface; and*

7           “(B) *is propelled by an electric motor and*  
8 *on-board, rechargeable energy storage system that*  
9 *is rechargeable using an off-board source of elec-*  
10 *tricity.*

11           “(5) *PLUG-IN HYBRID ELECTRIC VEHICLE.*—*The*  
12 *term ‘plug-in hybrid electric vehicle’ means a light-*  
13 *duty, medium-duty, or heavy-duty on-road or*  
14 *nonroad vehicle that is propelled by any combination*  
15 *of—*

16           “(A) *an electric motor and on-board, re-*  
17 *chargeable energy storage system capable of oper-*  
18 *ating the vehicle in intermittent or continuous*  
19 *all-electric mode and which is rechargeable using*  
20 *an off-board source of electricity; and*

21           “(B) *an internal combustion engine or heat*  
22 *engine using any combustible fuel.”;*

23           “(3) *in subsection (b) (as redesignated by para-*  
24 *graph (1))—*

1           (A) by striking “The Secretary” and insert-  
2           ing the following:

3           “(1) ALLOCATION.—The Secretary”; and

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

5           “(2) ELECTRIC VEHICLES.—Not later than Jan-  
6           uary 31, 2009, the Secretary shall—

7           “(A) allocate credit in an amount to be de-  
8           termined by the Secretary for—

9                   “(i) acquisition of—

10                           “(I) a hybrid electric vehicle;

11                           “(II) a plug-in hybrid electric ve-  
12                           hicle;

13                           “(III) a fuel cell electric vehicle;

14                           “(IV) a neighborhood electric vehi-  
15                           cle; or

16                           “(V) a medium- or heavy-duty  
17                           electric vehicle; and

18                           “(ii) investment in qualified alter-  
19                           native fuel infrastructure or nonroad equip-  
20                           ment, as determined by the Secretary; and

21           “(B) allocate more than 1, but not to exceed  
22           5, credits for investment in an emerging tech-  
23           nology relating to any vehicle described in sub-  
24           paragraph (A) to encourage—

25                   “(i) a reduction in petroleum demand;

1                   “(ii) technological advancement; and  
2                   “(iii) a reduction in vehicle emis-  
3                   sions.”;

4                   (4) in subsection (c) (as redesignated by para-  
5                   graph (1)), by striking “subsection (a)” and inserting  
6                   “subsection (b)”; and

7                   (5) by adding at the end the following:

8                   “(e) AUTHORIZATION OF APPROPRIATIONS.—There are  
9 authorized to be appropriated such sums as are necessary  
10 to carry out this section for each of fiscal years 2008  
11 through 2013.”.

12 **SEC. 247. COMMERCIAL INSULATION DEMONSTRATION**  
13 **PROGRAM.**

14 (a) **DEFINITIONS.**—In this section:

15                   (1) **ADVANCED INSULATION.**—The term “ad-  
16 vanced insulation” means insulation that has an R  
17 value of not less than R35 per inch.

18                   (2) **COVERED REFRIGERATION UNIT.**—The term  
19 “covered refrigeration unit” means any—

20                   (A) commercial refrigerated truck;

21                   (B) commercial refrigerated trailer; and

22                   (C) commercial refrigerator, freezer, or re-  
23 frigerator-freezer described in section 342(c) of  
24 the Energy Policy and Conservation Act (42  
25 U.S.C. 6313(c)).

1       (b) *REPORT.*—Not later than 90 days after the date  
2 of enactment of this Act, the Secretary shall submit to Con-  
3 gress a report that includes an evaluation of—

4           (1) *the state of technological advancement of ad-  
5 vanced insulation; and*

6           (2) *the projected amount of cost savings that  
7 would be generated by implementing advanced insula-  
8 tion into covered refrigeration units.*

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9       (c) *DEMONSTRATION PROGRAM.*—

10           (1) *ESTABLISHMENT.*—If the Secretary deter-  
11 mines in the report described in subsection (b) that  
12 the implementation of advanced insulation into cov-  
13 ered refrigeration units would generate an economi-  
14 cally justifiable amount of cost savings, the Secretary,  
15 in cooperation with manufacturers of covered refriger-  
16 eration units, shall establish a demonstration pro-  
17 gram under which the Secretary shall demonstrate the  
18 cost-effectiveness of advanced insulation.

19           (2) *DISCLOSURE.*—Section 623 of the Energy  
20 Policy Act of 1992 (42 U.S.C. 13293) may apply to  
21 any project carried out under this subsection.

22           (3) *COST-SHARING.*—Section 988 of the Energy  
23 Policy Act of 2005 (42 U.S.C. 16352) shall apply to  
24 any project carried out under this subsection.

1 (d) *AUTHORIZATION OF APPROPRIATIONS.*—Of the  
2 funds authorized under section 911(b) of Public Law 109–  
3 58, the Energy Policy Act of 2005, such sums shall be allo-  
4 cated to carry out this program.

5 ***Subtitle D—Setting Energy***  
6 ***Efficiency Goals***

7 ***SEC. 251. OIL SAVINGS PLAN AND REQUIREMENTS.***

8 (a) *OIL SAVINGS TARGET AND ACTION PLAN.*—Not  
9 later than 270 days after the date of enactment of this Act,  
10 the Director of the Office of Management and Budget (re-  
11 ferred to in this section as the “Director”) shall publish in  
12 the Federal Register an action plan consisting of—

13 (1) a list of requirements proposed or to be pro-  
14 posed pursuant to subsection (b) that are authorized  
15 to be issued under law in effect on the date of enact-  
16 ment of this Act, and this Act, that will be sufficient,  
17 when taken together, to save from the baseline deter-  
18 mined under subsection (e)—

19 (A) 2,500,000 barrels of oil per day on aver-  
20 age during calendar year 2016;

21 (B) 7,000,000 barrels of oil per day on av-  
22 erage during calendar year 2026; and

23 (C) 10,000,000 barrels per day on average  
24 during calendar year 2031; and

1           (2) a Federal Government-wide analysis  
2 demonstrating—

3           (A) the expected oil savings from the base-  
4 line to be accomplished by each requirement; and

5           (B) that all such requirements, taken to-  
6 gether, will achieve the oil savings specified in  
7 this subsection.

8 (b) STANDARDS AND REQUIREMENTS.—

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9           (1) IN GENERAL.—On or before the date of publi-  
10 cation of the action plan under subsection (a), the  
11 Secretary of Energy, the Secretary of Transportation,  
12 the Secretary of Defense, the Secretary of Agriculture,  
13 the Secretary of the Treasury, the Administrator of  
14 the Environmental Protection Agency, and the head  
15 of any other agency the President determines appro-  
16 priate shall each propose, or issue a notice of intent  
17 to propose, regulations establishing each standard or  
18 other requirement listed in the action plan that is  
19 under the jurisdiction of the respective agency using  
20 authorities described in paragraph (2).

21           (2) AUTHORITIES.—The head of each agency de-  
22 scribed in paragraph (1) shall use to carry out this  
23 subsection—

1           (A) any authority in existence on the date  
2 of enactment of this Act (including regulations);  
3 and

4           (B) any new authority provided under this  
5 Act (including an amendment made by this Act).

6           (3) FINAL REGULATIONS.—Not later than 18  
7 months after the date of enactment of this Act, the  
8 head of each agency described in paragraph (1) shall  
9 promulgate final versions of the regulations required  
10 under this subsection.

11           (4) CONTENT OF REGULATIONS.—Each proposed  
12 and final regulation promulgated under this sub-  
13 section shall—

14           (A) be sufficient to achieve at least the oil  
15 savings resulting from the regulation under the  
16 action plan published under subsection (a); and

17           (B) be accompanied by an analysis by the  
18 applicable agency demonstrating that the regula-  
19 tion will achieve the oil savings from the baseline  
20 determined under subsection (e).

21           (c) INITIAL EVALUATION.—

22           (1) IN GENERAL.—Not later than 2 years after  
23 the date of enactment of this Act, the Director shall—

24           (A) publish in the Federal Register a Fed-  
25 eral Government-wide analysis of—

1           (i) the oil savings achieved from the  
2           baseline established under subsection (e);  
3           and

4           (ii) the expected oil savings under the  
5           standards and requirements of this Act (and  
6           amendments made by this Act); and

7           (B) determine whether oil savings will meet  
8           the targets established under subsection (a).

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9           (2) *INSUFFICIENT OIL SAVINGS.*—If the oil sav-  
10          ings are less than the targets established under sub-  
11          section (a), simultaneously with the analysis required  
12          under paragraph (1)—

13               (A) the Director shall publish a revised ac-  
14               tion plan that is sufficient to achieve the targets;  
15               and

16               (B) the head of each agency referred to in  
17               subsection (b)(1) shall propose new or revised  
18               regulations that are sufficient to achieve the tar-  
19               gets under paragraphs (1), (2), and (3), respec-  
20               tively, of subsection (b).

21           (3) *FINAL REGULATIONS.*—Not later than 180  
22          days after the date on which regulations are proposed  
23          under paragraph (2)(B), the head of each agency re-  
24          ferred to in subsection (b)(1) shall promulgate final

1 *versions of those regulations that comply with sub-*  
2 *section (b)(1).*

3 *(d) REVIEW AND UPDATE OF ACTION PLAN.—*

4 *(1) REVIEW.—Not later than January 1, 2011,*  
5 *and every 3 years thereafter, the Director shall submit*  
6 *to Congress, and publish, a report that—*

7 *(A) evaluates the progress achieved in im-*  
8 *plementing the oil savings targets established*  
9 *under subsection (a);*

10 *(B) analyzes the expected oil savings under*  
11 *the standards and requirements established*  
12 *under this Act and the amendments made by this*  
13 *Act; and*

14 *(C)(i) analyzes the potential to achieve oil*  
15 *savings that are in addition to the savings re-*  
16 *quired by subsection (a); and*

17 *(ii) if the President determines that it is in*  
18 *the national interest, establishes a higher oil sav-*  
19 *ings target for calendar year 2017 or any subse-*  
20 *quent calendar year.*

21 *(2) INSUFFICIENT OIL SAVINGS.—If the oil sav-*  
22 *ings are less than the targets established under sub-*  
23 *section (a), simultaneously with the report required*  
24 *under paragraph (1)—*

1           (A) the Director shall publish a revised ac-  
2           tion plan that is sufficient to achieve the targets;  
3           and

4           (B) the head of each agency referred to in  
5           subsection (b)(1) shall propose new or revised  
6           regulations that are sufficient to achieve the tar-  
7           gets under paragraphs (1), (2), and (3), respec-  
8           tively, of subsection (b).

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9           (3) FINAL REGULATIONS.—Not later than 180  
10          days after the date on which regulations are proposed  
11          under paragraph (2)(B), the head of each agency re-  
12          ferred to in subsection (b)(1) shall promulgate final  
13          versions of those regulations that comply with sub-  
14          section (b)(1).

15          (e) BASELINE AND ANALYSIS REQUIREMENTS.—In  
16          performing the analyses and promulgating proposed or  
17          final regulations to establish standards and other require-  
18          ments necessary to achieve the oil savings required by this  
19          section, the Secretary of Energy, the Secretary of Transpor-  
20          tation, the Secretary of Defense, the Secretary of Agri-  
21          culture, the Administrator of the Environmental Protection  
22          Agency, and the head of any other agency the President de-  
23          termines to be appropriate shall—

24                 (1) determine oil savings as the projected reduc-  
25                 tion in oil consumption from the baseline established

1 by the reference case contained in the report of the  
2 Energy Information Administration entitled "Annual  
3 Energy Outlook 2005";

4 (2) determine the oil savings projections required  
5 on an annual basis for each of calendar years 2009  
6 through 2026; and

7 (3) account for any overlap among the standards  
8 and other requirements to ensure that the projected oil  
9 savings from all the promulgated standards and re-  
10 quirements, taken together, are as accurate as prac-  
11 ticable.

12 (f) **NONREGULATORY MEASURES.**—The action plan re-  
13 quired under subsection (a) and the revised action plans  
14 required under subsections (c) and (d) shall include—

15 (1) a projection of the barrels of oil displaced by  
16 efficiency and sources of energy other than oil, includ-  
17 ing biofuels, electricity, and hydrogen; and

18 (2) a projection of the barrels of oil saved  
19 through enactment of this Act and the Energy Policy  
20 Act of 2005 (42 U.S.C. 15801 et seq.).

21 **SEC. 252. NATIONAL ENERGY EFFICIENCY IMPROVEMENT**  
22 **GOALS.**

23 (a) **GOALS.**—The goals of the United States are—

24 (1) to achieve an improvement in the overall en-  
25 ergy productivity of the United States (measured in

1 *gross domestic product per unit of energy input) of at*  
2 *least 2.5 percent per year by the year 2012; and*

3 *(2) to maintain that annual rate of improve-*  
4 *ment each year through 2030.*

5 *(b) STRATEGIC PLAN.—*

6 *(1) IN GENERAL.—Not later than 1 year after*  
7 *the date of enactment of this Act, the Secretary, in co-*  
8 *operation with the Administrator of the Environ-*  
9 *mental Protection Agency and the heads of other ap-*  
10 *propriate Federal agencies, shall develop a strategic*  
11 *plan to achieve the national goals for improvement in*  
12 *energy productivity established under subsection (a).*

13 *(2) PUBLIC INPUT AND COMMENT.—The Sec-*  
14 *retary shall develop the plan in a manner that pro-*  
15 *vides appropriate opportunities for public input and*  
16 *comment.*

17 *(c) PLAN CONTENTS.—The strategic plan shall—*

18 *(1) establish future regulatory, funding, and pol-*  
19 *icy priorities to ensure compliance with the national*  
20 *goals;*

21 *(2) include energy savings estimates for each sec-*  
22 *tor; and*

23 *(3) include data collection methodologies and*  
24 *compilations used to establish baseline and energy*  
25 *savings data.*

1 (d) *PLAN UPDATES.*—

2 (1) *IN GENERAL.*—*The Secretary shall—*

3 (A) *update the strategic plan biennially;*  
4 *and*

5 (B) *include the updated strategic plan in*  
6 *the national energy policy plan required by sec-*  
7 *tion 801 of the Department of Energy Organiza-*  
8 *tion Act (42 U.S.C. 7321).*

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9 (2) *CONTENTS.*—*In updating the plan, the Sec-*  
10 *retary shall—*

11 (A) *report on progress made toward imple-*  
12 *menting efficiency policies to achieve the na-*  
13 *tional goals established under subsection (a); and*

14 (B) *verify, to the maximum extent prac-*  
15 *ticable, energy savings resulting from the poli-*  
16 *cies.*

17 (e) *REPORT TO CONGRESS AND PUBLIC.*—*The Sec-*  
18 *retary shall submit to Congress, and make available to the*  
19 *public, the initial strategic plan developed under subsection*  
20 *(b) and each updated plan.*

21 **SEC. 253. NATIONAL MEDIA CAMPAIGN.**

22 (a) *IN GENERAL.*—*The Secretary, acting through the*  
23 *Assistant Secretary for Energy Efficiency and Renewable*  
24 *Energy (referred to in this section as the “Secretary”), shall*  
25 *develop and conduct a national media campaign—*

1           (1) to increase energy efficiency throughout the  
2 economy of the United States over the next decade;

3           (2) to promote the national security benefits as-  
4 sociated with increased energy efficiency; and

5           (3) to decrease oil consumption in the United  
6 States over the next decade.

7           (b) *CONTRACT WITH ENTITY.*—The Secretary shall  
8 carry out subsection (a) directly or through—

9           (1) ~~competitively bid contracts with 1 or more~~  
10 nationally recognized media firms for the development  
11 and distribution of monthly television, radio, and  
12 newspaper public service announcements; or

13           (2) collective agreements with 1 or more nation-  
14 ally recognized institutes, businesses, or nonprofit or-  
15 ganizations for the funding, development, and dis-  
16 tribution of monthly television, radio, and newspaper  
17 public service announcements.

18           (c) *USE OF FUNDS.*—

19           (1) *IN GENERAL.*—Amounts made available to  
20 carry out this section shall be used for the following:

21           (A) *ADVERTISING COSTS.*—

22           (i) The purchase of media time and  
23 space.

24           (ii) Creative and talent costs.

1                   (iii) *Testing and evaluation of adver-*  
2                   *tising.*

3                   (iv) *Evaluation of the effectiveness of*  
4                   *the media campaign.*

5                   (B) *ADMINISTRATIVE COSTS.—Operational*  
6                   *and management expenses.*

7                   (2) *LIMITATIONS.—In carrying out this section,*  
8                   *the Secretary shall allocate not less than 85 percent*  
9                   *of funds made available under subsection (e) for each*

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10                  *fiscal year for the advertising functions specified*  
11                  *under paragraph (1)(A).*

12                  (d) *REPORTS.—The Secretary shall annually submit*  
13                  *to Congress a report that describes—*

14                   (1) *the strategy of the national media campaign*  
15                   *and whether specific objectives of the campaign were*  
16                   *accomplished, including—*

17                   (A) *determinations concerning the rate of*  
18                   *change of energy consumption, in both absolute*  
19                   *and per capita terms; and*

20                   (B) *an evaluation that enables consider-*  
21                   *ation whether the media campaign contributed*  
22                   *to reduction of energy consumption;*

23                   (2) *steps taken to ensure that the national media*  
24                   *campaign operates in an effective and efficient man-*

1 *ner consistent with the overall strategy and focus of*  
2 *the campaign;*

3 *(3) plans to purchase advertising time and*  
4 *space;*

5 *(4) policies and practices implemented to ensure*  
6 *that Federal funds are used responsibly to purchase*  
7 *advertising time and space and eliminate the poten-*  
8 *tial for waste, fraud, and abuse; and*

9 *(5) all contracts or cooperative agreements en-*  
10 *tered into with a corporation, partnership, or indi-*  
11 *vidual working on behalf of the national media cam-*  
12 *paign.*

13 *(e) AUTHORIZATION OF APPROPRIATIONS.—*

14 *(1) IN GENERAL.—There is authorized to be ap-*  
15 *propriated to carry out this section \$5,000,000 for*  
16 *each of fiscal years 2008 through 2012.*

17 *(2) DECREASED OIL CONSUMPTION.—The Sec-*  
18 *retary shall use not less than 50 percent of the*  
19 *amount that is made available under this section for*  
20 *each fiscal year to develop and conduct a national*  
21 *media campaign to decrease oil consumption in the*  
22 *United States over the next decade.*

23 **SEC. 254. MODERNIZATION OF ELECTRICITY GRID SYSTEM.**

24 *(a) STATEMENT OF POLICY.—It is the policy of the*  
25 *United States that developing and deploying advanced tech-*

1 nology to modernize and increase the efficiency of the elec-  
2 tricity grid system of the United States is essential to main-  
3 tain a reliable and secure electricity transmission and dis-  
4 tribution infrastructure that can meet future demand  
5 growth.

6 (b) PROGRAMS.—The Secretary, the Federal Energy  
7 Regulatory Commission, and other Federal agencies, as ap-  
8 propriate, shall carry out programs to support the use, de-  
9 velopment, and demonstration of advanced transmission  
10 and distribution technologies, including real-time moni-  
11 toring and analytical software—

12 (1) to maximize the capacity and efficiency of  
13 electricity networks;

14 (2) to enhance grid reliability;

15 (3) to reduce line losses;

16 (4) to facilitate the transition to real-time elec-  
17 tricity pricing;

18 (5) to allow grid incorporation of more onsite re-  
19 newable energy generators;

20 (6) to enable electricity to displace a portion of  
21 the petroleum used to power the national transpor-  
22 tation system of the United States; and

23 (7) to enable broad deployment of distributed  
24 generation and demand side management technology.

1 **SEC. 255. SMART GRID SYSTEM REPORT.**

2 (a) *IN GENERAL.*—*The Secretary, acting through the*  
3 *Director of the Office of Electricity Delivery and Energy*  
4 *Reliability (referred to in this section as the “Secretary”),*  
5 *shall, after consulting with any interested individual or en-*  
6 *tity as appropriate, no later than one year after enactment,*  
7 *report to Congress concerning the status of smart grid de-*  
8 *ployments nationwide and any regulatory or government*  
9 *barriers to continued deployment.*

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10 **SEC. 256. SMART GRID TECHNOLOGY RESEARCH, DEVELOP-**  
11 **MENT, AND DEMONSTRATION.**

12 (a) *POWER GRID DIGITAL INFORMATION TECH-*  
13 *NOLOGY.*—*The Secretary, in consultation with the Federal*  
14 *Energy Regulatory Commission and other appropriate*  
15 *agencies, electric utilities, the States, and other stakeholders,*  
16 *shall carry out a program—*

17 (1) *to develop advanced techniques for measuring*  
18 *peak load reductions and energy-efficiency savings*  
19 *from smart metering, demand response, distributed*  
20 *generation, and electricity storage systems;*

21 (2) *to investigate means for demand response,*  
22 *distributed generation, and storage to provide ancil-*  
23 *lary services;*

24 (3) *to conduct research to advance the use of*  
25 *wide-area measurement and control networks, includ-*  
26 *ing data mining, visualization, advanced computing,*

1     *and secure and dependable communications in a*  
2     *highly-distributed environment;*

3             (4) *to test new reliability technologies in a grid*  
4     *control room environment against a representative set*  
5     *of local outage and wide area blackout scenarios;*

6             (5) *to investigate the feasibility of a transition*  
7     *to time-of-use and real-time electricity pricing;*

8             (6) *to develop algorithms for use in electric*  
9     *transmission system software applications;*

10            (7) *to promote the use of underutilized electricity*  
11     *generation capacity in any substitution of electricity*  
12     *for liquid fuels in the transportation system of the*  
13     *United States; and*

14            (8) *in consultation with the Federal Energy Reg-*  
15     *ulatory Commission, to propose interconnection pro-*  
16     *ocols to enable electric utilities to access electricity*  
17     *stored in vehicles to help meet peak demand loads.*

18     (b) *SMART GRID REGIONAL DEMONSTRATION INITIA-*  
19     *TIVE.—*

20            (1) *IN GENERAL.—The Secretary shall establish*  
21     *a smart grid regional demonstration initiative (re-*  
22     *ferred to in this subsection as the “Initiative”)* *com-*  
23     *posed of demonstration projects specifically focused on*  
24     *advanced technologies for use in power grid sensing,*  
25     *communications, analysis, and power flow control.*

1     *The Secretary shall seek to leverage existing smart*  
2     *grid deployments.*

3             (2) *GOALS.—The goals of the Initiative shall*  
4     *be—*

5                     (A) *to demonstrate the potential benefits of*  
6                     *concentrated investments in advanced grid tech-*  
7                     *nologies on a regional grid;*

8                     (B) *to facilitate the commercial transition*  
9                     *from the current power transmission and dis-*  
10                    *tribution system technologies to advanced tech-*  
11                    *nologies;*

12                    (C) *to facilitate the integration of advanced*  
13                    *technologies in existing electric networks to im-*  
14                    *prove system performance, power flow control,*  
15                    *and reliability;*

16                    (D) *to demonstrate protocols and standards*  
17                    *that allow for the measurement and validation of*  
18                    *the energy savings and fossil fuel emission reduc-*  
19                    *tions associated with the installation and use of*  
20                    *energy efficiency and demand response tech-*  
21                    *nologies and practices; and*

22                    (E) *to investigate differences in each region*  
23                    *and regulatory environment regarding best prac-*  
24                    *tices in implementing smart grid technologies.*

25             (3) *DEMONSTRATION PROJECTS.—*

1           (A) *IN GENERAL.*—*In carrying out the ini-*  
2           *tiative, the Secretary shall carry out smart grid*  
3           *demonstration projects in up to 5 electricity con-*  
4           *trol areas, including rural areas and at least 1*  
5           *area in which the majority of generation and*  
6           *transmission assets are controlled by a tax-ex-*  
7           *empt entity.*

8           (B) *COOPERATION.*—*A demonstration*  
9           *project under subparagraph (A) shall be carried*  
10           *out in cooperation with the electric utility that*  
11           *owns the grid facilities in the electricity control*  
12           *area in which the demonstration project is car-*  
13           *ried out.*

14           (C) *FEDERAL SHARE OF COST OF TECH-*  
15           *NOLOGY INVESTMENTS.*—*The Secretary shall pro-*  
16           *vide to an electric utility described in subpara-*  
17           *graph (B) financial assistance for use in paying*  
18           *an amount equal to not more than 50 percent of*  
19           *the cost of qualifying advanced grid technology*  
20           *investments made by the electric utility to carry*  
21           *out a demonstration project.*

22           (4) *AUTHORIZATION OF APPROPRIATIONS.*—  
23           *There are authorized to be appropriated—*

1           (A) to carry out subsection (a), such sums  
2           as are necessary for each of fiscal years 2008  
3           through 2012; and

4           (B) to carry out subsection (b),  
5           \$100,000,000 for each of fiscal years 2008  
6           through 2012.

7 **SEC. 257. SMART GRID INTEROPERABILITY FRAMEWORK.**

8           (a) **INTEROPERABILITY FRAMEWORK.**—The Federal  
9 *Energy Regulatory Commission (referred to in this section*  
10 *as the “Commission”), in cooperation with other relevant*  
11 *federal agencies, shall coordinate with smart grid stake-*  
12 *holders to develop protocols for the establishment of a flexi-*  
13 *ble framework for the connection of smart grid devices and*  
14 *systems that would align policy, business, and technology*  
15 *approaches in a manner that would enable all electric re-*  
16 *sources, including demand-side resources, to contribute to*  
17 *an efficient, reliable electricity network.*

18           (c) **SCOPE OF FRAMEWORK.**—The framework developed  
19 under subsection (b) shall be designed—

20           (1) to accommodate traditional, centralized gen-  
21 eration and transmission resources and consumer dis-  
22 tributed resources, including distributed generation,  
23 renewable generation, energy storage, energy effi-  
24 ciency, and demand response and enabling devices  
25 and systems;

1           (2) to be flexible to incorporate—

2                   (A) regional and organizational differences;

3           and

4                   (B) technological innovations; and

5           (3) to consider include voluntary uniform stand-  
6           ards for certain classes of mass-produced electric ap-  
7           pliances and equipment for homes and businesses that  
8           enable customers, at their election and consistent with

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9           applicable State and federal laws, and are manufac-  
10          tured with the ability to respond to electric grid emer-  
11          gencies and demand response signals by curtailing  
12          all, or a portion of, the electrical power consumed by  
13          the appliances or equipment in response to an emer-  
14          gency or demand response signal, including  
15          through—

16                   (A) load reduction to reduce total electrical  
17          demand;

18                   (B) adjustment of load to provide grid an-  
19          cillary services; and

20                   (C) in the event of a reliability crisis that  
21          threatens an outage, short-term load shedding to  
22          help preserve the stability of the grid.

23           (4) Such voluntary standards should incorporate  
24          appropriate manufacturer lead time.

1 **SEC. 258. STATE CONSIDERATION OF SMART GRID.**

2       Section 111(d) of the Public Utility Regulatory Poli-  
3 cies Act of 1978 (16 U.S.C. 2621(d)) is amended by adding  
4 at the end the following:

5               “(16) **CONSIDERATION OF SMART GRID IN-**  
6               **VESTMENTS.**—Each State shall consider requir-  
7               ing that, prior to undertaking investments in  
8               nonadvanced grid technologies, an electric utility  
9               of the State demonstrate to the State that the  
10              electric utility considered an investment in a  
11              qualified smart grid system based on appro-  
12              priate factors, including—

- 13                       “(i) total costs;
- 14                       “(ii) cost-effectiveness;
- 15                       “(iii) improved reliability;
- 16                       “(iv) security;
- 17                       “(v) system performance; and
- 18                       “(vi) societal benefit.

19               “(B) **RATE RECOVERY.**—Each State shall  
20               consider authorizing each electric utility of the  
21               State to recover from ratepayers any capital, op-  
22               erating expenditure, or other costs of the electric  
23               utility relating to the deployment of a qualified  
24               smart grid system, including a reasonable rate of  
25               return on the capital expenditures of the electric



1 (A) 3 shall be appointed by the President;

2 (B) 3 shall be appointed by the majority  
3 leader of the Senate;

4 (C) 3 shall be appointed by the minority  
5 leader of the Senate;

6 (D) 3 shall be appointed by the Speaker of  
7 the House of Representatives; and

8 (E) 3 shall be appointed by the minority  
9 leader of the House of Representatives.

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10 (3) CO-CHAIRPERSONS.—

11 (A) IN GENERAL.—The President shall des-  
12 ignate 2 co-chairpersons from among the mem-  
13 bers of the Commission appointed.

14 (B) POLITICAL AFFILIATION.—The co-chair-  
15 persons designated under subparagraph (A) shall  
16 not both be affiliated with the same political  
17 party.

18 (4) DEADLINE FOR APPOINTMENT.—Members of  
19 the Commission shall be appointed not later than 90  
20 days after the date of enactment of this Act.

21 (5) TERM; VACANCIES.—

22 (A) TERM.—A member of the Commission  
23 shall be appointed for the life of the Commission.

24 (B) VACANCIES.—Any vacancy in the  
25 Commission—

1                   (i) shall not affect the powers of the  
2                   Commission; and

3                   (ii) shall be filled in the same manner  
4                   as the original appointment.

5           (b) *PURPOSE.*—The Commission shall conduct a com-  
6   prehensive review of the energy policy of the United States  
7   by—

8                   (1) reviewing relevant analyses of the current  
9                   and long-term energy policy of, and conditions in, the  
10                  United States;

11                  (2) identifying problems that may threaten the  
12                  achievement by the United States of long-term energy  
13                  policy goals, including energy independence;

14                  (3) analyzing potential solutions to problems  
15                  that threaten the long-term ability of the United  
16                  States to achieve those energy policy goals; and

17                  (4) providing recommendations that will ensure,  
18                  to the maximum extent practicable, that the energy  
19                  policy goals of the United States are achieved.

20           (c) *REPORT AND RECOMMENDATIONS.*—

21                   (1) *IN GENERAL.*—Not later than December 31 of  
22                   each of calendar years 2009, 2011, 2013, and 2015,  
23                   the Commission shall submit to Congress and the  
24                   President a report on the progress of United States in  
25                   meeting the long-term energy policy goal of energy

1 *independence, including a detailed statement of the*  
 2 *consensus findings, conclusions, and recommendations*  
 3 *of the Commission.*

4 (2) *LEGISLATIVE LANGUAGE.—If a recommenda-*  
 5 *tion submitted under paragraph (1) involves legisla-*  
 6 *tive action, the report shall include proposed legisla-*  
 7 *tive language to carry out the action.*

8 (d) *COMMISSION PERSONNEL MATTERS.—*

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9 (1) *STAFF AND DIRECTOR.—The Commission*  
 10 *shall have a staff headed by an Executive Director.*

11 (2) *STAFF APPOINTMENT.—The Executive Direc-*  
 12 *tor may appoint such personnel as the Executive Di-*  
 13 *rector and the Commission determine to be appro-*  
 14 *priate.*

15 (3) *EXPERTS AND CONSULTANTS.—With the ap-*  
 16 *proval of the Commission, the Executive Director may*  
 17 *procure temporary and intermittent services under*  
 18 *section 3109(b) of title 5, United States Code.*

19 (4) *FEDERAL AGENCIES.—*

20 (A) *DETAIL OF GOVERNMENT EMPLOY-*  
 21 *EES.—*

22 (i) *IN GENERAL.—Upon the request of*  
 23 *the Commission, the head of any Federal*  
 24 *agency may detail, without reimbursement,*  
 25 *any of the personnel of the Federal agency*

1           to the Commission to assist in carrying out  
2           the duties of the Commission.

3           (ii) *NATURE OF DETAIL.*—Any detail  
4           of a Federal employee under clause (i) shall  
5           not interrupt or otherwise affect the civil  
6           service status or privileges of the Federal  
7           employee.

8           (B) *TECHNICAL ASSISTANCE.*—Upon the re-  
9           quest of the Commission, the head of a Federal  
10          agency shall provide such technical assistance to  
11          the Commission as the Commission determines to  
12          be necessary to carry out the duties of the Com-  
13          mission.

14       (e) *RESOURCES.*—

15           (1) *IN GENERAL.*—The Commission shall have  
16          reasonable access to materials, resources, statistical  
17          data, and such other information from Executive  
18          agencies as the Commission determines to be nec-  
19          essary to carry out the duties of the Commission.

20           (2) *FORM OF REQUESTS.*—The co-chairpersons of  
21          the Commission shall make requests for access de-  
22          scribed in paragraph (1) in writing, as necessary.

1 **Subtitle E—Promoting Federal**  
2 **Leadership in Energy Efficiency**  
3 **and Renewable Energy**

4 **SEC. 261. FEDERAL FLEET CONSERVATION REQUIREMENTS.**

5 (a) **FEDERAL FLEET CONSERVATION REQUIRE-**  
6 **MENTS.—**

7 (1) *IN GENERAL.—Part J of title III of the En-*  
8 *ergy Policy and Conservation Act (42 U.S.C. 6374 et*  
9 *seq.) is amended by adding at the end the following:*

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10 **“SEC. 400FF. FEDERAL FLEET CONSERVATION REQUIRE-**  
11 **MENTS.**

12 **“(a) MANDATORY REDUCTION IN PETROLEUM CON-**  
13 **SUMPTION.—**

14 *“(1) IN GENERAL.—The Secretary shall issue*  
15 *regulations (including provisions for waivers from the*  
16 *requirements of this section) for Federal fleets subject*  
17 *to section 400AA requiring that not later than Octo-*  
18 *ber 1, 2015, each Federal agency achieve at least a 20*  
19 *percent reduction in petroleum consumption, and that*  
20 *each Federal agency increase alternative fuel con-*  
21 *sumption by 10 percent annually, as calculated from*  
22 *the baseline established by the Secretary for fiscal*  
23 *year 2005.*

24 **“(2) PLAN.—**

1           “(A) *REQUIREMENT.*—*The regulations shall*  
2           *require each Federal agency to develop a plan to*  
3           *meet the required petroleum reduction levels and*  
4           *the alternative fuel consumption increases.*

5           “(B) *MEASURES.*—*The plan may allow an*  
6           *agency to meet the required petroleum reduction*  
7           *level through—*

8                     “(i) *the use of alternative fuels;*

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9                     “(ii) *the acquisition of vehicles with*  
10            *higher fuel economy, including hybrid vehi-*  
11            *cles, neighborhood electric vehicles, electric*  
12            *vehicles, and plug-in hybrid vehicles if the*  
13            *vehicles are commercially available;*

14                    “(iii) *the substitution of cars for light*  
15            *trucks;*

16                    “(iv) *an increase in vehicle load fac-*  
17            *tors;*

18                    “(v) *a decrease in vehicle miles trav-*  
19            *eled;*

20                    “(vi) *a decrease in fleet size; and*

21                    “(vii) *other measures.*

22           “(b) *FEDERAL EMPLOYEE INCENTIVE PROGRAMS FOR*  
23            *REDUCING PETROLEUM CONSUMPTION.*—

24                    “(1) *IN GENERAL.*—*Each Federal agency shall*  
25            *actively promote incentive programs that encourage*

1 Federal employees and contractors to reduce petro-  
2 leum usage through the use of practices such as—

3 “(A) telecommuting;

4 “(B) public transit;

5 “(C) carpooling; and

6 “(D) bicycling and the use of 2-wheeled elec-  
7 tric drive devices.

8 “(2) MONITORING AND SUPPORT FOR INCENTIVE

9 PROGRAMS.—The Administrator of General Services,  
10 the Director of the Office of Personnel Management,  
11 and the Secretary of Energy shall monitor and pro-  
12 vide appropriate support to agency programs de-  
13 scribed in paragraph (1).

14 “(3) RECOGNITION.—The Secretary may estab-  
15 lish a program under which the Secretary recognizes  
16 private sector employers and State and local govern-  
17 ments for outstanding programs to reduce petroleum  
18 usage through practices described in paragraph (1).

19 “(c) REPLACEMENT TIRES.—

20 “(1) IN GENERAL.—Except as provided in para-  
21 graph (2), the regulations issued under subsection  
22 (a)(1) shall include a requirement that, to the max-  
23 imum extent practicable, each Federal agency pur-  
24 chase energy-efficient replacement tires for the respec-  
25 tive fleet vehicles of the agency.

1           “(2) *EXCEPTIONS.—This section does not apply*

2           *to—*

3                     “(A) *law enforcement motor vehicles;*

4                     “(B) *emergency motor vehicles; or*

5                     “(C) *motor vehicles acquired and used for*

6                     *military purposes that the Secretary of Defense*

7                     *has certified to the Secretary must be exempt for*

8                     *national security reasons.*

9           “(d) *ANNUAL REPORTS ON COMPLIANCE.—The Sec-*  
10 *retary shall submit to Congress an annual report that sum-*  
11 *marizes actions taken by Federal agencies to comply with*  
12 *this section.”.*

13           (2) *TABLE OF CONTENTS AMENDMENT.—The*  
14 *table of contents of the Energy Policy and Conserva-*  
15 *tion Act (42 U.S.C. prec. 6201) is amended by adding*  
16 *at the end of the items relating to part J of title III*  
17 *the following:*

          “*Sec. 400FF. Federal fleet conservation requirements.”.*

18           (b) *AUTHORIZATION OF APPROPRIATIONS.—There is*  
19 *authorized to be appropriated to carry out the amendment*  
20 *made by this section \$10,000,000 for the period of fiscal*  
21 *years 2008 through 2013.*

1 **SEC. 262. FEDERAL REQUIREMENT TO PURCHASE ELEC-**  
2 **TRICITY GENERATED BY RENEWABLE EN-**  
3 **ERGY.**

4 *Section 203 of the Energy Policy Act of 2005 (42*  
5 *U.S.C. 15852) is amended—*

6 *(1) by striking subsection (a) and inserting the*  
7 *following:*

8 *“(a) REQUIREMENT.—*

9 ~~*“(1) IN GENERAL.—The President, acting*~~  
10 *through the Secretary, shall require that, to the extent*  
11 *economically feasible and technically practicable, of*  
12 *the total quantity of domestic electric energy the Fed-*  
13 *eral Government consumes during any fiscal year, the*  
14 *following percentages shall be renewable energy from*  
15 *facilities placed in service after January 1, 1999:*

16 *“(A) Not less than 10 percent in fiscal year*  
17 *2010.*

18 *“(B) Not less than 15 percent in fiscal year*  
19 *2015.*

20 *“(2) CAPITOL COMPLEX.—The Architect of the*  
21 *Capitol, in consultation with the Secretary, shall en-*  
22 *sure that, of the total quantity of electric energy the*  
23 *Capitol complex consumes during any fiscal year, the*  
24 *percentages prescribed in paragraph (1) shall be re-*  
25 *newable energy.*

1           “(3) *WAIVER AUTHORITY.*—*The President may*  
2           *reduce or waive the requirement under paragraph (1)*  
3           *on a fiscal-year basis if the President determines that*  
4           *complying with paragraph (1) for a fiscal year would*  
5           *result in—*

6                     “(A) *a negative impact on military train-*  
7                     *ing or readiness activities conducted by the De-*  
8                     *partment of Defense;*

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9                     “(B) *a negative impact on domestic pre-*  
10                    *paredness activities conducted by the Depart-*  
11                    *ment of Homeland Security; or*

12                    “(C) *a requirement that a Federal agency*  
13                    *provide emergency response services in the event*  
14                    *of a natural disaster or terrorist attack.”; and*  
15                    *(2) by adding at the end the following:*

16           “(e) *CONTRACTS FOR RENEWABLE ENERGY FROM*  
17           *PUBLIC UTILITY SERVICES.*—*Notwithstanding section*  
18           *501(b)(1)(B) of title 40, United States Code, a contract for*  
19           *renewable energy may be made for a period of not more*  
20           *than 50 years.”.*

21 **SEC. 263. ENERGY SAVINGS PERFORMANCE CONTRACTS.**

22           (a). *RETENTION OF SAVINGS.*—*Section 546(c) of the*  
23           *National Energy Conservation Policy Act (42 U.S.C.*  
24           *8256(c)) is amended by striking paragraph (5).*

1       (b) *SUNSET AND REPORTING REQUIREMENTS.*—Sec-  
2       tion 801 of the National Energy Conservation Policy Act  
3       (42 U.S.C. 8287) is amended by striking subsection (c).

4       (c) *DEFINITION OF ENERGY SAVINGS.*—Section 804(2)  
5       of the National Energy Conservation Policy Act (42 U.S.C.  
6       8287c(2)) is amended—

7           (1) by redesignating subparagraphs (A), (B),  
8       and (C) as clauses (i), (ii), and (iii), respectively,  
9       and indenting appropriately;

10          (2) by striking “means a reduction” and insert-  
11       ing “means—

12               “(A) a reduction”;

13          (3) by striking the period at the end and insert-  
14       ing a semicolon; and

15          (4) by adding at the end the following:

16               “(B) the increased efficient use of an exist-  
17       ing energy source by cogeneration or heat recov-  
18       ery, and installation of renewable energy sys-  
19       tems;

20               “(C) if otherwise authorized by Federal or  
21       State law (including regulations), the sale or  
22       transfer of electrical or thermal energy generated  
23       on-site from renewable energy sources or cogen-  
24       eration, but in excess of Federal needs, to utili-  
25       ties or non-Federal energy users; and

1           “(D) the increased efficient use of existing  
2           water sources in interior or exterior applica-  
3           tions.”.

4           (d) NOTIFICATION.—

5           (1) AUTHORITY TO ENTER INTO CONTRACTS.—  
6           Section 801(a)(2)(D) of the National Energy Con-  
7           servation Policy Act (42 U.S.C. 8287(a)(2)(D)) is  
8           amended—

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9           (A) in clause (ii), by inserting “and” after  
10           the semicolon at the end;

11           (B) by striking clause (iii); and

12           (C) by redesignating clause (iv) as clause  
13           (iii).

14           (2) REPORTS.—Section 548(a)(2) of the National  
15           Energy Conservation Policy Act (42 U.S.C.  
16           8258(a)(2)) is amended by inserting “and any termi-  
17           nation penalty exposure” after “the energy and cost  
18           savings that have resulted from such contracts”.

19           (3) CONFORMING AMENDMENT.—Section 2913 of  
20           title 10, United States Code, is amended by striking  
21           subsection (e).

22           (e) ENERGY AND COST SAVINGS IN NONBUILDING AP-  
23           PLICATIONS.—

24           (1) DEFINITIONS.—In this subsection:

1 (A) *NONBUILDING APPLICATION.*—The term  
2 “nonbuilding application” means—

3 (i) any class of vehicles, devices, or  
4 equipment that is transportable under the  
5 power of the applicable vehicle, device, or  
6 equipment by land, sea, or air and that  
7 consumes energy from any fuel source for  
8 the purpose of—

---

9 (I) that transportation; or

10 (II) maintaining a controlled en-  
11 vironment within the vehicle, device, or  
12 equipment; and

13 (ii) any federally-owned equipment  
14 used to generate electricity or transport  
15 water.

16 (B) *SECONDARY SAVINGS.*—

17 (i) *IN GENERAL.*—The term “secondary  
18 savings” means additional energy or cost  
19 savings that are a direct consequence of the  
20 energy savings that result from the energy  
21 efficiency improvements that were financed  
22 and implemented pursuant to an energy  
23 savings performance contract.

24 (ii) *INCLUSIONS.*—The term “sec-  
25 ondary savings” includes—

1           (I) *energy and cost savings that*  
2           *result from a reduction in the need for*  
3           *fuel delivery and logistical support;*

4           (II) *personnel cost savings and*  
5           *environmental benefits; and*

6           (III) *in the case of electric genera-*  
7           *tion equipment, the benefits of in-*  
8           *creased efficiency in the production of*  
9           *electricity, including revenues received*  
10          *by the Federal Government from the*  
11          *sale of electricity so produced.*

12          (2) *STUDY.—*

13           (A) *IN GENERAL.—As soon as practicable*  
14           *after the date of enactment of this Act, the Sec-*  
15           *retary and the Secretary of Defense shall jointly*  
16           *conduct, and submit to Congress and the Presi-*  
17           *dent a report of, a study of the potential for the*  
18           *use of energy savings performance contracts to*  
19           *reduce energy consumption and provide energy*  
20           *and cost savings in nonbuilding applications.*

21           (B) *REQUIREMENTS.—The study under this*  
22           *subsection shall include—*

23           (i) *an estimate of the potential energy*  
24           *and cost savings to the Federal Government,*  
25           *including secondary savings and benefits,*

1 from increased efficiency in nonbuilding  
2 applications;

3 (ii) an assessment of the feasibility of  
4 extending the use of energy savings perform-  
5 ance contracts to nonbuilding applications,  
6 including an identification of any regu-  
7 latory or statutory barriers to such use; and

8 (iii) such recommendations as the Sec-  
9 retary and Secretary of Defense determine  
10 to be appropriate.

11 **SEC. 264. ENERGY MANAGEMENT REQUIREMENTS FOR FED-**  
12 **ERAL BUILDINGS.**

13 Section 543(a)(1) of the National Energy Conservation  
14 Policy Act (42 U.S.C. 8253(a)(1)) is amended by striking  
15 the table and inserting the following:

<b>"Fiscal Year</b>	<b>Percentage reduction</b>
2006 .....	2
2007 .....	4
2008 .....	9
2009 .....	12
2010 .....	15
2011 .....	18
2012 .....	21
2013 .....	24
2014 .....	27
2015 .....	30."

16 **SEC. 265. COMBINED HEAT AND POWER AND DISTRICT EN-**  
17 **ERGY INSTALLATIONS AT FEDERAL SITES.**

18 Section 543 of the National Energy Conservation Pol-  
19 icy Act (42 U.S.C. 8253) is amended by adding at the end  
20 the following:

1       “(f) *COMBINED HEAT AND POWER AND DISTRICT EN-*  
2 *ERGY INSTALLATIONS AT FEDERAL SITES.*—

3               “(1) *IN GENERAL.*—Not later than 18 months  
4 after the date of enactment of this subsection, the Sec-  
5 retary, in consultation with the Administrator of  
6 General Services and the Secretary of Defense, shall  
7 identify Federal sites that could achieve significant  
8 cost-effective energy savings through the use of com-  
9 bined heat and power or district energy installations.

10              “(2) *INFORMATION AND TECHNICAL ASSIST-*  
11 *ANCE.*—The Secretary shall provide agencies with in-  
12 formation and technical assistance that will enable  
13 the agencies to take advantage of the energy savings  
14 described in paragraph (1).

15              “(3) *ENERGY PERFORMANCE REQUIREMENTS.*—  
16 Any energy savings from the installations described  
17 in paragraph (1) may be applied to meet the energy  
18 performance requirements for an agency under sub-  
19 section (a)(1).”.

20 **SEC. 266. FEDERAL BUILDING ENERGY EFFICIENCY PER-**  
21 **FORMANCE STANDARDS.**

22       Section 305(a)(3)(A) of the Energy Conservation and  
23 Production Act (42 U.S.C. 6834(a)(3)(A)) is amended—

1 (1) in the matter preceding clause (i), by strik-  
2 ing "this paragraph" and by inserting "the Energy  
3 Efficiency Promotion Act of 2007"; and

4 (2) in clause (i)—

5 (A) in subclause (I), by striking "and" at  
6 the end;

7 (B) by redesignating subclause (II) as sub-  
8 clause (III); and

9 (C) by inserting after subclause (I) the fol-  
10 lowing:

11 "(II) the buildings be designed, to the extent  
12 economically feasible and technically practicable,  
13 so that the fossil fuel-generated energy consump-  
14 tion of the buildings is reduced, as compared  
15 with the fossil fuel-generated energy consumption  
16 by a similar Federal building in fiscal year  
17 2003 (as measured by Commercial Buildings  
18 Energy Consumption Survey or Residential En-  
19 ergy Consumption Survey data from the Energy  
20 Information Agency), by the percentage specified  
21 in the following table:

<b>"Fiscal Year</b>	<b>Percentage reduction</b>
2007 .....	50
2010 .....	60
2015 .....	70
2020 .....	80
2025 .....	90
2030 .....	100;

22 and".

1 **SEC. 267. APPLICATION OF INTERNATIONAL ENERGY CON-**  
2 **SERVATION CODE TO PUBLIC AND ASSISTED**  
3 **HOUSING.**

4 *Section 109 of the Cranston-Gonzalez National Afford-*  
5 *able Housing Act (42 U.S.C. 12709) is amended—*

6 *(1) in subsection (a)(1)(C), by striking, “, where*  
7 *such standards are determined to be cost effective by*  
8 *the Secretary of Housing and Urban Development”;*

---

9 *(2) in subsection (a)(2)—*

10 *(A) by striking “the Council of American*  
11 *Building Officials Model Energy Code, 1992”*  
12 *and inserting “2006 International Energy Con-*  
13 *servation Code”; and*

14 *(B) by striking “, and, with respect to reha-*  
15 *bilitation and new construction of public and as-*  
16 *sisted housing funded by HOPE VI revitaliza-*  
17 *tion grants under section 24 of the United States*  
18 *Housing Act of 1937 (42 U.S.C. 1437v), the 2003*  
19 *International Energy Conservation Code”;*

20 *(3) in subsection (b)—*

21 *(A) in the heading, by striking “MODEL*  
22 *ENERGY CODE.—” and inserting “INTER-*  
23 *NATIONAL ENERGY CONSERVATION CODE.—”;*

24 *(B) after “all new construction” in the first*  
25 *sentence insert “and rehabilitation”; and*

1           (C) by striking “, and, with respect to reha-  
 2           bilitation and new construction of public and as-  
 3           sisted housing funded by HOPE VI revitaliza-  
 4           tion grants under section 24 of the United States  
 5           Housing Act of 1937 (42 U.S.C. 1437v), the 2003  
 6           International Energy Conservation Code”;

7           (4) in subsection (c)—

8           (A) in the heading, by striking “MODEL  
 9           ENERGY CODE AND”; and

10           (B) by striking “, or, with respect to reha-  
 11           bilitation and new construction of public and as-  
 12           sisted housing funded by HOPE VI revitaliza-  
 13           tion grants under section 24 of the United States  
 14           Housing Act of 1937 (42 U.S.C. 1437v), the 2003  
 15           International Energy Conservation Code”;

16           (5) by adding at the end the following:

17           “(d) FAILURE TO AMEND THE STANDARDS.—If the  
 18           Secretaries have not, within 1 year after the requirements  
 19           of the 2006 IECC or the ASHRAE Standard 90.1–2004 are  
 20           revised, amended the standards or made a determination  
 21           under subsection (c) of this section, the Secretary of Hous-  
 22           ing and Urban Development or the Secretary of Agriculture  
 23           make a determination that the revised codes do not nega-  
 24           tively affect the availability or affordability of new con-  
 25           struction of assisted housing and single family and multi-

1 *family residential housing (other than manufactured*  
 2 *homes) subject to mortgages insured under the National*  
 3 *Housing Act (12 U.S.C. 1701 et seq.) or insured, guaran-*  
 4 *teed, or made by the Secretary of Agriculture under title*  
 5 *V of the Housing Act of 1949 (42 U.S.C. 1471 et seq.), re-*  
 6 *spectively, and the Secretary of Energy has made a deter-*  
 7 *mination under section 304 of the Energy Conservation and*  
 8 *Production Act (42 U.S.C. 6833) that the revised code or*  
 9 *standard would improve energy efficiency, all new construc-*  
 10 *tion and rehabilitation of housing specified in subsection*  
 11 *(a) shall meet the requirements of the revised code or stand-*  
 12 *ard.”;*

13           (6) *by striking “CABO Model Energy Code,*  
 14 *1992” each place it appears and inserting “the 2006*  
 15 *IECC”;* and

16           (7) *by striking “1989” each place it appears and*  
 17 *inserting “2004”.*

18 **SEC. 268. ENERGY EFFICIENT COMMERCIAL BUILDINGS INI-**  
 19 **TIATIVE.**

20 (a) *DEFINITIONS.—In this section:*

21           (1) *CONSORTIUM.—The term “consortium”*  
 22 *means a working group that is comprised of—*

23                   (A) *individuals representing—*

24                           (i) *1 or more businesses engaged in—*

1 (I) commercial building develop-  
2 ment;

3 (II) construction; or

4 (III) real estate;

5 (ii) financial institutions;

6 (iii) academic or research institutions;

7 (iv) State or utility energy efficiency

8 programs;

---

9 (v) nongovernmental energy efficiency  
10 organizations; and

11 (vi) the Federal Government;

12 (B) 1 or more building designers; and

13 (C) 1 or more individuals who own or oper-  
14 ate 1 or more buildings.

15 (2) ENERGY EFFICIENT COMMERCIAL BUILD-  
16 ING.—The term “energy efficient commercial build-  
17 ing” means a commercial building that is designed,  
18 constructed, and operated—

19 (A) to require a greatly reduced quantity of  
20 energy;

21 (B) to meet, on an annual basis, the bal-  
22 ance of energy needs of the commercial building  
23 from renewable sources of energy; and

24 (C) to be economically viable.

1           (3) *INITIATIVE.*—*The term “initiative” means*  
2 *the Energy Efficient Commercial Buildings Initia-*  
3 *tive.*

4           (b) *INITIATIVE.*—

5           (1) *IN GENERAL.*—*The Secretary shall enter into*  
6 *an agreement with the consortium to develop and*  
7 *carry out the initiative—*

8           (A) *to reduce the quantity of energy con-*  

---

9 *sumed by commercial buildings located in the*  
10 *United States; and*

11           (B) *to achieve the development of energy ef-*  
12 *ficiant commercial buildings in the United*  
13 *States.*

14           (2) *GOAL OF INITIATIVE.*—*The goal of the initia-*  
15 *tive shall be to develop technologies and practices and*  
16 *implement policies that lead to energy efficient com-*  
17 *mmercial buildings for—*

18           (A) *any commercial building newly con-*  
19 *structed in the United States by 2030;*

20           (B) *50 percent of the commercial building*  
21 *stock of the United States by 2040; and*

22           (C) *all commercial buildings in the United*  
23 *States by 2050.*

1           (3) *COMPONENTS.—In carrying out the initia-*  
2 *tive, the Secretary, in collaboration with the consor-*  
3 *tium, may—*

4           (A) *conduct research and development on*  
5 *building design, materials, equipment and con-*  
6 *trols, operation and other practices, integration,*  
7 *energy use measurement and benchmarking, and*  
8 *policies;*

---

9           (B) *conduct demonstration projects to*  
10 *evaluate replicable approaches to achieving en-*  
11 *ergy efficient commercial buildings for a variety*  
12 *of building types in a variety of climate zones;*

13           (C) *conduct deployment activities to dis-*  
14 *seminate information on, and encourage wide-*  
15 *spread adoption of, technologies, practices, and*  
16 *policies to achieve energy efficient commercial*  
17 *buildings; and*

18           (D) *conduct any other activity necessary to*  
19 *achieve any goal of the initiative, as determined*  
20 *by the Secretary, in collaboration with the con-*  
21 *sortium.*

22       (c) *AUTHORIZATION OF APPROPRIATIONS.—*

23           (1) *IN GENERAL.—There are authorized to be ap-*  
24 *propriated such sums as are necessary to carry out*  
25 *this section.*

1           (2) *ADDITIONAL FUNDING.*—*In addition to*  
2 *amounts authorized to be appropriated under para-*  
3 *graph (1), the Secretary may allocate funds from*  
4 *other appropriations to the initiative without chang-*  
5 *ing the purpose for which the funds are appropriated.*

6 **SEC. 269. CLEAN ENERGY CORRIDORS.**

7           *Section 216 of the Federal Power Act (16 U.S.C. 824p)*  
8 *is amended—*

9           (1) *in subsection (a)—*

10           (A) *by striking “(1) Not later than” and in-*  
11 *serting the following:*

12           “*(1) IN GENERAL.—Not later than*”;

13           (B) *by striking paragraph (2) and inserting*  
14 *the following:*

15           “*(2) REPORT AND DESIGNATIONS.—*

16           “*(A) IN GENERAL.—After considering alter-*  
17 *natives and recommendations from interested*  
18 *parties (including an opportunity for comment*  
19 *from affected States), the Secretary shall issue a*  
20 *report, based on the study conducted under para-*  
21 *graph (1), in which the Secretary may designate*  
22 *as a national interest electric transmission cor-*  
23 *ridor any geographic area experiencing electric*  
24 *energy transmission capacity constraints or con-*

1 *gestion that adversely affects consumers, includ-*  
 2 *ing constraints or congestion that—*

3 *“(i) increases costs to consumers;*

4 *“(ii) limits resource options to serve*  
 5 *load growth; or*

6 *“(iii) limits access to sources of clean*  
 7 *energy, such as wind, solar energy, geo-*  
 8 *thermal energy, and biomass.*

---

9 *“(B) ADDITIONAL DESIGNATIONS.—In addi-*  
 10 *tion to the corridor designations made under*  
 11 *subparagraph (A), the Secretary may designate*  
 12 *additional corridors in accordance with that sub-*  
 13 *paragraph upon the application by an interested*  
 14 *person, on the condition that the Secretary pro-*  
 15 *vides for an opportunity for notice and comment*  
 16 *by interested persons and affected States on the*  
 17 *application.”;*

18 *(C) in paragraph (3), the striking “(3) The*  
 19 *Secretary” and inserting the following:*

20 *“(3) CONSULTATION.—The Secretary”; and*

21 *(D) in paragraph (4)—*

22 *(i) by striking “(4) In determining”*  
 23 *and inserting the following:*

24 *“(4) BASIS FOR DETERMINATION.—In deter-*  
 25 *mining”; and*

1                   (ii) by striking subparagraphs (A)  
2                   through (E) and inserting the following:

3                   “(A) the economic vitality and development  
4                   of the corridor, or the end markets served by the  
5                   corridor, may be constrained by lack of adequate  
6                   or reasonably priced electricity;

7                   “(B)(i) economic growth in the corridor, or  
8                   the end markets served by the corridor, may be  
9                   jeopardized by reliance on limited sources of en-  
10                  ergy; and

11                  “(ii) a diversification of supply is war-  
12                  ranted;

13                  “(C) the energy independence of the United  
14                  States would be served by the designation;

15                  “(D) the designation would be in the inter-  
16                  est of national energy policy; and

17                  “(E) the designation would enhance na-  
18                  tional defense and homeland security.”; and

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

20                  “(l) RATES AND RECOVERY OF COSTS.—

21                  “(1) IN GENERAL.—Not later than 1 year after  
22                  the date of enactment of this subsection, the Commis-  
23                  sion shall promulgate regulations providing for the  
24                  allocation and recovery of costs prudently incurred by  
25                  public utilities in building and operating facilities

1 authorized under this section for transmission of elec-  
2 tric energy generated from clean sources (such as  
3 wind, solar energy, geothermal energy, and biomass).

4 “(2) *APPLICABLE PROVISIONS.*—All rates ap-  
5 proved under the regulations promulgated under  
6 paragraph (1), including any revisions to the regula-  
7 tions, shall be subject to the requirements under sec-  
8 tions 205 and 206 that all rates, charges, terms, and  
9 conditions be just and reasonable and not unduly dis-  
10 criminatory or preferential.”

11 **SEC. 270. FEDERAL STANDBY POWER STANDARD.**

12 (a) *DEFINITIONS.*—In this section:

13 (1) *AGENCY.*—

14 (A) *IN GENERAL.*—The term “Agency” has  
15 the meaning given the term “Executive agency”  
16 in section 105 of title 5, United States Code.

17 (B) *INCLUSIONS.*—The term “Agency” in-  
18 cludes military departments, as the term is de-  
19 fined in section 102 of title 5, United States  
20 Code.

21 (2) *ELIGIBLE PRODUCT.*—The term “eligible  
22 product” means a commercially available, off-the-shelf  
23 product that—

24 (A)(i) uses external standby power devices;

25 or

1           (ii) contains an internal standby power  
2           function; and

3           (B) is included on the list compiled under  
4           subsection (d).

5           (b) *FEDERAL PURCHASING REQUIREMENT.*—Subject  
6 to subsection (c), if an Agency purchases an eligible prod-  
7 uct, the Agency shall purchase—

8           (1) an eligible product that uses not more than  
9           1 watt in the standby power consuming mode of the  
10           eligible product; or

11           (2) if an eligible product described in paragraph  
12           (1) is not available, the eligible product with the low-  
13           est available standby power wattage in the standby  
14           power consuming mode of the eligible product.

15           (c) *LIMITATION.*—The requirements of subsection (b)  
16 shall apply to a purchase by an Agency only if—

17           (1) the lower-wattage eligible product is—

18                   (A) lifecycle cost-effective; and

19                   (B) practicable; and

20           (2) the utility and performance of the eligible  
21           product is not compromised by the lower wattage re-  
22           quirement.

23           (d) *ELIGIBLE PRODUCTS.*—The Secretary of Energy,  
24 in consultation with the Secretary of Defense, the Adminis-  
25 trator of the Environmental Protection Agency, and the Ad-

1 *ministrator of General Services, shall compile a publicly*  
 2 *accessible list of cost-effective eligible products that shall be*  
 3 *subject to the purchasing requirements of subsection (b).*

4 **SEC. 270A. STANDARD RELATING TO SOLAR HOT WATER**  
 5 **HEATERS.**

6 *Section 305(a)(3)(A) of the Energy Conservation and*  
 7 *Production Act (42 U.S.C. 6834(a)(3)(A)) (as amended by*  
 8 *section 266) is amended—*

---

9 *(1) in clause (i)(III), by striking “and” at the*  
 10 *end;*

11 *(2) in clause (ii), by striking the period at the*  
 12 *end and inserting “; and”; and*

13 *(3) by adding at the end the following:*

14 *“(iii) if life-cycle cost-effective, as com-*  
 15 *pared to other reasonably available tech-*  
 16 *nologies, not less than 30 percent of the hot*  
 17 *water demand for each new or substantially*  
 18 *modified Federal building be met through*  
 19 *the installation and use of solar hot water*  
 20 *heaters.”.*

21 **SEC. 270B. RENEWABLE ENERGY INNOVATION MANUFAC-**  
 22 **TURING PARTNERSHIP.**

23 *(a) ESTABLISHMENT.—The Secretary shall carry out*  
 24 *a program, to be known as the Renewable Energy Innova-*  
 25 *tion Manufacturing Partnership Program (referred to in*

1 *this section as the "Program"), to make assistance awards*  
2 *to eligible entities for use in carrying out research, develop-*  
3 *ment, and demonstration relating to the manufacturing of*  
4 *renewable energy technologies.*

5 (b) *SOLICITATION.—To carry out the Program, the*  
6 *Secretary shall annually conduct a competitive solicitation*  
7 *for assistance awards for an eligible project described in*  
8 *subsection (e).*

9 (c) *PROGRAM PURPOSES.—The purposes of the Pro-*  
10 *gram are—*

11 (1) *to develop, or aid in the development of, ad-*  
12 *vanced manufacturing processes, materials, and in-*  
13 *frastructure;*

14 (2) *to increase the domestic production of renew-*  
15 *able energy technology and components; and*

16 (3) *to better coordinate Federal, State, and pri-*  
17 *vate resources to meet regional and national renew-*  
18 *able energy goals through advanced manufacturing*  
19 *partnerships.*

20 (d) *ELIGIBLE ENTITIES.—An entity shall be eligible*  
21 *to receive an assistance award under the Program to carry*  
22 *out an eligible project described in subsection (e) if the enti-*  
23 *ty is composed of—*

24 (1) *1 or more public or private nonprofit institu-*  
25 *tions or national laboratories engaged in research, de-*

1        *velopment, demonstration, or technology transfer, that*  
2        *would participate substantially in the project; and*

3            (2) *1 or more private entities engaged in the*  
4        *manufacturing or development of renewable energy*  
5        *system components (including solar energy, wind en-*  
6        *ergy, biomass, geothermal energy, energy storage, or*  
7        *fuel cells).*

8        (e) *ELIGIBLE PROJECTS.*—*An eligible entity may use*  

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9        *an assistance award provided under this section to carry*  
10       *out a project relating to—*

11            (1) *the conduct of studies of market opportunities*  
12        *for component manufacturing of renewable energy*  
13        *systems;*

14            (2) *the conduct of multiyear applied research,*  
15        *development, demonstration, and deployment projects*  
16        *for advanced manufacturing processes, materials, and*  
17        *infrastructure for renewable energy systems; and*

18            (3) *other similar ventures, as approved by the*  
19        *Secretary, that promote advanced manufacturing of*  
20        *renewable technologies.*

21        (f) *CRITERIA AND GUIDELINES.*—*The Secretary shall*  
22        *establish criteria and guidelines for the submission, evalua-*  
23        *tion, and funding of proposed projects under the Program.*

1 (g) *COST SHARING.*—Section 988 of the Energy Policy  
2 Act of 2005 (42 U.S.C. 16352) shall apply to a project car-  
3 ried out under this section.

4 (h) *DISCLOSURE.*—Section 623 of the Energy Policy  
5 Act of 1992 (42 U.S.C. 13293) shall apply to a project car-  
6 ried out under this subsection.

7 (i) *SENSE OF THE SENATE.*—It is the sense of the Sen-  
8 ate that the Secretary should ensure that small businesses  
9 engaged in renewable manufacturing be considered for loan  
10 guarantees authorized under title XVII of the Energy Policy  
11 Act of 2005 (42 U.S.C. 16511 et seq.).

12 (j) *AUTHORIZATION OF APPROPRIATIONS.*—There is  
13 authorized to be appropriated out of funds already author-  
14 ized to carry out this section \$25,000,000 for each of fiscal  
15 years 2008 through 2013, to remain available until ex-  
16 pended.

17 **SEC. 270C. EXPRESS LOANS FOR RENEWABLE ENERGY AND**  
18 **ENERGY EFFICIENCY.**

19 Section 7(a)(31) of the Small Business Act (15 U.S.C.  
20 636(a)(31)) is amended by adding at the end the following:

21 “(F) *EXPRESS LOANS FOR RENEWABLE EN-*  
22 *ERGY AND ENERGY EFFICIENCY.*—

23 “(i) *DEFINITIONS.*—In this  
24 subparagraph—

25 “(I) the term ‘biomass’—

1                   “(aa) means any organic  
2 material that is available on a re-  
3 newable or recurring basis,  
4 including—

5                   “(AA) agricultural  
6 crops;

7                   “(BB) trees grown for  
8 energy production;

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9                   “(CC) wood waste and  
10 wood residues;

11                   “(DD) plants (including  
12 aquatic plants and grasses);

13                   “(EE) residues;

14                   “(FF) fibers;

15                   “(GG) animal wastes  
16 and other waste materials;  
17 and

18                   “(HH) fats, oils, and  
19 greases (including recycled  
20 fats, oils, and greases); and

21                   “(bb) does not include—

22                   “(AA) paper that is  
23 commonly recycled; or

24                   “(BB) unsegregated  
25 solid waste;

1           “(II) the term ‘energy efficiency  
2           project’ means the installation or up-  
3           grading of equipment that results in a  
4           significant reduction in energy usage;  
5           and

6           “(III) the term ‘renewable energy  
7           system’ means a system of energy de-  
8           rived from—

---

9                           “(aa) a wind, solar, biomass  
10                          (including biodiesel), or geo-  
11                          thermal source; or

12                         “(bb) hydrogen derived from  
13                          biomass or water using an energy  
14                          source described in item (aa).

15                         “(ii) *LOANS.*—Loans may be made  
16                          under the ‘Express Loan Program’ for the  
17                          purpose of—

18                         “(I) purchasing a renewable en-  
19                          ergy system; or

20                         “(II) an energy efficiency project  
21                          for an existing business.”.

22 **SEC. 270D. SMALL BUSINESS ENERGY EFFICIENCY.**

23           (a) *DEFINITIONS.*—In this section—

1           (1) the terms "Administration" and "Adminis-  
2           trator" mean the Small Business Administration and  
3           the Administrator thereof, respectively;

4           (2) the term "association" means the association  
5           of small business development centers established  
6           under section 21(a)(3)(A) of the Small Business Act  
7           (15 U.S.C. 648(a)(3)(A));

8           (3) the term "disability" has the meaning given  
9           that term in section 3 of the Americans with Disabil-  
10          ities Act of 1990 (42 U.S.C. 12102);

11          (4) the term "electric utility" has the meaning  
12          given that term in section 3 of the Public Utility Reg-  
13          ulatory Policies Act of 1978 (16 U.S.C. 2602);

14          (5) the term "on-bill financing" means a low in-  
15          terest or no interest financing agreement between a  
16          small business concern and an electric utility for the  
17          purchase or installation of equipment, under which  
18          the regularly scheduled payment of that small busi-  
19          ness concern to that electric utility is not reduced by  
20          the amount of the reduction in cost attributable to the  
21          new equipment and that amount is credited to the  
22          electric utility, until the cost of the purchase or in-  
23          stallation is repaid;

1           (6) the term "small business concern" has the  
2 meaning given that term in section 3 of the Small  
3 Business Act (15 U.S.C. 636);

4           (7) the term "small business development center"  
5 means a small business development center described  
6 in section 21 of the Small Business Act (15 U.S.C.  
7 648);

8           (8) the term "telecommuting" means the use of  
9 telecommunications to perform work functions under  
10 circumstances which reduce or eliminate the need to  
11 commute; and

12           (9) the term "veteran" has the meaning given  
13 that term in section 101 of title 38, United States  
14 Code.

15           (b) IMPLEMENTATION OF SMALL BUSINESS ENERGY  
16 EFFICIENCY PROGRAM.—

17           (1) IN GENERAL.—Not later than 90 days after  
18 the date of enactment of this Act, the Administrator  
19 shall promulgate final rules establishing the Govern-  
20 ment-wide program authorized under subsection (d)  
21 of section 337 of the Energy Policy and Conservation  
22 Act (42 U.S.C. 6307) that ensure compliance with  
23 that subsection by not later than 6 months after such  
24 date of enactment.

1           (2) *PLAN.*—Not later than 90 days after the date  
2 of enactment of this Act, the Administrator shall pub-  
3 lish a detailed plan regarding how the Administrator  
4 will—

5                   (A) assist small business concerns in becom-  
6 ing more energy efficient; and

7                   (B) build on the Energy Star for Small  
8 Business Program of the Department of Energy  
9 and the Environmental Protection Agency.

10           (3) *ASSISTANT ADMINISTRATOR FOR SMALL*  
11 *BUSINESS ENERGY POLICY.*—

12                   (A) *IN GENERAL.*—There is in the Adminis-  
13 tration an Assistant Administrator for Small  
14 Business Energy Policy, who shall be appointed  
15 by, and report to, the Administrator.

16                   (B) *DUTIES.*—The Assistant Administrator  
17 for Small Business Energy Policy shall—

18                           (i) oversee and administer the require-  
19 ments under this subsection and section  
20 337(d) of the Energy Policy and Conserva-  
21 tion Act (42 U.S.C. 6307(d)); and

22                           (ii) promote energy efficiency efforts  
23 for small business concerns and reduce en-  
24 ergy costs of small business concerns.

1           (4) *REPORTS.*—*The Administrator shall submit*  
2 *to the Committee on Small Business and Entrepre-*  
3 *neurship of the Senate and the Committee on Small*  
4 *Business of the House of Representatives an annual*  
5 *report on the progress of the Administrator in encour-*  
6 *aging small business concerns to become more energy*  
7 *efficient, including data on the rate of use of the*  
8 *Small Business Energy Clearinghouse established*  
9 *under section 337(d)(4) of the Energy Policy and*  
10 *Conservation Act (42 U.S.C. 6307(d)(4)).*

11           (c) *SMALL BUSINESS ENERGY EFFICIENCY.*—

12           (1) *AUTHORITY.*—*The Administrator shall estab-*  
13 *lish a Small Business Energy Efficiency Pilot Pro-*  
14 *gram (in this subsection referred to as the “Efficiency*  
15 *Pilot Program”)* to provide energy efficiency assist-  
16 *ance to small business concerns through small busi-*  
17 *ness development centers.*

18           (2) *SMALL BUSINESS DEVELOPMENT CENTERS.*—

19           (A) *IN GENERAL.*—*In carrying out the Effi-*  
20 *ciency Pilot Program, the Administrator shall*  
21 *enter into agreements with small business devel-*  
22 *opment centers under which such centers shall—*

23                   (i) *provide access to information and*  
24 *resources on energy efficiency practices, in-*  
25 *cluding on-bill financing options;*

1           (ii) conduct training and educational  
2           activities;

3           (iii) offer confidential, free, one-on-one,  
4           in-depth energy audits to the owners and  
5           operators of small business concerns regard-  
6           ing energy efficiency practices;

7           (iv) give referrals to certified profes-  
8           sionals and other providers of energy effi-  
9           ciency assistance who meet such standards  
10          for educational, technical, and professional  
11          competency as the Administrator shall es-  
12          tablish; and

13          (v) act as a facilitator between small  
14          business concerns, electric utilities, lenders,  
15          and the Administration to facilitate on-bill  
16          financing arrangements.

17          (B) REPORTS.—Each small business devel-  
18          opment center participating in the Efficiency  
19          Pilot Program shall submit to the Administrator  
20          and the Administrator of the Environmental  
21          Protection Agency an annual report that  
22          includes—

23               (i) a summary of the energy efficiency  
24               assistance provided by that center under the  
25               Efficiency Pilot Program;

1           (ii) the number of small business con-  
2           cerns assisted by that center under the Effi-  
3           ciency Pilot Program;

4           (iii) statistics on the total amount of  
5           energy saved as a result of assistance pro-  
6           vided by that center under the Efficiency  
7           Pilot Program; and

8           (iv) any additional information deter-  
9           mined necessary by the Administrator, in  
10          consultation with the association.

11          (C) *REPORTS TO CONGRESS.*—Not later  
12          than 60 days after the date on which all reports  
13          under subparagraph (B) relating to a year are  
14          submitted, the Administrator shall submit to the  
15          Committee on Small Business and Entrepreneur-  
16          ship of the Senate and the Committee on Small  
17          Business of the House of Representatives a report  
18          summarizing the information regarding the Effi-  
19          ciency Pilot Program submitted by small busi-  
20          ness development centers participating in that  
21          program.

22          (3) *ELIGIBILITY.*—A small business development  
23          center shall be eligible to participate in the Efficiency  
24          Pilot Program only if that center is certified under

1 *section 21(k)(2) of the Small Business Act (15 U.S.C.*  
2 *648(k)(2)).*

3 (4) *SELECTION OF PARTICIPATING STATE PRO-*  
4 *GRAMS.—*

5 (A) *GROUPINGS.—*

6 (i) *SELECTION OF PROGRAMS.—The*  
7 *Administrator shall select the small business*  
8 *development center programs of 2 States*  

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9 *from each of the groupings of States de-*  
10 *scribed in clauses (ii) through (xi) to par-*  
11 *ticipate in the pilot program established*  
12 *under this subsection.*

13 (ii) *GROUP 1.—Group 1 shall consist*  
14 *of Maine, Massachusetts, New Hampshire,*  
15 *Connecticut, Vermont, and Rhode Island.*

16 (iii) *GROUP 2.—Group 2 shall consist*  
17 *of New York, New Jersey, Puerto Rico, and*  
18 *the Virgin Islands.*

19 (iv) *GROUP 3.—Group 3 shall consist*  
20 *of Pennsylvania, Maryland, West Virginia,*  
21 *Virginia, the District of Columbia, and*  
22 *Delaware.*

23 (v) *GROUP 4.—Group 4 shall consist of*  
24 *Georgia, Alabama, North Carolina, South*

1           *Carolina, Mississippi, Florida, Kentucky,*  
2           *and Tennessee.*

3           (vi) *GROUP 5.—Group 5 shall consist*  
4           *of Illinois, Ohio, Michigan, Indiana, Wis-*  
5           *consin, and Minnesota.*

6           (vii) *GROUP 6.—Group 6 shall consist*  
7           *of Texas, New Mexico, Arkansas, Oklahoma,*  
8           *and Louisiana.*

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9           (viii) *GROUP 7.—Group 7 shall consist*  
10          *of Missouri, Iowa, Nebraska, and Kansas.*

11          (ix) *GROUP 8.—Group 8 shall consist*  
12          *of Colorado, Wyoming, North Dakota, South*  
13          *Dakota, Montana, and Utah.*

14          (x) *GROUP 9.—Group 9 shall consist of*  
15          *California, Guam, American Samoa, Ha-*  
16          *waii, Nevada, and Arizona.*

17          (xi) *GROUP 10.—Group 10 shall con-*  
18          *sist of Washington, Alaska, Idaho, and Or-*  
19          *egon.*

20          (5) *MATCHING REQUIREMENT.—Subparagraphs*  
21          *(A) and (B) of section 21(a)(4) of the Small Business*  
22          *Act (15 U.S.C. 648(a)(4)) shall apply to assistance*  
23          *made available under the Efficiency Pilot Program.*

24          (6) *GRANT AMOUNTS.—Each small business de-*  
25          *velopment center selected to participate in the Effi-*

1 *ciency Pilot Program under paragraph (4) shall be*  
2 *eligible to receive a grant in an amount equal to—*

3 *(A) not less than \$100,000 in each fiscal*  
4 *year; and*

5 *(B) not more than \$300,000 in each fiscal*  
6 *year.*

7 *(7) EVALUATION AND REPORT.—The Comptroller*  
8 *General of the United States shall—*

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9 *(A) not later than 30 months after the date*  
10 *of disbursement of the first grant under the Effi-*  
11 *ciency Pilot Program, initiate an evaluation of*  
12 *that pilot program; and*

13 *(B) not later than 6 months after the date*  
14 *of the initiation of the evaluation under sub-*  
15 *paragraph (A), submit to the Administrator, the*  
16 *Committee on Small Business and Entrepreneur-*  
17 *ship of the Senate, and the Committee on Small*  
18 *Business of the House of Representatives, a re-*  
19 *port containing—*

20 *(i) the results of the evaluation; and*

21 *(ii) any recommendations regarding*  
22 *whether the Efficiency Pilot Program, with*  
23 *or without modification, should be extended*  
24 *to include the participation of all small*  
25 *business development centers.*

1           (8) *GUARANTEE.*—*The Administrator may guar-*  
2           *antee the timely payment of a loan made to a small*  
3           *business concern through an on-bill financing agree-*  
4           *ment on such terms and conditions as the Adminis-*  
5           *trator shall establish through a formal rule making,*  
6           *after providing notice and an opportunity for com-*  
7           *ment.*

8           (9) *AUTHORIZATION OF APPROPRIATIONS.*—

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9           (A) *IN GENERAL.*—*There are authorized to*  
10          *be appropriated from such sums as are already*  
11          *authorized under section 21 of the Small Busi-*  
12          *ness Act to carry out this subsection—*

13               (i) *\$5,000,000 for the first fiscal year*  
14               *beginning after the date of enactment of this*  
15               *Act; and*

16               (ii) *\$5,000,000 for each of the 3 fiscal*  
17               *years following the fiscal year described in*  
18               *clause (i).*

19           (B) *LIMITATION ON USE OF OTHER*  
20          *FUNDS.*—*The Administrator may carry out the*  
21          *Efficiency Pilot Program only with amounts ap-*  
22          *propriated in advance specifically to carry out*  
23          *this subsection.*

24           (10) *TERMINATION.*—*The authority under this*  
25          *subsection shall terminate 4 years after the date of*

1     *disbursement of the first grant under the Efficiency*  
2     *Pilot Program.*

3     (d) *SMALL BUSINESS TELECOMMUTING.—*

4         (1) *PILOT PROGRAM.—*

5             (A) *IN GENERAL.—In accordance with this*  
6             *subsection, the Administrator shall conduct, in*  
7             *not more than 5 of the regions of the Adminis-*  
8             *tration, a pilot program to provide information*  

---

9             *regarding telecommuting to employers that are*  
10            *small business concerns and to encourage such*  
11            *employers to offer telecommuting options to em-*  
12            *ployees (in this subsection referred to as the*  
13            *“Telecommuting Pilot Program”).*

14            (B) *SPECIAL OUTREACH TO INDIVIDUALS*  
15            *WITH DISABILITIES.—In carrying out the Tele-*  
16            *commuting Pilot Program, the Administrator*  
17            *shall make a concerted effort to provide informa-*  
18            *tion to—*

19                 (i) *small business concerns owned by*  
20                 *or employing individuals with disabilities,*  
21                 *particularly veterans who are individuals*  
22                 *with disabilities;*

23                 (ii) *Federal, State, and local agencies*  
24                 *having knowledge and expertise in assisting*  
25                 *individuals with disabilities, including vet-*

1            *erans who are individuals with disabilities;*  
2            *and*

3                    *(iii) any group or organization, the*  
4            *primary purpose of which is to aid individ-*  
5            *uals with disabilities or veterans who are*  
6            *individuals with disabilities.*

7            *(C) PERMISSIBLE ACTIVITIES.—In carrying*  
8            *out the Telecommuting Pilot Program, the Ad-*  
9            *ministrator may—*

10                    *(i) produce educational materials and*  
11            *conduct presentations designed to raise*  
12            *awareness in the small business community*  
13            *of the benefits and the ease of telecom-*  
14            *muting;*

15                    *(ii) conduct outreach—*

16                            *(I) to small business concerns that*  
17            *are considering offering telecommuting*  
18            *options; and*

19                            *(II) as provided in subparagraph*  
20            *(B); and*

21                    *(iii) acquire telecommuting tech-*  
22            *nologies and equipment to be used for dem-*  
23            *onstration purposes.*

24            *(D) SELECTION OF REGIONS.—In deter-*  
25            *mining which regions will participate in the*

1           *Telecommuting Pilot Program, the Adminis-*  
2           *trator shall give priority consideration to regions*  
3           *in which Federal agencies and private-sector em-*  
4           *ployers have demonstrated a strong regional*  
5           *commitment to telecommuting.*

6           (2) *REPORT TO CONGRESS.—Not later than 2*  
7           *years after the date on which funds are first appro-*  
8           *priated to carry out this subsection, the Adminis-*

---

9           *trator shall transmit to the Committee on Small*  
10          *Business and Entrepreneurship of the Senate and the*  
11          *Committee on Small Business of the House of Rep-*  
12          *resentatives a report containing the results of an eval-*  
13          *uation of the Telecommuting Pilot Program and any*  
14          *recommendations regarding whether the pilot pro-*  
15          *gram, with or without modification, should be ex-*  
16          *tended to include the participation of all regions of*  
17          *the Administration.*

18          (3) *TERMINATION.—The Telecommuting Pilot*  
19          *Program shall terminate 4 years after the date on*  
20          *which funds are first appropriated to carry out this*  
21          *subsection.*

22          (4) *AUTHORIZATION OF APPROPRIATIONS.—*  
23          *There is authorized to be appropriated to the Admin-*  
24          *istration \$5,000,000 to carry out this subsection.*

1       (e) *ENCOURAGING INNOVATION IN ENERGY EFFI-*  
2 *CIENCY.—Section 9 of the Small Business Act (15 U.S.C.*  
3 *638) is amended by adding at the end the following:*

4       “(z) *ENCOURAGING INNOVATION IN ENERGY EFFI-*  
5 *CIENCY.—*

6           “(1) *FEDERAL AGENCY ENERGY-RELATED PRI-*  
7 *ORITY.—In carrying out its duties under this section*  
8 *to SBIR and STTR solicitations by Federal agencies,*  
9 *the Administrator shall—*

10           “(A) *ensure that such agencies give high*  
11 *priority to small business concerns that partici-*  
12 *pate in or conduct energy efficiency or renewable*  
13 *energy system research and development projects;*  
14 *and*

15           “(B) *include in the annual report to Con-*  
16 *gress under subsection (b)(7) a determination of*  
17 *whether the priority described in subparagraph*  
18 *(A) is being carried out.*

19           “(2) *CONSULTATION REQUIRED.—The Adminis-*  
20 *trator shall consult with the heads of other Federal*  
21 *agencies and departments in determining whether*  
22 *priority has been given to small business concerns*  
23 *that participate in or conduct energy efficiency or re-*  
24 *newable energy system research and development*  
25 *projects, as required by this section.*

1           “(3) *GUIDELINES.*—*The Administrator shall, as*  
2 *soon as is practicable after the date of enactment of*  
3 *this subsection, issue guidelines and directives to as-*  
4 *sist Federal agencies in meeting the requirements of*  
5 *this section.*

6           “(4) *DEFINITIONS.*—*In this subsection—*

7           “(A) *the term ‘biomass’—*

8           “(i) *means any organic material that*  

---

9 *is available on a renewable or recurring*  
10 *basis, including—*

11           “(I) *agricultural crops;*

12           “(II) *trees grown for energy pro-*  
13 *duction;*

14           “(III) *wood waste and wood resi-*  
15 *dues;*

16           “(IV) *plants (including aquatic*  
17 *plants and grasses);*

18           “(V) *residues;*

19           “(VI) *fibers;*

20           “(VII) *animal wastes and other*  
21 *waste materials; and*

22           “(VIII) *fats, oils, and greases (in-*  
23 *cluding recycled fats, oils, and greases);*

24 *and*

25           “(ii) *does not include—*

- 1                   “(I) paper that is commonly recycled; or  
2  
3                   “(II) unsegregated solid waste;  
4                   “(B) the term ‘energy efficiency project’  
5                   means the installation or upgrading of equipment that results in a significant reduction in  
6                   energy usage; and  
7                   “(C) the term ‘renewable energy system’  
8                   means a system of energy derived from—  
9                   “(i) a wind, solar, biomass (including  
10                   biodiesel), or geothermal source; or  
11                   “(ii) hydrogen derived from biomass or  
12                   water using an energy source described in  
13                   clause (i).”  
14

15 **Subtitle F—Assisting State and**  
16 **Local Governments in Energy Ef-**  
17 **iciency**

18 **SEC. 271. WEATHERIZATION ASSISTANCE FOR LOW-INCOME**  
19 **PERSONS.**

20                   Section 422 of the Energy Conservation and Produc-  
21                   tion Act (42 U.S.C. 6872) is amended by striking  
22                   “\$700,000,000 for fiscal year 2008” and inserting  
23                   “\$750,000,000 for each of fiscal years 2008 through 2012”.

1 **SEC. 272. STATE ENERGY CONSERVATION PLANS.**

2       Section 365(f) of the Energy Policy and Conservation  
3 Act (42 U.S.C. 6325(f)) is amended by striking “fiscal year  
4 2008” and inserting “each of fiscal years 2008 through  
5 2012”.

6 **SEC. 273. UTILITY ENERGY EFFICIENCY PROGRAMS.**

7       (a) **ELECTRIC UTILITIES.**—Section 111(d) of the Pub-  
8 lic Utility Regulatory Policies Act of 1978 (16 U.S.C.  
9 ~~2621(d)~~) is amended by adding at the end the following:

10           “(16) **INTEGRATED RESOURCE PLANNING.**—Each  
11 electric utility shall—

12                   “(A) integrate energy efficiency resources  
13 into utility, State, and regional plans; and

14                   “(B) adopt policies establishing cost-effective  
15 energy efficiency as a priority resource.

16           “(17) **RATE DESIGN MODIFICATIONS TO PRO-**  
17 **MOTE ENERGY EFFICIENCY INVESTMENTS.**—

18                   “(A) **IN GENERAL.**—The rates allowed to be  
19 charged by any electric utility shall—

20                           “(i) align utility incentives with the  
21 delivery of cost-effective energy efficiency;  
22 and

23                           “(ii) promote energy efficiency invest-  
24 ments.

25                   “(B) **POLICY OPTIONS.**—In complying with  
26 subparagraph (A), each State regulatory author-

1            *ity and each nonregulated utility shall*  
2            *consider—*

3                    *“(i) removing the throughput incentive*  
4                    *and other regulatory and management dis-*  
5                    *incentives to energy efficiency;*

6                    *“(ii) providing utility incentives for*  
7                    *the successful management of energy effi-*  
8                    *ciency programs;*

---

9                    *“(iii) including the impact on adop-*  
10                    *tion of energy efficiency as 1 of the goals of*  
11                    *retail rate design, recognizing that energy*  
12                    *efficiency must be balanced with other objec-*  
13                    *tives;*

14                    *“(iv) adopting rate designs that en-*  
15                    *courage energy efficiency for each customer*  
16                    *class; and*

17                    *“(v) allowing timely recovery of energy*  
18                    *efficiency-related costs.”.*

19            *(b) NATURAL GAS UTILITIES.—Section 303(b) of the*  
20            *Public Utility Regulatory Policies Act of 1978 (16 U.S.C.*  
21            *3203(b)) is amended by adding at the end the following:*

22                    *“(5) ENERGY EFFICIENCY.—Each natural gas*  
23                    *utility shall—*

1           “(A) *integrate energy efficiency resources*  
2 *into the plans and planning processes of the nat-*  
3 *ural gas utility; and*

4           “(B) *adopt policies that establish energy ef-*  
5 *iciency as a priority resource in the plans and*  
6 *planning processes of the natural gas utility.*

7           “(6) *RATE DESIGN MODIFICATIONS TO PROMOTE*  
8 *ENERGY EFFICIENCY INVESTMENTS.—*

---

9           “(A) *IN GENERAL.—The rates allowed to be*  
10 *charged by a natural gas utility shall align util-*  
11 *ity incentives with the deployment of cost-effec-*  
12 *tive energy efficiency.*

13           “(B) *POLICY OPTIONS.—In complying with*  
14 *subparagraph (A), each State regulatory author-*  
15 *ity and each nonregulated utility shall*  
16 *consider—*

17           “(i) *separating fixed-cost revenue re-*  
18 *covery from the volume of transportation or*  
19 *sales service provided to the customer;*

20           “(ii) *providing to utilities incentives*  
21 *for the successful management of energy effi-*  
22 *ciency programs, such as allowing utilities*  
23 *to retain a portion of the cost-reducing ben-*  
24 *efits accruing from the programs;*

1           “(iii) promoting the impact on adop-  
 2           tion of energy efficiency as 1 of the goals of  
 3           retail rate design, recognizing that energy  
 4           efficiency must be balanced with other objec-  
 5           tives; and

6           “(iv) adopting rate designs that en-  
 7           courage energy efficiency for each customer  
 8           class.”.

---

9 **SEC. 274. ENERGY EFFICIENCY AND DEMAND RESPONSE**

10 **PROGRAM ASSISTANCE.**

11       *The Secretary shall provide technical assistance re-*  
 12 *garding the design and implementation of the energy effi-*  
 13 *ciency and demand response programs established under*  
 14 *this title, and the amendments made by this title, to State*  
 15 *energy offices, public utility regulatory commissions, and*  
 16 *nonregulated utilities through the appropriate national lab-*  
 17 *oratories of the Department of Energy.*

18 **SEC. 275. ENERGY AND ENVIRONMENTAL BLOCK GRANT.**

19       *Title I of the Housing and Community Development*  
 20 *Act of 1974 (42 U.S.C. 5301 et seq.) is amended by adding*  
 21 *at the end the following:*

22 **“SEC. 123. ENERGY AND ENVIRONMENTAL BLOCK GRANT.**

23       “(a) **DEFINITIONS.**—*In this section*

24           “(1) **ELIGIBLE ENTITY.**—*The term ‘eligible enti-*  
 25 *ty’ means—*

1           “(A) a State;

2           “(B) an eligible unit of local government  
3           within a State; and

4           “(C) an Indian tribe.

5           “(2) ELIGIBLE UNIT OF LOCAL GOVERNMENT.—

6           The term ‘eligible unit of local government’ means—

7           “(A) a city with a population—

8           “(i) of at least 35,000; or

9           ~~“(ii) that causes the city to be 1 of the~~

10           top 10 most populous cities of the State in  
11           which the city is located; and

12           “(B) a county with a population—

13           “(i) of at least 200,000; or

14           “(ii) that causes the county to be 1 of  
15           the top 10 most populous counties of the  
16           State in which the county is located.

17           “(3) SECRETARY.—The term ‘Secretary’ means  
18           the Secretary of Energy.

19           “(4) STATE.—The term ‘State’ means—

20           “(A) a State;

21           “(B) the District of Columbia;

22           “(C) the Commonwealth of Puerto Rico; and

23           “(D) any other territory or possession of the  
24           United States.

1       “(b) *PURPOSE.*—*The purpose of this section is to assist*  
2 *State, Indian tribal, and local governments in imple-*  
3 *menting strategies—*

4               “(1) *to reduce fossil fuel emissions created as a*  
5 *result of activities within the boundaries of the States*  
6 *or units of local government in an environmentally*  
7 *sustainable way that, to the maximum extent prac-*  
8 *ticable, maximizes benefits for local and regional com-*  
9 *munities;*

10              “(2) *to reduce the total energy use of the States,*  
11 *Indian tribes, and units of local government; and*

12              “(3) *to improve energy efficiency in the trans-*  
13 *portation sector, building sector, and any other ap-*  
14 *propriate sectors.*

15       “(c) *PROGRAM.*—

16              “(1) *IN GENERAL.*—*The Secretary shall provide*  
17 *to eligible entities block grants to carry out eligible*  
18 *activities (as specified under paragraph (2)) relating*  
19 *to the implementation of environmentally beneficial*  
20 *energy strategies.*

21              “(2) *ELIGIBLE ACTIVITIES.*—*The Secretary, in*  
22 *consultation with the Administrator of the Environ-*  
23 *mental Protection Agency, the Secretary of Transpor-*  
24 *tation, and the Secretary of Housing and Urban De-*

1        *velopment, shall establish a list of activities that are*  
2        *eligible for assistance under the grant program.*

3                *“(3) ALLOCATION TO STATES, INDIAN TRIBES,*  
4        *AND ELIGIBLE UNITS OF LOCAL GOVERNMENT.—*

5                *“(A) IN GENERAL.—Of the amounts made*  
6        *available to provide grants under this subsection,*  
7        *the Secretary shall allocate—*

8                *“(i) 68 percent to eligible units of local*  

---

9        *government;*

10                *“(ii) 28 percent to States; and*

11                *“(iii) 4 percent to Indian tribes.*

12                *“(B) DISTRIBUTION TO ELIGIBLE UNITS OF*  
13        *LOCAL GOVERNMENT.—*

14                *“(i) IN GENERAL.—The Secretary shall*  
15        *establish a formula for the distribution of*  
16        *amounts under subparagraph (A)(i) to eli-*  
17        *gible units of local government, taking into*  
18        *account any factors that the Secretary de-*  
19        *termines to be appropriate, including the*  
20        *residential and daytime population of the*  
21        *eligible units of local government.*

22                *“(ii) CRITERIA.—Amounts shall be dis-*  
23        *tributed to eligible units of local government*  
24        *under clause (i) only if the eligible units of*  
25        *local government meet the criteria for dis-*

1            *tribution established by the Secretary for*  
2            *units of local government.*

3            *“(C) DISTRIBUTION TO STATES.—*

4                    *“(i) IN GENERAL.—Of the amounts*  
5                    *provided to States under subparagraph*  
6                    *(A)(ii), the Secretary shall distribute—*

7                            *“(I) at least 1.25 percent to each*  
8                            *State; and*

---

9                            *“(II) the remainder among the*  
10                          *States, based on a formula, to be deter-*  
11                          *mined by the Secretary, that takes into*  
12                          *account the population of the States*  
13                          *and any other criteria that the Sec-*  
14                          *retary determines to be appropriate.*

15                          *“(ii) CRITERIA.—Amounts shall be dis-*  
16                          *tributed to States under clause (i) only if*  
17                          *the States meet the criteria for distribution*  
18                          *established by the Secretary for States.*

19                          *“(iii) LIMITATION ON USE OF STATE*  
20                          *FUNDS.—At least 40 percent of the amounts*  
21                          *distributed to States under this subpara-*  
22                          *graph shall be used by the States for the*  
23                          *conduct of eligible activities in nonentitle-*  
24                          *ment areas in the States, in accordance*

1           *with any criteria established by the Sec-*  
2           *retary.*

3           “(D) *DISTRIBUTION TO INDIAN TRIBES.—*

4                 “(i) *IN GENERAL.—The Secretary shall*  
5                 *establish a formula for the distribution of*  
6                 *amounts under subparagraph (A)(iii) to eli-*  
7                 *gible Indian tribes, taking into account any*  
8                 *factors that the Secretary determines to be*  
9                 *appropriate, including the residential and*  
10                *daytime population of the eligible Indian*  
11                *tribes.*

12               “(ii) *CRITERIA.—Amounts shall be dis-*  
13                *tributed to eligible Indian tribes under*  
14                *clause (i) only if the eligible Indian tribes*  
15                *meet the criteria for distribution established*  
16                *by the Secretary for Indian tribes.*

17               “(4) *REPORT.—Not later than 2 years after the*  
18                *date on which an eligible entity first receives a grant*  
19                *under this section, and every 2 years thereafter, the*  
20                *eligible entity shall submit to the Secretary a report*  
21                *that describes any eligible activities carried out using*  
22                *assistance provided under this subsection.*

23               “(5) *AUTHORIZATION OF APPROPRIATIONS.—*  
24                *There are authorized to be appropriated such sums as*

1       are necessary to carry out this subsection for each of  
2       fiscal years 2008 through 2012.

3       “(d) ENVIRONMENTALLY BENEFICIAL ENERGY STRAT-  
4       EGIES SUPPLEMENTAL GRANT PROGRAM.—

5               “(1) IN GENERAL.—The Secretary shall provide  
6       to each eligible entity that meets the applicable cri-  
7       teria under subparagraph (B)(ii), (C)(ii), or (D)(ii)  
8       of subsection (c)(3) a supplemental grant to pay the  
9       Federal share of the total costs of carrying out an ac-  
10      tivity relating to the implementation of an environ-  
11      mentally beneficial energy strategy.

12              “(2) REQUIREMENTS.—To be eligible for a grant  
13      under paragraph (1), an eligible entity shall—

14              “(A) demonstrate to the satisfaction of the  
15      Secretary that the eligible entity meets the appli-  
16      cable criteria under subparagraph (B)(ii),  
17      (C)(ii), or (D)(ii) of subsection (c)(3); and

18              “(B) submit to the Secretary for approval a  
19      plan that describes the activities to be funded by  
20      the grant.

21              “(3) COST-SHARING REQUIREMENT.—

22              “(A) FEDERAL SHARE.—The Federal share  
23      of the cost of carrying out any activities under  
24      this subsection shall be 75 percent.

25              “(B) NON-FEDERAL SHARE.—

1           “(i) *FORM.*—Not more than 50 percent  
2           of the non-Federal share may be in the form  
3           of in-kind contributions.

4           “(ii) *LIMITATION.*—Amounts provided  
5           to an eligible entity under subsection (c)  
6           shall not be used toward the non-Federal  
7           share.

8           “(4) *MAINTENANCE OF EFFORT.*—An eligible en-  
9           tity shall provide assurances to the Secretary that  
10          funds provided to the eligible entity under this sub-  
11          section will be used only to supplement, not to sup-  
12          plant, the amount of Federal, State, tribal, and local  
13          funds otherwise expended by the eligible entity for eli-  
14          gible activities under this subsection.

15          “(5) *AUTHORIZATION OF APPROPRIATIONS.*—  
16          There are authorized to be appropriated such sums as  
17          are necessary to carry out this subsection for each of  
18          fiscal years 2008 through 2012.

19          “(e) *GRANTS TO OTHER STATES AND COMMUNITIES.*—

20                 “(1) *IN GENERAL.*—Of the total amount of funds  
21                 that are made available each fiscal year to carry out  
22                 this section, the Secretary shall use 2 percent of the  
23                 amount to make competitive grants under this section  
24                 to States, Indian tribes, and units of local govern-

1 *ment that are not eligible entities or to consortia of*  
 2 *such units of local government.*

3 “(2) *APPLICATIONS.*—*To be eligible for a grant*  
 4 *under this subsection, a State, Indian tribe, unit of*  
 5 *local government, or consortia described in paragraph*  
 6 *(1) shall apply to the Secretary for a grant to carry*  
 7 *out an activity that would otherwise be eligible for a*  
 8 *grant under subsection (c) or (d).*

---

9 “(3) *PRIORITY.*—*In awarding grants under this*  
 10 *subsection, the Secretary shall give priority to—*

11 “(A) *States with populations of less than*  
 12 *2,000,000; and*

13 “(B) *projects that would result in signifi-*  
 14 *cant energy efficiency improvements, reductions*  
 15 *in fossil fuel use, or capital improvements.”.*

16 **SEC. 276. ENERGY SUSTAINABILITY AND EFFICIENCY**  
 17 **GRANTS FOR INSTITUTIONS OF HIGHER EDU-**  
 18 **CATION.**

19 *Part G of title III of the Energy Policy and Conserva-*  
 20 *tion Act is amended by inserting after section 399 (42*  
 21 *U.S.C. 371h) the following:*

22 **“SEC. 399A. ENERGY SUSTAINABILITY AND EFFICIENCY**  
 23 **GRANTS FOR INSTITUTIONS OF HIGHER EDU-**  
 24 **CATION.**

25 “(a) *DEFINITIONS.*—*In this section:*

1           “(1) *ENERGY SUSTAINABILITY.*—The term ‘en-  
2           *ergy sustainability*’ includes using a renewable energy  
3           resource and a highly efficient technology for elec-  
4           tricity generation, transportation, heating, or cooling.

5           “(2) *INSTITUTION OF HIGHER EDUCATION.*—The  
6           term ‘institution of higher education’ has the meaning  
7           given the term in section 2 of the Energy Policy Act  
8           of 2005 (42 U.S.C. 15801).

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9           “(b) *GRANTS FOR ENERGY EFFICIENCY IMPROVE-*  
10          *MENT.*—

11           “(1) *IN GENERAL.*—The Secretary shall award  
12           not more than 100 grants to institutions of higher  
13           education to carry out projects to improve energy effi-  
14           ciency on the grounds and facilities of the institution  
15           of higher education, including not less than 1 grant  
16           to an institution of higher education in each State.

17           “(2) *CONDITION.*—As a condition of receiving a  
18           grant under this subsection, an institution of higher  
19           education shall agree to—

20                   “(A) implement a public awareness cam-  
21                   paign concerning the project in the community  
22                   in which the institution of higher education is  
23                   located; and

24                   “(B) submit to the Secretary, and make  
25                   available to the public, reports on any efficiency

1           *improvements, energy cost savings, and environ-*  
2           *mental benefits achieved as part of a project car-*  
3           *ried out under paragraph (1).*

4           “(c) *GRANTS FOR INNOVATION IN ENERGY SUSTAIN-*  
5           *ABILITY.—*

6           “(1) *IN GENERAL.—The Secretary shall award*  
7           *not more than 250 grants to institutions of higher*  
8           *education to engage in innovative energy sustain-*

---

9           *ability projects, including not less than 2 grants to*  
10           *institutions of higher education in each State.*

11           “(2) *INNOVATION PROJECTS.—An innovation*  
12           *project carried out with a grant under this subsection*  
13           *shall—*

14           “(A) *involve—*

15           “(i) *an innovative technology that is*  
16           *not yet commercially available; or*

17           “(ii) *available technology in an inno-*  
18           *vative application that maximizes energy*  
19           *efficiency and sustainability;*

20           “(B) *have the greatest potential for testing*  
21           *or demonstrating new technologies or processes;*  
22           *and*

23           “(C) *ensure active student participation in*  
24           *the project, including the planning, implementa-*  
25           *tion, evaluation, and other phases of the project.*

1           “(3) *CONDITION.*—As a condition of receiving a  
2           grant under this subsection, an institution of higher  
3           education shall agree to submit to the Secretary, and  
4           make available to the public, reports that describe the  
5           results of the projects carried out under paragraph  
6           (1).

7           “(d) *AWARDING OF GRANTS.*—

8           “(1) *APPLICATION.*—An institution of higher  
9           education that seeks to receive a grant under this sec-  
10          tion may submit to the Secretary an application for  
11          the grant at such time, in such form, and containing  
12          such information as the Secretary may prescribe.

13          “(2) *SELECTION.*—The Secretary shall establish  
14          a committee to assist in the selection of grant recipi-  
15          ents under this section.

16          “(e) *ALLOCATION TO INSTITUTIONS OF HIGHER EDU-*  
17          *CATION WITH SMALL ENDOWMENTS.*—Of the amount of  
18          grants provided for a fiscal year under this section, the Sec-  
19          retary shall provide not less 50 percent of the amount to  
20          institutions of higher education that have an endowment  
21          of not more than \$100,000,000, with 50 percent of the allo-  
22          cation set aside for institutions of higher education that  
23          have an endowment of not more than \$50,000,000.

24          “(f) *GRANT AMOUNTS.*—The maximum amount of  
25          grants for a project under this section shall not exceed—

1           “(1) in the case of grants for energy efficiency  
2           improvement under subsection (b), \$1,000,000; or

3           “(2) in the case of grants for innovation in en-  
4           ergy sustainability under subsection (c), \$500,000.

5           “(g) *AUTHORIZATION OF APPROPRIATIONS.*—There  
6           are authorized to be appropriated such sums as are nec-  
7           essary to carry out this section for each of fiscal years 2008  
8           through 2012.”

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9           **SEC. 277. ENERGY EFFICIENCY AND RENEWABLE ENERGY**  
10           **WORKER TRAINING PROGRAM.**

11           Section 1101 of the Energy Policy Act of 2005 (42  
12           U.S.C. 16411) is amended—

13           (1) by redesignating subsection (d) as subsection  
14           (e); and

15           (2) by inserting after subsection (c), the fol-  
16           lowing:

17           “(d) *ENERGY EFFICIENCY AND RENEWABLE ENERGY*  
18           *WORKER TRAINING PROGRAM.*—

19           “(1) *PURPOSE.*—It is the purpose of this sub-  
20           section to—

21           “(A) create a sustainable, comprehensive  
22           public program that provides quality training  
23           that is linked to jobs that are created through re-  
24           newable energy and energy efficiency initiatives;

1           “(B) satisfy industry demand for a skilled  
2 workforce, to support economic growth, to boost  
3 America’s global competitiveness in the expand-  
4 ing energy efficiency and renewable energy in-  
5 dustries, and to provide economic self-sufficiency  
6 and family-sustaining jobs for America’s work-  
7 ers, including low wage workers, through quality  
8 training and placement in job opportunities in  
9 the growing energy efficiency and renewable en-  
10 ergy industries;

11           “(C) provide grants for the safety, health,  
12 and skills training and education of workers who  
13 are, or may be engaged in, activities related to  
14 the energy efficiency and renewable energy in-  
15 dustries; and

16           “(D) provide funds for national and State  
17 industry-wide research, labor market informa-  
18 tion and labor exchange programs, and the devel-  
19 opment of nationally and State administered  
20 training programs.

21           “(2) GRANT PROGRAM.—

22           “(A) IN GENERAL.—Not later than 6  
23 months after the date of enactment of this Act,  
24 the Secretary of Labor (referred to in this sub-  
25 section as the ‘Secretary’), in consultation with

1           *the Secretary of Energy, shall establish an en-*  
2           *ergy efficiency and renewable energy worker*  
3           *training program under which the Secretary*  
4           *shall carry out the activities described in para-*  
5           *graph (3) to achieve the purposes of this sub-*  
6           *section.*

7           “(B) *ELIGIBILITY.—For purposes of pro-*  
8           *viding assistance and services under the program*  

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9           *established under this subsection—*

10           “(i) *target populations of individuals*  
11           *eligible for training and other services shall*  
12           *include, but not be limited to—*

13           “(I) *veterans, or past and present*  
14           *members of the reserve components of*  
15           *the Armed Forces;*

16           “(II) *workers affected by national*  
17           *energy and environmental policy;*

18           “(III) *workers displaced by the*  
19           *impacts of economic globalization;*

20           “(IV) *individuals, including at-*  
21           *risk youth, seeking employment path-*  
22           *ways out of poverty and into economic*  
23           *self-sufficiency;*

24           “(V) *formerly incarcerated, adju-*  
25           *dicated, non-violent offenders; and*

1                   “(VI) individuals in need of up-  
2                   dated training related to the energy ef-  
3                   ficiency and renewable energy indus-  
4                   tries; and

5                   “(ii) energy efficiency and renewable  
6                   energy industries eligible for such assistance  
7                   and services shall include—

8                   “(I) the energy-efficient building,  
9                   construction, and retrofits industries;

10                   “(II) the renewable electric power  
11                   industry;

12                   “(III) the energy efficient and ad-  
13                   vanced drive train vehicle industry;

14                   “(IV) the bio-fuels industry; and

15                   “(V) the deconstruction and mate-  
16                   rials use industries.

17                   “(3) ACTIVITIES.—

18                   “(A) NATIONAL RESEARCH PROGRAM.—

19                   Under the program established under paragraph  
20                   (2), the Secretary, acting through the Bureau of  
21                   Labor Statistics, shall provide assistance to sup-  
22                   port national research to develop labor market  
23                   data and to track future workforce trends result-  
24                   ing from energy-related initiatives carried out.

1           *under this section. Activities carried out under*  
2           *this paragraph shall include—*

3                     “(i) *linking research and development*  
4                     *in renewable energy and energy efficiency*  
5                     *technology with the development of stand-*  
6                     *ards and curricula for current and future*  
7                     *jobs;*

8                     “(ii) *the tracking and documentation*  
9                     *of academic and occupational competencies*  
10                    *as well as future skill needs with respect to*  
11                    *renewable energy and energy efficiency tech-*  
12                    *nology;*

13                    “(iii) *tracking and documentation of*  
14                    *occupational information and workforce*  
15                    *training data with respect to renewable en-*  
16                    *ergy and energy efficiency technology;*

17                    “(iv) *assessing new employment and*  
18                    *work practices including career ladder and*  
19                    *upgrade training as well as high perform-*  
20                    *ance work systems; and*

21                    “(v) *collaborating with State agencies,*  
22                    *industry, organized labor, and community*  
23                    *and nonprofit organizations to disseminate*  
24                    *successful innovations for labor market serv-*  
25                    *ices and worker training with respect to re-*

1           *renewable energy and energy efficiency tech-*  
2           *nology.*

3           “(B) NATIONAL ENERGY TRAINING PART-  
4           NERSHIP GRANTS.—

5                   “(i) IN GENERAL.—Under the program  
6                   established under paragraph (2), the Sec-  
7                   retary shall award National Energy Train-  
8                   ing Partnerships Grants on a competitive  
9                   basis to eligible entities to enable such enti-  
10                  ties to carry out national training that  
11                  leads to economic self-sufficiency and to de-  
12                  velop an energy efficiency and renewable  
13                  energy industries workforce. Grants shall be  
14                  awarded under this subparagraph so as to  
15                  ensure geographic diversity with at least 2  
16                  grants awarded to entities located in each of  
17                  the 4 Petroleum Administration for Defense  
18                  Districts with no subdistricts and at least 1  
19                  grant awarded to an entity located in each  
20                  of the subdistricts of the Petroleum Admin-  
21                  istration for Defense District with subdis-  
22                  tricts.

23                   “(ii) ELIGIBILITY.—To be eligible to  
24                   receive a grant under clause (i), an entity  
25                   shall be a non-profit partnership that—

1           “(I) includes the equal participa-  
2           tion of industry, including public or  
3           private employers, and labor organiza-  
4           tions, including joint labor-manage-  
5           ment training programs, and may in-  
6           clude community-based organizations,  
7           educational institutions, small busi-  
8           nesses, cooperatives, State and local  
9           veterans agencies, and veterans service  
10          organizations; and

11          “(II) demonstrates—

12                 “(aa) experience in imple-  
13                 menting and operating worker  
14                 skills training and education pro-  
15                 grams;

16                 “(bb) the ability to identify  
17                 and involve in training programs  
18                 carried out under this grant, tar-  
19                 get populations of workers who  
20                 are, or will be engaged in, activi-  
21                 ties related to energy efficiency  
22                 and renewable energy industries;  
23                 and

1                   “(cc) the ability to help  
2                   workers achieve economic self-suf-  
3                   ficiency.

4                   “(iii) ACTIVITIES.—Activities to be  
5                   carried out under a grant under this sub-  
6                   paragraph may include—

7                   “(I) the provision of occupational  
8                   skills training, including curriculum  

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9                   development, on-the-job training, and  
10                  classroom training;

11                  “(II) the provision of safety and  
12                  health training;

13                  “(III) the provision of basic skills,  
14                  literacy, GED, English as a second  
15                  language, and job readiness training;

16                  “(IV) individual referral and tui-  
17                  tion assistance for a community college  
18                  training program;

19                  “(V) the provision of customized  
20                  training in conjunction with an exist-  
21                  ing registered apprenticeship program  
22                  or labor-management partnership;

23                  “(VI) the provision of career lad-  
24                  der and upgrade training; and

1                   “(VII) the implementation of  
2                   *transitional jobs strategies.*

3                   “(C) STATE LABOR MARKET RESEARCH, IN-  
4                   FORMATION, AND LABOR EXCHANGE RESEARCH  
5                   PROGRAM.—

6                   “(i) IN GENERAL.—Under the program  
7                   established under paragraph (2), the Sec-  
8                   retary shall award competitive grants to  

---

9                   States to enable such States to administer  
10                  labor market and labor exchange informa-  
11                  tional programs that include the implemen-  
12                  tation of the activities described in clause  
13                  (ii).

14                  “(ii) ACTIVITIES.—A State shall use  
15                  amounts awarded under a grant under this  
16                  subparagraph to provide funding to the  
17                  State agency that administers the Wagner-  
18                  Peyster Act and State unemployment com-  
19                  pensation programs to carry out the fol-  
20                  lowing activities using State agency merit  
21                  staff:

22                  “(I) The identification of job  
23                  openings in the renewable energy and  
24                  energy efficiency sector.

1           “(II) *The administration of skill*  
2           *and aptitude testing and assessment*  
3           *for workers.*

4           “(III) *The counseling, case man-*  
5           *agement, and referral of qualified job*  
6           *seekers to openings and training pro-*  
7           *grams, including energy efficiency and*  
8           *renewable energy training programs.*

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9           “(D) *STATE ENERGY TRAINING PARTNER-*  
10          *SHIP PROGRAM.—*

11           “(i) *IN GENERAL.—Under the program*  
12           *established under paragraph (2), the Sec-*  
13           *retary shall award competitive grants to*  
14           *States to enable such States to administer*  
15           *renewable energy and energy efficiency*  
16           *workforce development programs that in-*  
17           *clude the implementation of the activities*  
18           *described in clause (ii).*

19           “(ii) *ACTIVITIES.—*

20           “(I) *IN GENERAL.—A State shall*  
21           *use amounts awarded under a grant*  
22           *under this subparagraph to award*  
23           *competitive grants to eligible State En-*  
24           *ergy Sector Partnerships to enable such*  
25           *Partnerships to coordinate with exist-*

1            *ing apprenticeship and labor manage-*  
2            *ment training programs and imple-*  
3            *ment training programs that lead to*  
4            *the economic self-sufficiency of train-*  
5            *ees.*

6            *“(II) ELIGIBILITY.—To be eligible*  
7            *to receive a grant under this subpara-*  
8            *graph, a State Energy Sector Partner-*  

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9            *ship shall—*

10            *“(aa) consist of non-profit*  
11            *organizations that include equal*  
12            *participation from industry, in-*  
13            *cluding public or private non-*  
14            *profit employers, and labor orga-*  
15            *nizations, including joint labor-*  
16            *management training programs,*  
17            *and may include representatives*  
18            *from local governments, worker*  
19            *investment agency one-stop career*  
20            *centers, community based organi-*  
21            *zations, community colleges, other*  
22            *post-secondary institutions, small*  
23            *businesses, cooperatives, State and*  
24            *local veterans agencies, and vet-*  
25            *erans service organizations;*

1                   “(bb) demonstrate experience  
2                   in implementing and operating  
3                   worker skills training and edu-  
4                   cation programs; and

5                   “(cc) demonstrate the ability  
6                   to identify and involve in train-  
7                   ing programs, target populations  
8                   of workers who are, or will be en-  
9                   gaged in, activities related to en-  
10                  ergy efficiency and renewable en-  
11                  ergy industries.

12                  “(iii) PRIORITY.—In awarding grants  
13                  under this subparagraph, the Secretary  
14                  shall give priority to States that dem-  
15                  onstrate linkages of activities under the  
16                  grant with—

17                  “(I) meeting national energy poli-  
18                  cies associated with energy efficiency,  
19                  renewable energy, and the reduction of  
20                  emissions of greenhouse gases; and

21                  “(II) meeting State energy poli-  
22                  cies associated with energy efficiency,  
23                  renewable energy, and the reduction of  
24                  emissions of greenhouse gases.

1                   “(iv) *COORDINATION.*—A grantee  
2                   *under this subparagraph shall coordinate*  
3                   *activities carried out under the grant with*  
4                   *existing apprenticeship and labor manage-*  
5                   *ment training programs and implement*  
6                   *training programs that lead to the economic*  
7                   *self-sufficiency of trainees, including*  
8                   *providing—*

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9                   “(I) *outreach and recruitment*  
10                  *services, in coordination with the ap-*  
11                  *propriate State agency;*

12                  “(II) *occupational skills training,*  
13                  *including curriculum development, on-*  
14                  *the-job training, and classroom train-*  
15                  *ing;*

16                  “(III) *safety and health training;*

17                  “(IV) *basic skills, literacy, GED,*  
18                  *English as a second language, and job*  
19                  *readiness training;*

20                  “(V) *individual referral and tui-*  
21                  *tion assistance for a community college*  
22                  *training program;*

23                  “(VI) *customized training in con-*  
24                  *junction with an existing registered*

1                   *apprenticeship program or labor-man-*  
2                   *agement partnership;*

3                   *“(VII) career ladder and upgrade*  
4                   *training; and*

5                   *“(VIII) services under transi-*  
6                   *tional jobs strategies.*

7                   “(4) *WORKER PROTECTIONS AND NON-*  
8                   *DISCRIMINATION REQUIREMENTS.—*

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9                   “(A) *APPLICATION OF WIA.—The provisions*  
10                  *of sections 181 and 188 of the Workforce Invest-*  
11                  *ment Act of 1998 (29 U.S.C. 2931 and 2938)*  
12                  *shall apply to all programs carried out with as-*  
13                  *sistance under this subsection.*

14                  “(B) *CONSULTATION WITH LABOR ORGANI-*  
15                  *ZATIONS.—If a labor organization represents a*  
16                  *substantial number of workers who are engaged*  
17                  *in similar work or training in an area that is*  
18                  *the same as the area that is proposed to be fund-*  
19                  *ed under this subsection, the labor organization*  
20                  *shall be provided an opportunity to be consulted*  
21                  *and to submit comments in regard to such a pro-*  
22                  *posal.*

23                  “(5) *AUTHORIZATION OF APPROPRIATIONS.—*  
24                  *There is authorized to be appropriated to carry out*

1     *this subsection, \$100,000,000 for each fiscal year, of*  
2     *which—*

3             “(A) *not to exceed 20 percent of the amount*  
4             *appropriated in each fiscal year shall be made*  
5             *available for, and shall be equally divided be-*  
6             *tween, national labor market research and infor-*  
7             *mation under paragraph (3)(A) and State labor*  
8             *market information and labor exchange research*  
9             *under paragraph (3)(C); and*

10            “(B) *the remainder shall be divided equally*  
11            *between National Energy Partnership Training*  
12            *Grants under paragraph (3)(B) and State en-*  
13            *ergy training partnership grants under para-*  
14            *graph (3)(D).*

15            “(6) *DEFINITION.—In this subsection, the term*  
16            *‘renewable electric power’ has the meaning given the*  
17            *term ‘renewable energy’ in section 203(b)(2) of the*  
18            *Energy Policy Act of 2005 (Public Law 109–58).”.*

19     **SEC. 278. ASSISTANCE TO STATES TO REDUCE SCHOOL BUS**  
20             **IDLING.**

21            (a) *STATEMENT OF POLICY.—Congress encourages*  
22            *each local educational agency (as defined in section*  
23            *9101(26) of the Elementary and Secondary Education Act*  
24            *of 1965 (20 U.S.C. 7801(26))) that receives Federal funds*  
25            *under the Elementary and Secondary Education Act of*



1 1965 (20 U.S.C. 6301 et seq.) to develop a policy to reduce  
 2 the incidence of school bus idling at schools while picking  
 3 up and unloading students.

4 (b) *AUTHORIZATION OF APPROPRIATIONS.*—There are  
 5 authorized to be appropriated to the Secretary, working in  
 6 coordination with the Secretary of Education, \$5,000,000  
 7 for each of fiscal years 2007 through 2012 for use in edu-  
 8 cating States and local education agencies about—

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9 (1) benefits of reducing school bus idling; and

10 (2) ways in which school bus idling may be re-  
 11 duced.

12 **SEC. 279. DEFINITION OF STATE.**

13 Section 412 of the Energy Conservation and Produc-  
 14 tion Act (42 U.S.C. 6862) is amended by striking para-  
 15 graph (8) and inserting the following:

16 “(8) *STATE.*—The term ‘State’ means—

17 “(A) a State;

18 “(B) the District of Columbia; and

19 “(C) the Commonwealth of Puerto Rico.”.

20 **SEC. 280. COORDINATION OF PLANNED REFINERY OUT-**  
 21 **AGES.**

22 (a) *DEFINITIONS.*—In this section:

23 (1) *ADMINISTRATOR.*—The term “Adminis-  
 24 trator” means the Administrator of the Energy Infor-  
 25 mation Administration.

1           (2) *PLANNED REFINERY OUTAGE.*—

2           (A) *IN GENERAL.*—The term “planned re-  
3           finery outage” means a removal, scheduled before  
4           the date on which the removal occurs, of a refin-  
5           ery, or any unit of a refinery, from service for  
6           maintenance, repair, or modification.

7           (B) *EXCLUSION.*—The term “planned refin-  
8           ery outage” does not include any necessary and  
9           unplanned removal of a refinery, or any unit of  
10          a refinery, from service as a result of a compo-  
11          nent failure, safety hazard, emergency, or action  
12          reasonably anticipated to be necessary to prevent  
13          such events.

14          (3) *REFINED PETROLEUM PRODUCT.*—The term  
15          “refined petroleum product” means any gasoline, die-  
16          sel fuel, fuel oil, lubricating oil, liquid petroleum gas,  
17          or other petroleum distillate that is produced through  
18          the refining or processing of crude oil or an oil de-  
19          rived from tar sands, shale, or coal.

20          (4) *REFINERY.*—The term “refinery” means a  
21          facility used in the production of a refined petroleum  
22          product through distillation, cracking, or any other  
23          process.

24          (5) *SECRETARY.*—The term “Secretary” means  
25          the Secretary of Energy.

1       (b) *REVIEW AND ANALYSIS OF AVAILABLE INFORMA-*  
2 *TION.—The Administrator shall, on an ongoing basis—*

3           (1) *review information on planned refinery out-*  
4 *ages that is available from commercial reporting serv-*  
5 *ices;*

6           (2) *analyze that information to determine wheth-*  
7 *er the scheduling of a planned refinery outage may*  
8 *nationally or regionally affect the price or supply of*  
9 *any refined petroleum product by—*

10           (A) *decreasing the production of the refined*  
11 *petroleum product; and*

12           (B) *causing or contributing to a retail or*  
13 *wholesale supply shortage or disruption;*

14           (3) *not less frequently than twice each year, sub-*  
15 *mit to the Secretary a report describing the results of*  
16 *the review and analysis under paragraphs (1) and*  
17 *(2); and*

18           (4) *specifically alert the Secretary of any*  
19 *planned refinery outage that the Administrator deter-*  
20 *mines may nationally or regionally affect the price or*  
21 *supply of a refined petroleum product.*

22       (c) *ACTION BY SECRETARY.—On a determination by*  
23 *the Secretary, based on a report or alert under paragraph*  
24 *(3) or (4) of subsection (b), that a planned refinery outage*  
25 *may affect the price or supply of a refined petroleum prod-*

1 *uct, the Secretary shall make available to refinery operators*  
 2 *information on planned refinery outages to encourage re-*  
 3 *ductions of the quantity of refinery capacity that is out of*  
 4 *service at any time.*

5 (d) *LIMITATION.*—*Nothing in this section shall alter*  
 6 *any existing legal obligation or responsibility of a refinery*  
 7 *operator, or create any legal right of action, nor shall this*  
 8 *section authoirze the Secretary—*

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9 (1) *to prohibit a refinery operator from con-*  
 10 *ducting a planned refinery outage; or*

11 (2) *to require a refinery operator to continue to*  
 12 *operate a refinery.*

13 **SEC. 281. TECHNICAL CRITERIA FOR CLEAN COAL POWER**  
 14 **INITIATIVE.**

15 *Section 402(b)(1)(B)(ii) of the Energy Policy Act of*  
 16 *2005 (42 U.S.C. 15962(b)(1)(B)(ii)) is amended by striking*  
 17 *subclause (I) and inserting the following:*

18 (I)(aa) *to remove at least 99 per-*  
 19 *cent of sulfur dioxide; or*

20 (bb) *to emit not more than 0.04*  
 21 *pound SO<sub>2</sub> per million Btu, based on*  
 22 *a 30-day average;”.*

1 **SEC. 282. ADMINISTRATION.**

2 *Section 106 of the Alaska Natural Gas Pipeline Act*  
 3 *(15 U.S.C. 720d) is amended by adding at the end the fol-*  
 4 *lowing:*

5 *“(h) ADMINISTRATION.—*

6 *“(1) PERSONNEL APPOINTMENTS.—*

7 *“(A) IN GENERAL.—The Federal Coordi-*  
 8 *nator may appoint and terminate such personnel*  
 9 *as the Federal Coordinator determines to be ap-*  
 10 *propriate.*

11 *“(B) AUTHORITY OF FEDERAL COORDI-*  
 12 *NATOR.—Personnel appointed by the Federal Co-*  
 13 *ordinator under subparagraph (A) shall be ap-*  
 14 *pointed without regard to the provisions of title*  
 15 *5, United States Code, governing appointments*  
 16 *in the competitive service.*

17 *“(2) COMPENSATION.—*

18 *“(A) IN GENERAL.—Subject to subpara-*  
 19 *graph (B), personnel appointed by the Federal*  
 20 *Coordinator under paragraph (1)(A) shall be*  
 21 *paid without regard to the provisions of chapter*  
 22 *51 and subchapter III of chapter 53 of title 5,*  
 23 *United States Code (relating to classification*  
 24 *and General Schedule pay rates).*

25 *“(B) MAXIMUM LEVEL OF COMPENSA-*  
 26 *TION.—The rate of pay for personnel appointed*

1           *by the Federal Coordinator under paragraph*  
2           *(1)(A) shall not exceed the maximum level of rate*  
3           *payable for level III of the Executive Schedule.*

4           “(C) *APPLICABILITY OF SECTION 5941.—*  
5           *Section 5941 of title 5, United States Code, shall*  
6           *apply to personnel appointed by the Federal Co-*  
7           *ordinator under paragraph (1)(A).*

8           “(3) *TEMPORARY SERVICES.—*

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9           “(A) *IN GENERAL.—The Federal Coordi-*  
10          *nator may procure temporary and intermittent*  
11          *services in accordance with section 3109(b) of*  
12          *title 5, United States Code.*

13          “(B) *MAXIMUM LEVEL OF COMPENSA-*  
14          *TION.—The level of compensation of an indi-*  
15          *vidual employed on a temporary or intermittent*  
16          *basis under subparagraph (A) shall not exceed*  
17          *the maximum level of rate payable for level III*  
18          *of the Executive Schedule.*

19          “(4) *FEEES, CHARGES, AND COMMISSIONS.—*

20          “(A) *IN GENERAL.—The Federal Coordi-*  
21          *nator shall have the authority to establish,*  
22          *change, and abolish reasonable filing and service*  
23          *fees, charges, and commissions, require deposits*  
24          *of payments, and provide refunds as provided to*  
25          *the Secretary of the Interior in section 304 of the*

1       *Federal Land Policy and Management Act of*  
2       *1976 (43 U.S.C. 1734), except that the authority*  
3       *shall be with respect to the duties of the Federal*  
4       *Coordinator, as delineated in the Alaska Natural*  
5       *Gas Pipeline Act (15 U.S.C. 720 et seq.), as*  
6       *amended.*

7           “(B) *AUTHORITY OF SECRETARY OF THE*  
8       *INTERIOR.—Subparagraph (A) shall not affect*  
9       *the authority of the Secretary of the Interior to*  
10       *establish, change, and abolish reasonable filing*  
11       *and service fees, charges, and commissions, re-*  
12       *quire deposits of payments, and provide refunds*  
13       *under section 304 of the Federal Land Policy*  
14       *and Management Act of 1976 (43 U.S.C. 1734).*

15           “(C) *USE OF FUNDS.—The Federal Coordi-*  
16       *nator is authorized to use, without further ap-*  
17       *propriation, amounts collected under subpara-*  
18       *graph (A) to carry out this section.”.*

19       **SEC. 283. OFFSHORE RENEWABLE ENERGY.**

20           “(a) *LEASES, EASEMENTS, OR RIGHTS-OF-WAY FOR*  
21       *ENERGY AND RELATED PURPOSES.—Section 8(p) of the*  
22       *Outer Continental Shelf Lands Act (43 U.S.C. 1337(p)) is*  
23       *amended—*

1           (1) by inserting after “Secretary of the Depart-  
2           ment in which the Coast Guard is operating” the fol-  
3           lowing: “, the Secretary of Commerce,”;

4           (2) by striking paragraph (3) and inserting the  
5           following:

6           “(3) *COMPETITIVE OR NONCOMPETITIVE BASIS.*—  
7           Any lease, easement, or right-of-way under paragraph  
8           (1) shall be issued on a competitive basis, unless—

---

9           “(A) the lease, easement, or right-of-way re-  
10           lates to a project that meets the criteria estab-  
11           lished under section 388(d) of the Energy Policy  
12           Act of 2005 (43 U.S.C. 1337 note; Public Law  
13           109–58);

14           “(B) the lease, easement, or right-of-way—

15           “(i) is for the placement and operation  
16           of a meteorological or marine data collec-  
17           tion facility; and

18           “(ii) has a term of not more than 5  
19           years; or

20           “(C) the Secretary determines, after pro-  
21           viding public notice of a proposed lease, ease-  
22           ment, or right-of-way, that no competitive inter-  
23           est exists.”; and

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

25           “(11) *CLARIFICATION.*—

1           “(A) *IN GENERAL.*—Subject to subpara-  
2           graph (B), the Federal Energy Regulatory Com-  
3           mission shall not have authority to approve or  
4           license a wave or current energy project on the  
5           outer Continental Shelf under part I of the Fed-  
6           eral Power Act (16 U.S.C. 792 et seq.)

7           “(B) *TRANSMISSION OF POWER.*—Subpara-  
8           graph (A) shall not affect any authority of the  
9           Commission with respect to the transmission of  
10          power generated from a project described in sub-  
11          paragraph (A).”.

12          (b) *CONSIDERATION OF CERTAIN REQUESTS FOR AU-*  
13 *THORIZATION.*—In considering a request for authorization  
14 of a project pending before the Commission on the outer  
15 Continental Shelf as of the date of enactment of this Act,  
16 the Secretary of the Interior shall rely, to the maximum  
17 extent practicable, on the materials submitted to the Com-  
18 mission before that date.

19          (c) *SAVINGS PROVISION.*—Nothing in this section or  
20 an amendment made by this section requires the resubmis-  
21 sion of any document that was previously submitted, or the  
22 reauthorization of any action that was previously author-  
23 ized, with respect to a project on the outer Continental  
24 Shelf, for which a preliminary permit was issued by the  
25 Commission before the date of enactment of this Act.

1 **Subtitle**                    **G—Marine**                    **and**  
2                    **Hydrokinetic Renewable Energy**  
3                    **Promotion**

4 **SEC. 291. DEFINITION OF MARINE AND HYDROKINETIC RE-**  
5                    **NEWABLE ENERGY.**

6                    (a) *IN GENERAL.*—*In this subtitle, the term “marine*  
7 *and hydrokinetic renewable energy” means electrical energy*  
8 *from—*

9                    (1) *waves, tides, and currents in oceans, estu-*  
10 *aries, and tidal areas;*

11                    (2) *free flowing water in rivers, lakes, and*  
12 *streams;*

13                    (3) *free flowing water in man-made channels,*  
14 *including projects that utilize nonmechanical struc-*  
15 *tures to accelerate the flow of water for electric power*  
16 *production purposes; and*

17                    (4) *differentials in ocean temperature (ocean*  
18 *thermal energy conversion).*

19                    (b) *EXCLUSION.*—*Except as provided in subsection*  
20 *(a)(3), the term “marine and hydrokinetic renewable en-*  
21 *ergy” does not include energy from any source that uses*  
22 *a dam, diversionary structure, or impoundment for electric*  
23 *power purposes.*

1 **SEC. 292. RESEARCH AND DEVELOPMENT.**

2 (a) *PROGRAM.*—*The Secretary, in consultation with*  
3 *the Secretary of Commerce and the Secretary of the Inte-*  
4 *rior, shall establish a program of marine and hydrokinetic*  
5 *renewable energy research, including—*

6 (1) *developing and demonstrating marine and*  
7 *hydrokinetic renewable energy technologies;*

8 (2) *reducing the manufacturing and operation*  
9 *costs of marine and hydrokinetic renewable energy*  
10 *technologies;*

11 (3) *increasing the reliability and survivability of*  
12 *marine and hydrokinetic renewable energy facilities;*

13 (4) *integrating marine and hydrokinetic renew-*  
14 *able energy into electric grids;*

15 (5) *identifying opportunities for cross fertiliza-*  
16 *tion and development of economies of scale between*  
17 *offshore wind and marine and hydrokinetic renewable*  
18 *energy sources;*

19 (6) *identifying, in conjunction with the Sec-*  
20 *retary of Commerce and the Secretary of the Interior,*  
21 *the potential environmental impacts of marine and*  
22 *hydrokinetic renewable energy technologies and meas-*  
23 *ures to minimize or prevent adverse impacts, and*  
24 *technologies and other means available for monitoring*  
25 *and determining environmental impacts;*

1           (7) *identifying, in conjunction with the Com-*  
2           *mandant of the United States Coast Guard, the po-*  
3           *tential navigational impacts of marine and*  
4           *hydrokinetic renewable energy technologies and meas-*  
5           *ures to minimize or prevent adverse impacts;*

6           (8) *standards development, demonstration, and*  
7           *technology transfer for advanced systems engineering*  
8           *and system integration methods to identify critical*  
9           *interfaces; and*

10          (9) *providing public information and oppor-*  
11          *tunity for public comment concerning all technologies.*

12          (b) *REPORT.*—*Not later than 18 months after the date*  
13          *of enactment of this Act, the Secretary, in consultation with*  
14          *the Secretary of Commerce and the Secretary of the Inte-*  
15          *rior, shall provide to the appropriate committees of Con-*  
16          *gress a report that addresses—*

17               (1) *the potential environmental impacts of*  
18               *hydrokinetic renewable energy technologies in free-*  
19               *flowing water in rivers, lakes, and streams;*

20               (2) *the means by which to minimize or prevent*  
21               *any adverse environmental impacts;*

22               (3) *the potential role of monitoring and adaptive*  
23               *management in addressing any adverse environ-*  
24               *mental impacts; and*

1           (4) *the necessary components of such an adaptive*  
2           *management program.*

3           (c) *AUTHORIZATION OF APPROPRIATIONS.—There are*  
4           *authorized to be appropriated to the Secretary to carry out*  
5           *this section \$50,000,000 for each of the fiscal years 2008*  
6           *through 2017.*

7 **SEC. 293. NATIONAL OCEAN ENERGY RESEARCH CENTERS.**

8           (a) *IN GENERAL.—Subject to the availability of appro-*  
9           *priations under subsection (e), the Secretary shall establish*  
10           *not less than 1, and not more than 6, national ocean energy*  
11           *research centers at institutions of higher education for the*  
12           *purpose of conducting research, development, demonstra-*  
13           *tion, and testing of ocean energy technologies and associated*  
14           *equipment.*

15           (b) *EVALUATIONS.—Each Center shall (in consultation*  
16           *with developers, utilities, and manufacturers) conduct eval-*  
17           *uations of technologies and equipment described in sub-*  
18           *section (a).*

19           (c) *LOCATION.—In establishing centers under this sec-*  
20           *tion, the Secretary shall locate the centers in coastal regions*  
21           *of the United State in a manner that, to the maximum ex-*  
22           *tent practicable, is geographically dispersed.*

23           (d) *COORDINATION.—Prior to carrying out any activ-*  
24           *ity under this section in waters subject to the jurisdiction*  
25           *of the United States, the Secretary shall identify, in con-*

1 *junction with the Secretary of Commerce and the Secretary*  
 2 *of Interior, the potential environmental impacts of such ac-*  
 3 *tivity and measures to minimize or prevent adverse im-*  
 4 *pacts.*

5 (e) *AUTHORIZATION OF APPROPRIATIONS.—There are*  
 6 *authorized to be appropriate such sums as are necessary*  
 7 *to carry out this section.*

8 **TITLE III—CARBON CAPTURE**  
 9 **AND STORAGE RESEARCH, DE-**  
 10 **VELOPMENT, AND DEM-**  
 11 **ONSTRATION**

12 **SEC. 301. SHORT TITLE.**

13 *This title may be cited as the “Carbon Capture and*  
 14 *Sequestration Act of 2007”.*

15 **SEC. 302. CARBON CAPTURE AND STORAGE RESEARCH, DE-**  
 16 **VELOPMENT, AND DEMONSTRATION PRO-**  
 17 **GRAM.**

18 *Section 963 of the Energy Policy Act of 2005 (42*  
 19 *U.S.C. 16293) is amended—*

20 (1) *in the section heading, by striking “RE-*  
 21 *SEARCH AND DEVELOPMENT” and inserting*  
 22 *“AND STORAGE RESEARCH, DEVELOPMENT,*  
 23 *AND DEMONSTRATION”;*

24 (2) *in subsection (a)—*

1 (A) by striking “research and development”  
2 and inserting “and storage research, develop-  
3 ment, and demonstration”; and

4 (B) by striking “capture technologies on  
5 combustion-based systems” and inserting “cap-  
6 ture and storage technologies related to energy  
7 systems”;

8 (3) in subsection (b)—

9 (A) ~~in paragraph (3), by striking “and” at~~  
10 ~~the end;~~

11 (B) in paragraph (4), by striking the period  
12 at the end and inserting “; and”; and

13 (C) by adding at the end the following:

14 “(5) to expedite and carry out large-scale testing  
15 of carbon sequestration systems in a range of geologi-  
16 cal formations that will provide information on the  
17 cost and feasibility of deployment of sequestration  
18 technologies.”; and

19 (4) by striking subsection (c) and inserting the  
20 following:

21 “(c) PROGRAMMATIC ACTIVITIES.—

22 “(1) ENERGY RESEARCH AND DEVELOPMENT UN-  
23 DERLYING CARBON CAPTURE AND STORAGE TECH-  
24 NOLOGIES AND CARBON USE ACTIVITIES.—

1           “(A) *IN GENERAL.*—*The Secretary shall*  
2           *carry out fundamental science and engineering*  
3           *research (including laboratory-scale experiments,*  
4           *numeric modeling, and simulations) to develop*  
5           *and document the performance of new ap-*  
6           *proaches to capture and store, recycle, or reuse*  
7           *carbon dioxide.*

8           “(B) *PROGRAM INTEGRATION.*—*The Sec-*  
9           *retary shall ensure that fundamental research*  
10           *carried out under this paragraph is appro-*  
11           *priately applied to energy technology develop-*  
12           *ment activities, the field testing of carbon seques-*  
13           *tration, and carbon use activities, including—*

14                   “(i) *development of new or improved*  
15                   *technologies for the capture and storage of*  
16                   *carbon dioxide;*

17                   “(ii) *development of new or improved*  
18                   *technologies that reduce the cost and in-*  
19                   *crease the efficacy of advanced compression*  
20                   *of carbon dioxide required for the storage of*  
21                   *carbon dioxide;*

22                   “(iii) *modeling and simulation of geo-*  
23                   *logical sequestration field demonstrations;*

1           “(iv) quantitative assessment of risks  
2 relating to specific field sites for testing of  
3 sequestration technologies;

4           “(v) research and development of new  
5 and improved technologies for—

6                   “(I) carbon use, including recy-  
7 cling and reuse of carbon dioxide; and

8                   “(II) the containment of carbon  
9 dioxide in the form of solid materials  
10 or products derived from a gasification  
11 technology that does not involve geo-  
12 logic containment or injection; and

13           “(vi) research and development of new  
14 and improved technologies for oxygen sepa-  
15 ration from air.

16           “(2) FIELD VALIDATION TESTING ACTIVITIES.—

17                   “(A) IN GENERAL.—The Secretary shall  
18 promote, to the maximum extent practicable, re-  
19 gional carbon sequestration partnerships to con-  
20 duct geologic sequestration tests involving carbon  
21 dioxide injection and monitoring, mitigation,  
22 and verification operations in a variety of can-  
23 didate geological settings, including—

24                           “(i) operating oil and gas fields;

25                           “(ii) depleted oil and gas fields;

1                   “(iii) unmineable coal seams;

2                   “(iv) deep saline formations;

3                   “(v) deep geological systems that may  
4                   be used as engineered reservoirs to extract  
5                   economical quantities of heat from geo-  
6                   thermal resources of low permeability or po-  
7                   rosity;

8                   “(vi) deep geologic systems containing  
9                   basalt formations; and

10                  “(vii) coal-bed methane recovery.

11                  “(B) OBJECTIVES.—The objectives of tests  
12                  conducted under this paragraph shall be—

13                   “(i) to develop and validate geo-  
14                   physical tools, analysis, and modeling to  
15                   monitor, predict, and verify carbon dioxide  
16                   containment;

17                   “(ii) to validate modeling of geological  
18                   formations;

19                   “(iii) to refine storage capacity esti-  
20                   mated for particular geological formations;

21                   “(iv) to determine the fate of carbon  
22                   dioxide concurrent with and following injec-  
23                   tion into geological formations;

24                   “(v) to develop and implement best  
25                   practices for operations relating to, and

1            *monitoring of, injection and storage of car-*  
2            *bon dioxide in geologic formations;*

3            *“(vi) to assess and ensure the safety of*  
4            *operations related to geological storage of*  
5            *carbon dioxide; and*

6            *“(vii) to allow the Secretary to pro-*  
7            *mulgate policies, procedures, requirements,*  
8            *and guidance to ensure that the objectives of*  
9            *this subparagraph are met in large-scale*  
10           *testing and deployment activities for carbon*  
11           *capture and storage that are funded by the*  
12           *Department of Energy.*

13           *“(3) LARGE-SCALE TESTING AND DEPLOY-*  
14           *MENT.—*

15           *“(A) IN GENERAL.—The Secretary shall*  
16           *conduct not less than 7 initial large-volume se-*  
17           *questration tests involving at least 1,000,000*  
18           *tons of carbon dioxide per year for geological*  
19           *containment of carbon dioxide (at least 1 of*  
20           *which shall be international in scope) to collect*  
21           *and validate information on the cost and feasi-*  
22           *bility of commercial deployment of technologies*  
23           *for geological containment of carbon dioxide.*

24           *“(B) DIVERSITY OF FORMATIONS TO BE*  
25           *STUDIED.—In selecting formations for study*

1           under this paragraph, the Secretary shall con-  
2           sider a variety of geological formations across the  
3           United States, and require characterization and  
4           modeling of candidate formations, as determined  
5           by the Secretary.

6           “(4) PREFERENCE IN PROJECT SELECTION FROM  
7           MERITORIOUS PROPOSALS.—In making competitive  
8           awards under this subsection, subject to the require-  
9           ments of section 989, the Secretary shall give pref-  
10          erence to proposals from partnerships among indus-  
11          trial, academic, and government entities.

12          “(5) COST SHARING.—Activities under this sub-  
13          section shall be considered research and development  
14          activities that are subject to the cost-sharing require-  
15          ments of section 988(b).

16          “(6) PROGRAM REVIEW AND REPORT.—During  
17          fiscal year 2011, the Secretary shall—

18                 “(A) conduct a review of programmatic ac-  
19                 tivities carried out under this subsection; and

20                 “(B) make recommendations with respect to  
21                 continuation of the activities.

22          “(d) AUTHORIZATION OF APPROPRIATIONS.—There  
23          are authorized to be appropriated to carry out this  
24          section—

25                 “(1) \$150,000,000 for fiscal year 2008;

1           “(2) \$200,000,000 for fiscal year 2009;

2           “(3) \$200,000,000 for fiscal year 2010;

3           “(4) \$180,000,000 for fiscal year 2011; and

4           “(5) \$165,000,000 for fiscal year 2012.”.

5 **SEC. 303. CARBON DIOXIDE STORAGE CAPACITY ASSESS-**

6                           **MENT.**

7           (a) *DEFINITIONS.*—*In this section*

8                 (1) *ASSESSMENT.*—*The term “assessment”*

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9                 *means the national assessment of capacity for carbon*  
10                *dioxide completed under subsection (f).*

11               (2) *CAPACITY.*—*The term “capacity” means the*  
12                *portion of a storage formation that can retain carbon*  
13                *dioxide in accordance with the requirements (includ-*  
14                *ing physical, geological, and economic requirements)*  
15                *established under the methodology developed under*  
16                *subsection (b).*

17               (3) *ENGINEERED HAZARD.*—*The term “engi-*  
18                *neered hazard” includes the location and completion*  
19                *history of any well that could affect potential storage.*

20               (4) *RISK.*—*The term “risk” includes any risk*  
21                *posed by geomechanical, geochemical, hydrogeological,*  
22                *structural, and engineered hazards.*

23               (5) *SECRETARY.*—*The term “Secretary” means*  
24                *the Secretary of the Interior, acting through the Di-*  
25                *rector of the United States Geological Survey.*

1           (6) *STORAGE FORMATION.*—The term “storage  
2           *formation*” means a deep saline formation,  
3           unmineable coal seam, or oil or gas reservoir that is  
4           capable of accommodating a volume of industrial car-  
5           bon dioxide.

6           (b) *METHODOLOGY.*—Not later than 1 year after the  
7           date of enactment of this Act, the Secretary shall develop  
8           a methodology for conducting an assessment under sub-  
9           section (f), taking into consideration—

10           (1) the geographical extent of all potential stor-  
11           age formations in all States;

12           (2) the capacity of the potential storage forma-  
13           tions;

14           (3) the injectivity of the potential storage forma-  
15           tions;

16           (4) an estimate of potential volumes of oil and  
17           gas recoverable by injection and storage of industrial  
18           carbon dioxide in potential storage formations;

19           (5) the risk associated with the potential storage  
20           formations; and

21           (6) the work done to develop the Carbon Seques-  
22           tration Atlas of the United States and Canada that  
23           was completed by the Department of Energy.

24           (c) *COORDINATION.*—

25           (1) *FEDERAL COORDINATION.*—

1           (A) *CONSULTATION.*—*The Secretary shall*  
2           *consult with the Secretary of Energy and the Ad-*  
3           *ministrator of the Environmental Protection*  
4           *Agency on issues of data sharing, format, devel-*  
5           *opment of the methodology, and content of the*  
6           *assessment required under this title to ensure the*  
7           *maximum usefulness and success of the assess-*  
8           *ment.*

9           (B) *COOPERATION.*—*The Secretary of En-*  
10          *ergy and the Administrator shall cooperate with*  
11          *the Secretary to ensure, to the maximum extent*  
12          *practicable, the usefulness and success of the as-*  
13          *essment.*

14          (2) *STATE COORDINATION.*—*The Secretary shall*  
15          *consult with State geological surveys and other rel-*  
16          *evant entities to ensure, to the maximum extent prac-*  
17          *ticable, the usefulness and success of the assessment.*

18          (d) *EXTERNAL REVIEW AND PUBLICATION.*—*On com-*  
19          *pletion of the methodology under subsection (b), the Sec-*  
20          *retary shall—*

21                 (1) *publish the methodology and solicit comments*  
22                 *from the public and the heads of affected Federal and*  
23                 *State agencies;*

24                 (2) *establish a panel of individuals with exper-*  
25                 *tise in the matters described in paragraphs (1)*

1 through (5) of subsection (b) composed, as appropriate,  
2 of representatives of Federal agencies, institutions  
3 of higher education, nongovernmental organizations,  
4 State organizations, industry, and international  
5 geoscience organizations to review the methodology  
6 and comments received under paragraph (1);  
7 and

8 (3) on completion of the review under paragraph  
9 (2), publish in the Federal Register the revised final  
10 methodology.

11 (e) PERIODIC UPDATES.—The methodology developed  
12 under this section shall be updated periodically (including  
13 at least once every 5 years) to incorporate new data as the  
14 data becomes available.

15 (f) NATIONAL ASSESSMENT.—

16 (1) IN GENERAL.—Not later than 2 years after  
17 the date of publication of the methodology under sub-  
18 section (d)(1), the Secretary, in consultation with the  
19 Secretary of Energy and State geological surveys,  
20 shall complete a national assessment of capacity for  
21 carbon dioxide in accordance with the methodology.

22 (2) GEOLOGICAL VERIFICATION.—As part of the  
23 assessment under this subsection, the Secretary shall  
24 carry out a drilling program to supplement the geo-  
25 logical data relevant to determining storage capacity

1 of carbon dioxide in geological storage formations,  
2 including—

3 (A) well log data;

4 (B) core data; and

5 (C) fluid sample data.

6 (3) *PARTNERSHIP WITH OTHER DRILLING PRO-*  
7 *GRAMS.*—As part of the drilling program under para-  
8 *graph (2), the Secretary shall enter, as appropriate,*  
9 *into partnerships with other entities to collect and in-*  
10 *tegrate data from other drilling programs relevant to*  
11 *the storage of carbon dioxide in geologic formations.*

12 (4) *INCORPORATION INTO NATCARB.*—

13 (A) *IN GENERAL.*—On completion of the as-  
14 *essment, the Secretary of Energy and the Sec-*  
15 *retary of the Interior shall incorporate the re-*  
16 *sults of the assessment using—*

17 (i) *the NatCarb database, to the max-*  
18 *imum extent practicable; or*

19 (ii) *a new database developed by the*  
20 *Secretary of Energy, as the Secretary of*  
21 *Energy determines to be necessary.*

22 (B) *RANKING.*—The database shall include  
23 *the data necessary to rank potential storage sites*  
24 *for capacity and risk, across the United States,*

1           *within each State, by formation, and within*  
2           *each basin.*

3           (5) *REPORT.*—*Not later than 180 days after the*  
4           *date on which the assessment is completed, the Sec-*  
5           *retary shall submit to the Committee on Energy and*  
6           *Natural Resources of the Senate and the Committee*  
7           *on Science and Technology of the House of Represent-*  
8           *atives a report describing the findings under the as-*  
9           *essment.*

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10          (6) *PERIODIC UPDATES.*—*The national assess-*  
11          *ment developed under this section shall be updated pe-*  
12          *riodically (including at least once every 5 years) to*  
13          *support public and private sector decisionmaking.*

14          (g) *AUTHORIZATION OF APPROPRIATIONS.*—*There is*  
15          *authorized to be appropriated to carry out this section*  
16          *\$30,000,000 for the period of fiscal years 2008 through*  
17          *2012.*

18   **SEC. 304. CARBON CAPTURE AND STORAGE INITIATIVE.**

19          (a) *DEFINITIONS.*—*In this section:*

20               (1) *INDUSTRIAL SOURCES OF CARBON DIOX-*  
21               *IDE.*—*The term “industrial sources of carbon diox-*  
22               *ide” means one or more facilities to—*

23                       (A) *generate electric energy from fossil fuels;*

24                       (B) *refine petroleum;*

25                       (C) *manufacture iron or steel;*

1           (D) manufacture cement or cement clinker;

2           (E) manufacture commodity chemicals (in-  
3           cluding from coal gasification);

4           (F) manufacture transportation fuels from  
5           coal; or

6           (G) manufacture biofuels.

7           (2) SECRETARY.—The term “Secretary” means  
8           the Secretary of Energy.

9           (b) PROGRAM ESTABLISHMENT.—

10           (1) IN GENERAL.—The Secretary shall carry out  
11           a program to demonstrate technologies for the large-  
12           scale capture of carbon dioxide from industrial  
13           sources of carbon dioxide.

14           (2) SCOPE OF AWARD.—An award under this  
15           section shall be only for the portion of the project  
16           that—

17           (A) carries out the large-scale capture (in-  
18           cluding purification and compression) of carbon  
19           dioxide;

20           (B) provides for the cost of transportation  
21           and injection of carbon dioxide; and

22           (C) incorporates a comprehensive measure-  
23           ment, monitoring, and validation program.

1           (3) *QUALIFICATIONS FOR AWARD.*—*To be eligible*  
2 *for an award under this section, a project proposal*  
3 *must include the following:*

4           (A) *CAPACITY.*—*The capture of not less*  
5 *than eighty-five percent of the produced carbon*  
6 *dioxide at the facility, and not less than 500,000*  
7 *short tons of carbon dioxide per year.*

8           (B) *STORAGE AGREEMENT.*—*A binding*  
9 *agreement for the storage of all of the captured*  
10 *carbon dioxide in—*

11           (i) *a field testing validation activity*  
12 *under section 963 of the Energy Policy Act*  
13 *of 2005, as amended by this Act; or*

14           (ii) *other geological storage projects ap-*  
15 *proved by the Secretary.*

16           (C) *PURITY LEVEL.*—*A purity level of at*  
17 *least 95 percent carbon dioxide by volume for the*  
18 *captured carbon dioxide delivered for storage.*

19           (D) *COMMITMENT TO CONTINUED OPER-*  
20 *ATION OF SUCCESSFUL UNIT.*—*If the project suc-*  
21 *cessfully demonstrates capture and storage of*  
22 *carbon dioxide, a commitment to continued cap-*  
23 *ture and storage of carbon dioxide after the con-*  
24 *clusion of the demonstration.*



1 *Capitol, with the approval of the commission in control of*  
2 *the House Office Building appointed under the first section*  
3 *of the Act of March 4, 1907 (2 U.S.C. 2001).*

4       “(b) *CAPITOL POWER PLANT CARBON DIOXIDE EMIS-*  
5 *SIONS DEMONSTRATION PROGRAM.—*

6               “(1) *DEFINITIONS.—In this subsection:*

7                       “(A) *ADMINISTRATOR.—The term ‘Adminis-*  
8 *trator’ means the Administrator of the Environ-*  
9 *mental Protection Agency.*

10                      “(B) *CARBON DIOXIDE ENERGY EFFI-*  
11 *CIENCY.—The term ‘carbon dioxide energy effi-*  
12 *ciency’, with respect to a project, means the*  
13 *quantity of electricity used to power equipment*  
14 *for carbon dioxide capture and storage or use.*

15                      “(C) *PROGRAM.—The term ‘program’*  
16 *means the competitive grant demonstration pro-*  
17 *gram established under paragraph (2)(B).*

18               “(2) *ESTABLISHMENT OF PROGRAM.—*

19                      “(A) *FEASIBILITY STUDY.—Not later than*  
20 *180 days after the date of enactment of this sec-*  
21 *tion, the Architect of the Capitol, in cooperation*  
22 *with the Administrator, shall complete a feasi-*  
23 *bility study evaluating the available methods to*  
24 *proceed with the project and program established*  
25 *under this section, taking into consideration—*

1           “(i) the availability of carbon capture  
2           technologies;

3           “(ii) energy conservation and carbon  
4           reduction strategies; and

5           “(iii) security of operations at the  
6           Capitol power plant.

7           “(B) COMPETITIVE GRANT PROGRAM.—The  
8           Architect of the Capitol, in cooperation with the

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9           Administrator, shall establish a competitive  
10          grant demonstration program under which the  
11          Architect of the Capitol shall, subject to the  
12          availability of appropriations, provide to eligible  
13          entities, as determined by the Architect of the  
14          Capitol, in cooperation with the Administrator,  
15          grants to carry out projects to demonstrate, dur-  
16          ing the 2-year period beginning on the date of  
17          enactment of this subsection, the capture and  
18          storage or use of carbon dioxide emitted from the  
19          Capitol power plant as a result of burning coal.

20          “(3) REQUIREMENTS.—

21                 “(A) PROVISION OF GRANTS.—

22                         “(i) IN GENERAL.—The Architect of the  
23                         Capitol, in cooperation with the Adminis-  
24                         trator, shall provide the grants under the  
25                         program on a competitive basis.

1           “(ii) *FACTORS FOR CONSIDERATION.*—

2           *In providing grants under the program, the*  
3           *Architect of the Capitol, in cooperation with*  
4           *the Administrator, shall take into*  
5           *consideration—*

6                   “(I) *the practicability of conver-*  
7                   *sion by the proposed project of carbon*  
8                   *dioxide into useful products, such as*  
9                   *transportation fuel;*

10                   “(II) *the carbon dioxide energy ef-*  
11                   *iciency of the proposed project; and*

12                   “(III) *whether the proposed*  
13                   *project is able to reduce more than 1*  
14                   *air pollutant regulated under this Act.*

15           “(B) *REQUIREMENTS FOR ENTITIES.*—*An*  
16           *entity that receives a grant under the program*  
17           *shall—*

18                   “(i) *use to carry out the project of the*  
19                   *entity a technology designed to reduce or*  
20                   *eliminate emission of carbon dioxide that is*  
21                   *in existence on the date of enactment of this*  
22                   *subsection that has been used—*

23                   “(I) *by not less than 3 other fa-*  
24                   *cilities (including a coal-fired power*  
25                   *plant); and*

1                   “(II) on a scale of not less than 5  
2                   times the size of the proposed project of  
3                   the entity at the Capitol power plant;  
4                   and

5                   “(ii) carry out the project of the entity  
6                   in consultation with, and with the concu-  
7                   rence of, the Architect of the Capitol and the  
8                   Administrator.

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9                   “(C) CONSISTENCY WITH CAPITOL POWER  
10                  PLANT MODIFICATIONS.—The Architect of the  
11                  Capitol may require changes to a project under  
12                  the program that are necessary to carry out any  
13                  modifications to be made to the Capitol power  
14                  plant.

15                  “(4) INCENTIVE.—In addition to the grant under  
16                  this subsection, the Architect of the Capitol may pro-  
17                  vide to an entity that receives such a grant an incen-  
18                  tive award in an amount equal to not more than  
19                  \$50,000, of which—

20                  “(A) \$15,000 shall be provided after the  
21                  project of the entity has sustained operation for  
22                  a period of 100 days, as determined by the Ar-  
23                  chitect of the Capitol;

24                  “(B) \$15,000 shall be provided after the  
25                  project of the entity has sustained operation for

1 a period of 200 days, as determined by the Ar-  
2 chitect of the Capitol; and

3 “(C) \$20,000 shall be provided after the  
4 project of the entity has sustained operation for  
5 a period of 300 days, as determined by the Ar-  
6 chitect of the Capitol.

7 “(5) *TERMINATION.*—The program shall termi-  
8 nate on the date that is 2 years after the date of en-  
9 actment of this subsection.

10 “(6) *AUTHORIZATION OF APPROPRIATIONS.*—  
11 There is authorized to be appropriated to carry out  
12 the program \$3,000,000.”

13 **SEC. 306. ASSESSMENT OF CARBON SEQUESTRATION AND**  
14 **METHANE AND NITROUS OXIDE EMISSIONS**  
15 **FROM TERRESTRIAL ECOSYSTEMS.**

16 (a) *DEFINITIONS.*—In this section:

17 (1) *ADAPTATION STRATEGY.*—The term “adapta-  
18 tion strategy” means a land use and management  
19 strategy that can be used to increase the sequestration  
20 capabilities of any terrestrial ecosystem.

21 (2) *ASSESSMENT.*—The term “assessment”  
22 means the national assessment authorized under sub-  
23 section (b).

1           (3) *COVERED GREENHOUSE GAS.*—*The term*  
2           *“covered greenhouse gas” means carbon dioxide, ni-*  
3           *trous oxide, and methane gas.*

4           (4) *NATIVE PLANT SPECIES.*—*The term “native*  
5           *plant species” means any noninvasive, naturally oc-*  
6           *curring plant species within a terrestrial ecosystem.*

7           (5) *SECRETARY.*—*The term “Secretary” means*  
8           *the Secretary of the Interior.*

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9           (6) *FEDERAL LAND.*—*The term “Federal land”*  
10          *means—*

11                   (A) *land of the National Forest System (as*  
12                   *defined in section 11(a) of the Forest and Range-*  
13                   *land Renewable Resources Planning Act of 1974*  
14                   *(16 U.S.C. 1609(a)) administered by the Sec-*  
15                   *retary of Agriculture, acting through the Chief of*  
16                   *the Forest Service; and*

17                   (B) *public lands (as defined in section 103*  
18                   *of the Federal Land Policy and Management Act*  
19                   *of 1976 (43 U.S.C. 1702)), the surface of which*  
20                   *is administered by the Secretary of the Interior,*  
21                   *acting through the Director of the Bureau of*  
22                   *Land Management.*

23           (7) *TERRESTRIAL ECOSYSTEM.*—

1           (A) *IN GENERAL.*—The term “terrestrial  
2           ecosystem” means any ecological and surficial  
3           geological system on Federal land.

4           (B) *INCLUSIONS.*—The term “terrestrial  
5           ecosystem” includes—

6                   (i) forest land;

7                   (ii) grassland; and

8                   (iii) freshwater aquatic ecosystems.

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9           (b) *AUTHORIZATION OF ASSESSMENT.*—Not later than  
10          2 years after the date on which the final methodology is  
11          published under subsection (f)(3)(D), the Secretary shall  
12          complete a national assessment of—

13                   (1) the quantity of carbon stored in and released  
14                   from terrestrial ecosystems; including from man-  
15                   caused and natural fires; and

16                   (2) the annual flux of covered greenhouse gases  
17                   in and out of terrestrial ecosystems.

18          (c) *COMPONENTS.*—In conducting the assessment  
19          under subsection (b), the Secretary shall—

20                   (1) determine the processes that control the flux  
21                   of covered greenhouse gases in and out of each terres-  
22                   trial ecosystem;

23                   (2) estimate the technical and economic potential  
24                   for increasing carbon sequestration in natural and  
25                   managed terrestrial ecosystems through management

1 *activities or restoration activities in each terrestrial*  
2 *ecosystem;*

3 (3) *develop near-term and long-term adaptation*  
4 *strategies or mitigation strategies that can be*  
5 *employed—*

6 (A) *to enhance the sequestration of carbon*  
7 *in each terrestrial ecosystem;*

8 (B) *to reduce emissions of covered green-*  
9 *house gases; and*

10 (C) *to adapt to climate change; and*

11 (4) *estimate annual carbon sequestration capac-*  
12 *ity of terrestrial ecosystems under a range of policies*  
13 *in support of management activities to optimize se-*  
14 *questration.*

15 (d) *USE OF NATIVE PLANT SPECIES.—In developing*  
16 *restoration activities under subsection (c)(2) and manage-*  
17 *ment strategies and adaptation strategies under subsection*  
18 *(c)(3), the Secretary shall emphasize the use of native plant*  
19 *species (including mixtures of many native plant species)*  
20 *for sequestering covered greenhouse gas in each terrestrial*  
21 *ecosystem.*

22 (e) *CONSULTATION.—In conducting the assessment*  
23 *under subsection (b) and developing the methodology under*  
24 *subsection (f), the Secretary shall consult with—*

25 (1) *the Secretary of Energy;*

1           (2) *the Secretary of Agriculture;*

2           (3) *the Administrator of the Environmental Pro-*  
3 *tection Agency;*

4           (4) *the heads of other relevant agencies;*

5           (5) *consortia based at institutions of higher edu-*  
6 *cation and with research corporations; and*

7           (6) *Federal forest and grassland managers.*

8           (f) *METHODOLOGY.—*

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9           (1) *IN GENERAL.—Not later than 1 year after*  
10 *the date of enactment of this Act, the Secretary shall*  
11 *develop a methodology for conducting the assessment.*

12           (2) *REQUIREMENTS.—The methodology developed*  
13 *under paragraph (1)—*

14           (A) *shall—*

15           (i) *determine the method for meas-*  
16 *uring, monitoring, quantifying, and mone-*  
17 *tizing covered greenhouse gas emissions and*  
18 *reductions, including methods for allocating*  
19 *and managing offsets or credits; and*

20           (ii) *estimate the total capacity of each*  
21 *terrestrial ecosystem to—*

22           (I) *sequester carbon; and*

23           (II) *reduce emissions of covered*  
24 *greenhouse gases; and*

1           (B) may employ economic and other sys-  
2           tems models, analyses, and estimations, to be de-  
3           veloped in consultation with each of the individ-  
4           uals described in subsection (e).

5           (3) *EXTERNAL REVIEW AND PUBLICATION.*—On  
6           completion of a proposed methodology, the Secretary  
7           shall—

8                   (A) publish the proposed methodology;

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9                   (B) at least 60 days before the date on  
10                  which the final methodology is published, solicit  
11                  comments from—

12                           (i) the public; and

13                           (ii) heads of affected Federal and State  
14                          agencies;

15                   (C) establish a panel to review the proposed  
16                  methodology published under subparagraph (A)  
17                  and any comments received under subparagraph  
18                  (B), to be composed of members—

19                           (i) with expertise in the matters de-  
20                          scribed in subsections (c) and (d); and

21                           (ii) that are, as appropriate, represent-  
22                          atives of Federal agencies, institutions of  
23                          higher education, nongovernmental organi-  
24                          zations, State organizations, industry, and  
25                          international organizations; and

1           (D) on completion of the review under sub-  
2           paragraph (C), publish in the Federal register  
3           the revised final methodology.

4           (g) *ESTIMATE; REVIEW.*—The Secretary shall—

5           (1) based on the assessment, prescribe the data,  
6           information, and analysis needed to establish a sci-  
7           entifically sound estimate of—

8           (A) the carbon sequestration capacity of rel-  
9           evant terrestrial ecosystems;

10           (B) a national inventory of covered green-  
11           house gas sources that is consistent with the in-  
12           ventory prepared by the Environmental Protec-  
13           tion Agency entitled the “Inventory of U.S.  
14           Greenhouse Gas Emissions and Sinks: 1990-  
15           2005”; and

16           (C) the willingness of covered greenhouse  
17           gas emitters to pay to sequester the covered  
18           greenhouse gases emitted by the applicable  
19           emitters in designated terrestrial ecosystems; and

20           (2) not later than 180 days after the date on  
21           which the assessment is completed, submit to the  
22           heads of applicable Federal agencies and the appro-  
23           priate committees of Congress a report that describes  
24           the results of the assessment.

1       (h) *DATA AND REPORT AVAILABILITY.*—On completion  
2 of the assessment, the Secretary shall incorporate the results  
3 of the assessment into a web-accessible database for public  
4 use.

5 **SEC. 307. ABRUPT CLIMATE CHANGE RESEARCH PROGRAM.**

6       (a) *ESTABLISHMENT OF PROGRAM.*—The Secretary of  
7 Commerce shall establish within the Office of Oceanic and  
8 Atmospheric Research of the National Oceanic and Atmos-  
9 pheric Administration, and shall carry out, a program of  
10 scientific research on abrupt climate change.

11       (b) *PURPOSES OF PROGRAM.*—The purposes of the pro-  
12 gram are as follows:

13           (1) *To develop a global array of terrestrial and*  
14 *oceanographic indicators of paleoclimate in order to*  
15 *sufficiently identify and describe past instances of ab-*  
16 *rupt climate change.*

17           (2) *To improve understanding of thresholds and*  
18 *nonlinearities in geophysical systems related to the*  
19 *mechanisms of abrupt climate change.*

20           (3) *To incorporate such mechanisms into ad-*  
21 *vanced geophysical models of climate change.*

22           (4) *To test the output of such models against an*  
23 *improved global array of records of past abrupt cli-*  
24 *mate changes.*

1       (c) *ABRUPT CLIMATE CHANGE DEFINED.*—*In this sec-*  
2 *tion, the term “abrupt climate change” means a change in*  
3 *the climate that occurs so rapidly or unexpectedly that*  
4 *human or natural systems have difficulty adapting to the*  
5 *climate as changed.*

6       (d) *AUTHORIZATION OF APPROPRIATIONS.*—*Of such*  
7 *sums previously authorized, there is authorized to be appro-*  
8 *priated to the Department of Commerce for each of fiscal*  

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9 *years 2009 through 2014, to remain available until ex-*  
10 *pendent, such sums as are necessary, not to exceed*  
11 *\$10,000,000, to carry out the research program required*  
12 *under this section.*

13 ***TITLE IV—COST-EFFECTIVE AND***  
14 ***ENVIRONMENTALLY SUSTAIN-***  
15 ***ABLE PUBLIC BUILDINGS***

16 ***Subtitle A—Public Buildings Cost***  
17 ***Reduction***

18 ***SEC. 401. SHORT TITLE.***

19       *This subtitle may be cited as the “Public Buildings*  
20 *Cost Reduction Act of 2007”.*

21 ***SEC. 402. COST-EFFECTIVE AND GEOTHERMAL HEAT PUMP***  
22 ***TECHNOLOGY ACCELERATION PROGRAM.***

23       (a) *DEFINITION OF ADMINISTRATOR.*—*In this section,*  
24 *the term “Administrator” means the Administrator of Gen-*  
25 *eral Services.*

1 (b) *ESTABLISHMENT.*—

2 (1) *IN GENERAL.*—*The Administrator shall es-*  
3 *tablish a program to accelerate the use of more cost-*  
4 *effective technologies and practices and geothermal*  
5 *heat pumps at GSA facilities.*

6 (2) *REQUIREMENTS.*—*The program established*  
7 *under this subsection shall—*

8 (A) *ensure centralized responsibility for the*  
9 *coordination of cost reduction-related and geo-*  
10 *thermal heat pump-related recommendations,*  
11 *practices, and activities of all relevant Federal*  
12 *agencies;*

13 (B) *provide technical assistance and oper-*  
14 *ational guidance to applicable tenants to achieve*  
15 *the goal identified in subsection (c)(2)(B)(vi);*  
16 *and*

17 (C) *establish methods to track the success of*  
18 *Federal departments and agencies with respect to*  
19 *that goal.*

20 (c) *ACCELERATED USE OF TECHNOLOGIES.*—

21 (1) *REVIEW.*—

22 (A) *IN GENERAL.*—*As part of the program*  
23 *under this section, not later than 90 days after*  
24 *the date of enactment of this Act, the Adminis-*  
25 *trator shall conduct a review of—*

1           (i) *current use of cost-effective lighting*  
2           *technologies and geothermal heat pumps in*  
3           *GSA facilities; and*

4           (ii) *the availability to managers of*  
5           *GSA facilities of cost-effective lighting tech-*  
6           *nologies and geothermal heat pumps.*

7           (B) *REQUIREMENTS.—The review under*  
8           *subparagraph (A) shall—*

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9           (i) *examine the use of cost-effective*  
10           *lighting technologies, geothermal heat*  
11           *pumps, and other cost-effective technologies*  
12           *and practices by Federal agencies in GSA*  
13           *facilities; and*

14           (ii) *as prepared in consultation with*  
15           *the Administrator of the Environmental*  
16           *Protection Agency, identify cost-effective*  
17           *lighting technology and geothermal heat*  
18           *pump technology standards that could be*  
19           *used for all types of GSA facilities.*

20           (2) *REPLACEMENT.—*

21           (A) *IN GENERAL.—As part of the program*  
22           *under this section, not later than 180 days after*  
23           *the date of enactment of this Act, the Adminis-*  
24           *trator shall establish, using available appropria-*  
25           *tions, a cost-effective lighting technology and geo-*

1        *thermal heat pump technology acceleration pro-*  
2        *gram to achieve maximum feasible replacement*  
3        *of existing lighting, heating, cooling technologies*  
4        *with cost-effective lighting technologies and geo-*  
5        *thermal heat pump technologies in each GSA fa-*  
6        *cility.*

7                *(B) ACCELERATION PLAN TIMETABLE.—*

8                    *(i) IN GENERAL.—To implement the*

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9                *program established under subparagraph*  
10               *(A), not later than 1 year after the date of*  
11               *enactment of this Act, the Administrator*  
12               *shall establish a timetable, including mile-*  
13               *stones for specific activities needed to re-*  
14               *place existing lighting, heating, cooling*  
15               *technologies with cost-effective lighting tech-*  
16               *nologies and geothermal heat pump tech-*  
17               *nologies, to the maximum extent feasible*  
18               *(including at the maximum rate feasible),*  
19               *at each GSA facility.*

20                    *(ii) GOAL.—The goal of the timetable*  
21               *under clause (i) shall be to complete, using*  
22               *available appropriations, maximum feasible*  
23               *replacement of existing lighting, heating,*  
24               *and cooling technologies with cost-effective*  
25               *lighting technologies and geothermal heat*

1            *pump technologies by not later than the*  
2            *date that is 5 years after the date of enact-*  
3            *ment of this Act.*

4            *(d) GSA FACILITY TECHNOLOGIES AND PRACTICES.—*  
5            *Not later than 180 days after the date of enactment of this*  
6            *Act, and annually thereafter, the Administrator shall—*

7            *(1) ensure that a manager responsible for accel-*  
8            *erating the use of cost-effective technologies and prac-*  

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9            *tices and geothermal heat pump technologies is des-*  
10           *ignated for each GSA facility; and*

11           *(2) submit to Congress a plan, to be implemented*  
12           *to the maximum extent feasible (including at the*  
13           *maximum rate feasible) using available appropria-*  
14           *tions, by not later than the date that is 5 years after*  
15           *the date of enactment of this Act, that—*

16           *(A) with respect to cost-effective technologies*  
17           *and practices—*

18           *(i) identifies the specific activities*  
19           *needed to achieve a 20-percent reduction in*  
20           *operational costs through the application of*  
21           *cost-effective technologies and practices from*  
22           *2003 levels at GSA facilities by not later*  
23           *than 5 years after the date of enactment of*  
24           *this Act;*

1           (ii) describes activities required and  
2           carried out to estimate the funds necessary  
3           to achieve the reduction described in clause  
4           (i);

5           (B) includes an estimate of the funds nec-  
6           essary to carry out this section;

7           (C) describes the status of the implementa-  
8           tion of cost-effective technologies and practices  

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9           and geothermal heat pump technologies and  
10          practices at GSA facilities, including—

11           (i) the extent to which programs, in-  
12           cluding the program established under sub-  
13           section (b), are being carried out in accord-  
14           ance with this subtitle; and

15           (ii) the status of funding requests and  
16           appropriations for those programs;

17           (D) identifies within the planning, budg-  
18           eting, and construction processes, all types of  
19           GSA facility-related procedures that inhibit new  
20           and existing GSA facilities from implementing  
21           cost-effective technologies or geothermal heat  
22           pump technologies;

23           (E) recommends language for uniform  
24           standards for use by Federal agencies in imple-  
25           menting cost-effective technologies and practices

1        *and geothermal heat pump technologies and*  
2        *practices;*

3            *(F) in coordination with the Office of Man-*  
4        *agement and Budget, reviews the budget process*  
5        *for capital programs with respect to alternatives*  
6        *for—*

7            *(i) permitting Federal agencies to re-*  
8        *tain all identified savings accrued as a re-*  
9        *sult of the use of cost-effective technologies*  
10       *and geothermal heat pump technologies; and*

11           *(ii) identifying short- and long-term*  
12       *cost savings that accrue from the use of cost-*  
13       *effective technologies and practices and geo-*  
14       *thermal heat pump technologies and prac-*  
15       *tices;*

16           *(G)(i) with respect to geothermal heat pump*  
17       *technologies, achieves substantial operational cost*  
18       *savings through the application of the tech-*  
19       *nologies; and*

20           *(ii) with respect to cost-effective technologies*  
21       *and practices, achieves cost savings through the*  
22       *application of cost-effective technologies and*  
23       *practices sufficient to pay the incremental addi-*  
24       *tional costs of installing the cost-effective tech-*

1           nologies and practices by not later than the date  
2           that is 5 years after the date of installation; and

3           (H) includes recommendations to address  
4           each of the matters, and a plan for implementa-  
5           tion of each recommendation, described in sub-  
6           paragraphs (A) through (G).

7           (e) *AUTHORIZATION OF APPROPRIATIONS.*—There are  
8           authorized to be appropriated such sums as are necessary  

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9           to carry out this section, to remain available until ex-  
10          pended.

11 **SEC. 403. ENVIRONMENTAL PROTECTION AGENCY DEM-**  
12                           **ONSTRATION GRANT PROGRAM FOR LOCAL**  
13                           **GOVERNMENTS.**

14           (a) *GRANT PROGRAM.*—

15           (1) *IN GENERAL.*—The Administrator of the En-  
16           vironmental Protection Agency (referred to in this  
17           section as the “Administrator”) shall establish a dem-  
18           onstration program under which the Administrator  
19           shall provide competitive grants to assist local govern-  
20           ments (such as municipalities and counties), with re-  
21           spect to local government buildings—

22                   (A) to deploy cost-effective technologies and  
23                   practices; and

24                   (B) to achieve operational cost savings,  
25                   through the application of cost-effective tech-

1            *nologies and practices, as verified by the Admin-*  
2            *istrator.*

3            (2) *COST SHARING.—*

4                    (A) *IN GENERAL.—The Federal share of the*  
5                    *cost of an activity carried out using a grant pro-*  
6                    *vided under this section shall be 40 percent.*

7                    (B) *WAIVER OF NON-FEDERAL SHARE.—The*  
8                    *Administrator may waive up to 100 percent of*  
9                    *the local share of the cost of any grant under this*  
10                   *section should the Administrator determine that*  
11                   *the community is economically distressed, pursu-*  
12                   *ant to objective economic criteria established by*  
13                   *the Administrator in published guidelines.*

14                   (3) *MAXIMUM AMOUNT.—The amount of a grant*  
15                   *provided under this subsection shall not exceed*  
16                   *\$1,000,000.*

17                   (b) *GUIDELINES.—*

18                    (1) *IN GENERAL.—Not later than 1 year after*  
19                    *the date of enactment of this Act, the Administrator*  
20                    *shall issue guidelines to implement the grant program*  
21                    *established under subsection (a).*

22                    (2) *REQUIREMENTS.—The guidelines under*  
23                    *paragraph (1) shall establish—*

24                            (A) *standards for monitoring and*  
25                            *verification of operational cost savings through*

1           *the application of cost-effective technologies and*  
2           *practices reported by grantees under this section;*

3                   *(B) standards for grantees to implement*  
4           *training programs, and to provide technical as-*  
5           *sistance and education, relating to the retrofit of*  
6           *buildings using cost-effective technologies and*  
7           *practices; and*

8                   *(C) a requirement that each local govern-*  

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9           *ment that receives a grant under this section*  
10          *shall achieve facility-wide cost savings, through*  
11          *renovation of existing local government buildings*  
12          *using cost-effective technologies and practices, of*  
13          *at least 40 percent as compared to the baseline*  
14          *operational costs of the buildings before the ren-*  
15          *ovation (as calculated assuming a 3-year, weath-*  
16          *er-normalized average).*

17          *(c) COMPLIANCE WITH STATE AND LOCAL LAW.—*  
18          *Nothing in this section or any program carried out using*  
19          *a grant provided under this section supersedes or otherwise*  
20          *affects any State or local law, to the extent that the State*  
21          *or local law contains a requirement that is more stringent*  
22          *than the relevant requirement of this section.*

23          *(d) AUTHORIZATION OF APPROPRIATIONS.—There is*  
24          *authorized to be appropriated to carry out this section*  
25          *\$20,000,000 for each of fiscal years 2007 through 2012.*

1 (e) *REPORTS.*—

2 (1) *IN GENERAL.*—*The Administrator shall pro-*  
3 *vide annual reports to Congress on cost savings*  
4 *achieved and actions taken and recommendations*  
5 *made under this section, and any recommendations*  
6 *for further action.*

7 (2) *FINAL REPORT.*—*The Administrator shall*  
8 *issue a final report at the conclusion of the program,*  
9 *including findings, a summary of total cost savings*  
10 *achieved, and recommendations for further action.*

11 (f) *TERMINATION.*—*The program under this section*  
12 *shall terminate on September 30, 2012.*

13 **SEC. 404. DEFINITIONS.**

14 *In this subtitle:*

15 (1) *COST-EFFECTIVE LIGHTING TECHNOLOGY.*—

16 (A) *IN GENERAL.*—*The term “cost-effective*  
17 *lighting technology” means a lighting technology*  
18 *that—*

19 (i) *will result in substantial oper-*  
20 *ational cost savings by ensuring an in-*  
21 *stalled consumption of not more than 1*  
22 *watt per square foot; or*

23 (ii) *is contained in a list under—*

24 (I) *section 553 of Public Law 95-*  
25 *619 (42 U.S.C. 8259b); and*

1 (II) *Federal acquisition regula-*  
2 *tion 23-203.*

3 (B) *INCLUSIONS.—The term “cost-effective*  
4 *lighting technology” includes—*

5 (i) *lamps;*

6 (ii) *ballasts;*

7 (iii) *luminaires;*

8 (iv) *lighting controls;*

9 (v) *daylighting; and*

10 (vi) *early use of other highly cost-effec-*  
11 *tive lighting technologies.*

12 (2) *COST-EFFECTIVE TECHNOLOGIES AND PRAC-*  
13 *TICES.—The term “cost-effective technologies and*  
14 *practices” means a technology or practice that—*

15 (A) *will result in substantial operational*  
16 *cost savings by reducing utility costs; and*

17 (B) *complies with the provisions of section*  
18 *553 of Public Law 95-619 (42 U.S.C. 8259b)*  
19 *and Federal acquisition regulation 23-203.*

20 (3) *OPERATIONAL COST SAVINGS.—*

21 (A) *IN GENERAL.—The term “operational*  
22 *cost savings” means a reduction in end-use oper-*  
23 *ational costs through the application of cost-effec-*  
24 *tive technologies and practices or geothermal*  
25 *heat pumps, including a reduction in electricity*

1           *consumption relative to consumption by the*  
2           *same customer or at the same facility in a given*  
3           *year, as defined in guidelines promulgated by*  
4           *the Administrator pursuant to section 403(b),*  
5           *that achieves cost savings sufficient to pay the*  
6           *incremental additional costs of using cost-effec-*  
7           *tive technologies and practices or geothermal*  
8           *heat pumps by not later than—*

9                     *(i) for cost-effective technologies and*  
10                    *practices, the date that is 5 years after the*  
11                    *date of installation; and*

12                    *(ii) for geothermal heat pumps, as soon*  
13                    *as practical after the date of installation of*  
14                    *the applicable geothermal heat pump.*

15            (B) *INCLUSIONS.—The term “operational*  
16            *cost savings” includes savings achieved at a fa-*  
17            *ility as a result of—*

18                    *(i) the installation or use of cost-effec-*  
19                    *tive technologies and practices; or*

20                    *(ii) the planting of vegetation that*  
21                    *shades the facility and reduces the heating,*  
22                    *cooling, or lighting needs of the facility.*

23            (C) *EXCLUSION.—The term “operational*  
24            *cost savings” does not include savings from*  
25            *measures that would likely be adopted in the ab-*

1           *sence of cost-effective technology and practices*  
2           *programs, as determined by the Administrator.*

3           (4) *GEOTHERMAL HEAT PUMP.*—*The term “geo-*  
4           *thermal heat pump” means any heating or air condi-*  
5           *tioning technology that—*

6                     (A) *uses the ground or ground water as a*  
7                     *thermal energy source to heat, or as a thermal*  
8                     *energy sink to cool, a building; and*

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9                     (B) *meets the requirements of the Energy*  
10                    *Star program of the Environmental Protection*  
11                    *Agency applicable to geothermal heat pumps on*  
12                    *the date of purchase of the technology.*

13           (5) *GSA FACILITY.*—

14                    (A) *IN GENERAL.*—*The term “GSA facility”*  
15                    *means any building, structure, or facility, in*  
16                    *whole or in part (including the associated sup-*  
17                    *port systems of the building, structure, or facil-*  
18                    *ity) that—*

19                             (i) *is constructed (including facilities*  
20                             *constructed for lease), renovated, or pur-*  
21                             *chased, in whole or in part, by the Admin-*  
22                             *istrator for use by the Federal Government;*  
23                             *or*

1           (ii) is leased, in whole or in part, by  
2           the Administrator for use by the Federal  
3           Government—

4           (I) except as provided in sub-  
5           clause (II), for a term of not less than  
6           5 years; or

7           (II) for a term of less than 5  
8           years, if the Administrator determines  
9           that use of cost-effective technologies  
10          and practices would result in the pay-  
11          back of expenses.

12          (B) *INCLUSION.*—The term “GSA facility”  
13          includes any group of buildings, structures, or  
14          facilities described in subparagraph (A) (includ-  
15          ing the associated energy-consuming support sys-  
16          tems of the buildings, structures, and facilities).

17          (C) *EXEMPTION.*—The Administrator may  
18          exempt from the definition of “GSA facility”  
19          under this paragraph a building, structure, or  
20          facility that meets the requirements of section  
21          543(c) of Public Law 95-619 (42 U.S.C.  
22          8253(c)).

1 **Subtitle B—Installation of Photo-**  
2 **voltaic System at Department of**  
3 **Energy Headquarters Building**

4 **SEC. 411. INSTALLATION OF PHOTOVOLTAIC SYSTEM AT DE-**  
5 **PARTMENT OF ENERGY HEADQUARTERS**  
6 **BUILDING.**

7 (a) *IN GENERAL.*—*The Administrator of General*  
8 *Services shall install a photovoltaic system, as set forth in*  
9 *the Sun Wall Design Project, for the headquarters building*  
10 *of the Department of Energy located at 1000 Independence*  
11 *Avenue, Southwest, Washington, D.C., commonly known as*  
12 *the Forrestal Building.*

13 (b) *FUNDING.*—*There shall be available from the Fed-*  
14 *eral Buildings Fund established by section 592 of title 40,*  
15 *United States Code, \$30,000,000 to carry out this section.*  
16 *Such sums shall be derived from the unobligated balance*  
17 *of amounts made available from the Fund for fiscal year*  
18 *2007, and prior fiscal years, for repairs and alterations and*  
19 *other activities (excluding amounts made available for the*  
20 *energy program). Such sums shall remain available until*  
21 *expended.*

22 (c) *OBLIGATION OF FUNDS.*—*None of the funds made*  
23 *available pursuant to subsection (b) may be obligated prior*  
24 *to September 30, 2007.*

1       **Subtitle C—High-Performance**  
2                   **Green Buildings**

3   **SEC. 421. SHORT TITLE.**

4       *This subtitle may be cited as the “High-Performance*  
5 *Green Buildings Act of 2007”.*

6   **SEC. 422. FINDINGS AND PURPOSES.**

7       (a) *FINDINGS.—Congress finds that—*

8           (1) *high-performance green buildings—*

9                   (A) *reduce energy, water, and material re-*  
10 *source use and the generation of waste;*

11                   (B) *improve indoor environmental quality,*  
12 *and protect indoor air quality by, for example,*  
13 *using materials that emit fewer or no toxic*  
14 *chemicals into the indoor air;*

15                   (C) *improve thermal comfort;*

16                   (D) *improve lighting and the acoustic envi-*  
17 *ronment;*

18                   (E) *improve the health and productivity of*  
19 *individuals who live and work in the buildings;*

20                   (F) *improve indoor and outdoor impacts of*  
21 *the buildings on human health and the environ-*  
22 *ment;*

23                   (G) *increase the use of environmentally*  
24 *preferable products, including biobased, recycled,*

1           *and nontoxic products with lower lifecycle im-*  
2           *pacts; and*

3                     *(H) increase opportunities for reuse of ma-*  
4           *terials and for recycling;*

5           *(2) during the planning, design, and construc-*  
6           *tion of a high-performance green building, the envi-*  
7           *ronmental and energy impacts of building location*  
8           *and site design, the minimization of energy and ma-*  
9           *terials use, and the environmental impacts of the*  
10          *building are considered;*

11                    *(3) according to the United States Green Build-*  
12          *ing Council, certified green buildings, as compared to*  
13          *conventional buildings—*

14                    *(A) use an average of 36 percent less total*  
15            *energy (and in some cases up to 50 to 70 percent*  
16            *less total energy);*

17                    *(B) use 30 percent less water; and*

18                    *(C) reduce waste costs, often by 50 to 90*  
19            *percent;*

20                    *(4) the benefits of high-performance green build-*  
21          *ings are important, because in the United States,*  
22          *buildings are responsible for approximately—*

23                    *(A) 39 percent of primary energy use;*

24                    *(B) 12 percent of potable water use;*

1           (C) 136,000,000 tons of building-related  
2           construction and demolition debris;

3           (D) 70 percent of United States resource  
4           consumption; and

5           (E) 70 percent of electricity consumption;

6           (5) green building certification programs can be  
7           highly beneficial by disseminating up-to-date infor-  
8           mation and expertise regarding high-performance

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9           green buildings, and by providing third-party  
10          verification of green building design, practices, and  
11          materials, and other aspects of buildings; and

12          (6) a July 2006 study completed for the General  
13          Services Administration, entitled "Sustainable Build-  
14          ing Rating Systems Summary," concluded that—

15               (A) green building standards are an impor-  
16               tant means to encourage better practices;

17               (B) the Leadership in Energy and Environ-  
18               mental Design (LEED) standard for green  
19               building certification is "currently the dominant  
20               system in the United States market and is being  
21               adapted to multiple markets worldwide"; and

22               (C) there are other useful green building  
23               certification or rating programs in various  
24               stages of development and adoption, including

1           *the Green Globes program and other rating sys-*  
2           *tems.*

3           **(b) PURPOSES.**—*The purposes of this subtitle are—*

4           (1) *to encourage the Federal Government to act*  
5           *as an example for State and local governments, the*  
6           *private sector, and individuals by building high-per-*  
7           *formance green buildings that reduce energy use and*  
8           *environmental impacts;*

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9           (2) *to establish an Office within the General*  
10          *Services Administration, and a Green Building Advi-*  
11          *sory Committee, to advance the goals of conducting*  
12          *research and development and public outreach, and to*  
13          *move the Federal Government toward construction of*  
14          *high-performance green buildings;*

15          (3) *to encourage States, local governments, and*  
16          *school systems to site, build, renovate, and operate*  
17          *high-performance green schools through the adoption*  
18          *of voluntary guidelines for those schools, the dissemi-*  
19          *nation of grants, and the adoption of environmental*  
20          *health plans and programs;*

21          (4) *to strengthen Federal leadership on high-per-*  
22          *formance green buildings through the adoption of in-*  
23          *centives for high-performance green buildings, and*  
24          *improved green procurement by Federal agencies; and*

1           (5) to demonstrate that high-performance green  
 2 buildings can and do provide significant benefits, in  
 3 order to encourage wider adoption of green building  
 4 practices, through the adoption of demonstration  
 5 projects.

6 **SEC. 423. DEFINITIONS.**

7 *In this subtitle:*

8           (1) **ADMINISTRATOR.**—The term “Adminis-  
 9 trator” means the Administrator of General Services.

10           (2) **COMMITTEE.**—The term “Committee” means  
 11 the Green Building Advisory Committee established  
 12 under section 433(a).

13           (3) **DIRECTOR.**—The term “Director” means the  
 14 individual appointed to the position established under  
 15 section 431(a).

16           (4) **FEDERAL FACILITY.**—

17           (A) **IN GENERAL.**—The term “Federal facil-  
 18 ity” means any building or facility the intended  
 19 use of which requires the building or facility to  
 20 be—

21                   (i) accessible to the public; and

22                   (ii) constructed or altered by or on be-  
 23 half of the United States.

24           (B) **EXCLUSIONS.**—The term “Federal facil-  
 25 ity” does not include a privately-owned residen-

1            *tial or commercial structure that is not leased by*  
2            *the Federal Government.*

3            (5) *HIGH-PERFORMANCE GREEN BUILDING.*—*The*  
4            *term “high-performance green building” means a*  
5            *building—*

6            (A) *that, during its life-cycle—*

7                    (i) *reduces energy, water, and material*  
8                    *resource use and the generation of waste;*

9                    (ii) *improves indoor environmental*  
10                   *quality, including protecting indoor air*  
11                   *quality during construction, using low-*  
12                   *emitting materials, improving thermal com-*  
13                   *fort, and improving lighting and acoustic*  
14                   *environments that affect occupant health*  
15                   *and productivity;*

16                   (iii) *improves indoor and outdoor im-*  
17                   *pacts of the building on human health and*  
18                   *the environment;*

19                   (iv) *increases the use of environ-*  
20                   *mentally preferable products, including*  
21                   *biobased, recycled content, and nontoxic*  
22                   *products with lower life-cycle impacts;*

23                   (v) *increases reuse and recycling op-*  
24                   *portunities; and*

1                   (vi) integrates systems in the building;

2                   and

3                   (B) for which, during its planning, design,  
4                   and construction, the environmental and energy  
5                   impacts of building location and site design are  
6                   considered.

7                   (6) *LIFE CYCLE*.—The term “life cycle”, with re-  
8                   spect to a high-performance green building, means all  

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9                   stages of the useful life of the building (including com-  
10                  ponents, equipment, systems, and controls of the  
11                  building) beginning at conception of a green building  
12                  project and continuing through site selection, design,  
13                  construction, landscaping, commissioning, operation,  
14                  maintenance, renovation, deconstruction or demoli-  
15                  tion, removal, and recycling of the green building.

16                  (7) *LIFE-CYCLE ASSESSMENT*.—The term “life-  
17                  cycle assessment” means a comprehensive system ap-  
18                  proach for measuring the environmental performance  
19                  of a product or service over the life of the product or  
20                  service, beginning at raw materials acquisition and  
21                  continuing through manufacturing, transportation,  
22                  installation, use, reuse, and end-of-life waste manage-  
23                  ment.

24                  (8) *LIFE-CYCLE COSTING*.—The term “life-cycle  
25                  costing”, with respect to a high-performance green

1 *building, means a technique of economic evaluation*  
2 *that—*

3 *(A) sums, over a given study period, the*  
4 *costs of initial investment (less resale value), re-*  
5 *placements, operations (including energy use),*  
6 *and maintenance and repair of an investment*  
7 *decision; and*

8 *(B) is expressed—*

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9 *(i) in present value terms, in the case*  
10 *of a study period equivalent to the longest*  
11 *useful life of the building, determined by*  
12 *taking into consideration the typical life of*  
13 *such a building in the area in which the*  
14 *building is to be located; or*

15 *(ii) in annual value terms, in the case*  
16 *of any other study period.*

17 *(9) OFFICE.—The term “Office” means the Office*  
18 *of High-Performance Green Buildings established*  
19 *under section 432(a).*

20 **PART I—OFFICE OF HIGH-PERFORMANCE GREEN**  
21 **BUILDINGS**

22 **SEC. 431. OVERSIGHT.**

23 *(a) IN GENERAL.—The Administrator shall establish*  
24 *within the General Services Administration, and appoint*

1 *an individual to serve as Director in, a position in the ca-*  
2 *reer-reserved Senior Executive service, to—*

3           (1) *establish and manage the Office in accord-*  
4 *ance with section 432; and*

5           (2) *carry out other duties as required under this*  
6 *subtitle.*

7           (b) *COMPENSATION.—The compensation of the Direc-*  
8 *tor shall not exceed the maximum rate of basic pay for the*  
9 *Senior Executive Service under section 5382 of title 5,*  
10 *United States Code, including any applicable locality-based*  
11 *comparability payment that may be authorized under sec-*  
12 *tion 5304(h)(2)(C) of that title.*

13 **SEC. 432. OFFICE OF HIGH-PERFORMANCE GREEN BUILD-**  
14 **INGS.**

15           (a) *ESTABLISHMENT.—The Director shall establish*  
16 *within the General Services Administration an Office of*  
17 *High-Performance Green Buildings.*

18           (b) *DUTIES.—The Director shall—*

19                   (1) *ensure full coordination of high-performance*  
20 *green building information and activities within the*  
21 *General Services Administration and all relevant*  
22 *Federal agencies, including, at a minimum—*

23                           (A) *the Environmental Protection Agency;*

24                           (B) *the Office of the Federal Environmental*  
25 *Executive;*

- 1           (C) *the Office of Federal Procurement Pol-*  
2           *icy;*  
3           (D) *the Department of Energy;*  
4           (E) *the Department of Health and Human*  
5           *Services;*  
6           (F) *the Department of Defense; and*  
7           (G) *such other Federal agencies as the Di-*  
8           *rector considers to be appropriate;*
- 

9           (2) *establish a senior-level green building advi-*  
10          *sory committee, which shall provide advice and rec-*  
11          *ommendations in accordance with section 433;*

12          (3) *identify and biennially reassess improved or*  
13          *higher rating standards recommended by the Com-*  
14          *mittee;*

15          (4) *establish a national high-performance green*  
16          *building clearinghouse in accordance with section*  
17          *434, which shall provide green building information*  
18          *through—*

19               (A) *outreach;*

20               (B) *education; and*

21               (C) *the provision of technical assistance;*

22          (5) *ensure full coordination of research and de-*  
23          *velopment information relating to high-performance*  
24          *green building initiatives under section 435;*

1           (6) *identify and develop green building stand-*  
2           *ards that could be used for all types of Federal facili-*  
3           *ties in accordance with section 435;*

4           (7) *establish green practices that can be used*  
5           *throughout the life of a Federal facility;*

6           (8) *review and analyze current Federal budget*  
7           *practices and life-cycle costing issues, and make rec-*  
8           *ommendations to Congress, in accordance with section*  
9           *436; and*

10          (9) *complete and submit the report described in*  
11          *subsection (c).*

12          (c) *REPORT.*—*Not later than 2 years after the date of*  
13          *enactment of this Act, and biennially thereafter, the Direc-*  
14          *tor shall submit to Congress a report that—*

15               (1) *describes the status of the green building ini-*  
16               *tiatives under this subtitle and other Federal pro-*  
17               *grams in effect as of the date of the report,*  
18               *including—*

19                       (A) *the extent to which the programs are*  
20                       *being carried out in accordance with this sub-*  
21                       *title; and*

22                       (B) *the status of funding requests and ap-*  
23                       *propriations for those programs;*

24               (2) *identifies within the planning, budgeting,*  
25               *and construction process all types of Federal facility*

1 *procedures that inhibit new and existing Federal fa-*  
2 *ilities from becoming high-performance green build-*  
3 *ings, as measured by the standard for high-perform-*  
4 *ance green buildings identified in accordance with*  
5 *subsection (d);*

6 *(3) identifies inconsistencies, as reported to the*  
7 *Committee, in Federal law with respect to product ac-*  
8 *quisition guidelines and high-performance product*  
9 *guidelines;*

10 *(4) recommends language for uniform standards*  
11 *for use by Federal agencies in environmentally re-*  
12 *sponsible acquisition;*

13 *(5) in coordination with the Office of Manage-*  
14 *ment and Budget, reviews the budget process for cap-*  
15 *ital programs with respect to alternatives for—*

16 *(A) restructuring of budgets to require the*  
17 *use of complete energy- and environmental-cost*  
18 *accounting;*

19 *(B) using operations expenditures in budg-*  
20 *et-related decisions while simultaneously incor-*  
21 *porating productivity and health measures (as*  
22 *those measures can be quantified by the Office,*  
23 *with the assistance of universities and national*  
24 *laboratories);*

1           (C) *permitting Federal agencies to retain*  
2           *all identified savings accrued as a result of the*  
3           *use of life cycle costing; and*

4           (D) *identifying short- and long-term cost*  
5           *savings that accrue from high-performance green*  
6           *buildings, including those relating to health and*  
7           *productivity;*

8           (6) *identifies green, self-sustaining technologies*  

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9           *to address the operational needs of Federal facilities*  
10           *in times of national security emergencies, natural dis-*  
11           *asters, or other dire emergencies;*

12           (7) *summarizes and highlights development, at*  
13           *the State and local level, of green building initiatives,*  
14           *including Executive orders, policies, or laws adopted*  
15           *promoting green building (including the status of im-*  
16           *plementation of those initiatives); and*

17           (8) *includes, for the 2-year period covered by the*  
18           *report, recommendations to address each of the mat-*  
19           *ters, and a plan for implementation of each rec-*  
20           *ommendation, described in paragraphs (1) through*  
21           *(6).*

22           (d) *IDENTIFICATION OF STANDARD.—*

23           (1) *IN GENERAL.—For the purpose of subsection*  
24           *(c)(2), not later than 60 days after the date of enact-*  
25           *ment of this Act, the Director shall identify a stand-*

1        *ard that the Director determines to be the most likely*  
2        *to encourage a comprehensive and environmentally-*  
3        *sound approach to certification of green buildings.*

4            (2) *BASIS.—The standard identified under para-*  
5        *graph (1) shall be based on—*

6            (A) *a biennial study, which shall be carried*  
7        *out by the Director to compare and evaluate*  
8        *standards;*

9            (B) *the ability and availability of assessors*  
10       *and auditors to independently verify the criteria*  
11       *and measurement of metrics at the scale nec-*  
12       *essary to implement this subtitle;*

13           (C) *the ability of the applicable standard-*  
14       *setting organization to collect and reflect public*  
15       *comment;*

16           (D) *the ability of the standard to be devel-*  
17       *oped and revised through a consensus-based proc-*  
18       *ess;*

19           (E) *an evaluation of the adequacy of the*  
20       *standard, which shall give credit for—*

21                (i) *efficient and sustainable use of*  
22        *water, energy, and other natural resources;*

23                (ii) *use of renewable energy sources;*

24                (iii) *improved indoor environmental*  
25       *quality through enhanced indoor air qual-*

1           *ity, thermal comfort, acoustics, day light-*  
2           *ing, pollutant source control, and use of*  
3           *low-emission materials and building system*  
4           *controls; and*

5                     *(iv) such other criteria as the Director*  
6           *determines to be appropriate; and*

7                     *(F) national recognition within the build-*  
8           *ing industry.*

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9           (3) *BIENNIAL REVIEW.—The Director shall—*

10                    *(A) conduct a biennial review of the stand-*  
11           *ard identified under paragraph (1); and*

12                    *(B) include the results of each biennial re-*  
13           *view in the report required to be submitted under*  
14           *subsection (c).*

15           (e) *IMPLEMENTATION.—The Office shall carry out each*  
16   *plan for implementation of recommendations under sub-*  
17   *section (c)(7).*

18   **SEC. 433. GREEN BUILDING ADVISORY COMMITTEE.**

19           (a) *ESTABLISHMENT.—Not later than 180 days after*  
20   *the date of enactment of this Act, the Director shall establish*  
21   *an advisory committee, to be known as the “Green Building*  
22   *Advisory Committee”.*

23           (b) *MEMBERSHIP.—*

24                    (1) *IN GENERAL.—The Committee shall be com-*  
25   *posed of representatives of, at a minimum—*

1           (A) each agency referred to in section  
2           432(b)(1); and

3           (B) other relevant agencies and entities, as  
4           determined by the Director, including at least 1  
5           representative of each of—

6                   (i) State and local governmental green  
7                   building programs;

8                   (ii) independent green building asso-  
9                   ciations or councils;

10                   (iii) building experts, including archi-  
11                   tects, material suppliers, and construction  
12                   contractors;

13                   (iv) security advisors focusing on na-  
14                   tional security needs, natural disasters, and  
15                   other dire emergency situations; and

16                   (v) environmental health experts, in-  
17                   cluding those with experience in children's  
18                   health.

19           (2) *NON-FEDERAL MEMBERS.*—The total number  
20           of non-Federal members on the Committee at any  
21           time shall not exceed 15.

22           (c) *MEETINGS.*—The Director shall establish a regular  
23           schedule of meetings for the Committee.

24           (d) *DUTIES.*—The Committee shall provide advice and  
25           expertise for use by the Director in carrying out the duties

1 *under this subtitle, including such recommendations relat-*  
2 *ing to Federal activities carried out under sections 434*  
3 *through 436 as are agreed to by a majority of the members*  
4 *of the Committee.*

5 (e) *FACA EXEMPTION.—The Committee shall not be*  
6 *subject to section 14 of the Federal Advisory Committee Act*  
7 *(5 U.S.C. App.).*

8 **SEC. 434. PUBLIC OUTREACH.**

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9 *The Director, in coordination with the Committee,*  
10 *shall carry out public outreach to inform individuals and*  
11 *entities of the information and services available Govern-*  
12 *ment-wide by—*

13 (1) *establishing and maintaining a national*  
14 *high-performance green building clearinghouse, in-*  
15 *cluding on the Internet, that—*

16 (A) *identifies existing similar efforts and*  
17 *coordinates activities of common interest; and*

18 (B) *provides information relating to high-*  
19 *performance green buildings, including*  
20 *hyperlinks to Internet sites that describe related*  
21 *activities, information, and resources of—*

22 (i) *the Federal Government;*

23 (ii) *State and local governments;*

1                   (iii) the private sector (including non-  
2 governmental and nonprofit entities and or-  
3 ganizations); and

4                   (iv) other relevant organizations, in-  
5 cluding those from other countries;

6           (2) identifying and recommending educational  
7 resources for implementing high-performance green  
8 building practices, including security and emergency

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9 benefits and practices;

10           (3) providing access to technical assistance on  
11 using tools and resources to make more cost-effective,  
12 energy-efficient, health-protective, and environ-  
13 mentally beneficial decisions for constructing high-  
14 performance green buildings, including tools available  
15 to conduct life-cycle costing and life-cycle assessment;

16           (4) providing information on application proc-  
17 esses for certifying a high-performance green building,  
18 including certification and commissioning;

19           (5) providing technical information, market re-  
20 search, or other forms of assistance or advice that  
21 would be useful in planning and constructing high-  
22 performance green buildings; and

23           (6) using such other methods as are determined  
24 by the Director to be appropriate.

1 **SEC. 435. RESEARCH AND DEVELOPMENT.**

2 (a) *ESTABLISHMENT.*—*The Director, in coordination*  
3 *with the Committee, shall—*

4 (1)(A) *survey existing research and studies relat-*  
5 *ing to high-performance green buildings; and*

6 (B) *coordinate activities of common interest;*

7 (2) *develop and recommend a high-performance*  
8 *green building research plan that—*

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9 (A) *identifies information and research*  
10 *needs, including the relationships between*  
11 *human health, occupant productivity, and each*  
12 *of—*

13 (i) *emissions from materials and prod-*  
14 *ucts in the building;*

15 (ii) *natural day lighting;*

16 (iii) *ventilation choices and tech-*  
17 *nologies;*

18 (iv) *heating, cooling, and system con-*  
19 *trol choices and technologies;*

20 (v) *moisture control and mold;*

21 (vi) *maintenance, cleaning, and pest*  
22 *control activities;*

23 (vii) *acoustics; and*

24 (viii) *other issues relating to the*  
25 *health, comfort, productivity, and perform-*  
26 *ance of occupants of the building; and*

1           (B) promotes the development and dissemi-  
2           nation of high-performance green building meas-  
3           urement tools that, at a minimum, may be  
4           used—

5                   (i) to monitor and assess the life-cycle  
6                   performance of facilities (including dem-  
7                   onstration projects) built as high-perform-  
8                   ance green buildings; and

9                   (ii) to perform life-cycle assessments;

10           (3) assist the budget and life-cycle costing func-  
11           tions of the Office under section 436;

12           (4) study and identify potential benefits of green  
13           buildings relating to security, natural disaster, and  
14           emergency needs of the Federal Government; and

15           (5) support other research initiatives determined  
16           by the Office.

17           (b) *INDOOR AIR QUALITY.*—The Director, in consulta-  
18           tion with the Committee, shall develop and carry out a com-  
19           prehensive indoor air quality program for all Federal fa-  
20           cilities to ensure the safety of Federal workers and facility  
21           occupants—

22                   (1) during new construction and renovation of  
23                   facilities; and

24                   (2) in existing facilities.

1 **SEC. 436. BUDGET AND LIFE-CYCLE COSTING AND CON-**  
2 **TRACTING.**

3 (a) *ESTABLISHMENT.*—*The Director, in coordination*  
4 *with the Committee, shall—*

5 (1) *identify, review, and analyze current budget*  
6 *and contracting practices that affect achievement of*  
7 *high-performance green buildings, including the iden-*  
8 *tification of barriers to green building life-cycle cost-*  
9 *ing and budgetary issues;*

10 (2) *develop guidance and conduct training ses-*  
11 *sions with budget specialists and contracting per-*  
12 *sonnel from Federal agencies and budget examiners to*  
13 *apply life-cycle cost criteria to actual projects;*

14 (3) *identify tools to aid life-cycle cost decision-*  
15 *making; and*

16 (4) *explore the feasibility of incorporating the*  
17 *benefits of green buildings, such as security benefits,*  
18 *into a cost-budget analysis to aid in life-cycle costing*  
19 *for budget and decision making processes.*

20 **SEC. 437. AUTHORIZATION OF APPROPRIATIONS.**

21 *There is authorized to be appropriated to carry out*  
22 *this part \$4,000,000 for each of fiscal years 2008 through*  
23 *2012, to remain available until expended.*

1       **PART II—HEALTHY HIGH-PERFORMANCE**2                               **SCHOOLS**3       **SEC. 441. DEFINITION OF HIGH-PERFORMANCE SCHOOL.**

4       *In this part, the term "high-performance school" has*  
5 *the meaning given the term "healthy, high-performance*  
6 *school building" in section 5586 of the Elementary and Sec-*  
7 *ondary Education Act of 1965 (20 U.S.C. 7277e).*

8       **SEC. 442. GRANTS FOR HEALTHY SCHOOL ENVIRONMENTS.**

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9       *The Administrator of the Environmental Protection*  
10 *Agency, in consultation with the Secretary of Education,*  
11 *may provide grants to qualified State agencies for use in—*

12               (1) *providing technical assistance for programs*  
13 *of the Environmental Protection Agency (including*  
14 *the Tools for Schools Program and the Healthy School*  
15 *Environmental Assessment Tool) to schools for use in*  
16 *addressing environmental issues; and*

17               (2) *development of State school environmental*  
18 *quality plans that include—*

19                       (A) *standards for school building design,*  
20 *construction, and renovation; and*

21                       (B) *identification of ongoing school building*  
22 *environmental problems in the State and rec-*  
23 *ommended solutions to address those problems,*  
24 *including assessment of information on the expo-*  
25 *sure of children to environmental hazards in*  
26 *school facilities.*

1 **SEC. 443. MODEL GUIDELINES FOR SITING OF SCHOOL FA-**  
2 **CILITIES.**

3 *The Administrator of the Environmental Protection*  
4 *Agency, in consultation with the Secretary of Education*  
5 *and the Secretary of Health and Human Services, shall de-*  
6 *velop voluntary school site selection guidelines that account*  
7 *for—*

8 (1) *the special vulnerability of children to haz-*  
9 *ardous substances or pollution exposures in any case*  
10 *in which the potential for contamination at a poten-*  
11 *tial school site exists;*

12 (2) *modes of transportation available to students*  
13 *and staff;*

14 (3) *the efficient use of energy; and*

15 (4) *the potential use of a school at the site as an*  
16 *emergency shelter.*

17 **SEC. 444. PUBLIC OUTREACH.**

18 (a) *IN GENERAL.—The Administrator of the Environ-*  
19 *mental Protection Agency shall provide to the Director in-*  
20 *formation relating to all activities carried out under this*  
21 *part, which the Director shall include in the report de-*  
22 *scribed in section 432(c).*

23 (b) *PUBLIC OUTREACH.—The Director shall ensure, to*  
24 *the maximum extent practicable, that the public clearing-*  
25 *house established under section 434 receives and makes*  
26 *available information on the exposure of children to envi-*

1 *ronmental hazards in school facilities, as provided by the*  
2 *Administrator of the Environmental Protection Agency.*

3 **SEC. 445. ENVIRONMENTAL HEALTH PROGRAM.**

4 (a) *IN GENERAL.*—*The Administrator of the Environ-*  
5 *mental Protection Agency, in consultation with the Sec-*  
6 *retary of Education, the Secretary of Health and Human*  
7 *Services, and other relevant agencies, shall issue voluntary*  
8 *guidelines for use by the State in developing and imple-*  
9 *menting an environmental health program for schools*  
10 *that—*

11 (1) *takes into account the status and findings of*  
12 *Federal research initiatives established under this*  
13 *subtitle and other relevant Federal law with respect*  
14 *to school facilities, including relevant updates on*  
15 *trends in the field, such as the impact of school facil-*  
16 *ity environments on student and staff—*

17 (A) *health, safety, and productivity; and*

18 (B) *disabilities or special needs;*

19 (2) *provides research using relevant tools identi-*  
20 *fied or developed in accordance with section 435(a) to*  
21 *quantify the relationships between—*

22 (A) *human health, occupant productivity,*  
23 *and student performance; and*

24 (B) *with respect to school facilities, each*  
25 *of—*

- 1                   (i) *pollutant emissions from materials*  
2                   *and products;*
- 3                   (ii) *natural day lighting;*
- 4                   (iii) *ventilation choices and tech-*  
5                   *nologies;*
- 6                   (iv) *heating and cooling choices and*  
7                   *technologies;*
- 8                   (v) *moisture control and mold;*
- 9                   (vi) *maintenance, cleaning, and pest*  
10                  *control activities;*
- 11                  (vii) *acoustics; and*
- 12                  (viii) *other issues relating to the*  
13                  *health, comfort, productivity, and perform-*  
14                  *ance of occupants of the school facilities;*
- 15                  (3) *provides technical assistance on siting, de-*  
16                  *sign, management, and operation of school facilities,*  
17                  *including facilities used by students with disabilities*  
18                  *or special needs;*
- 19                  (4) *collaborates with federally funded pediatric*  
20                  *environmental health centers to assist in on-site school*  
21                  *environmental investigations;*
- 22                  (5) *assists States and the public in better under-*  
23                  *standing and improving the environmental health of*  
24                  *children; and*



1 *the use of green buildings and related technology in the op-*  
2 *erations of the Federal Government, including through—*  
3       (1) *the provision of recognition awards; and*  
4       (2) *the maximum feasible retention of financial*  
5 *savings in the annual budgets of Federal agencies.*

6 **SEC. 452. FEDERAL PROCUREMENT.**

7       (a) *IN GENERAL.—Not later than 2 years after the*  
8 *date of enactment of this Act, the Director of the Office of*  

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*9 Federal Procurement Policy, in consultation with the Di-*  
10 *rector and the Under Secretary of Defense for Acquisition,*  
11 *Technology, and Logistics, shall promulgate revisions of the*  
12 *applicable acquisition regulations, to take effect as of the*  
13 *date of promulgation of the revisions—*

14               (1) *to direct any Federal procurement executives*  
15 *involved in the acquisition, construction, or major*  
16 *renovation (including contracting for the construction*  
17 *or major renovation) of any facility, to the maximum*  
18 *extent practicable—*

19                       (A) *to employ integrated design principles;*

20                       (B) *to optimize building and systems en-*  
21 *ergy performance;*

22                       (C) *to protect and conserve water;*

23                       (D) *to enhance indoor environmental qual-*  
24 *ity; and*

1           (E) to reduce environmental impacts of ma-  
2           terials and waste flows; and

3           (2) to direct Federal procurement executives in-  
4           volved in leasing buildings, to give preference to the  
5           lease of facilities that, to the maximum extent  
6           practicable—

7           (A) are energy-efficient; and

8           (B) have applied contemporary high-per-  
9           formance and sustainable design principles dur-  
10          ing construction or renovation.

11          (b) *GUIDANCE.*—Not later than 90 days after the date  
12 of promulgation of the revised regulations under subsection  
13 (a), the Director shall issue guidance to all Federal procure-  
14 ment executives providing direction and the option to re-  
15 negotiate the design of proposed facilities, renovations for  
16 existing facilities, and leased facilities to incorporate im-  
17 provements that are consistent with this section.

18 **SEC. 453. FEDERAL GREEN BUILDING PERFORMANCE.**

19          (a) *IN GENERAL.*—Not later than October 31 of each  
20 of the 2 fiscal years following the fiscal year in which this  
21 Act is enacted, and at such times thereafter as the Comp-  
22 troller General of the United States determines to be appro-  
23 priate, the Comptroller General of the United States shall,  
24 with respect to the fiscal years that have passed since the  
25 preceding report—



1           (1) *conduct an audit of the implementation of*  
2 *this subtitle; and*

3           (2) *submit to the Office, the Committee, the Ad-*  
4 *ministrator, and Congress a report describing the re-*  
5 *sults of the audit.*

6       (b) *CONTENTS.—An audit under subsection (a) shall*  
7 *include a review, with respect to the period covered by the*  
8 *report under subsection (a)(2), of—*

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9           (1) *budget, life-cycle costing, and contracting*  
10 *issues, using best practices identified by the Comp-*  
11 *troller General of the United States and heads of other*  
12 *agencies in accordance with section 436;*

13           (2) *the level of coordination among the Office,*  
14 *the Office of Management and Budget, and relevant*  
15 *agencies;*

16           (3) *the performance of the Office in carrying out*  
17 *the implementation plan;*

18           (4) *the design stage of high-performance green*  
19 *building measures;*

20           (5) *high-performance building data that were*  
21 *collected and reported to the Office; and*

22           (6) *such other matters as the Comptroller Gen-*  
23 *eral of the United States determines to be appro-*  
24 *priate.*

1 (c) *ENVIRONMENTAL STEWARDSHIP SCORECARD.*—

2 *The Director shall consult with the Committee to enhance,*  
3 *and assist in the implementation of, the Environmental*  
4 *Stewardship Scorecard announced at the White House sum-*  
5 *mit on Federal sustainable buildings in January 2006, to*  
6 *measure the implementation by each Federal agency of sus-*  
7 *tainable design and green building initiatives.*

8 **SEC. 454. STORM WATER RUNOFF REQUIREMENTS FOR FED-**

9 **ERAL DEVELOPMENT PROJECTS.**

10 *The sponsor of any development or redevelopment*  
11 *project involving a Federal facility with a footprint that*  
12 *exceeds 5,000 square feet shall use site planning, design,*  
13 *construction, and maintenance strategies for the property*  
14 *to maintain, to the maximum extent technically feasible,*  
15 *the predevelopment hydrology of the property with regard*  
16 *to the temperature, rate, volume, and duration of flow.*

17 **PART IV—DEMONSTRATION PROJECT**

18 **SEC. 461. COORDINATION OF GOALS.**

19 (a) *IN GENERAL.*—*The Director shall establish guide-*  
20 *lines to implement a demonstration project to contribute*  
21 *to the research goals of the Office.*

22 (b) *PROJECTS.*—

23 (1) *IN GENERAL.*—*In accordance with guidelines*  
24 *established by the Director under subsection (a) and*

1     *the duties of the Director described in part I, the Di-*  
2     *rector shall carry out 3 demonstration projects.*

3             (2) *LOCATION OF PROJECTS.*—*Each project car-*  
4     *ried out under paragraph (1) shall be located in a*  
5     *Federal building in a State recommended by the Di-*  
6     *rector in accordance with subsection (c).*

7             (3) *REQUIREMENTS.*—*Each project carried out*  
8     *under paragraph (1) shall—*

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9                     (A) *provide for the evaluation of the infor-*  
10     *mation obtained through the conduct of projects*  
11     *and activities under this subtitle; and*

12                    (B) *achieve the highest available rating*  
13     *under the standard identified pursuant to section*  
14     *432(d).*

15             (c) *CRITERIA.*—*With respect to the existing or pro-*  
16     *posed Federal facility at which a demonstration project*  
17     *under this section is conducted, the Federal facility shall—*

18                    (1) *be an appropriate model for a project relat-*  
19     *ing to—*

20                      (A) *the effectiveness of high-performance*  
21     *technologies;*

22                      (B) *analysis of materials, components, and*  
23     *systems, including the impact on the health of*  
24     *building occupants;*

1           (C) *life-cycle costing and life-cycle assess-*  
2           *ment of building materials and systems; and*

3           (D) *location and design that promote access*  
4           *to the Federal facility through walking, biking,*  
5           *and mass transit; and*

6           (2) *possess sufficient technological and organiza-*  
7           *tional adaptability.*

8           (d) *REPORT.—Not later than 1 year after the date of*  
9           *enactment of this Act, and annually thereafter through Sep-*  
10          *tember 30, 2013, the Director shall submit to the Adminis-*  
11          *trator a report that describes the status of and findings re-*  
12          *garding the demonstration project.*

13   **SEC. 462. AUTHORIZATION OF APPROPRIATIONS.**

14          *There is authorized to be appropriated to carry out*  
15          *the Federal demonstration project described in section*  
16          *461(b) \$10,000,000 for the period of fiscal years 2008*  
17          *through 2012, to remain available until expended.*

18   **TITLE V—CORPORATE AVERAGE**  
19   **FUEL ECONOMY STANDARDS**

20   **SEC. 501. SHORT TITLE.**

21          *This title may be cited as the “Ten-in-Ten Fuel Econ-*  
22          *omy Act”.*

1 **SEC. 502. AVERAGE FUEL ECONOMY STANDARDS FOR AUTO-**  
2 **MOBILES AND CERTAIN OTHER VEHICLES.**

3 (a) *INCREASED STANDARDS.*—Section 32902 of title  
4 49, United States Code, is amended—

5 (1) by striking “**NON-PASSENGER**  
6 **AUTOMOBILES.**—” in subsection (a) and insert-  
7 ing “**PRESCRIPTION OF STANDARDS BY**  
8 **REGULATION.**—”;

---

9 (2) by striking “(except passenger automobiles)”  
10 in subsection (a); and

11 (3) by striking subsection (b) and inserting the  
12 following:

13 “(b) *STANDARDS FOR AUTOMOBILES AND CERTAIN*  
14 *OTHER VEHICLES.*—

15 “(1) *IN GENERAL.*—The Secretary of Transpor-  
16 tation, after consultation with the Administrator of  
17 the Environmental Protection Agency, shall prescribe  
18 average fuel economy standards for—

19 “(A) automobiles manufactured by manu-  
20 facturers in each model year beginning with  
21 model year 2011 in accordance with subsection  
22 (c); and

23 “(B) commercial medium-duty or heavy-  
24 duty on-highway vehicles in accordance with  
25 subsection (k).

1           “(2) FUEL ECONOMY TARGET FOR AUTO-  
2 MOBILES.—

3           “(A) AUTOMOBILE FUEL ECONOMY AVERAGE  
4 FOR MODEL YEARS 2011 THROUGH 2020.—*The*  
5 *Secretary shall prescribe average fuel economy*  
6 *standards for automobiles in each model year be-*  
7 *ginning with model year 2011 to achieve a com-*  
8 *bined fuel economy average for model year 2020*

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9 *of at least 35 miles per gallon for the fleet of*  
10 *automobiles manufactured or sold in the United*  
11 *States. The average fuel economy standards pre-*  
12 *scribed by the Secretary shall be the maximum*  
13 *feasible average fuel economy standards for*  
14 *model years 2011 through 2019.*

15           “(B) AUTOMOBILE FUEL ECONOMY AVERAGE  
16 FOR MODEL YEARS 2021 THROUGH 2030.—*For*  
17 *model years 2021 through 2030, the average fuel*  
18 *economy required to be attained by the fleet of*  
19 *automobiles manufactured or sold in the United*  
20 *States shall be the maximum feasible average*  
21 *fuel economy standard for the fleet.*

22           “(C) PROGRESS TOWARD STANDARD RE-  
23 QUIRED.—*In prescribing average fuel economy*  
24 *standards under subparagraph (A), the Sec-*  
25 *retary shall prescribe annual fuel economy*

1        *standard increases that increase the applicable*  
2        *average fuel economy standard ratably beginning*  
3        *with model year 2011 and ending with model*  
4        *year 2020.”.*

5        (b) *FUEL ECONOMY TARGET FOR COMMERCIAL ME-*  
6        *DIUM-DUTY AND HEAVY-DUTY ON-HIGHWAY VEHICLES.—*  
7        *Section 32902 of title 49, United States Code, is amended*  
8        *by adding at the end thereof the following:*

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9        “(k) *COMMERCIAL MEDIUM- AND HEAVY-DUTY ON-*  
10        *HIGHWAY VEHICLES.—*

11        “(1) *STUDY.—No later than 18 months after the*  
12        *date of enactment of the Ten-in-Ten Fuel Economy*  
13        *Act, the Secretary of Transportation, in consultation*  
14        *with the Secretary of Energy and the Administrator*  
15        *of the Environmental Protection Agency, shall exam-*  
16        *ine the fuel efficiency of commercial medium- and*  
17        *heavy-duty on-highway vehicles and determine—*

18        “(A) *the appropriate test procedures and*  
19        *methodologies for measuring commercial*  
20        *medium- and heavy-duty on-highway vehicle fuel*  
21        *efficiency;*

22        “(B) *the appropriate metric for measuring*  
23        *and expressing commercial medium- and heavy-*  
24        *duty on-highway vehicle fuel efficiency perform-*  
25        *ance, taking into consideration, among other*

1           *things, the work performed by such on-highway*  
2           *vehicles and types of operations in which they*  
3           *are used;*

4           “(C) *the range of factors, including, without*  
5           *limitation, design, functionality, use, duty cycle,*  
6           *infrastructure, and total overall energy consump-*  
7           *tion and operating costs that effect commercial*  
8           *medium- and heavy-duty on-highway vehicle fuel*  
9           *efficiency; and*

10           “(D) *such other factors and conditions that*  
11           *could have an impact on a program to improve*  
12           *commercial medium- and heavy-duty on-high-*  
13           *way vehicle fuel efficiency.*

14           “(2) *RULEMAKING.—No later than 24 months*  
15           *after completion of the study required by paragraph*  
16           *(1), the Secretary, in consultation with the Secretary*  
17           *of Energy and the Administrator of the Environ-*  
18           *mental Protection Agency, by regulation, shall deter-*  
19           *mine in a rulemaking procedure how to implement a*  
20           *commercial medium- and heavy-duty on-highway ve-*  
21           *hicle fuel efficiency improvement program designed to*  
22           *achieve the maximum feasible improvement, and shall*  
23           *adopt appropriate test methods, measurement metrics,*  
24           *fuel economy standards, and compliance and enforce-*  
25           *ment protocols that are appropriate, cost-effective,*

1     *and technologically feasible for commercial medium-*  
 2     *and heavy-duty on-highway vehicles.*

3             “(3) *LEAD-TIME; REGULATORY STABILITY.*—*Any*  
 4     *commercial medium- and heavy-duty on-highway ve-*  
 5     *hicle fuel efficiency regulatory program adopted pur-*  
 6     *suant to this subsection shall provide no less than 4*  
 7     *full model years of regulatory lead-time and 3 full*  
 8     *model years of regulatory stability.*

9             “(4) *COMMERCIAL MEDIUM- AND HEAVY-DUTY*  
 10     *ON-HIGHWAY VEHICLE DEFINED.*—*In this subsection,*  
 11     *the term ‘commercial medium- and heavy-duty on-*  
 12     *highway vehicle’ means an on-highway vehicle with a*  
 13     *gross vehicle weight rating of more than 8,500*  
 14     *pounds, and that, in the case of a vehicle with a gross*  
 15     *vehicle weight rating of less than 10,000 pounds, is*  
 16     *not an automobile.”.*

17             “(c) *AUTHORITY OF SECRETARY.*—*Section 32902 of*  
 18     *title 49, United States Code, as amended by subsection (b),*  
 19     *is further amended by adding at the end thereof the fol-*  
 20     *lowing:*

21             “(l) *AUTHORITY OF THE SECRETARY.*—

22             “(1) *VEHICLE ATTRIBUTES; MODEL YEARS COV-*  
 23     *ERED.*—*The Secretary shall—*

24             “(A) *prescribe by regulation average fuel*  
 25     *economy standards for automobiles based on ve-*

1            *hicle attributes related to fuel economy and to*  
2            *express the standards in the form of a mathe-*  
3            *matical function; and*

4            *“(B) issue regulations under this title pre-*  
5            *scribing average fuel economy standards for 1 or*  
6            *more model years.*

7            *“(2) PROHIBITION OF UNIFORM PERCENTAGE IN-*  
8            *CREASE.—When the Secretary prescribes a standard,*

9            *or prescribes an amendment under this section that*  
10           *changes a standard, the standard may not be ex-*  
11           *pressed as a uniform percentage increase from the*  
12           *fuel-economy performance of attribute classes or cat-*  
13           *egories already achieved in a model year by a manu-*  
14           *facturer.”.*

15 **SEC. 503. AMENDING FUEL ECONOMY STANDARDS.**

16           *(a) IN GENERAL.—Section 32902(c) of title 49, United*  
17           *States Code, is amended to read as follows:*

18           *“(c) AMENDING FUEL ECONOMY STANDARDS.—Not-*  
19           *withstanding subsections (a) and (b), the Secretary of*  
20           *Transportation—*

21           *“(1) may prescribe a standard higher than that*  
22           *required under subsection (b); or*

23           *“(2) may prescribe an average fuel economy*  
24           *standard for automobiles that is the maximum fea-*  
25           *sible level for the model year, despite being lower than*

1     *the standard required under subsection (b), if the Sec-*  
2     *retary determines, based on clear and convincing evi-*  
3     *dence, that the average fuel economy standard pre-*  
4     *scribed in accordance with subsections (a) and (b) for*  
5     *automobiles in that model year is shown not to be*  
6     *cost-effective.”.*

7     **(b) FEASIBILITY CRITERIA.**—Section 32902(f) of title  
8 49, United States Code, is amended to read as follows:

9     **“(f) DECISIONS ON MAXIMUM FEASIBLE AVERAGE**  
10 **FUEL ECONOMY.**—

11         **“(1) IN GENERAL.**—When deciding maximum  
12     *feasible average fuel economy under this section, the*  
13     *Secretary shall consider—*

14             **“(A) economic practicability;**

15             **“(B) the effect of other motor vehicle stand-**  
16     *ards of the Government on fuel economy;*

17             **“(C) environmental impacts; and**

18             **“(D) the need of the United States to con-**  
19     *serve energy.*

20         **“(2) LIMITATIONS.**—In setting any standard  
21     *under subsection (b), (c), or (d), the Secretary shall*  
22     *ensure that each standard is the highest standard*  
23     *that—*

24             **“(A) is technologically achievable;**

1           “(B) can be achieved without materially re-  
2           ducing the overall safety of automobiles manu-  
3           factured or sold in the United States;

4           “(C) is not less than the standard for that  
5           class of vehicles from any prior year; and

6           “(D) is cost-effective.

7           “(3) *COST-EFFECTIVE DEFINED.*—In this sub-  
8           section, the term ‘cost-effective’ means that the value

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9           to the United States of reduced fuel use from a pro-  
10          posed fuel economy standard is greater than or equal  
11          to the cost to the United States of such standard. In  
12          determining cost-effectiveness, the Secretary shall give  
13          priority to those technologies and packages of tech-  
14          nologies that offer the largest reduction in fuel use re-  
15          lative to their costs.

16          “(4) *FACTORS FOR CONSIDERATION BY SEC-*  
17          *RETARY IN DETERMINING COST-EFFECTIVENESS.*—The  
18          Secretary shall consult with the Administrator of the  
19          Environmental Protection Agency, and may consult  
20          with such other departments and agencies as the Sec-  
21          retary deems appropriate, and shall consider in the  
22          analysis the following factors:

23               “(A) Economic security.

24               “(B) The impact of the oil or energy inten-  
25               sity of the United States economy on the sensi-

1           *tivity of the economy to oil and other fuel price*  
2           *changes, including the magnitude of gross domes-*  
3           *tic product losses in response to short term price*  
4           *shocks or long term price increases.*

5           “(C) *National security, including the im-*  
6           *act of United States payments for oil and other*  
7           *fuel imports on political, economic, and military*  
8           *developments in unstable or unfriendly oil-ex-*  
9           *porting countries.*

10          “(D) *The uninternalized costs of pipeline*  
11          *and storage oil seepage, and for risk of oil spills*  
12          *from production, handling, and transport, and*  
13          *related landscape damage.*

14          “(E) *The emissions of pollutants including*  
15          *greenhouse gases over the lifecycle of the fuel and*  
16          *the resulting costs to human health, the economy,*  
17          *and the environment.*

18          “(F) *Such additional factors as the Sec-*  
19          *retary deems relevant.*

20          “(5) *MINIMUM VALUATION.—When considering*  
21          *the value to consumers of a gallon of gasoline saved,*  
22          *the Secretary of Transportation shall use as a min-*  
23          *imum value the greater of—*

24                 “(A) *the average value of gasoline prices*  
25                 *projected by the Energy Information Adminis-*

1            *tration over the period covered by the standard;*

2            *or*

3            *“(B) the average value of gasoline prices for*  
4            *the 5-year period immediately preceding the year*  
5            *in which the standard is established.”.*

6            (c) *CONSULTATION REQUIREMENT.*—Section 32902(i)  
7 of title 49, United States Code, is amended by inserting  
8 *“and the Administrator of the Environmental Protection*  
9 *Agency”* after *“Energy”*.

10            (d) *COMMENTS.*—Section 32902(j) of title 49, United  
11 States Code, is amended—

12            (1) *by striking paragraph (1) and inserting “(1)*  
13 *Before issuing a notice proposing to prescribe or*  
14 *amend an average fuel economy standard under sub-*  
15 *section (b), (c), or (g) of this section, the Secretary of*  
16 *Transportation shall give the Secretary of Energy*  
17 *and Administrator of the Environmental Protection*  
18 *Agency at least 30 days after the receipt of the notice*  
19 *during which the Secretary of Energy and Adminis-*  
20 *trator may, if the Secretary of Energy or Adminis-*  
21 *trator concludes that the proposed standard would ad-*  
22 *versely affect the conservation goals of the Secretary*  
23 *of Energy or environmental protection goals of the*  
24 *Administrator, provide written comments to the Sec-*  
25 *retary of Transportation about the impact of the*

1       *standard on those goals. To the extent the Secretary*  
 2       *of Transportation does not revise a proposed standard*  
 3       *to take into account comments of the Secretary of En-*  
 4       *ergy or Administrator on any adverse impact of the*  
 5       *standard, the Secretary of Transportation shall in-*  
 6       *clude those comments in the notice.”; and*

7               *(2) by inserting “and the Administrator” after*  
 8       *“Energy” each place it appears in paragraph (2).*

9       *(e) ALTERNATIVE FUEL ECONOMY STANDARDS FOR*  
 10       *LOW VOLUME MANUFACTURERS AND NEW ENTRANTS.—*  
 11       *Section 32902(d) of title 49, United States Code, is amend-*  
 12       *ed to read as follows:*

13               *“(d) ALTERNATIVE AVERAGE FUEL ECONOMY STAND-*  
 14       *ARD.—*

15               *“(1) IN GENERAL.—Upon the application of an*  
 16       *eligible manufacturer, the Secretary of Transpor-*  
 17       *tation may prescribe an alternative average fuel econ-*  
 18       *omy standard for automobiles manufactured by that*  
 19       *manufacturer if the Secretary determines that—*

20                       *“(A) the applicable standard prescribed*  
 21               *under subsection (a), (b), or (c) is more stringent*  
 22               *than the maximum feasible average fuel economy*  
 23               *level that manufacturer can achieve; and*

24                       *“(B) the alternative average fuel economy*  
 25               *standard prescribed under this subsection is the*

1           *maximum feasible average fuel economy level*  
2           *that manufacturer can achieve.*

3           “(2) *APPLICATION OF ALTERNATIVE STAND-*  
4           *ARD.—The Secretary may provide for the application*  
5           *of an alternative average fuel economy standard pre-*  
6           *scribed under paragraph (1) to—*

7                   “(A) *the manufacturer that applied for the*  
8                   *alternative average fuel economy standard;*

9                   “(B) *all automobiles to which this sub-*  
10                  *section applies; or*

11                  “(C) *classes of automobiles manufactured by*  
12                  *eligible manufacturers.*

13           “(3) *IMPORTERS.—Notwithstanding paragraph*  
14           *(1), an importer registered under section 30141(c)*  
15           *may not be exempted as a manufacturer under para-*  
16           *graph (1) for an automobile that the importer—*

17                   “(A) *imports; or*

18                   “(B) *brings into compliance with applicable*  
19                   *motor vehicle safety standards prescribed under*  
20                   *chapter 301 for an individual described in sec-*  
21                   *tion 30142.*

22           “(4) *APPLICATION.—The Secretary of Transpor-*  
23           *tation may prescribe the contents of an application*  
24           *for an alternative average fuel economy standard.*

1           “(5) *ELIGIBLE MANUFACTURER DEFINED.*—In  
2 *this section, the term ‘eligible manufacturer’ means a*  
3 *manufacturer that—*

4           “(A) *is not owned in whole or in part by*  
5 *another manufacturer that sold greater than 0.5*  
6 *percent of the number of automobiles sold in the*  
7 *United States in the model year prior to the*  
8 *model year to which the application relates;*

9           “(B) *sold in the United States fewer than*  
10 *0.4 percent of the number of automobiles sold in*  
11 *the United States in the model year that is 2*  
12 *years before the model year to which the applica-*  
13 *tion relates; and*

14           “(C) *will sell in the United States fewer*  
15 *than 0.4 percent of the automobiles sold in the*  
16 *United States for the model year for which the*  
17 *alternative average fuel economy standard will*  
18 *apply.*

19           “(6) *LIMITATION.*—For purposes of this sub-  
20 *section, notwithstanding section 32901(a)(4), the term*  
21 *‘automobile manufactured by a manufacturer’ in-*  
22 *cludes every automobile manufactuered by a person*  
23 *that controls, is controlled by, or is under common*  
24 *control with the manufacturer.*

25           “(f) *TECHNICAL AND CONFORMING AMENDMENTS.*—

1           (1) Section 32902(d) of title 49, United States  
2 Code, is amended by striking "passenger" each place  
3 it appears.

4           (2) Section 32902(g) of title 49, United States  
5 Code, is amended—

6           (A) by striking "subsection (a) or (d)" each  
7 place it appears in paragraph (1) and inserting

8 ~~"subsection (a) or (d)"~~

9           (B) striking "(and submit the amendment  
10 to Congress when required under subsection  
11 (c)(2) of this section)" in paragraph (2).

12 **SEC. 504. DEFINITIONS.**

13           (a) *IN GENERAL.*—Section 32901(a) of title 49, United  
14 States Code, is amended—

15           (1) by striking paragraph (3) and inserting the  
16 following:

17           “(3) except as provided in section 32908 of this  
18 title, ‘automobile’ means a 4-wheeled vehicle that is  
19 propelled by fuel, or by alternative fuel, manufactured  
20 primarily for use on public streets, roads, and high-  
21 ways and rated at not more than 10,000 pounds gross  
22 vehicle weight, except—

23           “(A) a vehicle operated only on a rail line;

1           “(B) a vehicle manufactured by 2 or more  
2           manufacturers in different stages and less than  
3           10,000 of which are manufactured per year; or

4           “(C) a work truck.”; and

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

6           “(17) ‘work truck’ means an automobile that the  
7           Secretary determines by regulation—

8           ~~“(A) is rated at between 8,500 and 10,000~~  
9           ~~pounds gross vehicle weight; and~~

10           “(B) is not a medium-duty passenger vehi-  
11           cle (as defined in section 86.1803-01 of title 40,  
12           Code of Federal Regulations).”.

13           (b) *DEADLINE FOR REGULATIONS.*—The Secretary of  
14           Transportation—

15           (1) shall issue proposed regulations imple-  
16           menting the amendments made by subsection (a) not  
17           later than 1 year after the date of enactment of this  
18           Act; and

19           (2) shall issue final regulations implementing  
20           the amendments not later than 18 months after the  
21           date of the enactment of this Act.

22           (c) *EFFECTIVE DATE.*—Regulations prescribed under  
23           subsection (b) shall apply beginning with model year 2010.

1 **SEC. 505. ENSURING SAFETY OF AUTOMOBILES.**

2 (a) *IN GENERAL.*—Subchapter II of chapter 301 of  
3 title 49, United States Code, is amended by adding at the  
4 end the following:

5 **“§ 30129. Vehicle compatibility standard**

6 “(a) *STANDARDS.*—The Secretary of Transportation  
7 shall issue a motor vehicle safety standard to reduce auto-  
8 ~~mobile incompatibility. The standard shall address charac-~~  
9 *teristics necessary to ensure better management of crash*  
10 *forces in multiple vehicle frontal and side impact crashes*  
11 *between different types, sizes, and weights of automobiles*  
12 *with a gross vehicle weight of 10,000 pounds or less in order*  
13 *to decrease occupant deaths and injuries.*

14 “(b) *CONSUMER INFORMATION.*—The Secretary shall  
15 *develop and implement a public information side and fron-*  
16 *tal compatibility crash test program with vehicle ratings*  
17 *based on risks to occupants, risks to other motorists, and*  
18 *combined risks by vehicle make and model.”.*

19 (b) *RULEMAKING DEADLINES.*—

20 (1) *RULEMAKING.*—The Secretary of Transpor-  
21 *tation shall issue—*

22 (A) *a notice of a proposed rulemaking*  
23 *under section 30129 of title 49, United States*  
24 *Code, not later than January 1, 2012; and*

25 (B) *a final rule under such section not later*  
26 *than December 31, 2014.*

1           (2) *EFFECTIVE DATE OF REQUIREMENTS.*—Any  
2           requirement imposed under the final rule issued  
3           under paragraph (1) shall become fully effective not  
4           later than September 1, 2018.

5           (c) *CONFORMING AMENDMENT.*—The chapter analysis  
6           for chapter 301 is amended by inserting after the item relat-  
7           ing to section 30128 the following:

          “30129. *Vehicle compatibility standard*”.

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8   **SEC. 506. CREDIT TRADING PROGRAM.**

9           Section 32903 of title 49, United States Code, is  
10          amended—

11           (1) by striking “passenger” each place it ap-  
12          pears;

13           (2) by striking “section 32902(b)-(d) of this  
14          title” each place it appears and inserting “subsection  
15          (a), (c), or (d) of section 32902”;

16           (3) by striking “3 consecutive model years” in  
17          subsection (a)(2) and inserting “5 consecutive model  
18          years”;

19           (4) in subsection (a)(2), by striking “clause (1)  
20          of this subsection,” and inserting “paragraph (1)”;  
21          and

22           (5) by striking subsection (e) and inserting the  
23          following:

24          “(e) *CREDIT TRADING AMONG MANUFACTURERS.*—  
25          The Secretary of Transportation may establish, by regula-

1 *tion, a corporate average fuel economy credit trading pro-*  
2 *gram to allow manufacturers whose automobiles exceed the*  
3 *average fuel economy standards prescribed under section*  
4 *32902 to earn credits to be sold to manufacturers whose*  
5 *automobiles fail to achieve the prescribed standards such*  
6 *that the total oil savings associated with manufacturers that*  
7 *exceed the prescribed standards are preserved when transfer-*  
8 *ring credits to manufacturers that fail to achieve the pre-*  
9 *scribed standards.”.*

10 **SEC. 507. LABELS FOR FUEL ECONOMY AND GREENHOUSE**  
11 **GAS EMISSIONS.**

12 *Section 32908 of title 49, United States Code, is*  
13 *amended—*

14 *(1) by redesignating subparagraph (F) of sub-*  
15 *section (b)(1) as subparagraph (H) and inserting*  
16 *after subparagraph (E) the following:*

17 *“(F) a label (or a logo imprinted on a label re-*  
18 *quired by this paragraph) that—*

19 *“(i) reflects an automobile’s performance on*  
20 *the basis of criteria developed by the Adminis-*  
21 *trator to reflect the fuel economy and greenhouse*  
22 *gas and other emissions consequences of oper-*  
23 *ating the automobile over its likely useful life;*

1           “(ii) permits consumers to compare per-  
2           formance results under clause (i) among all  
3           automobiles; and

4           “(iii) is designed to encourage the manufac-  
5           ture and sale of automobiles that meet or exceed  
6           applicable fuel economy standards under section  
7           32902.

8           “(G) a fuelstar under paragraph (5).”; and

---

9           (2) by adding at the end of subsection (b) the fol-  
10          lowing:

11          “(4) GREEN LABEL PROGRAM.—

12           “(A) MARKETING ANALYSIS.—Not later than 2  
13          years after the date of the enactment of the Ten-in-  
14          Ten Fuel Economy Act, the Administrator shall im-  
15          plement a consumer education program and execute  
16          marketing strategies to improve consumer under-  
17          standing of automobile performance described in  
18          paragraph (1)(F).

19           “(B) ELIGIBILITY.—Not later than 3 years after  
20          the date described in subparagraph (A), the Adminis-  
21          trator shall issue requirements for the label or logo re-  
22          quired under paragraph (1)(F) to ensure that an  
23          automobile is not eligible for the label or logo unless  
24          it—

1           “(i) meets or exceeds the applicable fuel  
2           economy standard; or

3           “(ii) will have the lowest greenhouse gas  
4           emissions over the useful life of the vehicle of all  
5           vehicles in the vehicle attribute class to which it  
6           belongs in that model year.

7           “(5) FUELSTAR PROGRAM.—

8           “(A) IN GENERAL.—The Secretary shall establish  
9           a program, to be known as the ‘Fuelstar Program’,  
10          under which stars shall be imprinted on or attached  
11          to the label required by paragraph (1).

12          “(B) GREEN STARS.—Under the Fuelstar Pro-  
13          gram, a manufacturer may include on the label  
14          maintained on an automobile under paragraph (1)—

15                 “(i) 1 green star for any automobile that  
16                 meets the average fuel economy standard for the  
17                 model year under section 32902; and

18                 “(ii) 1 additional green star for each 2  
19                 miles per gallon by which the automobile exceeds  
20                 such standard.

21          “(C) GOLD STARS.—Under the Fuelstar Pro-  
22          gram, a manufacturer may include a gold star on the  
23          label maintained on an automobile under paragraph  
24          (1) if the automobile attains a fuel economy of at  
25          least 50 miles per gallon.”.

1 **SEC. 508. CONTINUED APPLICABILITY OF EXISTING STAND-**  
2 **ARDS.**

3 *Nothing in this title, or the amendments made by this*  
4 *title, shall be construed to affect the application of section*  
5 *32902 of title 49, United States Code, to passenger auto-*  
6 *mobiles or non-passenger automobiles manufactured before*  
7 *model year 2011.*

8 **SEC. 509. NATIONAL ACADEMY OF SCIENCES STUDIES.**

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9 (a) *IN GENERAL.—As soon as practicable after the*  
10 *date of enactment of this Act, the Secretary of Transpor-*  
11 *tation shall execute an agreement with the National Acad-*  
12 *emy of Sciences to develop a report evaluating vehicle fuel*  
13 *economy standards, including—*

14 (1) *an assessment of automotive technologies and*  
15 *costs to reflect developments since the Academy's 2002*  
16 *report evaluating the corporate average fuel economy*  
17 *standards was conducted;*

18 (2) *an analysis of existing and potential tech-*  
19 *nologies that may be used practically to improve*  
20 *automobile and medium-duty and heavy-duty truck*  
21 *fuel economy;*

22 (3) *an analysis of how such technologies may be*  
23 *practically integrated into the automotive and me-*  
24 *dium-duty and heavy-duty truck manufacturing*  
25 *process; and*

1           (4) *an assessment of how such technologies may*  
2           *be used to meet the new fuel economy standards under*  
3           *chapter 329 of title 49, United States Code, as*  
4           *amended by this title.*

5           (b) *QUINQUENNIAL UPDATES.*—*After submitting the*  
6           *initial report, the Academy shall update the report at 5*  
7           *year intervals thereafter through 2025.*

8           (c) *REPORT.*—*The Academy shall submit the report to*  
9           *the Secretary, the Senate Committee on Commerce, Science,*  
10           *and Transportation and the House of Representatives Com-*  
11           *mittee on Energy and Commerce, with its findings and rec-*  
12           *ommendations no later than 18 months after the date on*  
13           *which the Secretary executes the agreement with the Acad-*  
14           *emy.*

15           **SEC. 510. STANDARDS FOR EXECUTIVE AGENCY AUTO-**  
16           **MOBILES.**

17           (a) *IN GENERAL.*—*Section 32917 of title 49, United*  
18           *States Code, is amended to read as follows:*

19           **“§ 32917. Standards for Executive agency automobiles**

20           **“(a) FUEL EFFICIENCY.**—*The head of an Executive*  
21           *agency shall ensure that each new automobile procured by*  
22           *the Executive agency is as fuel efficient as practicable.*

23           **“(b) DEFINITIONS.**—*In this section:*

1           “(1) *EXECUTIVE AGENCY*.—*The term ‘Executive*  
 2           *agency’ has the meaning given that term in section*  
 3           *105 of title 5.*

4           “(2) *NEW AUTOMOBILE*.—*The term ‘new auto-*  
 5           *mobile’, with respect to the fleet of automobiles of an*  
 6           *executive agency, means an automobile that is leased*  
 7           *for at least 60 consecutive days or bought, by or for*  
 8           *the Executive agency, after September 30, 2008. The*  
 9           *term does not include any vehicle designed for com-*  
 10           *bat-related missions, law enforcement work, or emer-*  
 11           *gency rescue work.”.*

12           (b) *REPORT*.—*The Administrator of the General Serv-*  
 13           *ices Administration shall develop a report describing and*  
 14           *evaluating the efforts of the heads of the Executive agencies*  
 15           *to comply with section 32917 of title 49, United States*  
 16           *Code, for fiscal year 2009. The Administrator shall submit*  
 17           *the report to Congress no later than December 31, 2009.*

18           **SEC. 511. INCREASING CONSUMER AWARENESS OF FLEXI-**  
 19           **BLE FUEL AUTOMOBILES.**

20           Section 32908 of title 49, United States Code, is  
 21           amended by adding at the end the following:

22           “(g) *INCREASING CONSUMER AWARENESS OF FLEXI-*  
 23           *BLE FUEL AUTOMOBILES*.—(1) *The Secretary of Energy,*  
 24           *in consultation with the Secretary of Transportation, shall*  
 25           *prescribe regulations that require the manufacturer of auto-*

1 *mobiles distributed in interstate commerce for sale in the*  
2 *United States—*

3           “(A) *to prominently display a permanent badge*  
4 *or emblem on the quarter panel or tailgate of each*  
5 *such automobile that indicates such vehicle is capable*  
6 *of operating on alternative fuel; and*

7           “(B) *to include information in the owner’s man-*  
8 *ual of each such automobile information that*  
9 *describes—*

10               “(i) *the capability of the automobile to op-*  
11 *erate using alternative fuel;*

12               “(ii) *the benefits of using alternative fuel,*  
13 *including the renewable nature, and the environ-*  
14 *mental benefits of using alternative fuel; and*

15           “(C) *to contain a fuel tank cap that is clearly*  
16 *labeled to inform consumers that the automobile is ca-*  
17 *pable of operating on alternative fuel.*

18           “(2) *The Secretary of Transportation shall collaborate*  
19 *with automobile retailers to develop voluntary methods for*  
20 *providing prospective purchasers of automobiles with infor-*  
21 *mation regarding the benefits of using alternative fuel in*  
22 *automobiles, including—*

23               “(A) *the renewable nature of alternative fuel;*  
24 *and*

1           “(B) the environmental benefits of using alter-  
2       native fuel.”.

3 **SEC. 512. PERIODIC REVIEW OF ACCURACY OF FUEL ECON-**  
4           **OMY LABELING PROCEDURES.**

5       *Beginning in December, 2009, and not less often than*  
6 *every 5 years thereafter, the Administrator of the Environ-*  
7 *mental Protection Agency, in consultation with the Sec-*  
8 *retary of Transportation, shall—*

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9           (1) *reevaluate the fuel economy labeling proce-*  
10 *dures described in the final rule published in the Fed-*  
11 *eral Register on December 27, 2006 (71 Fed. Reg.*  
12 *77,872; 40 C.F.R. parts 86 and 600) to determine*  
13 *whether changes in the factors used to establish the la-*  
14 *beling procedures warrant a revision of that process;*  
15 *and*

16           (2) *submit a report to the Senate Committee on*  
17 *Commerce, Science, and Transportation and the*  
18 *House of Representatives Committee on Energy and*  
19 *Commerce that describes the results of the reevalua-*  
20 *tion process.*

21 **SEC. 513. TIRE FUEL EFFICIENCY CONSUMER INFORMA-**  
22           **TION.**

23       (a) *IN GENERAL.—Chapter 301 of title 49, United*  
24 *States Code, is amended by inserting after section 30123*  
25 *the following new section:*

1 **“§ 30123A. Tire fuel efficiency consumer information**

2 “(a) *RULEMAKING.*—

3 “(1) *IN GENERAL.*—Not later than 18 months  
4 after the date of enactment of the Ten-in-Ten Fuel  
5 Economy Act, the Secretary of Transportation shall,  
6 after notice and opportunity for comment, promulgate  
7 rules establishing a national tire fuel efficiency con-  
8 sumer information program for tires designed for use  
9 on motor vehicles to educate consumers about the ef-  
10 fect of tires on automobile fuel efficiency.

11 “(2) *ITEMS INCLUDED IN RULE.*—The rule-  
12 making shall include—

13 “(A) a national tire fuel efficiency rating  
14 system for motor vehicle tires to assist consumers  
15 in making more educated tire purchasing deci-  
16 sions;

17 “(B) requirements for providing informa-  
18 tion to consumers, including information at the  
19 point of sale and other potential information  
20 dissemination methods, including the Internet;

21 “(C) specifications for test methods for  
22 manufacturers to use in assessing and rating  
23 tires to avoid variation among test equipment  
24 and manufacturers; and

25 “(D) a national tire maintenance consumer  
26 education program including, information on

1           *tire inflation pressure, alignment, rotation, and*  
2           *tread wear to maximize fuel efficiency.*

3           “(3) *APPLICABILITY.*—*This section shall not*  
4           *apply to tires excluded from coverage under section*  
5           *575.104(c)(2) of title 49, Code of Federal Regulations,*  
6           *as in effect on date of enactment of the Ten-in-Ten*  
7           *Fuel Economy Act.*

8           “(b) *CONSULTATION.*—*The Secretary shall consult*  
9           *with the Secretary of Energy and the Administrator of the*  
10           *Environmental Protection Agency on the means of con-*  
11           *veying tire fuel efficiency consumer information.*

12           “(c) *REPORT TO CONGRESS.*—*The Secretary shall con-*  
13           *duct periodic assessments of the rules promulgated under*  
14           *this section to determine the utility of such rules to con-*  
15           *sumers, the level of cooperation by industry, and the con-*  
16           *tribution to national goals pertaining to energy consump-*  
17           *tion. The Secretary shall transmit periodic reports detail-*  
18           *ing the findings of such assessments to the Senate Com-*  
19           *mittee on Commerce, Science, and Transportation and the*  
20           *House of Representatives Committee on Energy and Com-*  
21           *merce.*

22           “(d) *TIRE MARKING.*—*The Secretary shall not require*  
23           *permanent labeling of any kind on a tire for the purpose*  
24           *of tire fuel efficiency information.*

1       “(e) *PREEMPTION.*—When a requirement under this  
2 section is in effect, a State or political subdivision of a  
3 State may adopt or enforce a law or regulation on tire fuel  
4 efficiency consumer information only if the law or regula-  
5 tion is identical to that requirement. Nothing in this section  
6 shall be construed to preempt a State or political subdivi-  
7 sion of a State from regulating the fuel efficiency of tires  
8 not otherwise preempted under this chapter.”

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9       (b) *ENFORCEMENT.*—Section 30165(a) of title 49,  
10 United States Code, is amended by adding at the end the  
11 following:

12               “(4) *SECTION 30123a.*—Any person who fails to  
13 comply with the national tire fuel efficiency consumer  
14 information program under section 30123A is liable  
15 to the United States Government for a civil penalty  
16 of not more than \$50,000 for each violation.”

17       (c) *Conforming Amendment.*—The chapter analysis  
18 for chapter 301 of title 49, United States Code, is amended  
19 by inserting after the item relating to section 30123 the fol-  
20 lowing:

“30123A. Tire fuel efficiency consumer information”.

21 **SEC. 514. ADVANCED BATTERY INITIATIVE.**

22       (a) *IN GENERAL.*—The Secretary of Energy, in con-  
23 sultation with the Secretary of Transportation, shall estab-  
24 lish and carry out an Advanced Battery Initiative in ac-  
25 cordance with this section to support research, development,

1 demonstration, and commercial application of battery tech-  
2 nologies.

3 (b) *INDUSTRY ALLIANCE.*—Not later than 180 days  
4 after the date of enactment of this Act, the Secretary shall  
5 competitively select an Industry Alliance to represent par-  
6 ticipants who are private, for-profit firms headquartered in  
7 the United States, the primary business of which is the  
8 manufacturing of batteries.

9 (c) *RESEARCH.*—

10 (1) *GRANTS.*—The Secretary shall carry out re-  
11 search activities of the Initiative through competi-  
12 tively-awarded grants to—

13 (A) researchers, including Industry Alliance  
14 participants;

15 (B) small businesses;

16 (C) National Laboratories; and

17 (D) institutions of higher education.

18 (2) *INDUSTRY ALLIANCE.*—The Secretary shall  
19 annually solicit from the Industry Alliance—

20 (A) comments to identify advanced battery  
21 technology and battery systems needs relevant  
22 to—

23 (i) electric drive technology; and

24 (ii) other applications the Secretary  
25 deems appropriate;

1           (B) *an assessment of the progress of re-*  
2           *search activities of the Initiative; and*

3           (C) *assistance in annually updating ad-*  
4           *vanced battery technology and battery systems*  
5           *roadmaps.*

6           (d) *AVAILABILITY TO THE PUBLIC.—The information*  
7           *and roadmaps developed under this section shall be avail-*  
8           *able to the public.*

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9           (e) *PREFERENCE.—In making awards under this sub-*  
10          *section, the Secretary shall give preference to participants*  
11          *in the Industry Alliance.*

12          (f) *COST SHARING.—In carrying out this section, the*  
13          *Secretary shall require cost sharing in accordance with sec-*  
14          *tion 120(b) of title 23, United States Code.*

15          (g) *AUTHORIZATION OF APPROPRIATIONS.—There are*  
16          *authorized to be appropriated to carry out this section such*  
17          *sums as may be necessary for each of fiscal years 2008*  
18          *through 2012.*

19       **SEC. 515. BIODIESEL STANDARDS.**

20          (a) *IN GENERAL.—Not later than 180 days after the*  
21          *date of enactment of this Act, the Administrator of the En-*  
22          *vironmental Protection Agency, in consultation with the*  
23          *Secretary of Transportation and the Secretary of Energy,*  
24          *shall promulgate regulations to ensure that all diesel-equiv-*  
25          *alent fuels derived from renewable biomass that are intro-*

1 *duced into interstate commerce are tested and certified to*  
2 *comply with appropriate American Society for Testing and*  
3 *Materials standards.*

4 (b) *DEFINITIONS.—In this section:*

5 (1) *BIODIESEL.—*

6 (A) *IN GENERAL.—The term “biodiesel”*  
7 *means the monoalkyl esters of long chain fatty*  
8 *acids derived from plant or animal matter that*  
9 *meet—*

10 (i) *the registration requirements for*  
11 *fuels and fuel additives established by the*  
12 *Environmental Protection Agency under*  
13 *section 211 of the Clean Air Act (42 U.S.C.*  
14 *7545); and*

15 (ii) *the requirements of the American*  
16 *Society of Testing and Materials D6751.*

17 (B) *INCLUSIONS.—The term “biodiesel” in-*  
18 *cludes esters described in subparagraph (A) de-*  
19 *rived from—*

20 (i) *animal waste, including poultry*  
21 *fat, poultry waste, and other waste mate-*  
22 *rial; and*

23 (ii) *municipal solid waste, sludge, and*  
24 *oil derived from wastewater or the treat-*  
25 *ment of wastewater.*

1           (2) *BIODIESEL BLEND.*—The term “biodiesel  
2 blend” means a mixture of biodiesel and diesel fuel,  
3 including—

4           (A) a blend of biodiesel and diesel fuel ap-  
5 proximately 5 percent of the content of which is  
6 biodiesel (commonly known as “B5”); and

7           (B) a blend of biodiesel and diesel fuel ap-  
8 proximately 20 percent of the content of which is

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9 biodiesel (commonly known as “B20”).

10 **SEC. 516. USE OF CIVIL PENALTIES FOR RESEARCH AND DE-**  
11 **VELOPMENT.**

12       Section 32912 of title 49, United States Code, is  
13 amended by adding at the end thereof the following:

14       “(e) *USE OF CIVIL PENALTIES.*—For fiscal year 2008  
15 and each fiscal year thereafter, from the total amount de-  
16 posited in the general fund of the Treasury during the pre-  
17 ceding fiscal year from fines, penalties, and other funds ob-  
18 tained through enforcement actions conducted pursuant to  
19 this section (including funds obtained under consent de-  
20 crees), the Secretary of the Treasury, subject to the avail-  
21 ability of appropriations, shall—

22           “(1) transfer 50 percent of such total amount to  
23 the account providing appropriations to the Secretary  
24 of Transportation for the administration of this chap-  
25 ter, which shall be used by the Secretary to carry out

1 a program of research and development into fuel sav-  
2 ing automotive technologies and to support rule-  
3 making under this chapter; and

4 “(2) transfer 50 percent of such total amount to  
5 the Energy Security Fund established by section  
6 517(a) of the Ten-in-Ten Fuel Economy Act.”.

7 **SEC. 517. ENERGY SECURITY FUND AND ALTERNATIVE**  
8 **FUEL GRANT PROGRAM.**

9 (a) **ESTABLISHMENT OF FUND.**—

10 (1) **IN GENERAL.**—There is established in the  
11 Treasury a fund, to be known as the “Energy Secu-  
12 rity Fund” (referred to in this section as the  
13 “Fund”), consisting of—

14 (A) amounts transferred to the Fund under  
15 section 32912(e)(2) of title 49, United States  
16 Code; and

17 (B) amounts credited to the Fund under  
18 paragraph (2)(C).

19 (2) **INVESTMENT OF AMOUNTS.**—

20 (A) **IN GENERAL.**—The Secretary of the  
21 Treasury shall invest in interest-bearing obliga-  
22 tions of the United States such portion of the  
23 Fund as is not, in the judgment of the Secretary  
24 of the Treasury, required to meet current with-  
25 drawals.

1           (B) *SALE OF OBLIGATIONS.*—*Any obliga-*  
2           *tion acquired by the Fund may be sold by the*  
3           *Secretary of the Treasury at the market price.*

4           (C) *CREDITS TO FUND.*—*The interest on,*  
5           *and the proceeds from the sale or redemption of,*  
6           *any obligations held in the Fund shall be cred-*  
7           *ited to, and form a part of, the Fund in accord-*  
8           *ance with section 9602 of the Internal Revenue*

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9           *Code of 1986.*

10          (3) *USE OF AMOUNTS IN FUND.*—*Amounts in the*  
11          *Fund shall be made available to the Secretary of En-*  
12          *ergy, subject to the availability of appropriations, to*  
13          *carry out the grant program under subsection (b).*

14          (b) *ALTERNATIVE FUELS GRANT PROGRAM.*—

15           (1) *IN GENERAL.*—*Not later than 90 days after*  
16          *the date of enactment of this Act, the Secretary of En-*  
17          *ergy, acting through the Clean Cities Program of the*  
18          *Department of Energy, shall establish and carry out*  
19          *a program under which the Secretary shall provide*  
20          *grants to expand the availability to consumers of al-*  
21          *ternative fuels (as defined in section 32901(a) of title*  
22          *49, United States Code).*

23          (2) *ELIGIBILITY.*—

24           (A) *IN GENERAL.*—*Except as provided in*  
25          *subparagraph (B), any entity that is eligible to*

1           *receive assistance under the Clean Cities Pro-*  
2           *gram shall be eligible to receive a grant under*  
3           *this subsection.*

4           (B) *EXCEPTIONS.—*

5                 (i) *CERTAIN OIL COMPANIES.—A large,*  
6                 *vertically-integrated oil company shall not*  
7                 *be eligible to receive a grant under this sub-*  
8                 *section.*

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9                 (ii) *PROHIBITION OF DUAL BENE-*  
10                 *FITS.—An entity that receives any other*  
11                 *Federal funds for the construction or expan-*  
12                 *sion of alternative refueling infrastructure*  
13                 *shall not be eligible to receive a grant under*  
14                 *this subsection for the construction or ex-*  
15                 *pansion of the same alternative refueling*  
16                 *infrastructure.*

17           (C) *ENSURING COMPLIANCE.—Not later*  
18           *than 30 days after the date of enactment of this*  
19           *Act, the Secretary of Energy shall promulgate*  
20           *regulations to ensure that, before receiving a*  
21           *grant under this subsection, an eligible entity*  
22           *meets applicable standards relating to the instal-*  
23           *lation, construction, and expansion of infrastruc-*  
24           *ture necessary to increase the availability to con-*

1           *sumers of alternative fuels (as defined in section*  
2           *32901(a) of title 49, United States Code).*

3           (3) *MAXIMUM AMOUNT.—*

4                 (A) *GRANTS.—The amount of a grant pro-*  
5           *vided under this subsection shall not exceed*  
6           *\$30,000.*

7                 (B) *AMOUNT PER STATION.—An eligible en-*  
8           *tity shall receive not more than \$90,000 under*  
9           *this subsection for any station of the eligible en-*  
10          *tity during a fiscal year.*

11          (4) *USE OF FUNDS.—*

12                 (A) *IN GENERAL.—A grant provided under*  
13          *this subsection shall be used for the construction*  
14          *or expansion of alternative fueling infrastruc-*  
15          *ture.*

16                 (B) *ADMINISTRATIVE EXPENSES.—Not more*  
17          *than 3 percent of the amount of a grant provided*  
18          *under this subsection shall be used for adminis-*  
19          *trative expenses.*

20 **SEC. 518. AUTHORIZATION OF APPROPRIATIONS.**

21           *There are authorized to be appropriated to the Sec-*  
22          *retary of Transportation \$25,000,000 for each of fiscal*  
23          *years 2009 through 2021 to carry out the provisions of*  
24          *chapter 329 of title 49, United States Code.*

1 **SEC. 519. APPLICATION WITH CLEAN AIR ACT.**

2 *Nothing in this title shall be construed to conflict with*  
3 *the authority provided by sections 202 and 209 of the Clean*  
4 *Air Act (42 U.S.C. 7521 and 7543, respectively).*

5 **SEC. 520. ALTERNATIVE FUEL VEHICLE ACTION PLAN.**

6 (a) *IN GENERAL.*—*The Secretary of Transportation*  
7 *shall, establish and implement an action plan which takes*  
8 *into consideration the availability and cost effectiveness of*  
9 *alternative fuels, which will ensure that, beginning with*  
10 *model year 2015, the percentage of new automobiles for sale*  
11 *in the United States that are alternative fuel automobiles*  
12 *is not less than 50 percent.*

13 (b) *DEFINITIONS.*—*In this section:*

14 (1) *ALTERNATIVE FUEL AUTOMOBILE.*—*The term*  
15 *“alternative fuel automobile” means the following but*  
16 *not limited to—*

17 (A) *a new advanced lean burn technology*  
18 *motor vehicle (as defined in section 30B(c)(3) of*  
19 *the Internal Revenue Code of 1986) that achieves*  
20 *at least 125 percent of the model year 2002 city*  
21 *fuel economy;*

22 (B) *an alternative fueled automobile;*

23 (C) *a flexible fuel automobile;*

24 (D) *a new qualified fuel cell motor vehicle*  
25 *(as defined in section 30B(e)(4) of such Code).*

1           (E) a new qualified hybrid motor vehicle  
2           (as defined in section 30B(d)(3) of such Code);

3           (F) a plug-in hybrid automobile;

4           (G) an electric automobile;

5           (H) a hydrogen internal combustion engine  
6           automobile; and

7           (I) any other automobile that uses substan-  
8           tially new technology and achieves at least 175  
9           percent of the model year 2002 city fuel econ-  
10          omy, as determined by the Secretary of Trans-  
11          portation, by regulation.

12          (2) *OTHER TERMS.*—Any term used in this sec-  
13          tion that is defined in section 32901 of title 49,  
14          United States Code, has the meaning given that term  
15          in that section.

16 **SEC. 521. STUDY OF THE ADEQUACY OF TRANSPORTATION**  
17               **OF DOMESTICALLY-PRODUCED RENEWABLE**  
18               **FUEL BY RAILROADS AND OTHER MODES OF**  
19               **TRANSPORTATION.**

20          (a) *STUDY.*—

21           (1) *IN GENERAL.*—The Secretary of Transpor-  
22          tation and the Secretary of Energy shall jointly con-  
23          duct a study of the adequacy of transportation of do-  
24          mestically-produced renewable fuels by railroad and

1 *other modes of transportation as designated by the*  
2 *Secretaries.*

3 (2) *COMPONENTS.—In conducting the study*  
4 *under paragraph (1), the Secretaries shall—*

5 (A) *consider the adequacy of existing rail-*  
6 *road and other transportation infrastructure,*  
7 *equipment, service and capacity to move the nec-*  
8 *essary quantities of domestically-produced re-*

---

*newable fuel within the timeframes required by*  
9 *section 111;*

10  
11 (B)(i) *consider the projected costs of moving*  
12 *the domestically-produced renewable fuel by rail-*  
13 *road and other modes transportation; and*

14 (ii) *consider the impact of the projected*  
15 *costs on the marketability of the domestically-*  
16 *produced renewable fuel;*

17 (C) *identify current and potential impedi-*  
18 *ments to the reliable transportation of adequate*  
19 *supplies of domestically-produced renewable fuel*  
20 *at reasonable prices, including practices cur-*  
21 *rently utilized by domestic producers, shippers,*  
22 *and receivers of renewable fuels;*

23 (D) *consider whether inadequate competi-*  
24 *tion exists within and between modes of trans-*  
25 *portation for the transportation of domestically-*

1        *produced renewable fuel and, if such inadequate*  
2        *competition exists, whether such inadequate com-*  
3        *petition leads to an unfair price for the trans-*  
4        *portation of domestically-produced renewable*  
5        *fuel or unacceptable service for transportation of*  
6        *domestically-produced renewable fuel;*

7        *(E) consider whether Federal agencies have*  
8        *adequate legal authority to address instances of*  
9        *inadequate competition when inadequate com-*  
10       *petition is found to prevent domestic producers*  
11       *for renewable fuels from obtaining a fair and*  
12       *reasonable transportation price or acceptable*  
13       *service for the transportation of domestically-*  
14       *produced renewable fuels;*

15       *(F) consider whether Federal agencies have*  
16       *adequate legal authority to address railroad and*  
17       *transportation service problems that may be re-*  
18       *sulting in inadequate supplies of domestically-*  
19       *produced renewable fuel in any area of the*  
20       *United States;*

21       *(G) consider what transportation infra-*  
22       *structure capital expenditures may be necessary*  
23       *to ensure the reliable transportation of adequate*  
24       *supplies of domestically-produced renewable fuel*  
25       *at reasonable prices within the United States*

1           *and which public and private entities should be*  
2           *responsible for making such expenditures; and*

3                   (K) *provide recommendations on ways to*  
4           *facilitate the reliable transportation of adequate*  
5           *supplies of domestically-produced renewable fuel*  
6           *at reasonable prices.*

7           (b) *REPORT.*—*Not later than 180 days after the date*  
8 *of enactment of this Act, the Secretaries shall jointly submit*

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9 *to the Committee on Commerce, Science and Transpor-*  
10 *tation, the Committee on Energy and Natural Resources,*  
11 *and the Committee on Environment and Public Works of*  
12 *the Senate and the Committee on Transportation and In-*  
13 *frastructure and the Committee on Energy and Commerce*  
14 *of the House of Representatives a report that describes the*  
15 *results of the study conducted under subsection (a).*

## 16           **TITLE VI—PRICE GOUGING**

### 17           **SEC. 601. SHORT TITLE.**

18           *This title may be cited as the “Petroleum Consumer*  
19 *Price Gouging Protection Act”.*

### 20           **SEC. 602. DEFINITIONS.**

21           *In this title:*

22                   (1) *AFFECTED AREA.*—*The term “affected area”*  
23           *means an area covered by a Presidential declaration*  
24           *of energy emergency.*

1           (2) *SUPPLIER.*—The term “supplier” means any  
2           person engaged in the trade or business of selling or  
3           reselling, at retail or wholesale, or distributing crude  
4           oil, gasoline, or petroleum distillates.

5           (3) *PRICE GOUGING.*—The term “price gouging”  
6           means the charging of an unconscionably excessive  
7           price by a supplier in an affected area.

8           (4) *UNCONSCIONABLY EXCESSIVE PRICE.*—The  
9           term “unconscionably excessive price” means an aver-  
10          age price charged during an energy emergency de-  
11          clared by the President in an area and for a product  
12          subject to the declaration, that—

13                 (A)(i)(I) constitutes a gross disparity from  
14                 the average price at which it was offered for sale  
15                 in the usual course of the supplier’s business dur-  
16                 ing the 30 days prior to the President’s declara-  
17                 tion of an energy emergency; and

18                 (II) grossly exceeds the prices at which the  
19                 same or similar crude oil gasoline or petroleum  
20                 distillate was readily obtainable by purchasers  
21                 from other suppliers in the same relevant geo-  
22                 graphic market within the affected area; or

23                 (ii) represents an exercise of unfair leverage  
24                 or unconscionable means on the part of the sup-

1           plier, during a period of declared energy emer-  
2           gency; and

3           (B) is not attributable to increased whole-  
4           sale or operational costs, including replacement  
5           costs, outside the control of the supplier, incurred  
6           in connection with the sale of crude oil, gasoline,  
7           or petroleum distillates; and is not attributable  
8           to local, regional, national, or international  
9           market conditions.

10          (5) COMMISSION.—The term “Commission”  
11          means the Federal Trade Commission.

12 **SEC. 603. PROHIBITION ON PRICE GOUGING DURING EN-**  
13 **ERGY EMERGENCIES.**

14          (a) *IN GENERAL.*—During any energy emergency de-  
15          clared by the President under section 606 of this Act, it  
16          is unlawful for any supplier to sell, or offer to sell crude  
17          oil, gasoline or petroleum distillates subject to that declara-  
18          tion in, or for use in, the area to which that declaration  
19          applies at an unconscionably excessive price.

20          (b) *FACTORS CONSIDERED.*—In determining whether  
21          a violation of subsection (a) has occurred, there shall be  
22          taken into account, among other factors, whether—

23                  (1) the price charged was a price that would rea-  
24                  sonably exist in a competitive and freely functioning  
25                  market; and

1           (2) *the amount of gasoline or other petroleum*  
2           *distillate the seller produced, distributed, or sold dur-*  
3           *ing the period the Proclamation was in effect in-*  
4           *creased over the average amount during the preceding*  
5           *30 days.*

6 **SEC. 604. PROHIBITION ON MARKET MANIPULATION.**

7           *It is unlawful for any person, directly or indirectly,*  
8           *to use or employ, in connection with the purchase or sale*

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9           *of crude oil gasoline or petroleum distillates at wholesale,*  
10           *any manipulative or deceptive device or contrivance, in*  
11           *contravention of such rules and regulations as the Commis-*  
12           *sion may prescribe as necessary or appropriate in the pub-*  
13           *lic interest or for the protection of United States citizens.*

14 **SEC. 605. PROHIBITION ON FALSE INFORMATION.**

15           (α) *IN GENERAL.—It is unlawful for any person to*  
16           *report information related to the wholesale price of crude*  
17           *oil gasoline or petroleum distillates to a Federal department*  
18           *or agency if—*

19                   (1) *that person knew, or reasonably should have*  
20                   *known, the information to be false or misleading;*

21                   (2) *the information was required by law to be re-*  
22                   *ported; and*

23                   (3) *the person intended the false or misleading*  
24                   *data to affect data compiled by the department or*  
25                   *agency for statistical or analytical purposes with re-*



1           (4) *the product or products to which it applies.*

2           (c) *EXTENSIONS.—The President may—*

3           (1) *extend a declaration under subsection (a) for*  
4           *a period of not more than 30 days;*

5           (2) *extend such a declaration more than once;*  
6           *and*

7           (3) *discontinue such a declaration before its ex-*  
8           *piration.*

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9   **SEC. 607. ENFORCEMENT BY THE FEDERAL TRADE COMMIS-**  
10                                   **SION.**

11           (a) *ENFORCEMENT.—This title shall be enforced by the*  
12           *Federal Trade Commission in the same manner, by the*  
13           *same means, and with the same jurisdiction as though all*  
14           *applicable terms of the Federal Trade Commission Act were*  
15           *incorporated into and made a part of this title. In enforcing*  
16           *section 603 of this Act, the Commission shall give priority*  
17           *to enforcement actions concerning companies with total*  
18           *United States wholesale or retail sales of crude oil, gasoline,*  
19           *and petroleum distillates in excess of \$500,000,000 per year*  
20           *but shall not exclude enforcement actions against companies*  
21           *with total United States wholesale sales of \$500,000,000 or*  
22           *less per year.*

23           (b) *VIOLATION IS TREATED AS UNFAIR OR DECEPTIVE*  
24           *ACT OR PRACTICE.—The violation of any provision of this*  
25           *title shall be treated as an unfair or deceptive act or prac-*

1 *tice proscribed under a rule issued under section*  
2 *18(a)(1)(B) of the Federal Trade Commission Act (15*  
3 *U.S.C. 57a(a)(1)(B)).*

4 (c) *COMMISSION ACTIONS.—Following the declaration*  
5 *of an energy emergency by the President under section 606*  
6 *of this Act, the Commission shall—*

7 (1) *maintain within the Commission—*

8 (A) *a toll-free hotline that a consumer may*  
9 *call to report an incident of price gouging in the*  
10 *affected area; and*

11 (B) *a program to develop and distribute to*  
12 *the public informational materials to assist resi-*  
13 *dents of the affected area in detecting, avoiding,*  
14 *and reporting price gouging;*

15 (2) *consult with the Attorney General, the*  
16 *United States Attorney for the districts in which a*  
17 *disaster occurred (if the declaration is related to a*  
18 *major disaster), and State and local law enforcement*  
19 *officials to determine whether any supplier in the af-*  
20 *ected area is charging or has charged an unconscion-*  
21 *ably excessive price for crude oil, gasoline, or petro-*  
22 *leum distillates in the affected area; and*

23 (3) *conduct investigations as appropriate to de-*  
24 *termine whether any supplier in the affected area has*  
25 *violated section 603 of this Act, and upon such find-*

1       ing, take any action the Commission determines to be  
2       appropriate to remedy the violation.

3 **SEC. 608. ENFORCEMENT BY STATE ATTORNEYS GENERAL.**

4       (a) *IN GENERAL.*—A State, as *parens patriae*, may  
5 bring a civil action on behalf of its residents in an appro-  
6 priate district court of the United States to enforce the pro-  
7 visions of section 603 of this Act, or to impose the civil  
8 penalties authorized by section 609 for violations of section

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9 603, whenever the attorney general of the State has reason  
10 to believe that the interests of the residents of the State have  
11 been or are being threatened or adversely affected by a sup-  
12 plier engaged in the sale or resale, at retail or wholesale,  
13 or distribution of crude oil, gasoline or petroleum distillates  
14 in violation of section 603 of this Act.

15       (b) *NOTICE.*—The State shall serve written notice to  
16 the Commission of any civil action under subsection (a)  
17 prior to initiating the action. The notice shall include a  
18 copy of the complaint to be filed to initiate the civil action,  
19 except that if it is not feasible for the State to provide such  
20 prior notice, the State shall provide such notice imme-  
21 diately upon instituting the civil action.

22       (c) *AUTHORITY TO INTERVENE.*—Upon receiving the  
23 notice required by subsection (b), the Commission may in-  
24 tervene in the civil action and, upon intervening—

1           (1) *may be heard on all matters arising in such*  
2 *civil action; and*

3           (2) *may file petitions for appeal of a decision in*  
4 *such civil action.*

5           (d) *CONSTRUCTION.—For purposes of bringing any*  
6 *civil action under subsection (a), nothing in this section*  
7 *shall prevent the attorney general of a State from exercising*  
8 *the powers conferred on the Attorney General by the laws*  
9 *of such State to conduct investigations or to administer*  
10 *oaths or affirmations or to compel the attendance of wit-*  
11 *nesses or the production of documentary and other evidence.*

12           (e) *VENUE; SERVICE OF PROCESS.—In a civil action*  
13 *brought under subsection (a)—*

14           (1) *the venue shall be a judicial district in*  
15 *which—*

16                   (A) *the defendant operates;*

17                   (B) *the defendant was authorized to do*  
18 *business; or*

19                   (C) *where the defendant in the civil action*  
20 *is found;*

21           (2) *process may be served without regard to the*  
22 *territorial limits of the district or of the State in*  
23 *which the civil action is instituted; and*

24           (3) *a person who participated with the defendant*  
25 *in an alleged violation that is being litigated in the*

1 *civil action may be joined in the civil action without*  
2 *regard to the residence of the person.*

3 *(f) LIMITATION ON STATE ACTION WHILE FEDERAL*  
4 *ACTION IS PENDING.—If the Commission has instituted a*  
5 *civil action or an administrative action for violation of this*  
6 *title, a State attorney general, or official or agency of a*  
7 *State, may not bring an action under this section during*  
8 *the pendency of that action against any defendant named*  
9 *in the complaint of the Commission or the other agency for*  
10 *any violation of this title alleged in the Commission's civil*  
11 *or administrative action.*

12 *(g) NO PREEMPTION.—Nothing contained in this sec-*  
13 *tion shall prohibit an authorized State official from pro-*  
14 *ceeding in State court to enforce a civil or criminal statute*  
15 *of that State.*

16 **SEC. 609. PENALTIES.**

17 *(a) CIVIL PENALTY.—*

18 *(1) IN GENERAL.—In addition to any penalty*  
19 *applicable under the Federal Trade Commission Act,*  
20 *any supplier—*

21 *(A) that violates section 604 or section 605*  
22 *of this Act is punishable by a civil penalty of not*  
23 *more than \$1,000,000; and*

24 *(B) that violates section 603 of this Act is*  
25 *punishable by a civil penalty of—*

1                   (i) not more than \$500,000, in the case  
2                   of an independent small business marketer  
3                   of gasoline (within the meaning of section  
4                   324(c) of the Clean Air Act (42 U.S.C.  
5                   7625(c))); and

6                   (ii) not more than \$5,000,000 in the  
7                   case of any other supplier.

8                   (2) *METHOD.*—The penalties provided by para-  
9                   graph (1) shall be obtained in the same manner as  
10                  civil penalties imposed under section 5 of the Federal  
11                  Trade Commission Act (15 U.S.C. 45).

12                  (3) *MULTIPLE OFFENSES; MITIGATING FAC-*  
13                  *TORS.*—In assessing the penalty provided by sub-  
14                  section (a)—

15                       (A) each day of a continuing violation shall  
16                       be considered a separate violation; and

17                       (B) the court shall take into consideration,  
18                       among other factors, the seriousness of the viola-  
19                       tion and the efforts of the person committing the  
20                       violation to remedy the harm caused by the vio-  
21                       lation in a timely manner.

22                  (b) *CRIMINAL PENALTY.*—Violation of section 603 of  
23                  this Act is punishable by a fine of not more than  
24                  \$5,000,000, imprisonment for not more than 5 years, or  
25                  both.

1 **SEC. 610. EFFECT ON OTHER LAWS.**

2 (a) *OTHER AUTHORITY OF THE COMMISSION.*—*Noth-*  
 3 *ing in this title shall be construed to limit or affect in any*  
 4 *way the Commission's authority to bring enforcement ac-*  
 5 *tions or take any other measure under the Federal Trade*  
 6 *Commission Act (15 U.S.C. 41 et seq.) or any other provi-*  
 7 *sion of law.*

8 (b) *STATE LAW.*—*Nothing in this title preempts any*  
 9 *State law.*

10 **TITLE VII—ENERGY DIPLOMACY**  
 11 **AND SECURITY**

12 **SEC. 701. SHORT TITLE.**

13 *This title may be cited as the “Energy Diplomacy and*  
 14 *Security Act of 2007”.*

15 **SEC. 702. DEFINITIONS.**

16 *In this title:*

17 (1) **MAJOR ENERGY PRODUCER.**—*The term*  
 18 *“major energy producer” means a country that—*

19 (A) *had crude oil, oil sands, or natural gas*  
 20 *to liquids production of 1,000,000 barrels per*  
 21 *day or greater average in the previous year;*

22 (B) *has crude oil, shale oil, or oil sands re-*  
 23 *serves of 6,000,000,000 barrels or greater, as rec-*  
 24 *ognized by the Department of Energy;*

1           (C) had natural gas production of  
2           30,000,000,000 cubic meters or greater in the  
3           previous year;

4           (D) has natural gas reserves of  
5           1,250,000,000,000 cubic meters or greater, as rec-  
6           ognized by the Department of Energy; or

7           (E) is a direct supplier of natural gas or  
8           liquefied natural gas to the United States.

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9           (2) MAJOR ENERGY CONSUMER.—The term  
10          “major energy consumer” means a country that—

11           (A) had an oil consumption average of  
12           1,000,000 barrels per day or greater in the pre-  
13           vious year;

14           (B) had an oil consumption growth rate of  
15           8 percent or greater in the previous year;

16           (C) had a natural gas consumption of  
17           30,000,000,000 cubic meters or greater in the  
18           previous year; or

19           (D) had a natural gas consumption growth  
20           rate of 15 percent or greater in the previous  
21           year.

22 **SEC. 703. SENSE OF CONGRESS ON ENERGY DIPLOMACY**  
23 **AND SECURITY.**

24          (a) **FINDINGS.**—Congress makes the following findings:

1           (1) *It is imperative to the national security and*  
2           *prosperity of the United States to have reliable, af-*  
3           *fordable, clean, sufficient, and sustainable sources of*  
4           *energy.*

5           (2) *United States dependence on oil imports*  
6           *causes tremendous costs to the United States national*  
7           *security, economy, foreign policy, military, and envi-*  
8           *ronmental sustainability.*

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9           (3) *Energy security is a priority for the govern-*  
10          *ments of many foreign countries and increasingly*  
11          *plays a central role in the relations of the United*  
12          *States Government with foreign governments. Global*  
13          *reserves of oil and natural gas are concentrated in a*  
14          *small number of countries. Access to these oil and*  
15          *natural gas supplies depends on the political will of*  
16          *these producing states. Competition between govern-*  
17          *ments for access to oil and natural gas reserves can*  
18          *lead to economic, political, and armed conflict. Oil*  
19          *exporting states have received dramatically increased*  
20          *revenues due to high global prices, enhancing the abil-*  
21          *ity of some of these states to act in a manner threat-*  
22          *ening to global stability.*

23          (4) *Efforts to combat poverty and protect the en-*  
24          *vironment are hindered by the continued predomi-*  
25          *nance of oil and natural gas in meeting global energy*

1     *needs. Development of renewable energy through sus-*  
2     *tainable practices will help lead to a reduction in*  
3     *greenhouse gas emissions and enhance international*  
4     *development.*

5             (5) *Cooperation on energy issues between the*  
6     *United States Government and the governments of*  
7     *foreign countries is critical for securing the strategic*  
8     *and economic interests of the United States and of*

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9     *partner governments. In the current global energy sit-*  
10    *uation, the energy policies and activities of the gov-*  
11    *ernments of foreign countries can have dramatic im-*  
12    *pacts on United States energy security.*

13            (b) *SENSE OF CONGRESS.—It is the sense of Congress*  
14    *that—*

15            (1) *United States national security requires that*  
16    *the United States Government have an energy policy*  
17    *that pursues the strategic goal of achieving energy se-*  
18    *curity through access to clean, affordable, sufficient,*  
19    *reliable, and sustainable sources of energy;*

20            (2) *achieving energy security is a priority for*  
21    *United States foreign policy and requires continued*  
22    *and enhanced engagement with foreign governments*  
23    *and entities in a variety of areas, including activities*  
24    *relating to the promotion of alternative and renewable*  
25    *fuels, trade and investment in oil, coal, and natural*

1 gas, energy efficiency, climate and environmental pro-  
2 tection, data transparency, advanced scientific re-  
3 search, public-private partnerships, and energy ac-  
4 tivities in international development;

5 (3) the President should ensure that the inter-  
6 national energy activities of the United States Gov-  
7 ernment are given clear focus to support the national  
8 security needs of the United States, and to this end,

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9 there should be established a mechanism to coordinate  
10 the implementation of United States international en-  
11 ergy policy among the Federal agencies engaged in  
12 relevant agreements and activities; and

13 (4) the Secretary of State should ensure that en-  
14 ergy security is integrated into the core mission of the  
15 Department of State, and to this end, there should be  
16 established within the Office of the Secretary of State  
17 a Coordinator for International Energy Affairs with  
18 responsibility for—

19 (A) developing United States international  
20 energy policy in coordination with the Depart-  
21 ment of Energy and other relevant Federal agen-  
22 cies;

23 (B) working with appropriate United  
24 States Government officials to develop and up-

1           *date analyses of the national security implica-*  
2           *tions of global energy developments;*

3           *(C) incorporating energy security priorities*  
4           *into the activities of the Department;*

5           *(D) coordinating activities with relevant*  
6           *Federal agencies; and*

7           *(E) coordinating energy security and other*  
8           *relevant functions currently undertaken by of-*

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9           *ices within the Bureau of Economic, Business,*  
10           *and Agricultural Affairs, the Bureau of Democ-*  
11           *racy and Global Affairs, and other offices within*  
12           *the Department of State.*

13           *(5) the Department of Energy should be des-*  
14           *ignated as the lead United States Government agency*  
15           *in charge of formulating and coordinating the na-*  
16           *tional energy security policy of the United States,*  
17           *and in furtherance of these goals, there should be es-*  
18           *tablished within the Department of Energy an Assist-*  
19           *ant Secretary of Energy for Energy Security whose*  
20           *responsibilities should include—*

21           *(A) directing the development of the na-*  
22           *tional energy security strategy of the United*  
23           *States;*

24           *(B) coordinating the national energy secu-*  
25           *rity policy of the United States with the Depart-*

1           *ment of Defense, the Department of State, and*  
2           *the National Security Council, as appropriate,*  
3           *to address the impact of, and integrate national*  
4           *security and foreign policy on, the national en-*  
5           *ergy security policy of the United States;*

6           (C) *monitoring international and domestic*  
7           *energy developments to gauge their impact on the*  
8           *national energy security policy of the United*  

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9           *States and implementing changes in such policy*  
10           *as necessary to maintain the national security*  
11           *and energy security of the United States;*

12           (D) *identifying foreign sources of energy*  
13           *critical to the national energy security of the*  
14           *United States and developing strategies in con-*  
15           *junction with the Department of State for ensur-*  
16           *ing United States access to critical foreign en-*  
17           *ergy resources;*

18           (E) *developing strategies for reducing*  
19           *United States dependence on foreign sources of*  
20           *energy, including demand reduction, efficiency*  
21           *improvement, and development of alternative*  
22           *and new sources of domestic energy; and*

23           (F) *developing strategies in conjunction*  
24           *with the Department of State for working with*  
25           *major international producers and consumers,*

1           *including China, Russia, the European Union,*  
2           *and Africa, to minimize politicization of global*  
3           *energy resources while ensuring access through*  
4           *global energy markets.*

5 **SEC. 704. STRATEGIC ENERGY PARTNERSHIPS.**

6           *(a) FINDINGS.—Congress makes the following findings:*

7                 *(1) United States Government partnership with*  
8           *foreign governments and entities, including partner-*

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9           *ship with the private sector, for securing reliable and*  
10          *sustainable energy is imperative to ensuring United*  
11          *States security and economic interests, promoting*  
12          *international peace and security, expanding inter-*  
13          *national development, supporting democratic reform,*  
14          *fostering economic growth, and safeguarding the envi-*  
15          *ronment.*

16                 *(2) Democracy and freedom should be promoted*  
17          *globally by partnership with foreign governments, in-*  
18          *cluding in particular governments of emerging democ-*  
19          *racies such as those of Ukraine and Georgia, in their*  
20          *efforts to reduce their dependency on oil and natural*  
21          *gas imports.*

22                 *(3) The United States Government and the gov-*  
23          *ernments of foreign countries have common needs for*  
24          *adequate, reliable, affordable, clean, and sustainable*  
25          *energy in order to ensure national security, economic*

1 *growth, and high standards of living in their coun-*  
2 *tries. Cooperation by the United States Government*  
3 *with foreign governments on meeting energy security*  
4 *needs is mutually beneficial. United States Govern-*  
5 *ment partnership with foreign governments should in-*  
6 *clude cooperation with major energy consuming coun-*  
7 *tries, major energy producing countries, and other*  
8 *governments seeking to advance global energy security*  
9 *through reliable and sustainable means.*

10 (4) *The United States Government participates*  
11 *in hundreds of bilateral and multilateral energy*  
12 *agreements and activities with foreign governments*  
13 *and entities. These agreements and activities should*  
14 *reflect the strategic need for energy security.*

15 (b) *STATEMENT OF POLICY.—It is the policy of the*  
16 *United States—*

17 (1) *to advance global energy security through co-*  
18 *operation with foreign governments and entities;*

19 (2) *to promote reliable, diverse, and sustainable*  
20 *sources of all types of energy;*

21 (3) *to increase global availability of renewable*  
22 *and clean sources of energy;*

23 (4) *to decrease global dependence on oil and nat-*  
24 *ural gas energy sources; and*

1           (5) to engage in energy cooperation to strengthen  
2           strategic partnerships that advance peace, security,  
3           and democratic prosperity.

4           (c) *AUTHORITY.*—The Secretary of State, in coordina-  
5           tion with the Secretary of Energy, should immediately seek  
6           to establish and expand strategic energy partnerships with  
7           the governments of major energy producers and major en-  
8           ergy consumers, and with governments of other countries  
9           *(but excluding any countries that are ineligible to receive*  
10          *United States economic or military assistance).*

11          (d) *PURPOSES.*—The purposes of the strategic energy  
12          partnerships established pursuant to subsection (c) are—

13               (1) to strengthen global relationships to promote  
14               international peace and security through fostering co-  
15               operation in the energy sector on a mutually bene-  
16               ficial basis in accordance with respective national en-  
17               ergy policies;

18               (2) to promote the policy set forth in subsection  
19               (b), including activities to advance—

20                       (A) the mutual understanding of each coun-  
21                       try's energy needs, priorities, and policies, in-  
22                       cluding interparliamentary understanding;

23                       (B) measures to respond to acute energy  
24                       supply disruptions, particularly in regard to pe-  
25                       troleum and natural gas resources;

1           (C) long-term reliability and sustainability  
2           in energy supply;

3           (D) the safeguarding and safe handling of  
4           nuclear fuel;

5           (E) human and environmental protection;

6           (F) renewable energy production;

7           (G) access to reliable and affordable energy  
8           for underdeveloped areas, in particular energy

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9           access for the poor;

10          (H) appropriate commercial cooperation;

11          (I) information reliability and trans-  
12          parency; and

13          (J) research and training collaboration;

14          (3) to advance the national security priority of  
15          developing sustainable and clean energy sources, in-  
16          cluding through research and development related to,  
17          and deployment of—

18               (A) renewable electrical energy sources, in-  
19               cluding biomass, wind, and solar;

20               (B) renewable transportation fuels, includ-  
21               ing biofuels;

22               (C) clean coal technologies;

23               (D) carbon sequestration, including in con-  
24               junction with power generation, agriculture, and  
25               forestry; and

1           (E) energy and fuel efficiency, including  
2           hybrids and plug-in hybrids, flexible fuel, ad-  
3           vanced composites, hydrogen, and other transpor-  
4           tation technologies; and

5           (4) to provide strategic focus for current and fu-  
6           ture United States Government activities in energy  
7           cooperation to meet the global need for energy secu-  
8           rity.

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9           (e) DETERMINATION OF AGENDAS.—In general, the  
10          specific agenda with respect to a particular strategic energy  
11          partnership, and the Federal agencies designated to imple-  
12          ment related activities, shall be determined by the Secretary  
13          of State and the Secretary of Energy.

14          (f) USE OF CURRENT AGREEMENTS TO ESTABLISH  
15          PARTNERSHIPS.—Some or all of the purposes of the stra-  
16          tegic energy partnerships established under subsection (c)  
17          may be pursued through existing bilateral or multilateral  
18          agreements and activities. Such agreements and activities  
19          shall be subject to the reporting requirements in subsection  
20          (g).

21          (g) REPORTS REQUIRED.—

22                (1) INITIAL PROGRESS REPORT.—Not later than  
23                180 days after the date of the enactment of this Act,  
24                the Secretary of State shall submit to the appropriate  
25                congressional committees a report on progress made

1 *in developing the strategic energy partnerships au-*  
2 *thorized under this section.*

3 (2) *ANNUAL PROGRESS REPORTS.—*

4 (A) *IN GENERAL.—Not later than one year*  
5 *after the date of the enactment of this Act, and*  
6 *annually thereafter for 20 years, the Secretary of*  
7 *State shall submit to the appropriate congres-*  
8 *sional committees an annual report on agree-*

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9 *ments entered into and activities undertaken*  
10 *pursuant to this section, including international*  
11 *environment activities.*

12 (B) *CONTENT.—Each report submitted*  
13 *under this paragraph shall include details on—*

14 (i) *agreements and activities pursued*  
15 *by the United States Government with for-*  
16 *ign governments and entities, the imple-*  
17 *mentation plans for such agreements and*  
18 *progress measurement benchmarks, United*  
19 *States Government resources used in pur-*  
20 *suit of such agreements and activities, and*  
21 *legislative changes recommended for im-*  
22 *proved partnership; and*

23 (ii) *policies and actions in the energy*  
24 *sector of partnership countries pertinent to*

1            *United States economic, security, and envi-*  
2            *ronmental interests.*

3 **SEC. 705. INTERNATIONAL ENERGY CRISIS RESPONSE**  
4            **MECHANISMS.**

5            (a) *FINDINGS.—Congress makes the following findings:*

6            (1) *Cooperation between the United States Gov-*  
7            *ernment and governments of other countries during*  
8            *energy crises promotes the national security of the*

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9            *United States.*

10            (2) *The participation of the United States in the*  
11            *International Energy Program established under the*  
12            *Agreement on an International Energy Program,*  
13            *done at Paris November 18, 1974 (27 UST 1685), in-*  
14            *cluding in the coordination of national strategic pe-*  
15            *troleum reserves, is a national security asset that—*

16            (A) *protects the consumers and the economy*  
17            *of the United States in the event of a major dis-*  
18            *ruption in petroleum supply;*

19            (B) *maximizes the effectiveness of the*  
20            *United States strategic petroleum reserve through*  
21            *cooperation in accessing global reserves of var-*  
22            *ious petroleum products;*

23            (C) *provides market reassurance in coun-*  
24            *tries that are members of the International En-*  
25            *ergy Program; and*

1           (D) strengthens United States Government  
2           relationships with members of the International  
3           Energy Program.

4           (3) The International Energy Agency projects  
5           that the largest growth in demand for petroleum  
6           products, other than demand from the United States,  
7           will come from China and India, which are not mem-  
8           bers of the International Energy Program. The Gov-  
9           ernments of China and India vigorously pursue access  
10          to global oil reserves and are attempting to develop  
11          national petroleum reserves. Participation of the Gov-  
12          ernments of China and India in an international pe-  
13          troleum reserve mechanism would promote global en-  
14          ergy security, but such participation should be condi-  
15          tional on the Governments of China and India abid-  
16          ing by customary petroleum reserve management  
17          practices.

18          (4) In the Western Hemisphere, only the United  
19          States and Canada are members of the International  
20          Energy Program. The vulnerability of most Western  
21          Hemisphere countries to supply disruptions from po-  
22          litical, natural, or terrorism causes may introduce in-  
23          stability in the hemisphere and can be a source of  
24          conflict, despite the existence of major oil reserves in  
25          the hemisphere.

1           (5) *Countries that are not members of the Inter-*  
2 *national Energy Program and are unable to main-*  
3 *tain their own national strategic reserves are vulner-*  
4 *able to petroleum supply disruption. Disruption in*  
5 *petroleum supply and spikes in petroleum costs could*  
6 *devastate the economies of developing countries and*  
7 *could cause internal or interstate conflict.*

8           (6) *The involvement of the United States Govern-*  
9 *ment in the extension of international mechanisms to*  
10 *coordinate strategic petroleum reserves and the exten-*  
11 *sion of other emergency preparedness measures should*  
12 *strengthen the current International Energy Program.*

13       (b) *ENERGY CRISIS RESPONSE MECHANISMS WITH*  
14 *INDIA AND CHINA.—*

15           (1) *AUTHORITY.—The Secretary of State, in co-*  
16 *ordination with the Secretary of Energy, should im-*  
17 *mediately seek to establish a petroleum crisis response*  
18 *mechanism or mechanisms with the Governments of*  
19 *China and India.*

20           (2) *SCOPE.—The mechanism or mechanisms es-*  
21 *tablished under paragraph (1) should include—*

22               (A) *technical assistance in the development*  
23 *and management of national strategic petroleum*  
24 *reserves;*

1           (B) agreements for coordinating drawdowns  
2 of strategic petroleum reserves with the United  
3 States, conditional upon reserve holdings and  
4 management conditions established by the Sec-  
5 retary of Energy;

6           (C) emergency demand restraint measures;

7           (D) fuel switching preparedness and alter-  
8 native fuel production capacity; and

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9           (E) ongoing demand intensity reduction  
10 programs.

11           (3) *USE OF EXISTING AGREEMENTS TO ESTAB-*  
12 *LISH MECHANISM.*—The Secretary may, after con-  
13 sultation with Congress and in accordance with exist-  
14 ing international agreements, including the Inter-  
15 national Energy Program, include China and India  
16 in a petroleum crisis response mechanism through ex-  
17 isting or new agreements.

18           (c) *ENERGY CRISIS RESPONSE MECHANISM FOR THE*  
19 *WESTERN HEMISPHERE.*—

20           (1) *AUTHORITY.*—The Secretary of State, in co-  
21 ordination with the Secretary of Energy, should im-  
22 mediately seek to establish a Western Hemisphere en-  
23 ergy crisis response mechanism.

24           (2) *SCOPE.*—The mechanism established under  
25 paragraph (1) should include—

1           (A) an information sharing and coordi-  
2           nating mechanism in case of energy supply  
3           emergencies;

4           (B) technical assistance in the development  
5           and management of national strategic petroleum  
6           reserves within countries of the Western Hemi-  
7           sphere;

8           (C) technical assistance in developing na-  
9           tional programs to meet the requirements of  
10          membership in a future international energy ap-  
11          plication procedure as described in subsection  
12          (d);

13          (D) emergency demand restraint measures;

14          (E) energy switching preparedness and al-  
15          ternative energy production capacity; and

16          (F) ongoing demand intensity reduction  
17          programs.

18          (3) MEMBERSHIP.—The Secretary should seek to  
19          include in the Western Hemisphere energy crisis re-  
20          sponse mechanism membership for each major energy  
21          producer and major energy consumer in the Western  
22          Hemisphere and other members of the Hemisphere  
23          Energy Cooperation Forum authorized under section  
24          706.

1       (d) *INTERNATIONAL ENERGY PROGRAM APPLICATION*

2 *PROCEDURE.—*

3           (1) *AUTHORITY.—The President should place on*  
4 *the agenda for discussion at the Governing Board of*  
5 *the International Energy Agency, as soon as prac-*  
6 *ticable, the merits of establishing an international en-*  
7 *ergy program application procedure.*

8           (2) *PURPOSE.—The purpose of such procedure is*

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9 *to allow countries that are not members of the Inter-*  
10 *national Energy Program to apply to the Governing*  
11 *Board of the International Energy Agency for alloca-*  
12 *tion of petroleum reserve stocks in times of emergency*  
13 *on a grant or loan basis. Such countries should also*  
14 *receive technical assistance for, and be subject to, con-*  
15 *ditions requiring development and management of*  
16 *national programs for energy emergency prepared-*  
17 *ness, including demand restraint, fuel switching pre-*  
18 *paredness, and development of alternative fuels pro-*  
19 *duction capacity.*

20       (e) *REPORTS REQUIRED.—*

21           (1) *PETROLEUM RESERVES.—Not later than 180*  
22 *days after the date of the enactment of this Act, the*  
23 *Secretary of Energy shall submit to the appropriate*  
24 *congressional committees a report that evaluates the*  
25 *options for adapting the United States national stra-*

1     *tegic petroleum reserve and the international petro-*  
2     *leum reserve coordinating mechanism in order to*  
3     *carry out this section.*

4             (2) *CRISIS RESPONSE MECHANISMS.*—*Not later*  
5     *than 180 days after the date of the enactment of this*  
6     *Act, the Secretary of State, in coordination with the*  
7     *Secretary of Energy, shall submit to the appropriate*  
8     *congressional committees a report on the status of the*  

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9     *establishment of the international petroleum crisis re-*  
10    *sponse mechanisms described in subsections (b) and*  
11    *(c). The report shall include recommendations of the*  
12    *Secretary of State and the Secretary of Energy for*  
13    *any legislation necessary to establish or carry out*  
14    *such mechanisms.*

15            (3) *EMERGENCY APPLICATION PROCEDURE.*—*Not*  
16    *later than 60 days after a discussion by the Gov-*  
17    *erning Board of the International Energy Agency of*  
18    *the application procedure described under subsection*  
19    *(d), the President should submit to Congress a report*  
20    *that describes—*

21            (A) *the actions the United States Govern-*  
22    *ment has taken pursuant to such subsection; and*

23            (B) *a summary of the debate on the matter*  
24    *before the Governing Board of the International*  
25    *Energy Agency, including any decision that has*

1           *been reached by the Governing Board with re-*  
2           *spect to the matter.*

3 **SEC. 706. HEMISPHERE ENERGY COOPERATION FORUM.**

4           *(a) FINDINGS.—Congress makes the following findings:*

5           *(1) The engagement of the United States Govern-*  
6           *ment with governments of countries in the Western*  
7           *Hemisphere is a strategic priority for reducing the*  
8           *potential for tension over energy resources, maintain-*

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9           *ing and expanding reliable energy supplies, expand-*  
10           *ing use of renewable energy, and reducing the detri-*  
11           *mental effects of energy import dependence within the*  
12           *hemisphere. Current energy dialogues should be ex-*  
13           *panded and refocused as needed to meet this chal-*  
14           *lenge.*

15           *(2) Countries of the Western Hemisphere can*  
16           *most effectively meet their common needs for energy*  
17           *security and sustainability through partnership and*  
18           *cooperation. Cooperation between governments on en-*  
19           *ergy issues will enhance bilateral relationships among*  
20           *countries of the hemisphere. The Western Hemisphere*  
21           *is rich in natural resources, including biomass, oil,*  
22           *natural gas, coal, and has significant opportunity for*  
23           *production of renewable hydro, solar, wind, and other*  
24           *energies. Countries of the Western Hemisphere can*

1 *provide convenient and reliable markets for trade in*  
2 *energy goods and services.*

3 (3) *Development of sustainable energy alter-*  
4 *natives in the countries of the Western Hemisphere*  
5 *can improve energy security, balance of trade, and*  
6 *environmental quality and provide markets for en-*  
7 *ergy technology and agricultural products. Brazil and*  
8 *the United States have led the world in the produc-*

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9 *tion of ethanol, and deeper cooperation on biofuels*  
10 *with other countries of the hemisphere would extend*  
11 *economic and security benefits.*

12 (4) *Private sector partnership and investment in*  
13 *all sources of energy is critical to providing energy se-*  
14 *curity in the Western Hemisphere.*

15 (b) *HEMISPHERE ENERGY COOPERATION FORUM.—*

16 (1) *ESTABLISHMENT.—The Secretary of State,*  
17 *in coordination with the Secretary of Energy, should*  
18 *immediately seek to establish a regional-based min-*  
19 *isterial forum to be known as the Hemisphere Energy*  
20 *Cooperation Forum.*

21 (2) *PURPOSES.—The Hemisphere Energy Co-*  
22 *operation Forum should seek—*

23 (A) *to strengthen relationships between the*  
24 *United States and other countries of the Western*

1       *Hemisphere through cooperation on energy*  
2       *issues;*

3           *(B) to enhance cooperation between major*  
4       *energy producers and major energy consumers in*  
5       *the Western Hemisphere, particularly among the*  
6       *governments of Brazil, Canada, Mexico, the*  
7       *United States, and Venezuela;*

8           *(C) to ensure that energy contributes to the*  
9       *economic, social, and environmental enhance-*  
10       *ment of the countries of the Western Hemisphere;*

11           *(D) to provide an opportunity for open dia-*  
12       *logue and joint commitments between member*  
13       *governments and with private industry; and*

14           *(E) to provide participating countries the*  
15       *flexibility necessary to cooperatively address*  
16       *broad challenges posed to the energy supply of*  
17       *the Western Hemisphere that are practical in*  
18       *policy terms and politically acceptable.*

19       (3) *ACTIVITIES.*—*The Hemisphere Energy Co-*  
20       *operation Forum should implement the following ac-*  
21       *tivities:*

22           *(A) An Energy Crisis Initiative that will*  
23       *establish measures to respond to temporary en-*  
24       *ergy supply disruptions, including through—*

1           (i) strengthening sea-lane and infra-  
2 structure security;

3           (ii) implementing a real-time emer-  
4 gency information sharing system;

5           (iii) encouraging members to have  
6 emergency mechanisms and contingency  
7 plans in place; and

8           (iv) establishing a Western Hemisphere  
9 energy crisis response mechanism as author-  
10 ized under section 705(c).

11           (B) An Energy Sustainability Initiative to  
12 facilitate long-term supply security through fos-  
13 tering reliable supply sources of fuels, including  
14 development, deployment, and commercialization  
15 of technologies for sustainable renewable fuels  
16 within the region, including activities that—

17           (i) promote production and trade in  
18 sustainable energy, including energy from  
19 biomass;

20           (ii) facilitate investment, trade, and  
21 technology cooperation in energy infrastruc-  
22 ture, petroleum products, natural gas (in-  
23 cluding liquefied natural gas), energy effi-  
24 ciency (including automotive efficiency),

1           *clean fossil energy, renewable energy, and*  
2           *carbon sequestration;*

3                   (iii) *promote regional infrastructure*  
4           *and market integration;*

5                   (iv) *develop effective and stable regu-*  
6           *latory frameworks;*

7                   (v) *develop renewable fuels standards*  
8           *and renewable portfolio standards;*

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9                   (vi) *establish educational training and*  
10          *exchange programs between member coun-*  
11          *tries; and*

12                   (vii) *identify and remove barriers to*  
13          *trade in technology, services, and commod-*  
14          *ities.*

15           (C) *An Energy for Development Initiative*  
16          *to promote energy access for underdeveloped*  
17          *areas through energy policy and infrastructure*  
18          *development, including activities that—*

19                   (i) *increase access to energy services for*  
20          *the poor;*

21                   (ii) *improve energy sector market con-*  
22          *ditions;*

23                   (iii) *promote rural development through*  
24          *biomass energy production and use;*

1                   (iv) increase transparency of, and par-  
2                   ticipation in, energy infrastructure projects;

3                   (v) promote development and deploy-  
4                   ment of technology for clean and sustainable  
5                   energy development, including biofuel and  
6                   clean coal technologies; and

7                   (vi) facilitate use of carbon sequestra-  
8                   tion methods in agriculture and forestry  

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9                   and linking greenhouse gas emissions reduc-  
10                  tion programs to international carbon mar-  
11                  kets.

12           (c) *HEMISPHERE ENERGY INDUSTRY GROUP.*—

13                   (1) *AUTHORITY.*—The Secretary of State, in co-  
14                   ordination with the Secretary of Commerce and the  
15                   Secretary of Energy, should approach the govern-  
16                   ments of other countries in the Western Hemisphere  
17                   to seek cooperation in establishing a Hemisphere En-  
18                   ergy Industry Group, to be coordinated by the United  
19                   States Government, involving industry representatives  
20                   and government representatives from the Western  
21                   Hemisphere.

22                   (2) *PURPOSE.*—The purpose of the forum should  
23                   be to increase public-private partnerships, foster pri-  
24                   vate investment, and enable countries of the Western

1 *Hemisphere to devise energy agendas compatible with*  
2 *industry capacity and cognizant of industry goals.*

3 (3) *TOPICS OF DIALOGUES.—Topics for the*  
4 *forum should include—*

5 (A) *promotion of a secure investment cli-*  
6 *mate;*

7 (B) *development and deployment of biofuels*  
8 *and other alternative fuels and clean electrical*

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9 *production facilities, including clean coal and*  
10 *carbon sequestration;*

11 (C) *development and deployment of energy*  
12 *efficient technologies and practices, including in*  
13 *the industrial, residential, and transportation*  
14 *sectors;*

15 (D) *investment in oil and natural gas pro-*  
16 *duction and distribution;*

17 (E) *transparency of energy production and*  
18 *reserves data;*

19 (F) *research promotion; and*

20 (G) *training and education exchange pro-*  
21 *grams.*

22 (d) *ANNUAL REPORT.—The Secretary of State, in co-*  
23 *ordination with the Secretary of Energy, shall submit to*  
24 *the appropriate congressional committees an annual report*  
25 *on the implementation of this section, including the strategy*

1 *and benchmarks for measurement of progress developed*  
2 *under this section.*

3 **SEC. 707. NATIONAL SECURITY COUNCIL REORGANIZATION.**

4 *Section 101(a) of the National Security Act of 1947*  
5 *(50 U.S.C. 402(a)) is amended—*

6 *(1) by redesignating paragraphs (5), (6), and (7)*  
7 *as paragraphs (6), (7), and (8), respectively; and*

8 *(2) by inserting after paragraph (4) the fol-*  
9 *lowing:*

10 *“(5) the Secretary of Energy;”.*

11 **SEC. 708. ANNUAL NATIONAL ENERGY SECURITY STRATEGY**

12 **REPORT.**

13 **(a) REPORTS.—**

14 *(1) IN GENERAL.—Subject to paragraph (2), on*  
15 *the date on which the President submits to Congress*  
16 *the budget for the following fiscal year under section*  
17 *1105 of title 31, United States Code, the President*  
18 *shall submit to Congress a comprehensive report on*  
19 *the national energy security of the United States.*

20 *(2) NEW PRESIDENTS.—In addition to the re-*  
21 *ports required under paragraph (1), the President*  
22 *shall submit a comprehensive report on the national*  
23 *energy security of the United States by not later than*  
24 *150 days after the date on which the President as-*

1 *sumes the office of President after a presidential elec-*  
2 *tion.*

3 (b) *CONTENTS.—Each report under this section shall*  
4 *describe the national energy security strategy of the United*  
5 *States, including a comprehensive description of—*

6 (1) *the worldwide interests, goals, and objectives*  
7 *of the United States that are vital to the national en-*  
8 *ergy security of the United States;*

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9 (2) *the foreign policy, worldwide commitments,*  
10 *and national defense capabilities of the United States*  
11 *necessary—*

12 (A) *to deter political manipulation of world*  
13 *energy resources; and*

14 (B) *to implement the national energy secu-*  
15 *rity strategy of the United States;*

16 (3) *the proposed short-term and long-term uses of*  
17 *the political, economic, military, and other authori-*  
18 *ties of the United States—*

19 (A) *to protect or promote energy security;*  
20 *and*

21 (B) *to achieve the goals and objectives de-*  
22 *scribed in paragraph (1);*

23 (4) *the adequacy of the capabilities of the United*  
24 *States to protect the national energy security of the*  
25 *United States, including an evaluation of the balance*

1       *among the capabilities of all elements of the national*  
2       *authority of the United States to support the imple-*  
3       *mentation of the national energy security strategy;*  
4       *and*

5             (5) *such other information as the President de-*  
6       *termines to be necessary to inform Congress on mat-*  
7       *ters relating to the national energy security of the*  
8       *United States.*

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9       (c) **CLASSIFIED AND UNCLASSIFIED FORM.**—*Each na-*  
10      *tional energy security strategy report shall be submitted to*  
11      *Congress in—*

12             (1) *a classified form; and*

13             (2) *an unclassified form.*

14      **SEC. 709. APPROPRIATE CONGRESSIONAL COMMITTEES DE-**  
15                                      **FINED.**

16             *In this title, the term “appropriate congressional com-*  
17      *mittees” means the Committee on Foreign Relations and*  
18      *the Committee on Energy and Natural Resources of the Sen-*  
19      *ate and the Committee on Foreign Affairs and the Com-*  
20      *mittee on Energy and Commerce of the House of Represent-*  
21      *atives.*

1 **SEC. 710. NO OIL PRODUCING AND EXPORTING CARTELS**  
2 **ACT OF 2007.**

3 (a) *SHORT TITLE.*—*This section may be cited as the*  
4 *“No Oil Producing and Exporting Cartels Act of 2007” or*  
5 *“NOPEC”.*

6 (b) *SHERMAN ACT.*—*The Sherman Act (15 U.S.C. 1*  
7 *et seq.) is amended by adding after section 7 the following:*  
8 **“SEC. 7A. OIL PRODUCING CARTELS.**

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9 *“(a) IN GENERAL.*—*It shall be illegal and a violation*  
10 *of this Act for any foreign state, or any instrumentality*  
11 *or agent of any foreign state, to act collectively or in com-*  
12 *bination with any other foreign state, any instrumentality*  
13 *or agent of any other foreign state, or any other person,*  
14 *whether by cartel or any other association or form of co-*  
15 *operation or joint action—*

16 *“(1) to limit the production or distribution of*  
17 *oil, natural gas, or any other petroleum product;*

18 *“(2) to set or maintain the price of oil, natural*  
19 *gas, or any petroleum product; or*

20 *“(3) to otherwise take any action in restraint of*  
21 *trade for oil, natural gas, or any petroleum product;*  
22 *when such action, combination, or collective action has a*  
23 *direct, substantial, and reasonably foreseeable effect on the*  
24 *market, supply, price, or distribution of oil, natural gas,*  
25 *or other petroleum product in the United States.*

1       “(b) *SOVEREIGN IMMUNITY*.—A foreign state engaged  
2 *in conduct in violation of subsection (a) shall not be im-*  
3 *mune under the doctrine of sovereign immunity from the*  
4 *jurisdiction or judgments of the courts of the United States*  
5 *in any action brought to enforce this section.*

6       “(c) *INAPPLICABILITY OF ACT OF STATE DOCTRINE*.—  
7 *No court of the United States shall decline, based on the*  
8 *act of state doctrine, to make a determination on the merits*  
9 *in an action brought under this section.*

10       “(d) *ENFORCEMENT*.—The Attorney General of the  
11 *United States may bring an action to enforce this section*  
12 *in any district court of the United States as provided under*  
13 *the antitrust laws.”.*

14       (c) *SOVEREIGN IMMUNITY*.—Section 1605(a) of title  
15 28, *United States Code, is amended—*

16           (1) *in paragraph (6), by striking “or” after the*  
17 *semicolon;*

18           (2) *in paragraph (7), by striking the period and*  
19 *inserting “; or”; and*

20           (3) *by adding at the end the following:*

21           “(8) *in which the action is brought under section*  
22 *7A of the Sherman Act.”.*

1 **SEC. 711. CONVENTION ON SUPPLEMENTARY COMPENSA-**  
2 **TION FOR NUCLEAR DAMAGE CONTINGENT**  
3 **COST ALLOCATION.**

4 (a) *FINDINGS AND PURPOSE.*—

5 (1) *FINDINGS.*—*Congress finds that—*

6 (A) *section 170 of the Atomic Energy Act of*  
7 *1954 (42 U.S.C. 2210) (commonly known as the*  
8 *“Price-Anderson Act”)*—

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9 (i) *provides a predictable legal frame-*  
10 *work necessary for nuclear projects; and*

11 (ii) *ensures prompt and equitable com-*  
12 *ensation in the event of a nuclear incident*  
13 *in the United States;*

14 (B) *section 170 of that Act, in effect, pro-*  
15 *vides operators of nuclear powerplants with in-*  
16 *surance for damage arising out of a nuclear in-*  
17 *cident and funds the insurance primarily*  
18 *through the assessment of a retrospective pre-*  
19 *mium from each operator after the occurrence of*  
20 *a nuclear incident;*

21 (C) *the Convention on Supplementary Com-*  
22 *ensation for Nuclear Damage, done at Vienna*  
23 *on September 12, 1997, will establish a global*  
24 *system—*

1           (i) to provide a predictable legal  
2           framework necessary for nuclear energy  
3           projects; and

4           (ii) to ensure prompt and equitable  
5           compensation in the event of a nuclear inci-  
6           dent;

7           (D) the Convention benefits United States  
8           nuclear suppliers that face potentially unlimited

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9           liability for a nuclear incidents outside the cov-  
10          erage of section 170 of the Atomic Energy Act of  
11          1954 (42 U.S.C. 2210) by replacing a potentially  
12          open-ended liability with a predictable liability  
13          regime that, in effect, provides nuclear suppliers  
14          with insurance for damage arising out of such  
15          an incident;

16          (E) the Convention also benefits United  
17          States nuclear facility operators that may be  
18          publicly liable for a Price-Anderson incident by  
19          providing an additional early source for a Price-  
20          Anderson incident by providing an additional  
21          early source of funds to compensate damage aris-  
22          ing out of the Price-Anderson incident;

23          (F) the combined operation of the Conven-  
24          tion, section 170 of the Atomic Energy Act of  
25          1954 (42 U.S.C. 2210), and this section will

1           *augment the quantity of assured funds available*  
2           *for victims in a wider variety of nuclear inci-*  
3           *idents while reducing the potential liability of*  
4           *United States suppliers without increasing po-*  
5           *tential costs to United States operators;*

6           *(G) the cost of those benefits is the obliga-*  
7           *tion of the United States to contribute to the*  
8           *supplementary compensation fund established by*  

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9           *the Convention;*

10           *(H) any such contribution should be funded*  
11           *in a manner that neither upsets settled expecta-*  
12           *tions based on the liability regime established*  
13           *under section 170 of the Atomic Energy Act of*  
14           *1954 (42 U.S.C. 2210) nor shifts to Federal tax-*  
15           *payers liability risks for nuclear incidents at for-*  
16           *eign installations;*

17           *(I) with respect to a Price-Anderson inci-*  
18           *dent, funds already available under section 170*  
19           *of the Atomic Energy Act of 1954 (42 U.S.C.*  
20           *2210) should be used; and*

21           *(J) with respect to a nuclear incident out-*  
22           *side the United States not covered by section 170*  
23           *of the Atomic Energy Act of 1954 (42 U.S.C.*  
24           *2210), a retrospective premium should be pro-*  
25           *rated among nuclear suppliers relieved from po-*

1           *tential liability for which insurance is not avail-*  
2           *able.*

3           (2) *PURPOSE.*—*The purpose of this section is to*  
4           *allocate the contingent costs associated with partici-*  
5           *pation by the United States in the international nu-*  
6           *clear liability compensation system established by the*  
7           *Convention on Supplementary Compensation for Nu-*  
8           *clear Damage, done at Vienna on September 12,*

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9           1997—

10                   (A) *with respect to a Price-Anderson inci-*  
11                   *dent, by using funds made available under sec-*  
12                   *tion 170 of the Atomic Energy Act of 1954 (42*  
13                   *U.S.C. 2210) to cover the contingent costs in a*  
14                   *manner that neither increases the burdens nor*  
15                   *decreases the benefits under section 170 of that*  
16                   *Act; and*

17                   (B) *with respect to a covered incident out-*  
18                   *side the United States that is not a Price-Ander-*  
19                   *son incident, by allocating the contingent costs*  
20                   *equitably, on the basis of risk, among the class*  
21                   *of nuclear suppliers relieved by the Convention*  
22                   *from the risk of potential liability resulting from*  
23                   *any covered incident outside the United States.*

24           (b) *DEFINITIONS.*—*In this section:*

1           (1) *COMMISSION.*—The term “Commission”  
2 means the Nuclear Regulatory Commission.

3           (2) *CONTINGENT COST.*—The term “contingent  
4 cost” means the cost to the United States in the event  
5 of a covered incident the amount of which is equal to  
6 the amount of funds the United States is obligated to  
7 make available under paragraph 1(b) of Article III of  
8 the Convention.

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9           (3) *CONVENTION.*—The term “Convention”  
10 means the Convention on Supplementary Compensa-  
11 tion for Nuclear Damage, done at Vienna on Sep-  
12 tember 12, 1997.

13           (4) *COVERED INCIDENT.*—The term “covered in-  
14 cident” means a nuclear incident the occurrence of  
15 which results in a request for funds pursuant to Arti-  
16 cle VII of the Convention.

17           (5) *COVERED INSTALLATION.*—The term “covered  
18 installation” means a nuclear installation at which  
19 the occurrence of a nuclear incident could result in a  
20 request for funds under Article VII of the Convention.

21           (6) *COVERED PERSON.*—

22           (A) *IN GENERAL.*—The term “covered per-  
23 son” means—

24                   (i) a United States person; and

1                   (ii) an individual or entity (including  
2                   an agency or instrumentality of a foreign  
3                   country) that—

4                               (I) is located in the United States;

5                               or

6                               (II) carries out an activity in the  
7                   United States.

8                   (B) *EXCLUSIONS.*—The term “covered per-

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9                   son” does not include—

10                               (i) the United States; or

11                               (ii) any agency or instrumentality of  
12                   the United States.

13                   (7) *NUCLEAR SUPPLIER.*—The term “nuclear  
14                   supplier” means a covered person (or a successor in  
15                   interest of a covered person) that—

16                               (A) supplies facilities, equipment, fuel, serv-  
17                   ices, or technology pertaining to the design, con-  
18                   struction, operation, or decommissioning of a  
19                   covered installation; or

20                               (B) transports nuclear materials that could  
21                   result in a covered incident.

22                   (8) *PRICE-ANDERSON INCIDENT.*—The term  
23                   “Price-Anderson incident” means a covered incident  
24                   for which section 170 of the Atomic Energy Act of  
25                   1954 (42 U.S.C. 2210) would make funds available to

1       *compensate for public liability (as defined in section*  
2       *11 of that Act (42 U.S.C. 2014)).*

3           (9) *SECRETARY.*—*The term “Secretary” means*  
4       *the Secretary of Energy.*

5           (10) *UNITED STATES.*—

6           (A) *IN GENERAL.*—*The term “United*  
7       *States” has the meaning given the term in sec-*  
8       *tion 11 of the Atomic Energy Act of 1954 (42*  
9       *U.S.C. 2014).*

10          (B) *INCLUSIONS.*—*The term “United*  
11       *States” includes—*

12               (i) *the Commonwealth of Puerto Rico;*  
13               (ii) *any other territory or possession of*  
14       *the United States;*

15               (iii) *the Canal Zone; and*

16               (iv) *the waters of the United States ter-*  
17       *ritorial sea under Presidential Proclama-*  
18       *tion Number 5928, dated December 27,*  
19       *1988 (43 U.S.C. 1331 note).*

20          (11) *UNITED STATES PERSON.*—*The term*  
21       *“United States person” means—*

22               (A) *any individual who is a resident, na-*  
23       *tional, or citizen of the United States (other than*  
24       *an individual residing outside of the United*

1           *States and employed by a person who is not a*  
2           *United States person); and*

3                   *(B) any corporation, partnership, associa-*  
4           *tion, joint stock company, business trust, unin-*  
5           *corporated organization, or sole proprietorship*  
6           *that is organized under the laws of the United*  
7           *States.*

8           *(c) USE OF PRICE-ANDERSON FUNDS.—*

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9                   *(1) IN GENERAL.—Funds made available under*  
10          *section 170 of the Atomic Energy Act of 1954 (42*  
11          *U.S.C. 2210) shall be used to cover the contingent cost*  
12          *resulting from any Price-Anderson incident.*

13                  *(2) EFFECT.—The use of funds pursuant to*  
14          *paragraph (1) shall not reduce the limitation on pub-*  
15          *lic liability established under section 170 e. of the*  
16          *Atomic Energy Act of 1954 (42 U.S.C. 2210(e)).*

17          *(d) EFFECT ON AMOUNT OF PUBLIC LIABILITY.—*

18                  *(1) IN GENERAL.—Funds made available to the*  
19          *United States under Article VII of the Convention*  
20          *with respect to a Price-Anderson incident shall be*  
21          *used to satisfy public liability resulting from the*  
22          *Price-Anderson incident.*

23                  *(2) AMOUNT.—The amount of public liability al-*  
24          *lowable under section 170 of the Atomic Energy Act*  
25          *of 1954 (42 U.S.C. 2210) relating to a Price-And-*

1       son incident under paragraph (1) shall be increased  
2       by an amount equal to the difference between—

3               (A) the amount of funds made available for  
4               the Price-Anderson incident under Article VII of  
5               the Convention; and

6               (B) the amount of funds used under sub-  
7               section (c) to cover the contingent cost resulting  
8               from the Price-Anderson incident.

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9       (e) *RETROSPECTIVE RISK POOLING PROGRAM.*—

10           (1) *IN GENERAL.*—Except as provided in para-  
11           graph (2), each nuclear supplier shall participate in  
12           a retrospective risk pooling program in accordance  
13           with this section to cover the contingent cost resulting  
14           from a covered incident outside the United States that  
15           is not a Price-Anderson incident.

16           (2) *DEFERRED PAYMENT.*—

17               (A) *IN GENERAL.*—The obligation of a nu-  
18               clear supplier to participate in the retrospective  
19               risk pooling program shall be deferred until the  
20               United States is called on to provide funds pur-  
21               suant to Article VII of the Convention with re-  
22               spect to a covered incident that is not a Price-  
23               Anderson incident.

24               (B) *AMOUNT OF DEFERRED PAYMENT.*—The  
25               amount of a deferred payment of a nuclear sup-

1           plier under subparagraph (A) shall be based on  
2           the risk-informed assessment formula determined  
3           under subparagraph (C).

4           (C) RISK-INFORMED ASSESSMENT FOR-  
5           MULA.—

6           (i) IN GENERAL.—Not later than 3  
7           years after the date of enactment of this Act,  
8           and every 5 years thereafter, the Secretary  
9           shall, by regulation, determine the risk-in-  
10          formed assessment formula for the allocation  
11          among nuclear suppliers of the contingent  
12          cost resulting from a covered incident that  
13          is not a Price-Anderson incident, taking  
14          into account risk factors such as—

15               (I) the nature and intended pur-  
16               pose of the goods and services supplied  
17               by each nuclear supplier to each cov-  
18               ered installation outside the United  
19               States;

20               (II) the quantity of the goods and  
21               services supplied by each nuclear sup-  
22               plier to each covered installation out-  
23               side the United States;

24               (III) the hazards associated with  
25               the supplied goods and services if the

1 goods and services fail to achieve the  
2 intended purposes;

3 (IV) the hazards associated with  
4 the covered installation outside the  
5 United States to which the goods and  
6 services are supplied;

7 (V) the legal, regulatory, and fi-  
8 nancial infrastructure associated with  
9 the covered installation outside the  
10 United States to which the goods and  
11 services are supplied; and

12 (VI) the hazards associated with  
13 particular forms of transportation.

14 (ii) *FACTORS FOR CONSIDERATION.*—

15 *In determining the formula, the Secretary*  
16 *may—*

17 (I) *exclude—*

18 (aa) goods and services with  
19 negligible risk;

20 (bb) classes of goods and  
21 services not intended specifically  
22 for use in a nuclear installation;

23 (cc) a nuclear supplier with  
24 a *de minimis* share of the contin-  
25 gent cost; and

1                    (dd) a nuclear supplier no  
2                    longer in existence for which there  
3                    is no identifiable successor; and  
4                    (II) establish the period on which  
5                    the risk assessment is based.

6                    (iii) APPLICATION.—In applying the  
7                    formula, the Secretary shall not consider  
8                    any covered installation or transportation  
9                    for which funds would be available under  
10                   section 170 of the Atomic Energy Act of  
11                   1954 (42 U.S.C. 2210).

12                   (iv) REPORT.—Not later than 5 years  
13                   after the date of enactment of this Act and  
14                   every 5 years thereafter, the Secretary shall  
15                   submit to the Committee on Environment  
16                   and Public Works of the Senate and the  
17                   Committee on Energy and Commerce of the  
18                   House of Representatives a report on wheth-  
19                   er there is a need for continuation or  
20                   amendment of this section, taking into ac-  
21                   count the effects of the implementation of  
22                   the Convention on the United States nuclear  
23                   industry and suppliers.

24                   (f) REPORTING.—

25                   (1) COLLECTION OF INFORMATION.—

1           (A) *IN GENERAL.*—*The Secretary may col-*  
2           *lect information necessary for developing and*  
3           *implementing the formula for calculating the de-*  
4           *ferred payment of a nuclear supplier under sub-*  
5           *section (e)(2).*

6           (B) *PROVISION OF INFORMATION.*—*Each*  
7           *nuclear supplier and other appropriate persons*  
8           *shall make available to the Secretary such infor-*  
9           *mation, reports, records, documents, and other*  
10          *data as the Secretary determines, by regulation,*  
11          *to be necessary or appropriate to develop and*  
12          *implement the formula under subsection*  
13          *(e)(2)(C).*

14          (2) *PRIVATE INSURANCE.*—*The Secretary shall*  
15          *make available to nuclear suppliers, and insurers of*  
16          *nuclear suppliers, information to support the vol-*  
17          *untary establishment and maintenance of private in-*  
18          *surance against any risk for which nuclear suppliers*  
19          *may be required to pay deferred payments under this*  
20          *section.*

21          (g) *EFFECT ON LIABILITY.*—*Nothing in any other law*  
22          *(including regulations) limits liability for a covered inci-*  
23          *dent to an amount equal to less than the amount prescribed*  
24          *in paragraph 1(a) of Article IV of the Convention, unless*  
25          *the law—*

1           (1) *specifically refers to this section; and*

2           (2) *explicitly repeals, alters, amends, modifies,*  
3 *impairs, displaces, or supersedes the effect of this sub-*  
4 *section.*

5       (h) *PAYMENTS TO AND BY THE UNITED STATES.—*

6           (1) *ACTION BY NUCLEAR SUPPLIERS.—*

7           (A) *NOTIFICATION.—In the case of a request*  
8 *for funds under Article VII of the Convention re-*  
9 *sulting from a covered incident that is not a*  
10 *Price-Anderson incident, the Secretary shall no-*  
11 *tify each nuclear supplier of the amount of the*  
12 *deferred payment required to be made by the nu-*  
13 *clear supplier.*

14           (B) *PAYMENTS.—*

15           (i) *IN GENERAL.—Except as provided*  
16 *in clause (ii), not later than 60 days after*  
17 *receipt of a notification under subpara-*  
18 *graph (A), a nuclear supplier shall pay to*  
19 *the general fund of the Treasury the de-*  
20 *ferred payment of the nuclear supplier re-*  
21 *quired under subparagraph (A).*

22           (ii) *ANNUAL PAYMENTS.—A nuclear*  
23 *supplier may elect to prorate payment of*  
24 *the deferred payment required under sub-*  
25 *paragraph (A) in 5 equal annual payments*

1           *(including interest on the unpaid balance at*  
2           *the prime rate prevailing at the time the*  
3           *first payment is due).*

4           (C) *VOUCHERS.*—*A nuclear supplier shall*  
5           *submit payment certification vouchers to the*  
6           *Secretary of the Treasury in accordance with*  
7           *section 3325 of title 31, United States Code.*

8           (2) *USE OF FUNDS.*—

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9           (A) *IN GENERAL.*—*Amounts paid into the*  
10          *Treasury under paragraph (1) shall be available*  
11          *to the Secretary of the Treasury, without further*  
12          *appropriation and without fiscal year limita-*  
13          *tion, for the purpose of making the contributions*  
14          *of public funds required to be made by the*  
15          *United States under the Convention.*

16          (B) *ACTION BY SECRETARY OF TREAS-*  
17          *URY.*—*The Secretary of the Treasury shall pay*  
18          *the contribution required under the Convention*  
19          *to the court of competent jurisdiction under Arti-*  
20          *cle XIII of the Convention with respect to the ap-*  
21          *plicable covered incident.*

22          (3) *FAILURE TO PAY.*—*If a nuclear supplier fails*  
23          *to make a payment required under this subsection,*  
24          *the Secretary may take appropriate action to recover*  
25          *from the nuclear supplier—*

1           (A) *the amount of the payment due from the*  
2           *nuclear supplier;*

3           (B) *any applicable interest on the payment;*  
4           *and*

5           (C) *a penalty of not more than twice the*  
6           *amount of the deferred payment due from the*  
7           *nuclear supplier.*

8           (i) *LIMITATION ON JUDICIAL REVIEW; CAUSE OF AC-*  
9           *TION.—*

10           (1) *LIMITATION ON JUDICIAL REVIEW.—*

11           (A) *IN GENERAL.—In any civil action aris-*  
12           *ing under the Convention over which Article*  
13           *XIII of the Convention grants jurisdiction to the*  
14           *courts of the United States, any appeal or review*  
15           *by writ of mandamus or otherwise with respect*  
16           *to a nuclear incident that is not a Price-Ander-*  
17           *son incident shall be in accordance with chapter*  
18           *83 of title 28, United States Code, except that the*  
19           *appeal or review shall occur in the United States*  
20           *Court of Appeals for the District of Columbia*  
21           *Circuit.*

22           (B) *SUPREME COURT JURISDICTION.—Noth-*  
23           *ing in this paragraph affects the jurisdiction of*  
24           *the Supreme Court of the United States under*  
25           *chapter 81 of title 28, United States Code.*

1           (2) CAUSE OF ACTION.—

2                   (A) IN GENERAL.—Subject to subparagraph  
3           (B), in any civil action arising under the Con-  
4           vention over which Article XIII of the Conven-  
5           tion grants jurisdiction to the courts of the  
6           United States, in addition to any other cause of  
7           action that may exist, an individual or entity  
8           shall have a cause of action against the operator  
9           to recover for nuclear damage suffered by the in-  
10          dividual or entity.

11                   (B) REQUIREMENT.—Subparagraph (A)  
12          shall apply only if the individual or entity seeks  
13          a remedy for nuclear damage (as defined in Ar-  
14          ticle I of the Convention) that was caused by a  
15          nuclear incident (as defined in Article I of the  
16          Convention) that is not a Price-Anderson inci-  
17          dent.

18                   (C) EFFECT OF PARAGRAPH.—Nothing in  
19          this paragraph limits, modifies, extinguishes, or  
20          otherwise affects any cause of action that would  
21          have existed in the absence of enactment of this  
22          paragraph.

23           (j) RIGHT OF RECOURSE.—This section does not pro-  
24          vide to an operator of a covered installation any right of  
25          recourse under the Convention.

1       (k) *PROTECTION OF SENSITIVE UNITED STATES IN-*  
2 *FORMATION.—Nothing in the Convention or this section re-*  
3 *quires the disclosure of—*

4           (1) *any data that, at any time, was Restricted*  
5 *Data (as defined in section 11 of the Atomic Energy*  
6 *Act of 1954 (42 U.S.C. 2014));*

7           (2) *information relating to intelligence sources or*  
8 *methods protected by section 102A(i) of the National*  
9 *Security Act of 1947 (50 U.S.C. 403–1(i)); or*

10          (3) *national security information classified*  
11 *under Executive Order 12958 (50 U.S.C. 435 note; re-*  
12 *lating to classified national security information) (or*  
13 *a successor regulation).*

14       (l) *REGULATIONS.—*

15           (1) *IN GENERAL.—The Secretary or the Commis-*  
16 *sion, as appropriate, may prescribe regulations to*  
17 *carry out section 170 of the Atomic Energy Act of*  
18 *1954 (42 U.S.C. 2210) and this section.*

19           (2) *REQUIREMENT.—Rules prescribed under this*  
20 *subsection shall ensure, to the maximum extent prac-*  
21 *ticable, that—*

22           (A) *the implementation of section 170 of the*  
23 *Atomic Energy Act of 1954 (42 U.S.C. 2210)*  
24 *and this section is consistent and equitable; and*

1           (B) *the financial and operational burden on*  
2           *a Commission licensee in complying with section*  
3           *170 of that Act is not greater as a result of the*  
4           *enactment of this section.*

5           (3) *APPLICABILITY OF PROVISION.*—*Section 553*  
6           *of title 5, United States Code, shall apply with re-*  
7           *spect to the promulgation of regulations under this*  
8           *subsection.*

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9           (4) *EFFECT OF SUBSECTION.*—*The authority*  
10          *provided under this subsection is in addition to, and*  
11          *does not impair or otherwise affect, any other author-*  
12          *ity of the Secretary or the Commission to prescribe*  
13          *regulations.*

14          (m) *EFFECTIVE DATE.*—*This section takes effect on the*  
15          *date of enactment of this Act.*

## 16           **TITLE VIII—MISCELLANEOUS**

### 17           **SEC. 801. STUDY OF THE EFFECT OF PRIVATE WIRE LAWS** 18                           **ON THE DEVELOPMENT OF COMBINED HEAT** 19                           **AND POWER FACILITIES.**

20          (a) *STUDY.*—

21           (1) *IN GENERAL.*—*The Secretary, in consultation*  
22          *with the States and other appropriate entities, shall*  
23          *conduct a study of the laws (including regulations)*  
24          *affecting the siting of privately owned electric dis-*  
25          *tribution wires on and across public rights-of-way.*

1           (2) *REQUIREMENTS.*—*The study under para-*  
2 *graph (1) shall include—*

3           (A) *an evaluation of—*

4                   (i) *the purposes of the laws; and*

5                   (ii) *the effect the laws have on the de-*  
6 *velopment of combined heat and power fa-*  
7 *cilities;*

8           (B) *a determination of whether a change in*

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9                   *the laws would have any operating, reliability,*  
10 *cost, or other impacts on electric utilities and the*  
11 *customers of the electric utilities; and*

12           (C) *an assessment of—*

13                   (i) *whether privately owned electric*  
14 *distribution wires would result in duplica-*  
15 *tive facilities; and*

16                   (ii) *whether duplicative facilities are*  
17 *necessary or desirable.*

18           (b) *REPORT.*—*Not later than 1 year after the date of*  
19 *enactment of this Act, the Secretary shall submit to Con-*  
20 *gress a report that describes the results of the study con-*  
21 *ducted under subsection (a).*

Amend the title so as to read: “An Act to move the United States toward greater energy independence and security, to increase the production of clean renewable fuels, to protect consumers from price gouging, to increase the energy efficiency of products, buildings, and vehicles, to promote research on and deploy greenhouse

gas capture and storage options, and to improve the energy performance of the Federal Government, and for other purposes.”.

~~Attest:~~

~~Secretary~~

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1           **TITLE VIII—RENEWABLE**  
 2           **PORTFOLIO STANDARD**

3   **SEC. 801. RENEWABLE PORTFOLIO STANDARD.**

4           (a) IN GENERAL.—Title VI of the Public Utility Reg-  
 5   ulatory Policies Act of 1978 (16 U.S.C. 2601 et seq.) is  
 6   amended by adding at the end the following:

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7   **“SEC. 610. FEDERAL RENEWABLE PORTFOLIO STANDARD.**

8           “(a) RENEWABLE ENERGY REQUIREMENT.—

9           “(1) IN GENERAL.—Each retail electric supplier  
 10   that sells electricity to electric consumers shall ob-  
 11   tain a percentage of the base amount of electricity  
 12   it sells to electric consumers in any calendar year  
 13   from new renewable energy or existing renewable en-  
 14   ergy. The percentage obtained in a calendar year  
 15   shall not be less than the amount specified in the  
 16   following table:

“Calendar years	Minimum annual percentage
2010 through 2012 .....	3.75
2013 through 2016 .....	7.50
2017 through 2019 .....	11.25
2020 through 2030 .....	15.0

17           “(2) MEANS OF COMPLIANCE.—An electric util-  
 18   ity shall meet the requirements of paragraph (1)  
 19   by—

1           “(A) submitting to the Secretary renewable  
2 energy credits issued under subsection (b);

3           “(B) making alternative compliance pay-  
4 ments to the Secretary at the rate of 2 cents  
5 per kilowatt hour (as adjusted for inflation  
6 under subsection (g)); or

7           “(C) a combination of activities described  
8 in subparagraphs (A) and (B).

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9           “(3) SPECIAL RULE.—Nothing in this section  
10 authorizes or requires the Tennessee Valley Author-  
11 ity to make any capital expenditure on new gener-  
12 ating capacity, except to the extent that budget au-  
13 thority for the expenditure is provided in advance in  
14 an appropriations Act.

15           “(b) FEDERAL RENEWABLE ENERGY CREDIT TRAD-  
16 ING PROGRAM.—

17           “(1) IN GENERAL.—Not later than July 1,  
18 2009, the Secretary shall establish a Federal renew-  
19 able energy credit trading program under which elec-  
20 tric utilities shall submit to the Secretary renewable  
21 energy credits to certify the compliance of the elec-  
22 tric utilities with respect to obligations under sub-  
23 section (a)(1).

24           “(2) ADMINISTRATION.—As part of the pro-  
25 gram, the Secretary shall—

1           “(A) issue tradeable renewable energy  
2 credits to generators of electric energy from  
3 new renewable energy;

4           “(B) issue nontradeable renewable energy  
5 credits to generators of electric energy from ex-  
6 isting renewable energy;

7           “(C) issue renewable energy credits to elec-  
8 tric utilities associated with State renewable  
9 portfolio standard compliance mechanisms pur-  
10 suant to subsection (h);

11           “(D) ensure that a kilowatt hour, including  
12 the associated renewable energy credit, shall be  
13 used only once for purposes of compliance with  
14 this Act;

15           “(E) allow double credits for generation  
16 from facilities on Indian land, and triple credits  
17 for generation from small renewable distributed  
18 generators (meaning those no larger than 1  
19 megawatt); and

20           “(F) ensure that, with respect to a pur-  
21 chaser that, as of the date of enactment of this  
22 section, has a purchase agreement from a re-  
23 newable energy facility placed in service before  
24 that date, the credit associated with the genera-  
25 tion of renewable energy under the contract is

1 issued to the purchaser of the electric energy to  
2 the extent that the contract does not already  
3 provide for the allocation of the Federal credit.

4 “(3) DURATION.—A credit described in sub-  
5 paragraph (A), (B), or (C) of paragraph (2) may  
6 only be used for compliance with this section during  
7 the 3-year period beginning on the date of issuance  
8 of the credit.

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9 “(4) TRANSFERS.—An electric utility that holds  
10 credits in excess of the quantity of credits needed to  
11 comply with subsection (a) may transfer the credits  
12 to another electric utility in the same utility holding  
13 company system.

14 “(5) DELEGATION OF MARKET FUNCTION.—  
15 The Secretary may delegate to an appropriate mar-  
16 ket-making entity the administration of a national  
17 tradeable renewable energy credit market for pur-  
18 poses of creating a transparent national market for  
19 the sale or trade of renewable energy credits.

20 “(c) ENFORCEMENT.—

21 “(1) CIVIL PENALTIES.—Any electric utility  
22 that fails to meet the compliance requirements of  
23 subsection (a) shall be subject to a civil penalty.

24 “(2) AMOUNT OF PENALTY.—The amount of  
25 the civil penalty shall be determined by multiplying

1 the number of kilowatt-hours of electric energy sold  
2 to electric consumers in violation of subsection (a)  
3 by the greater of—

4 “(A) the value of the alternative compli-  
5 ance payment, as adjusted to reflect changes  
6 for the 12-month period ending the preceding  
7 November 30 in the Consumer Price Index for  
8 All Urban Consumers published by the Bureau  
9 of Labor Statistics of the Department of Labor;  
10 or

11 “(B) 200 percent of the average market  
12 value of renewable energy credits during the  
13 year in which the violation occurred.

14 “(3) MITIGATION OR WAIVER.—

15 “(A) PENALTY.—

16 “(i) IN GENERAL.—The Secretary  
17 may mitigate or waive a civil penalty under  
18 this subsection if the electric utility is un-  
19 able to comply with subsection (a) for a  
20 reason outside of the reasonable control of  
21 the utility.

22 “(ii) AMOUNT.—The Secretary shall  
23 reduce the amount of any penalty deter-  
24 mined under paragraph (2) by the amount  
25 paid by the electric utility to a State for

1 failure to comply with the requirement of  
2 a State renewable energy program if the  
3 State requirement is greater than the ap-  
4 plicable requirement of subsection (a).

5 “(B) REQUIREMENT.—The Secretary may  
6 waive the requirements of subsection (a) for a  
7 period of up to 5 years with respect to an elec-  
8 tric utility if the Secretary determines that the  
9 electric utility cannot meet the requirements be-  
10 cause of a hurricane, tornado, fire, flood, earth-  
11 quake, ice storm, or other natural disaster or  
12 act of God beyond the reasonable control of the  
13 utility.

14 “(4) PROCEDURE FOR ASSESSING PENALTY.—  
15 The Secretary shall assess a civil penalty under this  
16 subsection in accordance with the procedures pre-  
17 scribed by section 333(d) of the Energy Policy and  
18 Conservation Act of 1954 (42 U.S.C. 6303).

19 “(d) STATE RENEWABLE ENERGY ACCOUNT PRO-  
20 GRAM.—

21 “(1) IN GENERAL.—There is established in the  
22 Treasury a State renewable energy account program.

23 “(2) DEPOSITS.—All money collected by the  
24 Secretary from alternative compliance payments and  
25 the assessment of civil penalties under this section

1 shall be deposited into the renewable energy account  
2 established pursuant to this subsection.

3 “(3) USE.—Proceeds deposited in the State re-  
4 newable energy account shall be used by the Sec-  
5 retary, subject to appropriations, for a program to  
6 provide grants to the State agency responsible for  
7 developing State energy conservation plans under  
8 section 362 of the Energy Policy and Conservation  
9 Act (42 U.S.C. 6322) for the purposes of promoting  
10 renewable energy production, including programs  
11 that promote technologies that reduce the use of  
12 electricity at customer sites such as solar water  
13 heating.

14 “(4) ADMINISTRATION.—The Secretary may  
15 issue guidelines and criteria for grants awarded  
16 under this subsection. State energy offices receiving  
17 grants under this section shall maintain such  
18 records and evidence of compliance as the Secretary  
19 may require.

20 “(5) PREFERENCE.—In allocating funds under  
21 this program, the Secretary shall give preference—

22 “(A) to States in regions which have a dis-  
23 proportionately small share of economically sus-  
24 tainable renewable energy generation capacity;  
25 and

1                   “(B) to State programs to stimulate or en-  
2                   hance innovative renewable energy technologies.

3           “(e) RULES.—The Secretary shall issue rules imple-  
4           menting this section not later than 1 year after the date  
5           of enactment of this section.

6           “(f) EXEMPTIONS.—This section shall not apply in  
7           any calendar year to an electric utility—

8                   “(1) that sold less than 4,000,000 megawatt-  
9           hours of electric energy to electric consumers during  
10           the preceding calendar year; or

11                   “(2) in Hawaii.

12           “(g) INFLATION ADJUSTMENT.—Not later than De-  
13           cember 31 of each year beginning in 2008, the Secretary  
14           shall adjust for inflation the rate of the alternative compli-  
15           ance payment under subsection (a)(2)(B) and the amount  
16           of the civil penalty per kilowatt-hour under subsection  
17           (c)(2).

18           “(h) STATE PROGRAMS.—

19                   “(1) IN GENERAL.—Nothing in this section di-  
20           minishes any authority of a State or political sub-  
21           division of a State to adopt or enforce any law or  
22           regulation respecting renewable energy or the regu-  
23           lation of electric utilities, but, except as provided in  
24           subsection (c)(3), no such law or regulation shall re-  
25           lieve any person of any requirement otherwise appli-

1 cable under this section. The Secretary, in consulta-  
2 tion with States having such renewable energy pro-  
3 grams, shall, to the maximum extent practicable, fa-  
4 cilitate coordination between the Federal program  
5 and State programs.

6 “(2) REGULATIONS.—

7 “(A) IN GENERAL.—The Secretary, in con-  
8 sultation with States, shall promulgate regula-  
9 tions to ensure that an electric utility that is  
10 subject to the requirements of this section and  
11 is subject to a State renewable energy standard  
12 receives renewable energy credits if—

13 “(i) the electric utility complies with  
14 State standard by generating or pur-  
15 chasing renewable electric energy or renew-  
16 able energy certificates or credits; or

17 “(ii) the State imposes or allows other  
18 mechanisms for achieving the State stand-  
19 ard, including the payment of taxes, fees,  
20 surcharges, or other financial obligations.

21 “(B) AMOUNT OF CREDITS.—The amount  
22 of credits received by an electric utility under  
23 this subsection shall equal—

24 “(i) in the case of subparagraph  
25 (A)(i), the renewable energy resulting from

1 the generation or purchase by the electric  
2 utility of existing renewable energy or new  
3 renewable energy; and

4 “(ii) in the case of subparagraph  
5 (A)(ii), the pro rata share of the electric  
6 utility, based on the contributions to the  
7 mechanism made by the electric utility or  
8 customers of the electric utility, in the  
9 State, of the renewable energy resulting  
10 from those mechanisms.

11 “(C) PROHIBITION ON DOUBLE COUNT-  
12 ING.—The regulations promulgated under this  
13 paragraph shall ensure that a kilowatt-hour as-  
14 sociated with a renewable energy credit issued  
15 pursuant to this subsection shall not be used  
16 for compliance with this section more than  
17 once.

18 “(i) DEFINITIONS.—In this section:

19 “(1) BASE AMOUNT OF ELECTRICITY.—The  
20 term ‘base amount of electricity’ means the total  
21 amount of electricity sold by an electric utility to  
22 electric consumers in a calendar year, excluding—

23 “(A) electricity generated by a hydro-  
24 electric facility (including a pumped storage fa-

1 cility but excluding incremental hydropower);  
2 and

3 “(2) DISTRIBUTED GENERATION FACILITY.—

4 The term ‘distributed generation facility’ means a  
5 facility at a customer site.

6 “(3) EXISTING RENEWABLE ENERGY.—The

7 term ‘existing renewable energy’ means, except as  
8 provided in paragraph (7)(B), electric energy gen-

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9 erated at a facility (including a distributed genera-

10 tion facility) placed in service prior to January 1,

11 2001, from solar, wind, or geothermal energy, ocean

12 energy, biomass (as defined in section 203(a) of the

13 Energy Policy Act of 2005), or landfill gas.

14 “(4) GEOTHERMAL ENERGY.—The term ‘geo-

15 thermal energy’ means energy derived from a geo-

16 thermal deposit (within the meaning of section

17 613(e)(2) of the Internal Revenue Code of 1986).

18 “(5) INCREMENTAL GEOTHERMAL PRODUC-

19 TION.—

20 “(A) IN GENERAL.—The term ‘incremental

21 geothermal production’ means for any year the

22 excess of—

23 “(i) the total kilowatt hours of elec-

24 tricity produced from a facility (including a

1 distributed generation facility) using geo-  
2 thermal energy; over

3 “(ii) the average annual kilowatt  
4 hours produced at such facility for 5 of the  
5 previous 7 calendar years before the date  
6 of enactment of this section after elimi-  
7 nating the highest and the lowest kilowatt  
8 hour production years in such 7-year pe-  
9 riod.

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10 “(B) SPECIAL RULE.—A facility described  
11 in subparagraph (A) that was placed in service  
12 at least 7 years before the date of enactment of this  
13 section shall, commencing with the year in which  
14 such date of enactment occurs, reduce the amount  
15 calculated under subparagraph (A)(ii) each year, on  
16 a cumulative basis, by the average percentage de-  
17 crease in the annual kilowatt hour production for  
18 the 7-year period described in subparagraph (A)(ii)  
19 with such cumulative sum not to exceed 30 percent.

20 “(6) INCREMENTAL HYDROPOWER.—The term  
21 ‘incremental hydropower’ means additional energy  
22 generated as a result of efficiency improvements or  
23 capacity additions made on or after January 1,  
24 2001, or the effective date of an existing applicable  
25 State renewable portfolio standard program at a hy-

1 hydroelectric facility that was placed in service before  
2 that date. The term does not include additional en-  
3 ergy generated as a result of operational changes not  
4 directly associated with efficiency improvements or  
5 capacity additions. Efficiency improvements and ca-  
6 pacity additions shall be measured on the basis of  
7 the same water flow information used to determine  
8 a historic average annual generation baseline for the  
9 hydroelectric facility and certified by the Secretary  
10 or the Federal Energy Regulatory Commission.

11 “(7) NEW RENEWABLE ENERGY.—The term  
12 ‘new renewable energy’ means—

13 “(A) electric energy generated at a facility  
14 (including a distributed generation facility)  
15 placed in service on or after January 1, 2001,  
16 from—

17 “(i) solar, wind, or geothermal energy  
18 or ocean energy;

19 “(ii) biomass (as defined in section  
20 203(b) of the Energy Policy Act of 2005  
21 (42 U.S.C. 15852(b));

22 “(iii) landfill gas; or

23 “(iv) incremental hydropower; and

1           “(B) for electric energy generated at a fa-  
2           cility (including a distributed generation facil-  
3           ity) placed in service before January 1, 2001—

4           “(i) the additional energy above the  
5           average generation during the period be-  
6           ginning on January 1, 1998, and ending  
7           on January 1, 2001, at the facility from—

8           “(I) solar or wind energy or  
9           ocean energy;

10           “(II) biomass (as defined in sec-  
11           tion 203(b) of the Energy Policy Act  
12           of 2005 (42 U.S.C. 15852(b));

13           “(III) landfill gas; or

14           “(IV) incremental hydropower;

15           and

16           “(ii) incremental geothermal produc-  
17           tion.

18           “(8) OCEAN ENERGY.—The term ‘ocean energy’  
19           includes current, wave, tidal, and thermal energy.

20           “(9) RETAIL ELECTRIC SUPPLIER.—The term  
21           ‘retail electric supplier’ means a person that sells  
22           electric energy to electric consumers and sold not  
23           less than 1,000,000 megawatt-hours of electric en-  
24           ergy to electric consumers for purposes other than  
25           resale during the preceding calendar year; except

1 that such term does not include the United States,  
2 a State or any political subdivision of a State, or any  
3 agency, authority, or instrumentality of any one or  
4 more of the foregoing, or a rural electric cooperative  
5 “(j) SUNSET.—This section expires on December 31,  
6 2030.”.

7 (b) TABLE OF CONTENTS AMENDMENT.—The table  
8 of contents of the Public Utility Regulatory Policies Act  
9 of 1978 (16 U.S.C. prec. 2601) is amended by adding at  
10 the end of the items relating to title VI the following:

“Sec. 610. Federal renewable part folio standard.”.

